

# CURRICULUM VITA TUAN VO-DINH

## Business Address

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## EDUCATIONAL BACKGROUND

B.S. in Physics Engineering, 1971, Swiss Federal Institute of Technology- EPFL (Ecole Polytechnique Federale), Lausanne, Switzerland.

Ph.D. in Biophysical Chemistry, 1975, Swiss Federal Institute of Technology- ETH (Eidgenosische Technische Hochschule), Zurich, Switzerland.

## AWARDS AND ACADEMIC HONORS

1981, *RD-100 Award for Most Significant Technological Advance in Research & Dev (PNA Dosimeter)*  
1986, *Award for Excellence in Technology Transfer*, Federal Laboratory Consortium  
1987, *RD-100 Award for Most Significant Technological Advance in R&D (Fluoroimmunosensor)*  
1988, *Gold Medal Spectroscopy Award*, Society for Applied Spectroscopy  
1989, *Languedoc-Roussillon Medal*, University of Perpignan (France)  
1992, *Scientist of the Year*, Oak Ridge National Laboratory  
1992, *Thomas Jefferson Award*, Martin Marietta Corporation  
1992, *RD-100 Award for Most Technologically Significant Product of the Year (SERODS Technology)*  
1992, *Inventors International Hall of Fame Award*, Inventors Clubs of America  
1994, *RD-100 Award for Most Technologically Significant Product of the Year (PCB Spot Test)*  
1995, *Award for Excellence in Technology Transfer*, Federal Laboratory Consortium (SERODS)  
1996, *Inventor of the Year Award*, Tennessee Inventors Association  
1996, *RD-100 Award for Most Technologically Significant Advance in R&D (SERS Gene Probe)*  
1997, *AMSE Award*, American Museum of Science and Technology (BiOptics)  
1997, *BER-50 Award for Exceptional Service for a Health Citizenry*, US Department of Energy  
1998, *Lockheed Martin Commercialization Award*, Lockheed Martin  
1999, *RD-100 Award for Most Technologically Significant Advance in R&D (Multifunctional Biochip)*  
2003, *Distinguished Inventors Award*, Battelle Memorial Institute  
2003, *Director's Award for Outstanding Accomplishments in Science and Technology*, UT-Battelle  
2003, *RD-100 Award for Most Technologically Significant Advance in R&D (RAMITS)*  
2003, *Distinguished Scientist of the Year Award*, Oak Ridge National Laboratory  
2007, *R. Eugene and Susie E. Goodson Distinguished Professor of Biomedical Engineering*, Duke University  
2011, *Award on Spectrochemical Analysis*, American Chemical Society  
2017, *Induction to the National Academy of Inventors (NAI)*  
2019, *Sir George Stokes Award*, Royal Society of Chemistry (United Kingdom)  
2022, *SPIE President's Award*, SPIE The International Society for Optics and Photonics

## EDITOR/EDITORIAL BOARD OF SCIENTIFIC JOURNALS:

*Editor-in-Chief*, NanoBiotechnology (2005-2009)  
*Associate Editor*, Journal of Nanophotonics (2006-present)  
*Associate Editor*, Plasmonics (2006-present)  
*Associate Editor*, Ecotoxicology and Environmental Safety (2003-2009)  
*Topical Editor*, Polycyclic Aromatic Compounds Journal (1988-present).  
*Associate Editor*, Analusis (1991-1998).  
*Editorial Board Member* of Applied Physics Reviews (2015-present).  
*Editorial Board Member* of Applied Spectroscopy Journal (1987-1999).  
*Editorial Advisory Board Member* of Talanta Journal (1990-1994).  
*Editorial Advisory Board Member* of Spectrochimica Acta Review (1990-1993).

*Editorial Board* Member of Journal of Biomedical Optics (1995-present)  
*Editorial Board* Member of Journal of Analytical and Bioanalytical Chemistry (1999-2007)  
*Editorial Board* Member of Expert Review of Molecular Diagnostics (2001-present)  
*Editorial Board* Member of Journal of Luminescence (2002-present)  
*Editorial Board* Member of Nanomedicine (2006-present)  
*Editorial Board* Member of Journal of Science-Advanced Materials and Devices (2017-present)

### **PROFESSIONAL SOCIETIES:**

- Fellow, Royal Society of Chemistry (RSC)
- Fellow, National Academy of Inventors (NAI)
- Fellow, American Institute of Medical and Biological Engineering (AIMBE)
- Fellow, SPIE, The International Society of Optical Engineering
- Fellow, American Institute of Chemists (AIC)

Member: American Association for the Advancement of Science, American Chemical Society, Society for Applied Spectroscopy, ASTM, American Society for Testing Materials, International Society on Polycyclic Aromatic Compounds, Optical Society of America

### **PROFESSIONAL POSITIONS:**

(\* *Concurrently held positions*)

2006-present Duke University, Durham, North Carolina, U.S.A.

**Director** (\*), **Fitzpatrick Institute for Photonics** (FIP) [[www.fitzpatrick.duke.edu](http://www.fitzpatrick.duke.edu)]. Provide leadership and management to the FIP, which was established at Duke University in 2000 by a \$25,000,000 gift from Michael and Patty Fitzpatrick [[www.fitzpatrick.duke.edu/Fitzpat5.pdf](http://www.fitzpatrick.duke.edu/Fitzpat5.pdf)]. The research activities of the FIP involve over 150 faculty members from over 40 departments at the Edmund Pratt Engineering School, the Arts & Sciences School, and the Medical School at Duke University. The research programs are organized into various areas, including Biophotonics, Nano & Micro Systems, Nanophotonics, Quantum Optics & Information Photonics, Theoretical Modeling, and Novel Spectroscopies.

**R. Eugene and Susie E. Goodson Distinguished Professor of Biomedical Engineering** (\*)  
Pratt School of Engineering, Duke University: July 1, 2007 – present  
[<http://www.bme.duke.edu/faculty/vodinh/index.php>]

**Professor of Chemistry** (\*), Department of Chemistry, Arts & Sciences and Trinity College, Duke University  
[<http://fds.duke.edu/db/aas/Chemistry/faculty/tuan.vodinh>]

1977–2006 Oak Ridge National Laboratory (ORNL), Oak Ridge, Tennessee, U.S.A.

2003–2006 **Director**, Center for Advanced Biomedical Photonics (CABP): In coordination with the ORNL Associate Director, is responsible for the development and implementation of the Laboratory programs and strategic plans on bioengineering research initiatives [[www.ornl.gov/sci/cabp](http://www.ornl.gov/sci/cabp)]. This position involves the development of complex, multi-disciplinary research programs, involving integration and coordination of research activities and interactions of scientific staff from 4 different ORNL divisions and investigators from over 10 academic and research institutions.

1994–2006 **Corporate Fellow**: one of the highest honors for distinguished scientists at ORNL; Member of the Corporate Fellow Council, which assists the ORNL Laboratory Director in formulating effective scientific program strategies consistent with the overall goals of the laboratory.

1984–2006 **Group Leader**, Life Sciences Division, ORNL: Responsible for leadership and management of research groups. Responsible for all financial, human, equipment, and facility

resources for research groups in environmental monitoring systems, bioengineering, and medical applications. This line management position provides the opportunity to creatively manage and motivate staff, leveraging diversity, promoting developmental opportunities for staff, and fostering commitment and team spirit.

- Advanced Biomedical Science & Technology Group (2000-present)

- Advanced Monitoring Development Group (1984-2000)

[[www.ornl.gov/sci/biosensors](http://www.ornl.gov/sci/biosensors)]

1977–1984 **Staff Research Scientist**, Health and Safety Research Division, ORNL. Responsible for the research and development of environmental and biological monitoring of chemical pollutants and biomarkers of health effects associated with energy technologies

Summer 2010 **Visiting Professor**  
University of Paris Diderot- Paris 7  
Paris (France)

Spring 2004 **Distinguished Visiting Professor**  
Department of Chemistry  
University of Florida  
Gainesville, Florida, U.S.A.

2000–2006 **Adjunct Professor** (\*)  
Department of Neurosurgery  
University of California – San Francisco Medical School  
San Francisco, California, U.S.A.

1987–2006 **Adjunct Professor** (in three Departments)  
Graduate School of Genome Science and Technology (formerly Graduate School of Biomedical Sciences); Department of Chemistry, and Department of Environmental Practice  
University of Tennessee  
Knoxville, Tennessee, U.S.A.

Spring 1999 **Visiting Professor**  
Department of Chemistry  
University of Rome *La Sapienza*  
Rome (Italy)

### **PROFESSIONAL EXPERIENCE:**

In Biomedical Engineering, Biophotonics, Molecular Imaging, Plasmonics, Nanophotonics, Photothermal Therapy, Photo Immunotherapy:

- Developed screening techniques for measuring human exposure to carcinogens (DNA adducts).
- Developed laser "optical biopsy" for cancer diagnosis: esophageal and cervical cancer (US Patent, licensed to Optical Biopsy, LLC; and SpectroDiagnostics, Inc.)
- Developed nanoprobe for molecular imaging based on plasmonics (US patent pending)
- Developed nano-biosensor for single living cell analysis.
- Developed a continuous SERS monitor for analytical, environmental, and medical analysis with filter paper-based substrates (U.S. Patent) (Licensed to Gamma-Metrics, Inc.).
- Developed an antibody-based fluoroimmuno sensor for the detection of toxicologically important compounds in microsamples of body fluids (US Patent).
- Developed SERS Nanoprobe 'Molecular Sentinel' for biomedical diagnostics (US Patent).
- Developed molecular probe for biomedical diagnostics using Plasmonic Coupling Interference (PCI) (US Patent).
- Developed advanced molecular probes ('Inverse Molecular Sentinel') for biomedical diagnostics (US Patent).
- Developed advanced ultrasound technique for brain injuries and brain disease monitoring (US Patent).
- Developed non-invasive spectroscopic techniques (fluorescence, Raman, SERS) for disease diagnostics: cancer, heart diseases, infectious disease, diabetes, etc. (US Patents).

- Developed DNA Biochip for gene diagnostics and pathogen detection (US Patent; licensed to NanoDetection Technologies); RD-100 Award.
- Developed a new enhanced photonic modality for non-invasive photothermal therapy (US patent)
- Developed a new photonic technique for Synergistic Immuno Photo Nanotherapy (SYMPHONY) (US patent)

In Analytical Chemistry, Chemical Engineering, and Biological Sensing:

- Developed ultrasensitive spectroscopic technologies (synchronous luminescence, room temperature phosphorescence, SERS techniques) to detect byproducts and environmental pollutants associated with energy production (petroleum, synfuel, biofuel technologies)
- Established a new methodology for multicomponent analysis of complex systems for use as cost-effective monitoring technique in process and environmental control, energy production, pharmaceutical analysis, industrial hygiene, and cancer diagnostics applications.
- Investigated plasmonics systems for advanced solar energy conversion systems
- Developed a novel laser-based technique for trace analysis based on surface-enhanced Raman scattering (SERS) (U.S. Patent), licensed to IdentiChem, Inc.
- Invented a new passive dosimeter for sensitive detection of hazardous vapors produced during industrial and energy-related processes (U.S. patent); RD-100 Award.
- Developed a fiber-optics lightpipe luminoscope for monitoring skin contamination of workers in petrochemical, coal-related, and agricultural industries (licensed to Environmental Systems, Inc.).

Physical Chemistry and Optical Engineering:

- Investigated molecular and electronic spectroscopies of organic compounds of environmental, industrial, biological, and medical importance.
- Developed a laser-induced site-selection method using the "Shpolskii" technique for organic analysis of complex mixtures.
- Investigated structural characterization of biological compounds such as carcinogens and drugs in biomembrane systems.
- Acquired extensive practical experience in cryogenic technology (liquid nitrogen and liquid helium temperature techniques) and laser spectroscopy.
- Developed a New Optical Data Storage Technology based on SERODS (U.S. Patent)
- Developed applications for solid-state acousto-optic tunable filters (AOTF) for optical detection (multispectral molecular imaging).

## **SCIENTIFIC CAREER SUMMARY**

Dr. Vo-Dinh's research has profoundly impacted many fields involving biophotonics, laser-excited luminescence spectroscopy, room temperature phosphorimetry, synchronous luminescence spectroscopy, surface-enhanced Raman spectroscopy, field environmental instrumentation, fiberoptics sensors, nanosensors, biosensors and biochips for the protection of the environment and the improvement of human health. The numerous national and international awards reflect the impact and recognition of his scientific achievements.

Fundamental research on the synchronous luminescence (SL) methodology by Dr. Vo-Dinh has set the foundations of the technique for a variety of applications. The SL technique he developed for multicomponent analysis of complex samples can be used as a cost-effective monitoring for chemical analysis. This work has also led to numerous environmental, biological, and medical applications. The SL technique is being used by U.S. companies to lower the cost of quality assurance and environmental control procedures. It was applied at the National Cancer Institute to detect carcinogen-DNA adducts. Synchronous luminescence is a simple and cost-effective technique that can be used to detect carcinogen-DNA cancer in animals and disease humans. His SL technique was applied at the National Cancer Institute to detect carcinogen-DNA adducts. The significance and impact of this SL technique are reflected by the fact that, since the early 1980s, most spectrometer companies (Perkin-Elmer, SPEX Industries, etc.) have now incorporated SL as a standard feature in modern luminescence instruments citing Dr. Vo-Dinh SL studies. The proprietary SL technique is currently developed for multispectral imaging of cancer (gastro-intestinal cancer) and precancerous conditions (Barrett's dysplasia).

Dr. Vo-Dinh was one of the first scientists to develop and effectively utilize the Room Temperature Phosphorescence (RTP) technique for the rapid and cost-effective analysis of trace organic compounds adsorbed on filter paper. The RTP technique is a significant advance because it provides a new, practical, cost-effective, and much-needed screening tool. Unlike conventional low-temperature phosphorimetry, the RTP technique does not require expensive cryogenic equipment and low-temperature refrigerant. The RTP instrumental features and capabilities are highlighted by several spectrometer manufacturers (Spex Industries). *He was invited to write the first textbook book on RTP (Wiley, 1984).*

He has developed the RTP technique for use in a passive personnel dosimeter (the PNA monitor, US patent, 1987) that is designed to detect potentially toxic organic chemicals in occupational and residential environments. He was awarded his first RD-100 Award in 1981.

Recognizing the potential of the use of laser in vibrational spectroscopy, Dr. Vo-Dinh has focused his research activities on the development of the surface-enhanced Raman scattering (SERS) technique for trace organic analysis. *He published the first paper on the analytical use of SERS for organic analysis.* Prior to this work, most SERS studies were limited to basic research and were restricted to a few molecules. *He was awarded one of the first SERS-related U.S. patents (1987) for the instrument he developed to continuously monitor and analyze complex chemical and biological samples.* This invention is an important advance for the SERS technology in organic analysis because it successfully demonstrates that practical, simple-to-prepare, and cost-effective metal-covered filter materials coated with nanoparticles can provide efficient SERS substrates to detect chemical and biological compounds. The SERS technology was further developed to analyze environmental samples, cosmetics, drugs, and food products to make these products safer or to detect diseases, as well as for optical data storage. The SERS technique has led to the development of a new generation of molecular gene probes for the detection and molecular imaging of multiple diseases simultaneously (e.g., cancer, pathogens).

Always at the frontier of chemical instrumentation using light-matter interactions, his recent research endeavors have been focused on integrating biotechnology, fiberoptics, laser techniques, and molecular spectroscopy to develop the first antibody-based fiberoptics fluoroimmunosensor (FIS) device. The fiberoptics fluoroimmuno-sensor (FIS) with a micro regenerable probe is a breakthrough in chemical and biological sensing technology for a wide spectrum of biochemical and clinical applications, such as the assessment of an individual's exposure to chemical carcinogens, biomarkers for precancerous DNA damage (DNA adducts), response to drug therapy, and characterization of naturally occurring biologically active substances. The FIS will also open new horizons to a fundamental "smart catheter/sensor" technology for *in vivo* analysis. He was awarded his second *RD-100 Award* for this achievement in 1987.

In 1988, he received the Gold Medal Award from the Society of Applied Spectroscopy (SAS). The SAS award committee cited his notable achievements, including his pioneering work in "*solid-substrate room temperature phosphorescence, adaptation of laser-induced site selection spectroscopy to analysis of complex mixtures, and development of trace analysis techniques based on surface-enhanced Raman scattering spectroscopy.*"

In 1989, Dr. Vo-Dinh received the *Languedoc-Roussillon Medal* from the President of the University of Perpignan (France) for this scientific achievement.

In 1992, he received the *Inventor-of-the-Year Award* from ORNL and the Thomas Jefferson Award, the highest honor for technical achievement from Martin Marietta Corporation. He also received the International Hall of Fame Award in Advanced Technology from the Inventor Clubs of America and his third *RD-100 Award* for the development of the SERODS optical data storage.

In cancer diagnostics, Dr. Vo-Dinh and his coworkers have developed a unique *laser-induced fluorescence (LIF) technique* that can provide effective indices to diagnose malignant tumors in the esophagus without biopsy. The method was successfully tested with over 200 patients with nearly 100% accuracy for detecting gastrointestinal cancer in collaboration with The Thompson Cancer Survival Center. The DNF method led to the development of a rapid *in-situ* technique for non-invasive cancer diagnosis that does not require biopsy surgery, thus decreasing time and cost and improving the effectiveness of cancer prevention and treatment.

Dr. Vo-Dinh has developed a novel integrated *Multi-functional Biochip (MFB)* that allows simultaneous detection of several disease endpoints using different bioreceptors such as DNA, antibodies, enzymes, and cellular probes) on a single biochip platform. An essential element in the MFB development involves designing and developing an integrated circuit (IC) electro-optic system for the microchip detection elements using the complementary metal oxide silicon (CMOS)

technology. The biochip has applications for rapid diagnostics and screening of multiple medical diseases (cancer, BRCA1, HIV, tuberculosis, etc.) and infectious pathogens (B. anthracis, B. globigii, E. coli, etc). The technology has been licensed to *HealthSpex, Inc.* and *NanoDetection, Inc.*

Advances in nanotechnology and photonics have recently led to a new generation of devices for probing the cell machinery, elucidating intimate life processes occurring at the molecular level that were heretofore invisible to human inquiry. Recently, with the advent of nanotechnology, Dr. Vo-Dinh developed *the first antibody-based nanobiosensor* for monitoring biochemical species in a single living human cell (publication in *Nature Biotechnology*).

He recently developed a new generation of *plasmonics-based nanoprobes* (“molecular sentinels”-MS) for use in molecular imaging and medical applications (US patent pending). The MS nanoprobes have been successfully used to detect genomic biomarkers for cancers (e.g., breast, gastrointestinal, head, and neck cancer) and infectious diseases (e.g., HIV, malaria, dengue).

With the development of a novel two-pronged modality referred to as Synergistic Immuno Photothermal Nanotherapy (SYMPHONY), which combines immune-checkpoint inhibition and plasmonic gold nanostar (GNS)-mediated photothermal therapy, Vo-Dinh and his clinical collaborators were able to achieve complete eradication of primary treated tumors and distant untreated tumors and induce a long-term ‘anticancer vaccine’ effect in mice implanted with the MB49 bladder cancer cells.

His scientific achievements and impact have led to numerous invitations to organize and chair over 20 national and international conferences. In 1993, he was invited to serve as the *Honorary Chairman* of the first International Symposium on Analytical Sciences (SAS) held in Deauville (France). In 1994, he served as the *Honorary Chairman* of the second SAS international conference in Montreux (Switzerland).

In 1994, for his distinguished achievements, Dr. Vo-Dinh was promoted to *Corporate Fellow*, one of the highest honors for distinguished scientists at Oak Ridge National Laboratory.

In 1997, Dr. Vo-Dinh was selected as *one of the 12 scientists nationwide* to receive the prestigious *Biological and Environmental Research BER-50 Award* from the US Department of Energy (DOE) for Distinguished Service to a Healthy Citizenry at the 50th Anniversary of the DOE Biological and Environmental Research (BER) Program. [<http://genome.gsc.riken.go.jp/hgmis/publicat/berawards/index.html>]

In 2002, the Department of Commerce's United States Patent and Trademark Office (USPTO) recognized Dr. Vo-Dinh as “one of the four Asian Pacific Americans whose inventive abilities led to patents of products of benefit to all Americans and “*whose inventions have contributed to making this country the most technologically advanced in the world*”.

[<https://web.archive.org/web/20080414070744/http://www.uspto.gov/web/offices/com/speeches/02-37.htm>]  
[<http://www.uspto.gov/web/offices/com/speeches/02-37.htm>]

In 2003, Dr. Vo-Dinh was named *Distinguished Scientist of the Year* at Oak Ridge National Laboratory for “*his extraordinary scientific contributions over a 26-year career at ORNL, which includes numerous publications and innovations in the field of human health improvement and environmental protection*”.

[[http://www.ornl.gov/info/press\\_releases/get\\_press\\_release.cfm?ReleaseNumber=mr20031125-00](http://www.ornl.gov/info/press_releases/get_press_release.cfm?ReleaseNumber=mr20031125-00)]

In 2007, one year after joining Duke University, Dr. Vo-Dinh was awarded the *R. Eugene and Susie E. Goodson Distinguished Professorship of Biomedical Engineering* for “*his many accomplishments and advancements in the field of biomedical engineering*”. The distinguished professorship is the highest honor Duke University can award its faculty.

In 2011, Dr. Vo-Dinh received the *Award on Spectrochemical Analysis* from the American Chemical Society (ACS) Division of Analytical Chemistry. The ACS Division of Analytical Chemistry presents annually this award to “*recognize an individual who through scholarly activity has definitely and uniquely advanced the field of spectrochemical analysis and optical spectrometry*” [<https://acsanalytical.org/awards-resources/national-acs-awards/spectrochemical-analysis-2/>].

In 2013, Dr. Vo-Dinh was selected to *The Analytical Scientist Power List*, which recognizes the *100 Most Influential People* in the Analytical Sciences [<https://theanalyticalscientist.com/the-power-list-2013>].

In 2015, Dr. Vo-Dinh chaired the *World Photonics Forum*, organized on March 9-10, 2015, at the Fitzpatrick Institute for Photonics (FIP) to celebrate the 2015 *International Year of Light* (IYL), which was proclaimed by the United Nations. Key events included a roster of distinguished speakers – including two Nobel laureates – and a pre-symposium open house to expose the latest light-based science and technologies to the public.

In 2017, Dr. Vo-Dinh was inducted as a *Fellow of the National Academy of Inventors* (NAI). [<https://academyofinventors.org>]. Dr. Vo-Dinh was recognized for his pioneering development of a new generation of SERS gene probes that can detect nucleic acid biomarkers miRNAs to improve the early detection and diagnosis of cancer, with additional applications in high-throughput screenings and systems biology research. With over 49 patents, Vo-Dinh has also developed a wide variety of biophotonics technologies ranging from laser-induced fluorescence for direct detection of tumors without physical biopsy and a multifunctional biochip for global health and point-of-care disease diagnosis to plasmonics systems for nanoparticle-mediated photothermal therapy and immunotherapy to treat cancer and induce a long-term anti-cancer ‘vaccine’ effect.

In 2018, Dr. Vo-Dinh was invited to speak at UNESCO, the United Nations Educational, Scientific and Cultural Organization headquarters in Paris, France, on May 16, 2017, for the Inaugural Ceremony celebrating the first “*International Day of Light*” [<https://www.lightday.org>]. The annual event is intended to raise worldwide awareness of the many ways that light impacts modern society and to consider how advances in light-based science and technology can aid in achieving goals in education and sustainable development. Dr. Vo-Dinh’s talk at UNESCO is entitled “*Light Empowering Humanity*”: <https://www.youtube.com/watch?v=2FniAukiy0A>

In 2019, Dr. Vo-Dinh was awarded the *2019 Sir George Stokes Award* by the Royal Society of Chemistry (RSC), Analytical Division, United Kingdom. Vo-Dinh was recognized for his "*outstanding and sustained contributions to analytical science through innovations in the field of photonics, spectroscopy, molecular biology, and nanotechnology.*" The Sir George Stokes Award is an award presented every two years by the RSC that recognizes outstanding and sustained contributions to analytical science by someone demonstrably working in a complementary field, which has led to developments of seminal importance to chemical analysis. <https://pratt.duke.edu/about/news/vo-dinh-george-stokes-award>

The *RSC Sir George Stokes Award Symposium Honoring Tuan Vo-Dinh* was organized at the 2021 Annual SciX Conference, the premier meeting for analytical chemistry and allied sciences, on September 30, 2021, in Providence, Rhodes Island. <https://www.scixconference.org/RSC-Sir-George-Stokes-Award/>

In 2022, Dr. Vo-Dinh received the *2022 SPIE President’s Award* from SPIE, the International Society for Optics and Photonics, an international scientific society serving more than 250,000 people from 184 countries. The SPIE President’s Award is presented to an individual who, in the opinion of the President and the Board of Directors, has rendered a unique and meritorious service of outstanding benefit to the Society. <https://spie.org/news/tuan-vo-dinh-the-2022-spie-presidents-award>

## **RESEARCH MANAGEMENT AS PRINCIPAL INVESTIGATOR OR CO-PRINCIPAL INVESTIGATOR OF RESEARCH PROGRAMS AND GRANTS**

- |           |   |
|-----------|---|
| 2022-2027 | RAPID System for Early Detection of Head and Neck Cancer in Low-Resource Settings, Sponsor: National Institutes of Health (NIDCR) # 1R01DE030455-01A1 (5 yrs; \$2.7M); Vo-Dinh (PI) and Walter Lee (MPI). |
| 2022-2025 | Nanoplasmonic Biosensor Using Olfactory Receptor System, Sponsor: Bill and Melinda Gates Foundation (INV-040790) (Phase I and II, 4 years: \$814K); PI: Vo-Dinh   |
| 2023-2024 | Molecular Biomarker Study: Duke Pilot Project –Sponsor: Department of Veterans Affairs # 36C262-24-AP-5097, Department of Veterans Affairs (Phase I & II, 1 year; \$75K); PI: Vo-Dinh                     |
| 2019-2024 | Integrated Acoustofluidic Plasmonic Molecular Diagnostic System for Detecting MicroRNA Biomarkers. Sponsor: National Institutes of Health (NIGMS) #1R01GM135486-01 (4 yrs; \$1.7 M); PI: Vo-Dinh          |

2019-2024 Plasmonic nanoparticle-mediated immunotherapy to treat metastatic cancer. Sponsor: National Institutes of Health (NIBIB) #1R01EB028078-01A1 (5 yrs; \$2.1 M); Vo-Dinh (PI) and Inman (MPI)

2020-2024 Product Development of the Vertical Integrated Flow Assay System Technology ("VERIFAST") for Multiplex Pathogens Detection. Sponsor: Advanced Technology International/Defense Threat Reduction Agency # OTA W15QKN-16-9-1002 (5yrs; \$450K); PI: Zenhausen; Duke Subaward PI: Vo-Dinh

2018-2022 Plasmonics-Enhanced Optical Imaging Systems for Bioenergy Research. Sponsor: Department of Energy (DOE) Office of Science # DE-SC0019393 (3 yrs; \$1.3 M); PI: Vo-Dinh

2018-2019 Gold Nanostars: Orchestrating a Shining SYMPHONY Against Cancer. Sponsor: Duke Chancellor Discovery Award (1yr; \$75K); PI: P. Fecci, co-PI: Vo-Dinh

2018-2019 Nanoplasmonic Molecular Sentinels for Targeting Oncogenic RNA Splice Variants Driving Aggressive Cancer. (1yr; \$30K); PI: S. Patierno, co-PI: Vo-Dinh

2015-2018 Nanoplasmonics-based Molecular Analysis Tool for Molecular Biomarkers of Cancer; Sponsor: National Institutes of Health (NIH) #1R21CA196426 (3 yrs; \$670K); PI: Vo-Dinh

2015-2018 Multi-functional Plasmonics Nanoprobes for Cellular Sensing and Imaging; Sponsor: Department of Energy (DOE) Office of Science # DE-SC0014077 (3 yrs; \$1.725M); PI: Vo-Dinh

2016-2019 Synergistic immuno-photo-nanotherapy for bladder cancer, Sponsor: Department of Defense # W81XWH-17-1-0567 (2 yrs; \$625K); PI: Inman

2016-2018 Bloodborne Tropical Pathogen Detection Using multiple Nanophotonic Arrays; Sponsor: National Institutes of Health (NIH) # 1R21AI120981-01 (2 yrs; \$440K); Co-lead PIs: Taylor & Vo-Dinh

2016-2018 Development of special-shaped, low-cost, metal nanoparticles; Sponsor: Luna Innovations, Inc.; No.3136.02DU-W911SR-16-C-0014 D0-C9; (2yrs, \$120K); Site PI: Vo-Dinh

2012-2016 Plasmonics-Active SERS Nanoplatfoms for *In Vivo* Diagnostics (PASNID); Sponsor: Department of Defense (DARPA) # HR0011-13-2-003 (5 yrs; \$3.4M); PI: Vo-Dinh

2014-2015 Development and Synthesis of Gold Nanostars for Plasmonics Applications (MIPR Supplement to Transformation Optical Materials); Sponsor: US Army Research Office (1Yr: \$60,000); PI: Vo-Dinh

2015-2016 Plasmon-Enhanced Hybrid Photovoltaic/Photocatalytic Hydrogen Generation: Sponsor: Duke University Energy Initiative Fund (1Yr: \$30,000); PI: Hotz; Co-PIs: Mitzi and Vo-Dinh

2014-2015 Hydrogen Generation by Enhanced Photocatalysts Assisted by Plasmonic Structures; Sponsor: Duke Energy Research Initiative Fund (1Yr: \$40,000); PI: Hotz; Co-PI: Vo-Dinh

2012-2014 Plasmonics-Active Nanoplatfoms for SERS Detection: Study and Evaluation of Nanostars; Sponsor: BD Technologies Corp.; SPS #189498; (2yrs: \$224,000); PI: Vo-Dinh

2013-2014 Enhanced Photocatalytic Hydrogen Generation Assisted by Plasmonic Structures; Sponsor: Pratt Seed Fund, (1Yr: \$27,000); PI: Hotz,; Co-PI: Vo-Dinh

2013-2014 Design and Synthesis of Plasmonic Nanoshells for Advanced Obscurants; Sponsor: Luna Innovations, Inc. (SBIR PI; W911 SR-13cC-0071)(Duke PI: Vo-Dinh)

2012-2012 Europtrode XI Conference, Barcelona, Spain, 2012; Sponsor NSF # 3390077; (\$10,000); PI: Vo-Dinh

2009-2014 Photonic Studies of Emission, Communication, and Signal Processes in Cellular Systems; Sponsor: Immunolight, LLC, (5 years: \$1M); PI: Vo-Dinh

2009-2011 Dynamic Testing of Signal Transduction Deregulation During Brest Cancer Initiation; Sponsor: US Army Research; W81XWH-09-1-0064 (2 Yrs: \$500K); PIs: Sewaldt and Vo-Dinh

2009-2010 Development of a Point-of-Care Diagnostic for Candidemia and Community-acquired Respiratory Tract Infection Nanoprobes Using Molecular Sentinel, Sponsor: Coulter Foundation (1 yr: \$320K); PI: Ginsburg; Co-PI: Vo-Dinh

2008-2011 Photo-X: Non-invasive Photonic Modalities for Disease Treatment, Sponsor: Immunolight, LLC, (3 years: \$8M); PI: Vo-Dinh

2007-2012 Nanobiosensors for Probing Chemical Exposure and Metabolism Pathways of Individual Cells. Sponsor: National Institutes of Health (NIH); R01 ES014774-01A1 (3 yrs: \$1.2M); PI: Vo-Dinh

2006-2011 Ultrahigh Throughput Screening ( $\mu$ HTS) Based on Surface-enhanced Raman Scattering. Sponsor: National Institutes of Health (NIH); R01 EB006201(4 years: \$2M); PI: Vo-Dinh

2007-2009 Fiber Optic and III-Nitride Materials-based Chemical and Biological Sensing. Sponsor: Army Research Office (2 years; \$80K); PI: Vo-Dinh

2001-2008 Advanced Multi-spectral Imaging for Cancer Diagnostics: Sponsor: National Institutes of Health (NIH); Biomedical Research Partnership (BRP); R01 CA088787 (5 years: \$2M); PI: Vo-Dinh

2007-2009 Development Of Advanced Raman Spectroscopy Methods And Databases For The Evaluation Of Trace Evidence And The Examination Of Questioned Documents. Sponsor: Dept of Justice (2 yrs: \$1M); Co-PI: Vo-Dinh, PI: J. R. Lombardi

2007-2008 Fiber Optic and III-Nitride Materials-based Chemical and Biological Sensing. Sponsor: Army Research Office (1yr: \$40K); Co-PI: Vo-Dinh; PI: M. Gerhold)

2005-2007 Development of Nanoprobes for Imaging Single Cells Under Low-Dose Radiation (DOE) (3 years: \$300K); PI: Vo-Dinh

2004-2006 Advanced Biosensor Systems; Sponsor: Department of Energy (DOE) (5 years: \$1.5M); PI: Vo-Dinh

2004-2006 Advanced Plasmonic Sensors for Homeland Defense; Sponsor ORNL LDRD Program (3 years: \$500K); PI: T. Vo-Dinh

2003-2006 Biosensor for Reactive Oxygen Species; Sponsor: Philip Morris (3 years: \$1M); PI: Vo-Dinh

2004-2005 Advanced Algorithm for Hyperspectral Fluorescence Imaging for Skin Cancer Diagnostics; Sponsor ORNL SEED Funds (2 years: \$125K) PI: Vo-Dinh

2003-2005 NSOM and 3-D ORAM Radiation Dosimeter; Sponsor: DOE Office of Non-Proliferation (3 years: \$1.2M); PI: Bogard, Co-PI: Vo-Dinh

2001- 2005 Raman Monitoring System for BeO Exposure: Sponsor: National Security Administration and BWXT-Y12, LLC (4 yrs: \$1M); PI: Vo-Dinh.

1996 - 2004: Ultrasound Detection for Brain Injury. Sponsor: Department of the Army (5 yrs; \$650K) PI: Vo-Dinh

1999 – 2004 Advanced Multifunctional Biochip for Biochem Detection: Sponsor: DOE (5 yrs; \$2.5M); PI: Vo-Dinh

2000 – 2004 DNA Biochip for Environmental Monitoring; Sponsor-US Navy, New Mexico Tech. (3 yrs; \$1M); PI: Vo-Dinh

1999 – 2001 Advanced Synchronous Luminescence for Biomedical Diagnostics: Sponsor-US DOE (2 yrs; \$550K); PI: Vo-Dinh

2000 – 2002 Raman Monitor for Carbon Sequestration; Sponsor-ORNL (2 yrs; \$300K); Co-PI: Vo-Dinh; PI: S. Wullschleger.

1998 – 2001 Analytical Instrumentation: Sponsor-Federal Bureau of Investigation (4 yrs; \$900K); PI: Vo-Dinh

1998 – 2003 3D ORAM Dosimeter: Sponsor: US DOE and DTRA (6 years; \$1M) PI: Bogard, Co-PI: Vo-Dinh

1998 – 2003 Monitoring Systems for PAHs; Philip Morris, WFO No. ERD-99-1735 (5 yrs; \$2M); PI: Vo-Dinh

1997 - 2000: Advanced Nanosystems for Chemical Analysis and Medical Diagnostic. Sponsor: ORNL-LDRD (3 yrs; \$800K); PI: Vo-Dinh

1997 - 1999: SERS Gene for DNA Sequencing. Sponsor: US DOE (2 yrs; \$200K) PI: Vo-Dinh

1977 - 2000: Dosimetry for New Energy Systems Pollutants. Sponsor: U.S. Department of Energy (DOE): KP0102 (10 yrs; \$300K/yr); PI: Vo-Dinh

1993 - 1996: Advanced Biosensors. Sponsor: ORNL-LDRD Project (3 yrs; \$1M); PI: Vo-Dinh

1988 - 2000: Advanced In Situ Spectroscopic Analytical Methodologies and Instrumentation. Sponsor: U.S. Env. Protection Agency: DW-89-936227-01-1 (5 yrs; \$750K), PI: Vo-Dinh

1993 - 1998: Development of a SERODS Device. Sponsor: Office of Naval Research and AFOSR NOO14-41 F-0042 (3 yrs; \$1M), PI: Vo-Dinh

1994 - 1997: SERS Drug Detection. Sponsor: Gamma-Metrics, Inc. (\$50K), PI: Vo-Dinh

1988 - 1992: Surface-Enhanced Optical Data Storage. Sponsor: Office of Naval Research - NOO14-41-F-0042 (\$1M) 1866-E030-A1 (3 yrs; \$485K), PI: Vo-Dinh

1988 - 1989: Director's R&D Research Grants (Human Genome, SERS, UV-B Projects). Sponsor: Oak Ridge National Laboratory. (\$150K), Co-PI: Vo-Dinh

1991 - 1992 Luminescence Spot Test for PCBs. Sponsor: Office of Technology Development, US DOE (2 yrs; \$280K), PI: Vo-Dinh

1991 - 1994: SERS Dosimeter and Monitor. Sponsor: DOE Office of Arms Control No. ST766 (3 yrs; \$698K), PI: Vo-Dinh

1989 - 1991: Field Evaluation of Cost-Effective Screening Procedures in Indoor Air. Sponsor: U.S. Environmental Protection Agency; DW8930725 (2 yrs; \$160K), PI: Vo-Dinh

1986 - 1988: Integrated Study of Biomarker Formation and Mutagenic Profile in Mammalian Cells, Animals, and Human. Sponsor: U.S. EPA. (2 yrs; \$500K), Co-PI: Vo-Dinh (PI: E. Zeighami)

1982 - 1987: Practical Development and Fundamental Studies of Surface-Enhanced Raman Spectroscopy for Toxic Chemicals Detection. Sponsor: U.S. Dept of the Army; No. 3311-1450 (3 yrs; \$400K), PI: Vo-Dinh

1985 - 1988: Fiberoptics-Based Fluoroimmuno-Sensors. Sponsor: National Institutes of Health: (No. GM

- 34730-03) (3 yrs; \$171K); PI: Sepaniak, Co-PI: Vo-Dinh
- 1984 - 1985: Fluoroimmuno-Sensors. Sponsor: National Science Foundation: OIR-8413145 (2 yrs; \$107K), PI: Sepaniak; Co-PI: Vo-Dinh
- 1983 - 1985: Evaluation of Protective Clothing Materials. Sponsor: American Petroleum Inst. (2yrs; \$75K), Co-PI: Vo-Dinh; PI: Gammage
- 1983 - 1984: Evaluation of Screening Tools for Polynuclear Aromatic Pollutants in a Field Study. Sponsor: US EPA and PEDCO Environmental, Inc.; ERD-82-190 (1 yrs; \$75K), PI: Vo-Dinh

### **CHAIRMANSHIP, PROFESSIONAL COMMITTEE, AND RELATED ACTIVITIES:**

#### Research Grant Review Committee:

Chaired the 2007 NIH study session panel on the Quantum Grants program; Member of various NIH Review Committees on numerous panels and study groups related to biomedical engineering, cancer research, biomedical instrumentation, molecular imaging, and nanobiotechnology (1998-present).

Member of NSF Review Committee on various panels related to sensors and biomedical engineering (1999- present).

Invited reviewer of the European Union (EU) research program on nanobiotechnology, Vienna (Austria) October 22-23, 2006)

Invited reviewer of grants and contracts for the American Chemical Society, Department of Energy, National Institutes of Health, National Science Foundation, and the Petroleum Research Fund (1995 - present).

Member of U.S. Environmental Protection Agency ASRL Peer Review Committee (1985 - present).

Member of NIEHS Site Review Committee - NIEHS Center Grant - University of Cincinnati (1990).

Member of NIH Review Committee on NIH Shared Instrumentation Grant Program (1988).

Co-chair, EPA Peer Review Committee, Environmental Chemistry and Physics on Air Toxics Program, Raleigh, NC (1994 -1995).

#### Chairmanship for National and International Conferences and Symposia:

Chairman of *Scientific Panel on Monitoring Instrumentation for Occupational Health Research Program*, Office of Health and Environmental Research, U.S. Department of Energy (1984).

Organizer and Co-Chairman, *Scientific Work Group on Review and Establishment of Database for Polycyclic Aromatic Hydrocarbons*, U.S. Department of Energy and Environment Canada (1985).

International Program Committee Member: *International Symposium on Polyaromatic Hydrocarbons* (1987-present).

Scientific Organizing Committee Member, SPIE's *Symposium on Laser Spectroscopy*, Los Angeles, CA (1988).

Co-Chairman, *Second Meeting on Polycyclic Aromatic Compounds Database*, Gaithersburg, MD (1986).

Co-Chairman, SPIE's *Symposium on Laser Spectroscopy*, Fluorescence Detection II Conference, Los Angeles, CA, January 10, 1988.

Chairman, *ASTM Workshop on Luminescence Spectroscopy*, Oak Ridge National Laboratory, Oak Ridge, TN, June 3, 1988.

Chairman, *Symposium on Laser-Based Approaches in Luminescence Spectroscopy*, FACSS Meeting, Boston, MA, Oct 30-Nov 4, 1988.

Co-Chairman, *Conference on Fluorescence Detection II*, SPIE Meeting, Los Angeles, CA, Jan. 15-19, 1989.

Chairman, *Symposium on Laser-Based Molecular Spectroscopy*, FACSS Meeting, Chicago, IL, October 1-5, 1989.

Co-Chairman, *ASTM Symposium on Spectroscopy and Fiberoptics*, Las Vegas, Nevada, April 30-31, 1990.

Co-Chairman, *Symposium on Laser-Based Molecular Spectroscopy*, FACSS Meeting, Cleveland, Ohio, October 7-12, 1990.

Program Committee Member: *IVth International Symposium on Quantitative Luminescence Spectrometry*, Ghent (Belgium), May 27-31, 1991.

Chairman, *Conference on Methods and Technologies for Environmental and Process Monitoring*, Los Angeles, California, Jan. 19-21, 1992.

Chairman, *Symposium on Optical Fiberoptics Sensors*, 1992 Pittsburgh Conference, March 17, 1992.

Chairman, *International Conference on Monitoring Toxic Chemicals and Biomarkers*, Berlin (Germany), June 22-25, 1992.

Honorary President, *International Symposium on Analytical Sciences*, Deauville (France), May 5-7, 1993.

Program Committee Member, *International Symposium on Polycyclic Aromatic Compounds*, Tan-Tara, Missouri, September 8-10, 1993.

Honorary President, *Second International Symposium of Analytical Sciences*, Montreux (Switzerland), May 16-19, 1994

Organizing Committee and Session Chairman, *Workshop on Biomedical Technology Opportunities*, Atlanta, Georgia, April 3-4, 1995.

Honorary President, *Third International Symposium of Analytical Sciences*, Paris (France) March 12-16, 1995.

Chairman, *International Conference of Environmental Monitors and Hazardous Waste Sites*, Munich (Germany), June 19-23, 1995.

Chairman, *Symposium on Chemical Sensors and Biosensors*, FACSS Meeting, Cincinnati, Ohio, October 15-18, 1995.

Co-Chairman, *Conference on Biomedical Sensing Imaging and Tracking*, San Jose, CA, January 30-31, 1996, 1997.

Chairman, *Conference on Advanced Environmental Monitoring Technologies*, Denver, CO, August 6-8, 1996.

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems*, San Jose, California, January 1998.

International Steering Committee Member, *EUROPTRODE IV*, International Conference on Optical Chemical Sensors and Biosensors, Munster (Germany), April 1998

Chairman, *International Conference on Environmental and Remediation Technologies*, Boston, MA, November 1998.

General Chair of the *SPIE's International Symposium on Environmental and Industrial Sensing* at Photonics East, Boston, MA, November 1998.

General Chair of the *SPIE's International Symposium on Environmental and Industrial Sensing* at Photonics East, Boston, MA, November 1999.

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems II*, San Jose, California, January 1999.

General Chairman of the *SPIE's International Symposium on Environmental and Industrial Sensing* at Photonics East, Boston, MA, November 2000.

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems III*, San Jose, California, January 2000.

International Steering Committee Member, *EUROPTRODE V*, International Conference on Optical Chemical Sensors and Biosensors, Lyon (France), April 2000

General Chairman of the *SPIE's International Symposium on Environmental and Industrial Sensing* at Photonics East, Boston, MA, November 2000.

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems IV*, San Jose, California, January 2001.

Scientific Advisory Board, *Biochips 2001 Conference*, Brooklyn, NY, March, 2001.

General Chairman of the *International Symposium on Environmental and Industrial Sensing* at Photonics East 2002, Boston, MA, November 2001.

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems V*, San Jose, California, January 2002

International Steering Committee Member, *EUROPTRODE VI*, International Conference on Optical Chemical Sensors and Biosensors, Manchester (United Kingdom), April 2002

Steering Committee Member and Session Chair, National Institute of Health, Bioengineering Consortium, *NIH BECON Symposium on Sensors for Biology and Medicine*, Bethesda, MD, June 24-26, 2002

Chairman, *Conference on Biomedical Diagnostic and Surgical Assist Systems VI*, San Jose, California, January 25-27, 2003

International Program Committee Member, *ASIASENSE 2003*, Asian Conference on Sensors, Kuala Lumpur (Malaysia), July 14-18, 2003.

International Program Committee Member, *Colloquium Spectroscopicum Internationale XXXIII*, Granada (Spain), September 7-12, 2003

General Chairman, *Photonics East 2003*, Providence, RI, October 27-30, 2003.

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical System sIII*, San Jose, California, January 24-28, 2004

General Chairman, *Optics East 2004*, Philadelphia, PA, October 24-29, 2004.

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems II*, San Jose, California, January 22-24, 2005

Chairman, *Conference on Plasmonics in Biology and Medicine*, San Jose, California, January 22-24, 2005

Organization Committee Member, *CLEO/Europe 2005*, Biophotonics Topics, Munich (Germany), June 12-17, 2005

Organization Committee Member, *Conference on Advances on Optics for Biotechnology, Medicine and Surgery*, Copper Mountain, CO, July 24-28, 2005

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems IV*, San Jose, California, January 21-24, 2006

Chairman, *Conference on Plasmonics in Biology and Medicine*, San Jose, California, January 22-24, 2006

International Steering Committee Member, *EUROPTRODE VII*, International Conference on Optical Chemical Sensors and Biosensors, Tubingen (Germany) April 2006

General Symposium Co-Chairman, *SPIE Optics East 2006 Symposium*, Boston, MA, October 1-4, 2006.

Chairman, *2006 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, September 28-29, 2006

Member of Board of Visitors, Army Research Organization (ARO), Electrooptics Division Program Review Meeting, Research Triangle Park, North Carolina, November 17, 2006.

International Advisory Committee Member, *Ninth International Conference on Optics Within Life Sciences*, National Yang-Ming University, Taipei (Taiwan), November 26-29, 2006

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems V*, San Jose, California, January 21-24, 2007

Chairman, *Conference on Plasmonics in Biology and Medicine*, San Jose, California, January 22-24, 2006

General Symposium Co-Chairman, *SPIE Optics East 2007 Symposium*, Boston, MA, September 9-12, 2007.

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems V*, San Jose, California, January 19-21, 2007

Chairman, *2007 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, October 11-12, 2007

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems VI*, San Jose, California, January 20-21, 2008

Chairman, *Conference on Plasmonics in Biology and Medicine V*, San Jose, California, January 22-23, 2008

International Steering Committee Member, *EUROPTRODE VIII, International Conference on Optical Chemical Sensors and Biosensors*, Dublin (Ireland), March 30-April 4, 2008

Co-Chair, *Symposium on Nanophotonics*, IEEE/LEOS Summer Topical Meetings, Acapulco (Mexico), July 21-23, 2008.

Chairman, *2008 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, October 13-14, 2008

Co-Chair, *Symposium on Bio-Inspired Materials: Principles and Applications*, Annual Meeting of the Materials Research Society, Boston, MA, December 1-4, 2008

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems VII*, San Jose, California, January 25-26, 2009

Chairman, *Conference on Plasmonics in Biology and Medicine VI*, San Jose, California, January 26-27, 2009

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies VI*, Orlando, Florida, April 13-14, 2009

International Program Committee Member, *Second Symposium on Topical Problems of Biophotonics*, Novgorod–Samara (Russia), July 19-24, 2009.

Chairman, *2009 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, October 6, 2009

International Steering Committee Member, *EUROPTRODE X, International Conference on Optical Chemical Sensors and Biosensors*, Prague (Tcheque Republic), March 28-31, 2010.

International Advisory Committee Member, *10th International Conference on Fiber Optics and Photonics, PHOTONICS 2010*, Guwahati (India), December 11-15, 2010

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems VIII*, San Jose, California, January 24-26, 2010

Chairman, *Conference on Plasmonics in Biology and Medicine VI*, San Jose, California, January 26-27, 2010

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies VI*, Orlando, Florida, April 2-3, 2010

Chairman, *2010 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, October 27-28, 2010

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems IX*, San Jose, California, January 22-24, 2011

Chairman, *Conference on Plasmonics in Biology and Medicine VIII*, San Jose, California, January 23-24, 2011

International Program Committee Member, SPIE Eco-Photonics Symposium, Strasbourg (France), March 28-31, 2011.

International Steering Committee Member, *EUROPTRODE XI, International Conference on Optical Chemical Sensors and Biosensors*, Barcelona (Spain), April 1-4, 2012.

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies VIII*, Baltimore, MD, April 25-26, 2011

Chairman, *2011 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, October 10-11, 2011

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems X*, San Jose, California, January 23-24, 2012

Chairman, *Conference on Plasmonics in Biology and Medicine IX*, San Jose, California, January 24-25, 2012

Chair, Session on Biomedical Applications of Plasmonics, *International Conference META 12*, Paris (France), April 18-22, 2012

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies IX*, Baltimore, MD, April 26-27, 2012

Member of the Scientific Advisory Board, *Biomedical Sciences and Engineering Center*, Oak Ridge National Laboratory (2012-present)

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems XI*, San Francisco, California, - February 2-5, 2013

Chairman, *Conference on Plasmonics in Biology and Medicine X*, San Francisco, California, February 2-5, 2013

Chairman, *2013 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 11-12, 2013

Member of the *US National Academies Panel on Sensors and Electron Devices*, US National Academies, (2011-present)

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems XII*, San Jose, California, February 1-2, 2014

Chairman, *Conference on Plasmonics in Biology and Medicine XI*, San Jose, California, February 2-3, 2014

Chairman, *2014 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 11-12, 2014

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies X*, Baltimore, MD, May 6-4, 2014

International Steering Committee Member, *EUROPTRODE XII, International Conference on Optical Chemical Sensors and Biosensors*, Athens (Greece), April 13-16, 2014.

Member of the Advisory Board of the *United Nations (UN) Committee on the 2015 International Year of Light (IYL2015)*, proclaimed by the UN General Assembly 68th Session, 2015.

Chairman, *Conference on Advanced Biomedical Diagnostic and Clinical Systems XII*, San Jose, California, February 7-8, 2015

Chairman, *Conference on Plasmonics in Biology and Medicine XI*, San Jose, California, February 8-9, 2015

Chairman, *2015 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 9-10, 2015

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies X*, Baltimore, MD, April 20-22, 2015

International Scientific Committee Member, *Fiat Lux International Conference*, June 3-5, 2015, Rome (Italy)

Member Committee on Biophotonics, *European Photonics Industry Consortium (EPIC)*, (2105 to present)

Chairman, *2016 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 14-15, 2016

International Steering Committee Member, *EUROPTRODE XIII, International Conference on Optical Chemical Sensors and Biosensors*, Graz (Austria), March 20-26, 2016.

Scientific Committee Member, 14th Annual World Congress of Society for Brain Mapping and Therapeutics, Silicon Valley, California, March 30- April 1, 2017.

Chairman, Conference on Advanced Biomedical Diagnostic and Clinical Systems XV, San Francisco, California, - February 13-18, 2017

Chairman, *Conference on Plasmonics in Biology and Medicine XIII*, San Francisco, California, February 13-18, 2017

Chairman, *2017 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 13-14, 2017

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies XIV*, Anaheim, CA, April 21-22, 2017

Chairman, Conference on Advanced Biomedical Diagnostic and Clinical Systems XVI, San Francisco, California, - January 29-30, 2018

Chairman, Conference on *Plasmonics in Biology and Medicine XV*, San Francisco, California, January 29, 2018

Chairman, *2018 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 11-12, 2018

International Steering Committee Member, *EUROPTRODE XVI, International Conference on Optical Chemical Sensors and Biosensors*, Naples (Italy), March 25-28, 2018.

Chairman, *Conference on Plasmonics in Biology and Medicine XVI*, San Francisco, California, February 1-2, 2019

Chairman, *2019 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 11-12, 2019

Chairman, *Conference on Advanced Environmental, Chemical, and Biological Sensing Technologies XV*, Baltimore, Maryland, April 14-16, 2019

Chairman, *2020 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 9-10, 2020

International Steering Committee Member, *EUROPTRODE XV International Conference on Optical Chemical Sensors and Biosensors*, November 28-December 1, 2021, Warsaw (Poland)

Chairman, *Conference on Plasmonics in Biology and Medicine XVII*, San Francisco, California, February 2-3, 2020

Chairman, *2021 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, March 16-18, 2021

Chairman, *Conference on Plasmonics in Biology and Medicine XVIII*, San Francisco, California, March 6-11, 2021

Chairman, *2022 Symposium on Frontiers in Photonics Science and Technology*, Fitzpatrick Institute of Photonics, Duke University, Durham, North Carolina, May 7-8, 2022

Chairman, *Conference on Plasmonics in Biology and Medicine XIX*, San Francisco, California, January 23-24, 2022

Chairman, *Conference on Plasmonics in Biology and Medicine XX*, San Francisco, California, January 29-30, 2023

International Steering Committee Member, *EUROPTRODE XVI, International Conference on Optical Chemical Sensors and Biosensors*, March 24-March 27, 2024, Birmingham (United Kingdom)

## **TEACHING AND ACADEMIC-RELATED ACTIVITIES:**

R. Eugene and Susie E. Goodson Distinguished Professor of Biomedical Engineering and Professor of Chemistry, Duke University, Durham, North Carolina

Direct graduate research programs, develop and teach courses at the Department of Biomedical Engineering and Department of Chemistry, Duke University. The courses involve topics on “Advances in Photonics”, “Biosensors”, and “Analytical Chemistry” (2006-present).

Awarded the *Certificate of Excellence in Teaching*, Duke University, Pratt School of Engineering (2015).

Distinguished Visiting Professor, University of Florida, Gainesville, Florida

Invited Distinguished Visiting Professor at the Chemistry Department, University of Florida, Gainesville, FL, for the 2004 Spring Semester. Taught a series of lectures on “Advanced Biophotonics: A New Generation of Tools for Environmental and Biomedical Applications” and “Nanosensor Technologies”; conducted mentoring sessions with graduate students.

Professor (Adjunct Position) University of California – San Francisco (UCSF) Medical School

Co-direct research on in-vivo monitoring brain injury at the UCSF Department of Neurosurgery. The research deals with the development of a non-invasive diagnostic approach based on low-frequency ultra-sound and photoacoustic techniques (2000 - present).

Professor (Adjunct Position), University of Tennessee/Postdoctoral and Graduate Research Supervisor

Supervised, directed and co-directed M.S. and Ph.D. research projects for students and postdoctoral fellows at Oak Ridge National Laboratory and The University of Tennessee. Research topics deal with the development of novel analytical techniques for environmental studies, and biochemical research. (1980 - present).

Visiting Professor, University of Rome, Italy

Invited Visiting Professor at the University of Rome “La Sapienza,” Rome, Italy in the 1999 Spring Semester; Taught a series of lectures on “Advanced Spectroscopic Techniques and Sensors for Environmental and Biomedical Applications.

Undergraduate Teaching:

Taught a General Physics Laboratory course for undergraduate students majoring in chemistry and physics at the Ecole Polytechnique Federale, Lausanne (EPFL). Topics included theory and experiments in general mechanics, optics, and thermodynamics (1968 - 1970).

Taught a General Physical Chemistry Laboratory course for undergraduate students majoring in chemistry and physics at the Swiss Federal Institute of Technology, Zurich (Switzerland). Topics included theory and experiments in general spectroscopy, thermodynamics, separation techniques, optics, and thermodynamics (1971- 1975).

Directed Summer Student Research Projects for the Oak Ridge Associated University and the Great Lakes Colleges Association. Research topics involved the development of new analytical methods for environmental and biomedical analysis (1980 - 2006).

Taught undergraduate and graduate courses on Biosensors and Advances in Photonics, Duke University (2007 to present)

Graduate Teaching:

Currently teaching a course on Biosensors and a course on Advances in Photonics for graduate students and senior undergraduate students at Duke University (2006-present)

Taught a course on Biophysical Chemistry for students pursuing Ph.D. degrees in biochemistry and biology at the Graduate School of Biomedical Sciences, University of Tennessee, Knoxville. Subjects included biophysical analytical and spectrochemical techniques for macromolecules: diffusion, sedimentation, electrophoresis, chromatography, molecular spectroscopies, X-ray, and microscopy (1994 - 1999).

Taught an Introduction Course to Analytical Methods for students pursuing a postgraduate degree in analytical chemistry at the University of Florida, Off-campus Program in Jacksonville, Florida. Subjects included theory and practice for fluorescence, phosphorescence, ultraviolet, infrared, and mass spectrometries (1975 - 1976).

Taught a General Physical Chemistry laboratory course for graduate students in natural life sciences at ETH, the Swiss Federal Institute of Technology in Zurich, Switzerland. Subjects included electrochemistry, infrared, luminescence spectrometries, and general thermodynamics (1971 - 1975).

Served on committees for developing teaching curricula for the Graduate School of Biomedical Sciences and the Graduate School of Genomic Science and Technology at the University of Tennessee.

Taught undergraduate and graduate courses on Biosensors and Advances in Photonics, Duke University (2007 to present)

#### American Chemical Society (ACS) Short Course

Developer and instructor of the ACS short course on "Spectroscopy for Chemical Analysis: Rapid Screening and Advanced Techniques." (1989 - 1991).

#### Special Field Program for High School Science and Mathematics and Biotechnology:

Directed special Summer Field Programs sponsored by Oak Ridge National Laboratory, aimed to improve the academic levels in high schools and to promote excellence in science and mathematics teaching in Tennessee (1987 - present).

Served on the Educational Committee, American Institute of Chemists, Tennessee Section, and initiated a Traveling Educational Videotape Showing Program ("The World of Chemists") for high school teachers to increase interest in science education (1989 - present).

Served on the Tennessee Department of Education Task Force to establish a new curriculum in Biotechnology for High School Education (1990).

#### Thesis Research Director of Graduate Students

Directed Ph.D. Research Projects for students in the Department of Biomedical Engineering and Department of Chemistry, Duke University (2006 - present).

Directed Ph.D. Research Projects for students in the Chemistry Department, the Graduate School of Biomedical Sciences, and the Graduate School of Genomic Science and Technology at the University of Tennessee Knoxville (1980 - present).

Number of Ph.D. dissertations supervised: 12 (Duke University), 5 (ORNL/University of Tennessee, before joining Duke)

#### Postdoctoral Associates Supervised

D. W. Abbott, A. Alak, S. Atta, L.R. Allain, J. Bello, S. Burrows, A. D. Campiglia, K. Chen, Y. F. Cheng, Z. Chi, M. Culha, B. M. Cullum, A. Dhawan, P. D. Enlow, A. Fales, N. Gandra, A. M. Helmenstine, D. M. Hueber, A. S. D. S. Indrasekara, N. Isola, R. Jagannathan, R. W. Johnson, D. A. Landis, B. Lauly, A. Leonardo, Q. Liu, Y. liu, J. Mobley, M. Morena-Bondi, V. A. Narayanan, A. Pal, T. Pal, G. Reddy, J. K. Register, J. Scaffidi, J.M. Song, C. L. Stevenson, D. Stratis-Cullum, P. Strobbia, W. S. Sutherland, N. Taranenko, M. Wabuye, F. Yan, H. Yuan, Y. Zhang

#### PROFESSIONAL ASSOCIATION ACTIVITIES

- President, *International Society on Polycyclic Aromatic Compounds* (ISPAC) (1991-1993)

- Chairman of *IUPAC Commission on V-4 on Spectrochemical and Other Optical Procedures for Analysis*, (1991-2000)
- Chairman, *ASTM Subcommittee on Fiberoptics*, E13.09 (1988 - 2003).
- Member of Task Forces and Field Evaluation Teams for various synfuel industrial sites: H-coal pilot plant, Catlettsburg, Kentucky; gasifier at the University of Minnesota, Duluth, Minnesota; coal liquefaction plant; Morgantown, West Virginia (1979 - 1983).
- Member of Committee on Biotechnology Program, Oak Ridge National Laboratory (1993).
- Secretary of Technical Committee TT-6 in Energy-Environmental Interactions, Member of Technical Committees TP-6 on Ambient Measurements, TT-7 on Indoor Air, and TT-9 on Air Toxics, Air Pollution Control Association (1984-89).
- Member of Technical Committee on Indoor Air Quality, American Industrial Hygiene Association (1985-1990).
- Member of the Board of Directors, Air Pollution Control Association, East Tennessee Chapter (1985-1988).
- Secretary/Treasurer, *American Institute of Chemists*, East Tennessee Section (1988-1992)

### **TECHNOLOGY TRANSFER AND INDUSTRY-RELATED ACTIVITIES**

Member of the Board of Directors: Biochem Tech, Inc.

Several technologies developed at ORNL by Dr. Vo-Dinh have been licensed and commercialized by private companies and technology start-ups:

- Environmental Systems Corporation: the fiberoptic luminoscope
- Gamma-Metrics, Inc.: the SERS Toxic Chemical Analyzer (TCA™)
- Serotech, Inc.: the SERODS Optical Data Storage System
- Gargantuan Storage Devices, Inc: SERODS
- Pioneer Surgical Inc.: Cancer diagnosis (gastrointestinal tracts)
- Optical Biopsy, LLC: Cancer diagnosis (cervical tracts)
- Spectra Diagnostics Inc.: Cancer diagnostics (gastrointestinal tracts)
- IdentiChem. LLC: SERS for medical diagnostics
- HealthSpex, Inc.: Biochip for medical diagnostics
- ID Systems, LLC: Ramits technology for chemical, biological and medical sensing
- Nano Detection Technology (biochip technology for diagnostics)
- Immunolight, LLC (cancer nanotherapy)
- Minutia Company (stem cell therapy)

Served as consultant and subcontracting services for: ARCO Products Company, Biochem Tech, Inc.; Eli Lilly; Environmental Systems Corporation; Jetalon Solutions, Inc.; Monsanto; Optical Biopsy; PEDCo Environmental, Inc.; Radian Corporation; Rockwell International, Rohm and Haas Company, Shell Company, Thompson Cancer Survival Center.

### **MEDIA/PRESS COVERAGE**

Dr. Vo-Dinh's research activities have been highlighted in a large number of reports and news articles from many national and international publications (*Science, Nature, New York Times, Wall Street Journal*), and radio and television shows. Television media coverage includes:

- PBS Television: *Frontiers in Medicine* (biochip technology)
- CNN: *Technology Week* (rapid field spot test for PCBs and environmental pollutants)
- CNN: News laser optical biopsy for cancer diagnostics
- CNBC Television: *Profiles of America* (laser optical biopsy for cancer diagnostics)
- National Public Radio (NPR): SERODS optical data storage

### **CIVIC AND COMMUNITY ACTIVITIES:**

- Member of United Way Leadership Giving Program (2004-present)
- Tennessee Department of Education, Committee on Biotechnology Curriculum, 1990 - 1992
- Stage Committee, "Fantasy of Trees," Children's Hospital, Fund Raising Organization, 1989
- President, Vietnamese Association and Friends in East Tennessee, 1978-1979
- United Way Campaign Committee, ORNL, 1979
- Editor, Student Newsletter, "Culture and Technology," Zurich, Switzerland, 1970-1972.

**LANGUAGES:** Vietnamese  
English  
French  
German  
Spanish

**INVITED LECTURES, PLENARY LECTURES, AND KEYNOTES**

- 1976 First ORNL Workshop on Exposure to Polynuclear Aromatic Compounds, Oak Ridge National Laboratory
- 1977 Second ORNL Workshop on Exposure to Polynuclear Aromatic Compounds, Oak Ridge National Laboratory
- 1978 Ninth Material Research Symposium, Gaithersburg, Maryland, National Bureau of Standards  
American Chemical Society Instrumentation Award Symposium, Anaheim, California  
Symposium on the Industrial Hygiene Needs for the Coal and Oil Shale Industries, Brookhaven National Laboratory, Upton, New York
- 1979 Pacific Chemical Congress, Honolulu, Hawaii  
Symposium on Recent Developments and Future Trends in Fluorescence Spectroscopy, Pittsburgh Conference, Cleveland, Ohio  
Wake-Forest University, Winston-Salem, North Carolina
- 1980 Second EPA Symposium on Process Measurements for Environmental Assessment, Atlanta, Georgia  
Symposium on Instrumentation and Controls for Fossil Energy Processes, Virginia Beach, Virginia  
Workshop on Portable Instrumentation for Health and Safety, Fallen Leaf Lake, California  
Symposium on Luminescence Spectroscopy, Joint SE-SW American Chemical Society Meeting, New Orleans, Louisiana
- 1981 Annual Meeting of Instrument Society of America, St. Louis, Missouri  
EPA National Symposium on Monitoring Hazardous Organic Pollutants in Air, Raleigh, North Carolina  
Chemical Systems Laboratory, Aberdeen Proving Ground, Maryland  
National Institutes of Occupational Safety and Health, Cincinnati, Ohio
- 1982 ASTM Symposium on New Directions in Molecular Luminescence, Atlantic City, New Jersey  
Annual Technical Meeting of the Institute of Environmental Sciences, Atlanta, Georgia  
EPA National Symposium on Recent Advances in Pollutants Monitoring of Ambient Air and Stationary Sources, Raleigh, North Carolina  
Symposium on Identification and Analysis of Organic Pollutants in Air, Kansas City, Missouri  
Honeywell, Inc., Clearwater, Florida  
The University of Tennessee, Knoxville, Tennessee  
Symposium on Advances in Fluorescence and Phosphorescence, New York, New York
- 1983 National Institutes of Occupational Safety and Health, Cincinnati, Ohio  
U.S. Environmental Protection Agency, Environmental Systems Laboratory, Research Triangle Park, North Carolina  
Harvard Workshop on Evaluation of Monitoring Equipment for Personal Exposure Assessment, Harvard University  
Specialty Conference on Measurement and Monitoring of Non-Criteria Toxic Contaminants in Air, Chicago, Illinois
- 1984 Symposium on Recent Advances in Instrumentation and Analytical Methods for Ambient Gaseous Toxic Substances, San Francisco, California  
Workshop on Occupational Health Research, Knoxville, Tennessee  
International Chemical Congress, Honolulu, Hawaii

- DOE Workshop on Portable Instrumentation and Dosimeter, Knoxville, Tennessee  
 University of Dijon, Dijon (France)  
 Laboratory of Physical Chemistry, ETH, Zurich (Switzerland)  
 Joint European Communities Research Center, Ispra, (Italy)  
 World Health Organization, Geneva, (Switzerland)  
 University of Stockholm, Stockholm, (Sweden)
- 1985 Symposium on Analytical Chemistry of Nitrated Polynuclear Aromatic Compounds, Miami, Florida  
 Chemical Research and Development Center, Aberdeen Proving Ground, Maryland  
 Symposium on Indoor/Outdoor Air Pollution Relationships, West Long Branch, New Jersey  
 U.S. Environmental Protection Agency, EMSL, Las Vegas, Nevada  
 Workshop on Polycyclic Aromatic Database, Oak Ridge, Tennessee  
 Air Pollution Control Association Annual Meeting, Detroit, Michigan  
 Scientific Conference on Chemical Defense Research, Edgewood, Maryland
- 1986 National Cancer Institute, Bethesda, Maryland  
 Symposium on Chemical Basis for Toxicological Response to Synthetic Fuels, ACS Meeting, New York  
 Symposium on Measurements of Toxic Air Pollutants, Research Triangle Park, North Carolina  
 Air Pollution Control Association Annual Meeting, Minneapolis, Minnesota  
 Eli Lilly Research Center, Indianapolis, Indiana  
 Workshop on Recent Advances in Monitoring Techniques for DNA-Adducts, Washington, DC  
 Symposium on Advances in Raman Spectroscopy, FACS Meeting, St. Louis, Missouri  
 National Bureau of Standards, Gaithersburg, Maryland
- 1987 Vanderbilt University, Nashville, Tennessee - February, 1987  
 Marquette University, Milwaukee, Wisconsin - March 6, 1987  
 American Industrial Hygiene Meeting, Montreal (Canada) - May 31-June 6, 1987  
 Colloquium Spectroscopicum Internationale, Toronto (Canada) - June 21-26, 1987  
 American Chemical Society Annual Meeting, New Orleans, Louisiana, Aug 31-Sept. 4, 1987  
 Symposium on Microphase Luminescence Spectroscopy, FACS Meeting, Detroit, Michigan,  
 Oct. 5-8, 1987  
 National Institute of Occupational Safety and Health, Cincinnati, Ohio - July 16, 1987  
 International Symposium on Polyaromatic Hydrocarbons, Gaithersburg, Maryland, Sept. 23-25, 1987
- 1988 Symposium on Laser Spectroscopy, SPIE's OE/LASE 88, Los Angeles, California, Jan. 10-15, 1988  
 Emory University, Atlanta, Georgia - Feb. 2, 1988  
 Association for the Advancement on Medical Instrumentation Annual Meeting, Washington, D.C.,  
 May 15-18, 1988  
 International Laser Science Conference, Atlanta, Georgia - Oct. 2-4, 1988  
 Eastern Analytical Symposium, New York - Oct. 3-6, 1988  
 FACS Meeting, Boston, Massachusetts - Oct. 30 - Nov. 4, 1988  
 International Symposium on Screening Techniques, Las Vegas, Nevada - Oct. 9-13, 1988  
 NRC Workshop on Advances in Assessing Human Exposure to Airborne Pollutants, Yale  
 University - Oct. 19-20, 1988
- 1989 Conference on Fluorescence Detection III, SPIE Meeting, Los Angeles, CA, Jan. 15-19, 1989  
 ASTM Subcommittee on Fiber Optics Meeting, Atlanta, GA, March 7, 1989  
 State University of New York, Buffalo, NY, March 21, 1989.  
 International Course on Laser Spectroscopy, Malaga (Spain) May 22, 1989  
 University of Perpignan, Perpignan (France) May 29, 1989.  
 OE/SPIE Fiber's '89 Conference, Boston, MA, Sept. 5-8, 1989  
 International Symposium Polyaromatic Hydrocarbon, Gaithersburg, MD, Sept. 18-21, 1989  
 IUPAC International Conference, Lund (Sweden) August 11, 1989  
 German Environmental and Radiation Protection Agency (GSF), Munich (Germany), Aug. 16, 1989  
 Symposium on Laser-Based Molecular Spectroscopy, FACSS Meeting, Chicago, IL, Oct. 1-5, 1989  
 Rutgers University, Dec. 12, 1989.  
 Pacific Conference, Honolulu, Hawaii, December 18-21, 1989.
- 1990 Department of Defense, Washington, DC, February 8, 1990  
 AAAS Press Conference, New Orleans, Louisiana, February 16, 1990  
 ASTM Symposium on Spectroscopy and Fiber Optics, Las Vegas, Nevada, March 30, 1990

- University of Perpignan, Perpignan (France) June 15, 1990  
 SPIE Conference on Raman and Luminescence, San Diego, California, July 8-12, 1990  
 Shell Research Laboratories, Houston, Texas, September 11, 1990  
 OE/SPIE Fibers 90 Conference, San Jose, California, September 16-21, 1990  
 Symposium on Molecular Spectroscopy, FACSS Meeting, Cleveland, Ohio, October 7-12
- 1991 OE/LASE SPIE Conference in Laser Trace Detection Technique, Los Angeles, California, Jan 19-25, 1991  
 GammaMetrics, Inc., San Diego, California, Jan 24, 1991  
 US Environmental Pollution Agency, Las Vegas, Nevada, February 25-27, 1991  
 Pittsburgh Conference, Chicago, Illinois, March 3-7, 1991  
 ACS Annual Meeting, Atlanta, Georgia, April 14-18, 1991.  
 IUPAC General Assembly Meeting, Hamburg (Germany), August 5-8, 1991  
 International Symposium on Polyaromatic Hydrocarbons, Bordeaux (France), October 1-4, 1991  
 Iowa State University, DeMoines, Iowa, October 24, 1991  
 Florida State University, Tallahassee, Florida, October 1, 1991  
 Eastern Analytical Symposium, Somerset, New Jersey, November 12, 1991
- 1992 SPIE Conference on Environmental and Process Control Monitoring Technologies, Technologies, Los Angeles, California, January 20-23, 1992  
 Symposium on Optical Fiber-Optic Sensors, Pittsburgh Conference, New Orleans, Louisiana, March 11, 1992  
 International Conference on Monitoring Toxic Chemicals and Biomarkers, Berlin (Germany), June 22-25, 1992  
 Technical University of Munich, Munich (Germany), June 21, 1992  
 EC Research Center, Ispra (Italy), June 29, 1992  
 General Electric Research Center, Schenectady, New York, August 31, 1992  
 Spectroscopic Methods of Analysis Symposium, San Antonio, Texas, November 15, 1992  
 First International Congress of Medicine in the Oil Industry, Mexico City (Mexico), December 3-5, 1992
- 1993 Rohm and Hass Company, Philadelphia, Pennsylvania, April 14, 1993  
 Symposium of Analytical Sciences, Deauville (France), May 5, 1993  
 Harvard University, June 29, 1993  
 Massachusetts Institute of Technology, June 30, 1993  
 IUPAC General Assembly Meeting, Lisbon (Portugal), August 3-9, 1993  
 Annual FACSS Meeting, Detroit, Michigan, October 19, 1993  
 International Symposium on Polycyclic Aromatic Compounds, Tan-Tar, Missouri, September 9, 1993  
 Mire Corporation, JASON Meeting, La Hoya, California, July 9, 1993
- 1994 Symposium on Advances in Luminescence Spectroscopy, 1994, Pittsburgh Conference, Chicago, Illinois, March 3, 1994  
 Second European Symposium on Optical Chemical and Biosensors, Florence (Italy), April 20, 1994  
 University of Rome – La Sapienza, Department of Chemistry, Rome, Italy, April 25, 1994  
 Center for Chemical Sensors, University of Rome – Tor Vergata, Rome (Italy), April 26, 1994  
 Conference on Solid-State Memory Technologies, Pasadena, California, May 24, 1994  
 FACSS Analytical Symposium, Detroit, Michigan, October 4, 1994  
 Eastern Analytical Symposium, Somerset, New Jersey, November 11, 1994
- 1995 Conference on Laser Techniques for Diagnosis of Cancer and Other Diseases, San Jose, California, February 7-9, 1995.  
 WATTEC Conference on Energy, Knoxville, Tennessee, February 21, 1995  
 Biomedical Technology Opportunities: A Workshop, Atlanta, Georgia, April 3-4, 1995  
 Conference on Analytical Instrumentation, Madrid (Spain), April 5-7, 1995  
 Meeting on Photonics Technology Transfer Program, Orlando, Florida, April 24, 1995  
 International Conference on Environmental Monitors and Hazardous Waste, Munich

- (Germany), June 19-21, 1995  
 IUPAC General Assembly, Guilford (United Kingdom), August 4-11, 1995  
 Conference of the Optical Society of America, Portland, Oregon, September 10-14, 1995  
 Annual FACSS Meeting, Cincinnati, Ohio, October 15-18, 1995
- 1996 Conference on Biomedical Sensing, Imaging and Tracking Technologies, San Jose, January 30-31, 1996  
 Conference of the Optical Society of America, Orlando, FL, March 20-22, 1996  
 Europtrode Conference, Zurich (Switzerland), April 2-4, 1996  
 Conference on Aerosol Obscuration, Edgewood, MD, June 25-27, 1996  
 Conference on Advanced Environmental Monitoring Technologies, Denver, CO, August 6-8, 1996  
 International Conference on Raman Spectroscopy, Pittsburgh, PA, August 12-15, 1996  
 First Workshop on AOTF, University of Maryland, College Park, MD, September 24-25, 1996  
 Annual FACSS Meeting, Chicago, October 1-3, 1996
- 1997 Conference in Biomedical Sensing, Imaging and Tracking Technologies, San Jose, CA, February 10-12, 1997.  
 New York Academy of Sciences Conference on Optical Biopsy, New York, April 23-25, 1997.  
 NCI Conference on Breast Cancer, Washington, DC, May 1-2, 1997.  
 Advanced Technology for Trauma Care Conference, Ft. Walton Beach, FL, May 19-20, 1997.  
 EPA International symposium on analytical chemistry, Jekyll Island, GA, June 15-18, 1997.  
 American Society for Photobiology, St. Louis, MO, July 7-10, 1997.  
 Swiss Federal Institute of Technology, Zurich (Switzerland), September 1, 1997.  
 Symposium on Optical Sensors, Optical Society of America, Oct. 12-17, 1997, Long Beach, CA  
 Lester Wolfe Workshop in Laser and Medicine, MIT, Cambridge, MA, Oct. 31, 1997  
 Federal Multi-Agency Consortium on Imaging Technologies to Improve Women's Health, Washington, DC, Oct. 24, 1997  
 Annual FACSS Meeting, Providence, Rhode Island, October 29, 1997  
 Workshop on Measurement Issues for Nanometer Particles, Minneapolis, MN, Dec. 5-7, 1997
- 1998 Conference on Biomedical Sensing, Imaging and Tracking Technologies, San Jose, CA, Jan. 26-19, 1998  
 University of Tubingen, Tubingen (Germany), March 24, 1998, International Symposium on Analytical Chemistry, Dusseldorf (Germany), March 26, 1998  
 University of Hannover, Hannover (Germany), March 27, 1998  
 Europtrode Conference, Münster (Germany), April 1, 1998  
 HCI Conference, RNA/DNA Diagnostics, Washington, DC, May 19-21, 1998  
 National Institute of Occupational Health, Morgantown, West Virginia, July 22, 1998  
 Philip Morris, Richmond, Virginia, August 20, 1998.  
 Indiana University, Bloomington, Indiana, September 3, 1998
- 1999 Vanderbilt University, Nashville, Tennessee, March 1, 1999  
 Pittsburgh Conference, Orlando, Florida, March 8, 1999  
 GOMAC/HEART Conference, Monterey, California, March 9, 1999  
 University of Rome "La Sapienza," Rome (Italy), March 29-April 2, 1999  
 Virginia Commonwealth University, Richmond, Virginia, Annual Meeting of SPIE, Denver, Colorado, July 22, 1999  
 Colloquium Spectroscopicum Internationale, Ankara (Turkey), September 5-10, 1999  
 FACSS Meeting, Vancouver (Canada), October 26, 1999
- 2000 US Department of Agriculture, Athens, GA, March 21, 2000  
 University of South Carolina, March 31, 2000 (Weissman Lecture in Analytical Chemistry)  
 Europtrode Conference, Lyon, (France), April 17, 2000 (Plenary Lecture)  
 National Institute of Agronomy, University of Paris, Paris (France), April 21, 2000  
 Workshop on Advances in Optical Imaging for Biomedical Applications, Berlin, Germany, June 16, 2000  
 NIH Conference of Nanotechnology, Washington, DC, June 25-26, 2001

- 2001 Annual Meeting of Electrochemical Society, Washington, DC, March 23-25, 2001  
 Biochip 2001 Conference, New York, March 12, 2001  
 NCI Workshop on Probing Individual Cells, Washington, DC, March 13-14, 2001  
 BioInnova Conference, Montreal (Canada), March 14-15, 2001  
 Annual Meeting of American Chemical Society, April 3, 2001  
 HCI Conference on Microarrays, Macroresults, Boston, April 23, 2001  
 Harvard University, CIMIT Lecture, April 24, 2001  
 HCI Conference on Arrays and Molecular Labels, Washington, DC, May 17, 2001  
 SPIE Environmental and Industrial Sensing Symposium, Boston, MA, October 28-31, 2001
- 2002 Conference Biomedical Diagnostic, Guidance and Surgical Assist Systems, Conference Chair, San Jose, Jan. 2002  
 Conference on BeO Monitoring, Santa Fe, NM, February 12-14, 2002  
 Biochips Conference, Washington DC, MARCH 18-20, 2002  
 Eurotrode VI Conference, Manchester (United Kingdom) April 7-10, 2001  
 Institute of Agronomy, Paris (France), April 12, 2002  
 BECON Symposium on Sensors for Medical Applications, Washington DC, June 24-26, 2002  
 Gordon Conference on Lasers in Biology and Medicine, July 14-17, 2002  
 HCI Conference on Biomems and Nanotechnology, Columbus, September 6-7, 2002  
 Nanotechnology Symposium 2002, Nakazawa (Japan), Sep 12-15, 2002  
 University of Kyoto, Kyoto, September 17, 2002  
 Japan Advanced Institute of Science and Technology, Tokyo (Japan) September 20, 2002  
 FACCs Annual Conference on Analytical Chemistry, Providence, RI, October 14, 2002  
 SPIE Conference on Homeland Defense, Washington DC, Dec 10-12, 2002
- 2003 Conference on Biomedical and Clinical Diagnostic, Distinguished Visiting Professor Lectures San Jose, CA, January 27-28, 2003  
 University of Tennessee, Memphis, Tennessee, June 10, 2003  
 BIOCHIPS 2003, Boston, MA, June 12, 2003 (Plenary Lecture)  
 Stanford Photonics Workshop, Stanford University, CA, July 7-8, 2003  
 DARPA Workshop on Biosensors, California Institute of Technology, July 23, 2003  
 IGERT Photonics Research Center, SUNY Buffalo, July 25, 2003  
 World Congress on Biomedical Physics and Bioengineering, Sydney (Australia), August 24-29, 2003.  
 University of New South Wales, Sydney (Australia), September 2, 2003.  
 International Symposium on NanoBiotechnology: a Systems Approach, Okinawa (Japan), Oct. 12-17, 2003  
 SPIE Photonics East 2003, Providence, RI, Oct 26-29, 2003.  
 Cedars-Sinai Medical Center, Los Angeles, CA, November 11-12, 2003.  
 International Semiconductor Devices Research Symposium, Washington DC, Dec 10-12, 2003.
- 2004 University of Florida, University of Florida, Department of Chemistry, Spring Semester 2004, January 14-16, 2004 (Distinguished Visiting Professor Lectures)  
 Conference on Advanced Biomedical Diagnostic and Clinical Systems II, Conference Chair, San Jose, Jan. 25-29, 2004.  
 Conference on Plasmonics in Biology and Medicine I, Conference Chair, San Jose, January 25-29, 2004  
 First International Symposium on Micro & Nano Technology, March 14-17, Honolulu, HI (Keynote Lecture)  
 Eurotrode Conference, Madrid, Spain, April 5-8, Session Chair  
 Experimental Biology 2004, Washington DC, April 17-21, 2004  
 Stanford University, Palo Alto, CA, April 28, 2004  
 NATO-ASCOS 2004 International School of Quantum Electronics, Erice, Italy, July 30-Aug. 7, 2004  
 NATO Advanced Study Meeting, Ottawa, Canada, September 30, 2004  
 Optics East 2004, Philadelphia, PA, Oct. 24-27, 2004  
 Nanomaterials 2004 Conference, Stamford, CT, October 27, 2004  
 Wake Forest University, November 17, 2004  
 2<sup>nd</sup> Asian & Pacific Rim Symposium on Biophotonics, December 15-17, Taipei (Taiwan), (Plenary Keynote)

- 2005 Conference on Advanced Biomedical Diagnostic and Clinical Systems III, Conference Chair, San Jose, January 22-24, 2005  
 Conference on Plasmonics in Biology and Medicine II, Conference Chair, San Jose, January 22-24, 2005  
 Penn State University, College Station, PA, April 14, 2005  
 University of Virginia, Blacksburg, VA, April 15, 2005  
 International Conference on Coherent and Nonlinear Optics/International Conference on Lasers, Applications, and Technologies (ICONO/LAT), St. Petersburg (Russia), May 11-15, 2005 (Keynote Lecture)  
 Third International Conference on Materials for Advanced Technologies (ICMAT 2005), Singapore, July 3-8, 2005  
 DARPA Workshop on SERS and Nanoparticles, San Francisco, CA, July 29, 2005  
 Targeted Nanodelivery for Therapeutics and Molecular Imaging, Washington DC, August 22-23, 2005
- 2006 US-Indo Conference on Spectroscopy for National Security Application, Benares (India), Jan. 9-11, 2006 (Invited Lecture)  
 Conference on Advanced Biomedical Diagnostic and Clinical Systems IV, Conference Chair, San Jose, January 21-23, 2006  
 Conference on Plasmonics in Biology and Medicine III, Conference Chair, San Jose, January 22-23, 2006  
 DARPA Workshop on SERS Chem/Bio Sensors for Defense, Colorado Springs, CO, April 11-12, 2006  
 Nanotechnology Applications in Environmental Health Workshop, Raleigh, NC, April 20, 2006 (Keynote Lecture)  
 NIOSH Exposure Biology Workshop, Greensboro, NC, May 16-17, 2006  
 Annual Meeting of the American Chemical Society, San Francisco, CA, September 10-14, 2006  
 SPIE Optics East Symposium, Boston, MA, October 1-3, 2006
- 2007 Conference on Advanced Biomedical Diagnostic and Clinical Systems V, Conference Chair, San Jose, CA, Jan.21-22, 2007  
 Conference on Plasmonics in Biology and Medicine IV, Conference Chair, San Jose, CA, January 22-23, 2007  
 Pittsburgh Conference, Chicago, IL, February 25-27, 2007  
 Conference on Nanoscale Physics and Technology: the Interface with Medical and Biological Sciences, Univ. of Southampton, March 26-27, Southampton, United Kingdom-(Plenary Lecture)  
 Metropolitan Museum of Art, New York, NY, May 18, 2007  
 Engineering Conference International, Naples, FL, June 12-14, 2007  
 Hunter Chair Distinguished Lecture, Clemson University, November 30, 2007  
 Distinguished Lecture, Purdue University, December 5, 2007  
 Conference on Nanotechnology in Biology and Medicine, (Paris France), December 14, 2007
- 2008 Conference on Advanced Biomedical Diagnostic and Clinical Systems VI, Conference Chair, San Jose, January 20-21, 2008  
 Conference on Plasmonics in Biology and Medicine V, Conference Chair, San Jose, January 21-22, 2008  
 Pittsburgh Conference, New Orleans, LA, March 6-7, 2008  
 Spring Meeting of the Material Research Society, San Francisco, CA, March 24-28, 2008  
 Founders Lecture, Vanderbilt University, Nashville, TN, April 25, 2008  
 Meeting of the IEEE Laser Electro-Optics Society, Acapulco, (Mexico), July 20-24, 2008  
 Annual Meeting of the European Optical Society, Paris (France), Sep. 28-Oct. 3, 2008  
 Meeting of the IEEE Laser Electro-Optics Society, Newport Beach, CA, Sep 9-12, 2008  
 Fall Meeting of the Material Research Society, Boston, MA, Dec. 2-5, 2008
- 2009 Conference on Advanced Biomedical Diagnostic and Clinical Systems VII, Conference Chair, San Jose, Jan. 25-29, 2009  
 Conference on Plasmonics in Biology and Medicine VI, Conference Chair, San Jose, January 26-27, 2009  
 ORNL Conference on Biomedical Technology, Oak Ridge, TN, March 19-20, 2010  
 DARPA Microsystems Technology Office (MTO) Nano workshop, Sunriver, OR, July 7, 2010  
 Columbia University, Department of Radiology, July 15, 2010  
 Elcan Optical Technologies, Toronto, Canada, July 21-22, 2010  
 2009 SouthEastern Optical Conference, Durham, North Carolina, December 15, 2010-(Plenary Lecture)

- 2010 Conference on Advanced Biomedical Diagnostic and Clinical Systems VIII, Conference Chair, San Jose, Jan. 24-25, 2010  
 Conference on Plasmonics in Biology and Medicine VII, Conference Chair, San Jose, January 25-26, 2010  
 Metropolitan Biophotonics Symposium 2010. Washington DC, March 22, 2010, (Keynote Lecture)  
 Ophthalmology Technology Day, GlaxoSmithKline, September 21, 2010  
 International Conference on Biophotonics 2, Quebec City (Canada), Sep 25-25, 2010  
 FACCS Annual Meeting, Raleigh, Oct 17-21, 2010  
 Pacifichem 2010 Congress, Honolulu, HI, December 14-21, 2010
- 2011 Conference on Advanced Biomedical Diagnostic and Clinical Systems IX, Conference Chair, San Francisco, CA, Jan. 23-25, 2011  
 Conference on Plasmonics in Biology and Medicine VIII, Conference Chair, San Francisco, CA, January 24-26, 2011  
 AAAS Annual Meeting, Symposium on Lasers in Surgery, Regenerative Medicine and Medical Device Fabrication, Washington DC, February 19, 2011  
 NC Nanotechnology Commercialization Conference, Charlotte, NC, March 29-30, 2011  
 SPIE Conference on Optics & Electronics, Prague (Czech Republic), April 18-20, 2011  
 International Topical Meeting on Information Photonics, Ottawa (Canada), May 18-20, 2011  
 ACS Award Symposium, ACS Analytical Chemistry Division, Denver, CO, August 28-29, 2011  
 Seoul National University. Seoul (South Korea), November 7, 2011  
 5th IEEE International Conference on Nano/Molecular Medicine and Engineering (IEEE-NANOMED 2011), Jeju Island, December 9-12, 2011 (Plenary Lecture)
- 2012 Conference on Advanced Biomedical Diagnostic and Clinical Systems X, Conference Chair, San Francisco, California, January 23-24, 2012  
 Conference on Plasmonics in Biology and Medicine IX, Conference Chair, San Francisco, California, January 24-25, 2012  
 The Pennsylvania State University, Penn State Distinguished Lecture Series in the Life Science, March 2, 2012 (Distinguished Lecture)  
 University of Pennsylvania, Advanced in Biomedical Optics Distinguished Lecture Series, April 2, 2012 (Distinguished Lecture)  
 Biosensors & Bioelectronics- 2012 International Conference, Las Vegas, NV, May 14-16, 2012 (Keynote Lecture)  
 International Conference META 12, Paris (France), April 18-22, 2012  
 22<sup>nd</sup> International Conference on Optical Fiber Sensors-OFS-22, Beijing, China, October 15-19, 2012 (Plenary Lecture)  
 Shanghai Jiao Tong University, Shanghai (China) October 19, 2012
- 2013 Conference on Advanced Biomedical Diagnostic and Clinical Systems XI, Conference Chair, San Francisco, California, February 2-5, 2013  
 Conference on Plasmonics in Biology and Medicine X, Conference Chair, San Francisco, California, February 2-5, 2013  
 Florida International University, Miami, Florida, June 3, 2013 (Distinguished Lecture)  
 2013 Material Research Society Fall Meeting, Boston, MA, December 1-3, 2013
- 2014 Conference on Advanced Biomedical Diagnostic and Clinical Systems XII, Conference Chair, San Francisco, California, - February 1-2, 2014  
 Conference on Plasmonics in Biology and Medicine XI, San Francisco, Conference Chair, California, February 2-3, 2014  
 5th International Conference on Biomedical Engineering in Vietnam, Ho Chi Minh City, Vietnam, June 16-18, 2014 (Plenary Speaker)  
 University of Montreal, Montreal, Canada, Sep. 12, 2014
- 2015 Conference on Advanced Biomedical Diagnostic and Clinical Systems XIII, Conference Chair, San Francisco, California, - February 7-8, 2015  
 Conference on Plasmonics in Biology and Medicine XII, Conference Chair, San Francisco, California, February 8-9, 2015

- 2015 Pittcon Conference, March 8 – 12, New Orleans, LA  
 IPA 2015 / SPIE Biophotonics South America, Rio de Janeiro, Brazil, May 22 - May 26, 2015 (Plenary Speaker)  
 2015 SCix 2015 Conference, Rhode Island, September 27- October 5, 2015.  
 Institut Langevin, ESCPI ParisTech, Paris, France, October 26, 2015
- 2016 Conference on Advanced Biomedical Diagnostic and Clinical Systems XIV, Conference Chair, San Francisco, California, - February 13-18, 2016  
 Conference on Plasmonics in Biology and Medicine XIII, Conference Chair, San Francisco, California, February 13-18, 2016  
 DOE Genomic Science Program (GSP)-PI meeting, Washington DC, March 6-8, 2016 (invited Lecture)  
 University of Washington, Seattle, WA, April 25-26, 2016 (Invited Lecture)  
 Annual Symposium Personalized Nanomedicine, Miami, May-19-20, 2016 (Invited Lecture)  
 DOE Bioimaging Science Program Annual PI Meeting, Washington DC, August 2-3, 2016, Gaithersburg, MD (Plenary Lecture)  
 Biological Systems Science Division (BSSD) Integration Workshop, Rockville, MD, September 21-23, 2016 (Plenary Lecture)  
 Euro-Global Summit on Toxicology and Applied Pharmacology, Rome (Italy), October 24-26, 2016 (Keynote Lecture)  
 2nd Global Nanotechnology Congress (Nanotechnology-2016) Las Vegas, USA, December 01-03, 2016 (Keynote Lecture)
- 2017 Conference on Advanced Biomedical Diagnostic and Clinical Systems XIV, Conference Chair, San Francisco, California, - January 28-30, 2017  
 Conference on Plasmonics in Biology and Medicine XIV, Conference Chair, San Francisco, California, January 29-30, 2017  
 DOE Genomic Science Program (GSP)-PI meeting, Washington DC, February 5-8, 2017 (invited Lecture)  
 14th Annual World Brain Mapping of SBMT, Los Angeles, April 18-20, 2017 (Invited Lecture)  
 2nd International Conference on Bioscience, June 19-20, 2017, London, UK (Keynote Lecture)  
 Conference on Cancer Pharmacology Research, December 13-16, 2017 in New York, NY (Plenary Lecture)
- 2018 Conference on Advanced Biomedical Diagnostic and Clinical Systems XV, Conference Chair, San Francisco, California, - January 29-30, 2018  
 Conference on Plasmonics in Biology and Medicine XV, Conference Chair San Francisco, California, January 29, 2018  
 DOE Genomic Science Program (GSP)-PI meeting, Washington DC, February 28, 2018 (Plenary Lecture)  
 Europt(r)ode XIV, International Conference on Optical Chemical Sensors and Biosensors, Naples (Italy) March 25-28, 2018, Naples  
 United Nations *International of Day* Inaugural Ceremony, UNESCO Headquarters, Paris (France), May 16, 2018 (Invited Address)  
 Fourth International Conference on Bioinspired and Bio-based Chemistry and Materials, Nice (France), October 14-17, 2018 (Keynote Lecture)
- 2019 SPIE-BIOS Symposium, Track Chair on Clinical Technologies and Systems, San Francisco, California, 2–6 February 2019  
 Conference on Plasmonics in Biology and Medicine XVI, Conference Chair, San Francisco, California, 3–5 February 2019  
 EuroCMR 2019 Congress, European Assoc. of Cardiovascular Imaging, Venice (Italy), May 1-4, 2019  
 Congress OSA Sensors and Sensing Congress, San Jose, California, 25-27 June 2019 (Invited Tutorial Lecture)  
 5th World Congress on Cancer Research & Therapy”, London (United Kingdom), September 09-11, 2019 (Keynote Lecture)  
*Sir George Stokes Award Lecture*, King’s College, London (United Kingdom), October 14, 2019
- 2020 SPIE-BIOS Symposium, Track Chair on Clinical Technologies and Systems, San Francisco, California, February 2-6, 2022

Conference on Plasmonics in Biology and Medicine XVII, Conference Chair San Francisco, California, February 2-3, 2019

- 2021 SPIE-BIOS Symposium, Track Chair on Clinical Technologies and Systems, San Francisco, California, 2–6 February 2021  
Conference on Plasmonics in Biology and Medicine XVIII, Conference Chair San Francisco, California, February 3-4, 2021
- 2022 SPIE-BIOS Symposium, Track Chair on Clinical Technologies and Systems, San Francisco, California, January 24-26, 2022  
Conference on Plasmonics in Biology and Medicine XIX, Conference Chair, San Francisco, California, January 24-26, 2022
- 2023 SPIE-BIOS Symposium, Track Chair on Clinical Technologies and Systems, San Francisco, California, January 28- February 2, 2023  
Conference on Plasmonics in Biology and Medicine XX, San Francisco, California, Conference Chair, January 28-29, 2023  
LOPS 2023, Conference on Lasers, Optics, Photonics and Sensors, June 2-4, Fort Lauderdale, Florida, USA (Keynote Lecture)  
Global Congress on Cancer Research & Therapy CANCER CARE 2023, September 18 & 19, 2023, Rome, Italy (Keynote Lecture)

In addition to the above-invited talks, keynotes, and plenary lectures, Dr. Vo-Dinh's research group has presented over 200 additional contributed papers at national and international conferences.

## TUAN VO-DINH

### PUBLICATIONS LIST:

#### **A. Peer-Reviewed Journals and Invited Book Chapters:**

1. T. Vo-Dinh, R. Paetzold, and U. P. Wild,  
"Phosphorescence Spectra and Lifetimes of 1, 4-Naphthoquinones, Vitamin K3 and K1," Z. Phys. Chemie, 251: 395 (1972).
2. T. Vo-Dinh and U. P. Wild,  
"High-Resolution Luminescence Spectrometer: 1. Simultaneous Recording of Total Luminescence and Phosphorescence," Applied Optics 12: 1286 (1973).
3. T. Vo-Dinh and U. P. Wild,  
"Laser-Excited Luminescence of Coronene in a Shpolskii Matrix," Journal of Luminescence 6: 296 (1973).
4. T. Vo-Dinh and U. P. Wild,  
"Fluoreszenz and Phosphoreszenzspektren in Shpolskii Matrizen," Chimia, 28 (1): 18 (1974).
5. T. Vo-Dinh, U. T. Kreichbich, and U. P. Wild,  
"Phosphorescence Spectra from Selected Sites in N-ethylcarbazole in N-Alkanes," Chem. Phys. Lett., 24: 352 (1974).
6. T. Vo-Dinh and U. P. Wild,  
"High-Resolution Luminescence Spectrometer: 2. Data Treatment and Corrected Spectra," Applied Optics, 13: 2899 (1974).
7. T. Vo-Dinh, U. P. Wild, M. Lamotte, and A. M. Merle,  
"Quasilinear Fluorescence of Pyrene in a Monocrystalline Matrix," Chem. Phys. Lett., 39: 118 (1976).
8. T. Vo-Dinh, E. Lueyen, and J. D. Winefordner,  
"Heavy-Atom Effect on Room Temperature Phosphorimetry," Anal. Chem., 48: 1186 (1976).
9. U. P. Wild, H. G. Grieser, T. Vo-Dinh, and J. M. Oth,  
"Fluorescence from the Second Excited Singlet State of 18-Annulenes," Chem. Phys. Lett., 39: 119 (1976).
10. T. Vo-Dinh, K. P. Li, and J. D. Winefordner,  
"Fluorescence Studies of Benzo[a]pyrene in Lyposome Membrane Systems," Biochem. Biophys. Res. Comm. 73: 187 (1976).
11. T. Vo-Dinh, E. Lueyen and J. D. Winefordner,  
"Room Temperature Phosphorescence of Polyaromatic Hydrocarbons," Talanta 24: 146 (1977).
12. R. P. Cooney, T. Vo-Dinh, and J. D. Winefordner,  
"A Vidicon Image Converter as a Gas Phase Fluorescence Detector for Gas Chromatography," Anal. Spectrochim. Acta. 89: (1977).

13. R. P. Cooney, T. Vo-Dinh, G. Walden, and J. D. Winefordner,  
"Comparison of SIT Image Vidicon Multichannel and Photo-Multiplier Sequential Linear Scanning (SLS) Systems for the Measurement of Steady State and Transient Fluorescence of Molecules in Solution," Anal. Chem. **49**: 939 (1977).
14. T. Vo-Dinh, D. J. Johnson, and J. D. Winefordner,  
"An SIT Image Detector in Analytical Fluorescence Spectrometry," Spectrochimia Acta., **33A**: 341 (1977).
15. T. Vo-Dinh, G. L. Walden, and J. D. Winefordner,  
"Instrument for the Facilitation of Room Temperature Phosphorimetry with a Continuous Filter Paper Device," Anal. Chem. **49**: 1126 (1977).
16. T. Vo-Dinh and J. D. Winefordner,  
"Room Temperature Phosphorimetry as a New Spectrochemical Method of Analysis, Appl. Spectrosc. Rec. **13**(2): 261 (1977).
17. R. B. Gammage, T. Vo-Dinh, A. R. Hawthorne, J. H. Thorngate, and W. W. Parkinson,  
"New Techniques for Measuring Polynuclear Aromatic Compounds in the Workplace," pp. 78-98 in Analytical Chemistry of Liquid Fuel Sources, edited by P. C. Uden, ACS Advances in Chemistry Series, (1978).
18. R. B. Gammage, T. Vo-Dinh, A. R. Hawthorne, J. H. Thorngate, and W. W. Parkinson,  
"A New Generation of Monitors for Polynuclear Aromatic Compounds from Synthetic Fuel Production," pp. 155-74 in Polynuclear Aromatic Hydrocarbons: Carcinogenesis, Vol. 3, edited by P. W. Freudenthal and P. W. Jones, Raven Press (1978).
19. T. Vo-Dinh,  
"Multicomponent Analysis by Synchronous Luminescence Spectrometry," Anal. Chem., **50**: 396 (1978).
20. R. B. Gammage, J. H. Thorngate, W. W. Parkinson, A. R. Hawthorne, and T. Vo-Dinh,  
"On the Desirability of the Health Physics Society Assuming Responsibilities in Non-Nuclear and Non-Radiation Fields," Health Physics **35**: 711 (1978).
21. A. R. Hawthorne, J. H. Thorngate, R. B. Gammage, and T. Vo-Dinh, 4  
"Development of a Prototype Instrument for Field Monitoring of PAH Vapors," pp. 299-312, in Polynuclear Aromatic Hydrocarbons, edited by P. W. Jones, Ann Arbor Science Publishers, Columbus, Ohio (1978).
22. T. Vo-Dinh, R. B. Gammage, A. R. Hawthorne, and J. H. Thorngate,  
"Synchronous Spectroscopy for the Analysis of Polynuclear Aromatic Compounds," Environ. Sci. Technol. **12**: 1297 (1978).
23. T. Vo-Dinh, R. B. Gammage, A. R. Hawthorne, and J. H. Thorngate,  
"Analysis of Organic Pollutants by Synchronous Luminescence Spectrometry," pp. 111-19, in Polynuclear Aromatic Hydrocarbons, edited by P. W. Jones, Ann Arbor Science, Ann Arbor, Michigan (1979).
24. T. Vo-Dinh and R. B. Gammage,

- "Singlet-Triplet Energy Difference as a Parameter of Selectivity in Synchronous Phosphorimetry," Anal. Chem. 50: 2054 (1979).
25. T. Vo-Dinh,  
"Rapid Analysis of Polynuclear Aromatic Compounds in Complex Mixtures by RTP," pp. 263-268, in Assessing the Industrial Hygiene Needs for the Coal and Oil Shale Industries, edited by O. White, Brookhaven National Laboratory (1979).
26. T. Vo-Dinh and R. B. Gammage,  
"The Applicability of the Second Derivative Method to Room Temperature Phosphorescence Analysis," Anal. Chim. Acta., 107, 2611 (1979).
27. T. Vo-Dinh and J. A. Hooyman,  
"Selective Heavy-Atom Perturbation for Improved Analysis of Complex Mixtures by RTP," Anal. Chem. 50: 1915 (1979).
28. R. B. Gammage and T. Vo-Dinh,  
"Luminescence Monitoring of Oil Tar Contamination for Industrial Use," Nucl. Instrum. Meth. 175: 236 (1980).
29. T. Vo-Dinh, R. B. Gammage, and P. R. Martinez,  
"Identification and Quantification of Synthoil by RTP," Anal. Chim. Acta., 118: 313 (1980).
30. T. Vo-Dinh and R. B. Gammage,  
"Room Temperature Phosphorimetry for the Analysis of Synfuel and Environmental Samples," pp. 139-151, in Polynuclear Aromatic Hydrocarbons, edited by A. Bjorseth and A. J. Dennis, Battelle Press, Columbus, Ohio (1980).
31. T. Vo-Dinh,  
"Luminescence Spectroscopy," in Analytical Measurements and Instrumentation for Process and Pollution Control edited by P. N. Cheremisinoff and H. J. Perlis, Ann Arbor Science, Ann Arbor, Michigan (1981).
32. T. Vo-Dinh,  
"Synchronous Excitation Spectroscopy," in Modern Fluorescence Spectroscopy, Vol. 4, edited by E. L. Wehry, Plenum Press, New York, pp. 167-191 (1981).
33. T. Vo-Dinh and R. B. Gammage,  
"The Lightpipe Luminoscope for Monitoring Occupational Skin Contamination," J. Am. Ind. Hyg. Assoc. 42: 112 (1981).
34. T. Vo-Dinh, R. B. Gammage, and P. R. Martinez,  
"Analysis of a Workplace Air Particulate Sample by Synchronous Luminescence and Room Temperature Phosphorescence," Anal. Chem. 53: 253 (1981).
35. T. Vo-Dinh and R. B. Gammage,  
"The Use of a Fiber Optics Skin Contamination Monitor in the Workplace," pp. 270-81, in Measurement and Control of Chemical Hazards in the Workplace Environment, edited by G. Chowdhary, ACS Symposium Series No. 149 (1981).
36. T. Vo-Dinh and P. R. Martinez,

- "Direct Determination of Selected Components in a Coal Liquefaction Product by Synchronous Luminescence Techniques," Anal. Chim. Acta., 125: 13 (1981).
37. T. Vo-Dinh,  
"Recent Developments in the Analysis of Air Samples by Luminescence Techniques," Anal. Instrum. 19: 63 (1981).
38. T. Vo-Dinh,  
"New Luminescence Techniques Simplifies Air Analysis," InTech 5: 45 (1981).
39. T. Vo-Dinh,  
"Standards in Fluorescence Spectrometry, Book Review," Anal. Chem., 54: 1065A-6A (1982).
40. T. Vo-Dinh,  
"Synchronous Luminescence Spectroscopy: Methodology and Applicability," Appl. Spectrosc., 36: 576 (1982).
41. T. Vo-Dinh,  
"Rapid Screening Techniques for Trace Organic Analysis," in New Directions in Molecular Luminescence, edited by D. Eastwood, ASTM Publishers, Philadelphia, Pennsylvania, pp. 5-16 (1982).
42. R. B. Gammage, A. R. Hawthorne, T. Vo-Dinh, and D. D. Schuresko,  
"New Instruments for Plant Area and Personnel Monitoring," in Alternate Energy Sources III, Vol. 6, edited by V. T. Nejat, Hemisphere Publishing Co., Washington, D.C., pp. 209-223 (1983).
43. T. Vo-Dinh,  
"Surface Detection: Principles, Applications, and Recent Developments," J. Environ. Sci., Jan/Feb. 40 (1983).
44. T. Vo-Dinh, T. B. Bruwer, R. H. Jungers, and T. J. Wagner,  
"Screening Air Samples for Polynuclear Aromatic Compounds: A Field Study," in Measurement and Monitoring of Non-Criteria Toxic Contaminants, edited by E. R. Frederick, Publishers Choice Book, Mars, Pennsylvania, pp. 208-219 (1983).
45. T. Vo-Dinh,  
"Air Pollution: Applications of Simple Luminescence Techniques," in Identification and Analysis of Organic Pollutants in Air, edited by L. Keith, Ann Arbor Science, Ann Arbor, Michigan, pp. 257-270 (1984).
46. T. Vo-Dinh and R. B. Gammage,  
"Monitoring Exposure to Polynuclear Aromatic Compounds via Room Temperature Phosphorescence from Solid Substrates," Radiation Protection Dosimetry 6: 137-140 (1984).
47. T. Vo-Dinh, T. B. Bruwer, G. D. Colovos, T. J. Wagner and R. H. Jungers,  
"Field Evaluation of a Cost-Effective Screening Procedure for Polynuclear Aromatic Pollutants in Ambient Air Samples," Environ. Sci. Technol 18: 477 (1984).
48. A. R. Hawthorne, T. G. Matthews, and T. Vo-Dinh,  
"Measurement Techniques," in Indoor Air Pollution, edited by P. J. Walsh, C. S. Dudley, and E. D. Copenhagen, CRC Press, Boca Raton, New York, pp. 15-37 (1984).

49. T. Vo-Dinh and U. P. Wild,  
"Luminescence of 1,4-Naphthoquinone and the Vitamin K System in Shpolskii Matrices at 4K,"  
Spectrochim. Acta. A. **40A**: 411 (1984).
50. T. Vo-Dinh, M.Y.K. Hiromoto, G. M. Begun, and R. L. Moody,  
"Surface-Enhanced Raman Spectroscopy for Trace Organic Analysis," Anal. Chem., **56**: 1667  
(1984).
51. T. Vo-Dinh and G. H. Miller,  
"A New Passive Monitor for Direct Detection of PAH Vapors," in Polycyclic Aromatic  
Hydrocarbons, edited by M. Cooke and A. J. Dennis, Battelle Press, Columbus, Ohio, pp. 1357-1367  
(1984).
52. T. Vo-Dinh, A. R. Hawthorne, R. B. Gammage, and D. W. Abbott,  
"New Approaches for Monitoring PAH Exposures at the H-Coal Demonstration Plant," in Polycyclic  
Aromatic Hydrocarbons, edited by M. Cooke and A. J. Dennis, Battelle Press, Columbus, Ohio,  
pp. 1343-1355 (1984).
53. T. Vo-Dinh and D. W. Abbott,  
"A Ranking Index to Characterize Polynuclear Aromatic Pollutants in Environmental Samples,"  
Environ. Internat., **10**, 299 (1984).
54. D. W. Abbott and T. Vo-Dinh,  
"Detection of Nitrogen-Containing Compounds by Room Temperature Phosphorescence," Anal.  
Chem., **57**, 41 (1985).
55. T. Vo-Dinh, G. W. Suter, A. J. Kallir and U. P. Wild,  
"Phosphorescence Line Narrowing of Coronene and Phenanthrene Adsorbed on Cellulose  
Substrates," J. Phys. Chem., **89**, 3026 (1985).
56. T. Vo-Dinh, G. H. Miller, D. W. Abbott, R. L. Moody, C. Y. Ma and C. H. Ho,  
"Luminescence Analysis of Benzoquinoline Isomers in Complex Samples," Anal. Chim. Acta., **175**,  
181 (1985).
57. M. Meier, A. Wokaun, and T. Vo-Dinh,  
"Silver Particles on Stochastic Quartz Substrates Providing Tenfold Increase in Raman  
Enhancement," J. Phys. Chem., **89**, 1843 (1985).
58. T. Vo-Dinh,  
"Development of a Dosimeter for Personnel Exposure to Vapors of Polyaromatic Pollutants,"  
Environ. Sci. and Technol., **19**, 997 (1985).
59. M. Uziel, G. H. Miller, R. L. Moody, and T. Vo-Dinh,  
"Analysis of Pseudouridine by Fluorescence Spectrometry," Anal. Lett., **18**, 1821 (1985).
60. T. Vo-Dinh, M. Meier and A. Wokaun,  
"Surface-Enhanced Raman Spectroscopy with Silver Particles on Stochastic Post Substrates," Anal.  
Chim. Acta., **181**, 139 (1986).
61. P. D. Enlow, M. Buncick, R. J. Warmack, and T. Vo-Dinh,

- "Detection of Nitro-polynuclear Aromatic Compounds by Surface-Enhanced Raman Spectroscopy," Anal. Chem., 58, 1719 (1986).
62. T. Vo-Dinh and D. A. White,  
"Sensitized Fluorescence on Organic Solid Substrates," Anal. Chem., 58, 1128 (1986).
63. T. Vo-Dinh, G. D. Griffin, and K. R. Ambrose,  
"A Portable Fiberoptic Monitor for Enzyme-Amplification Fluorimetric Assays," Appl. Spectrosc., 40, 696 (1986)
64. G. W. Suter, A. J. Kallir, U. P. Wild and T. Vo-Dinh,  
"The H-Bonding Properties of a Room Temperature Phosphorescence Cellulose Substrate," J. Phys. Chem., 90, 4941 (1986).
65. T. Vo-Dinh, G. W. Suter, A. J. Kallir and U. P. Wild,  
"Fluorescence Line-Narrowing Spectrometry of Polycyclic Compounds on Filter Paper Substrate," Anal. Chem., 58, 3135 (1986).
66. D. W. Abbott, R. L. Moody, R. M. Mann, and T. Vo-Dinh,  
"Synchronous Luminescence Screening for Polynuclear Aromatic Compounds in Environmental Samples Collected at a Coal Gasification Process Development Unit," Am. Ind. Hyg. Assoc. J., 47, 379 (1986).
67. R. B. Gammage, T. Vo-Dinh, and D. A. White,  
"Measurement By Room Temperature Phosphorescence of Polynuclear Aromatic Hydrocarbon Fuels that Permeate Glove Materials," Rad. Protect. Dos., 17, 263 (1986).
68. T. Vo-Dinh, B. J. Tromberg, G. D. Griffin, K. R. Ambrose, M. J. Sepaniak, and E. M. Gardenhire,  
"Antibody-Based Fiberoptics Biosensor for the Carcinogen Benzo(a)pyrene," Appl. Spectrosc., 5, 735 (1987).
69. T. Vo-Dinh and D. A. White,  
"Development of Luminescence Procedures to Evaluate Permeation of Multiring Polyaromatic Compounds Through Protective Materials," Amer. Ind. Hyg. J., 48, 400 (1987).
70. T. Vo-Dinh,  
"Spectroscopic Identification of Surface Contaminants," in Treatise on Clean Surface Technology, edited by K. Mittal, Plenum Press, New York, New York pp. 103-122, (1987).
71. T. Vo-Dinh and M. Uziel,  
"Laser-Induced Room Temperature Phosphorescence Detection of Benzo(a)pyrene-DNA Adducts," Anal. Chem., 59, 1093 (1987).
72. T. Vo-Dinh,  
"Evaluation of an Improved Fiberoptics Luminoscope with Background Correction," Am. Ind. Hyg. Assoc. J., 48(6), 594 (1987).
73. T. Vo-Dinh, M. Uziel, and A. L. Morrison,  
"Surface-Enhanced Raman Spectrometry of Benzo(a)pyrene-DNA Adducts," Appl. Spectrosc. 41, 605 (1987).

74. T. Vo-Dinh and A. M. Alak  
"Enhanced Room Temperature Phosphorescence of Anthracene Using Cyclodextrin Treated Filter Paper Substrate," Appl. Spectrosc., 41, 963 (1987).
75. T. Vo-Dinh, B. J. Tromberg, G. D. Griffin, M. J. Sepaniak, and K. R. Ambrose,  
"Femtomole Detection of Benzo(a)pyrene Using A New Fiberoptics Biosensor," in Polycyclic Aromatic Hydrocarbons, Edited by W. May and M. Cooke (1987).
76. G. W. Suter, A. J. Kalir, U. P. Wild, and T. Vo-Dinh,  
"External Heavy-Atom Effect on Room Temperature Phosphorescence" Anal. Chem., 59, 1644 (1987).
77. A. M. Alak and T. Vo-Dinh,  
"Surface-Enhanced Raman Spectrometry of Organo-Phosphorus Chemical Agents," Anal. Chem., 59, 2149 (1987).
78. B. J. Tromberg, M. J. Sepaniak, T. Vo-Dinh, and G. D. Griffin,  
"Fiber Optic Chemical Sensors for Competitive Binding Fluorimmunoassay," Anal. Chem. 59, 1226 (1987).
79. D. W. Armstrong, L. A. Spino, T. Vo-Dinh, and A. M. Alak,  
"Micelle-Mediated Resonance Raman Analysis of Dilute Solutions of Fluorescent Molecules Using Ultraviolet Laser Excitation," Spectroscopy 2, 54 (1987).
80. R. L. Moody, T. Vo-Dinh, and W. H. Fletcher,  
"Investigation of Experimental Parameters for Surface-Enhanced Raman Spectroscopy," Appl. Spectrosc., 41, 966 (1987).
81. M. Uziel, R. J. Ward, and T. Vo-Dinh,  
"Synchronous Fluorescence Measurements of BaP Metabolites in Human and Animal Urine," Anal. Lett., 20(5) (1987).
82. L. A. Spino, D. W. Armstrong, A. M. Alak, and T. Vo-Dinh,  
"Resonance Raman Analysis of Fluorescent Compounds Using Micellar Solutions and UV Excitation," Appl. Spectrosc., 41, 771 (1987).
83. L. A. Spino, D. W. Armstrong, A. Alak, and T. Vo-Dinh,  
"Direct Synchronous Luminescence Detection of Co-Eluting Solutes in Pseudophase Liquid Chromatography," J. Chromatogr., 409, 147 (1987).
84. R. Petra, M. J. Sepaniak, and T. Vo-Dinh,  
"Fiberoptics-Based Time-Resolved Fluorimetry for Immunoassays," Talanta, 35, 139 (1988).
85. T. Vo-Dinh, A. Alak, and R. L. Moody,  
"Raman Spectroscopy for Chemical and Biological Analysis," Spectrochim. Acta. B, 4/5, 605 (1988).
86. G. D. Griffin, K. R. Ambrose, R. M. Thomason, C. M. Murchison, M. McManis,  
P. G. R. St. Wecker, and T. Vo-Dinh,

- "Production and Characterization of Antibodies to Benzo[a]pyrene," in Polycyclic Aromatic Hydrocarbons: A Decade of Progress, Eds. M. Cooke and A. J. Dennis, Battelle Press, Columbus, OH, pp. 329-340 (1988).
87. T. Vo-Dinh, G. D. Griffin, K. R. Ambrose, M. J. Sepaniak, and B. J. Tromberg, "Fiberoptics Immunofluorescence Spectroscopy for Chemical and Biological Monitoring," in Polycyclic Aromatic Hydrocarbons: A Decade of Progress, Eds. Cooke and A. J. Dennis, Battelle Press, Columbus, OH, pp. 885-900 (1988).
88. D. A. White and T. Vo-Dinh, "Room Temperature Phosphorimetry to Study Permeation Through Protective Clothing Materials," Appl. Spectr., 42, 285 (1988).
89. R. B. Gammage, W. G. Dreibelbis, D. A. White, T. Vo-Dinh and J. D. Hugendar, "Evaluation of Protective Garment Fabrics Challenged by Petroleum and Synfuel Fluids," in Performance of Protective Clothing, S. Z. Mansdorf, R. Sager, A. P. Nielson, Eds., ASTM Publications 989, ASTM, pp. 327-338 (1988).
90. T. Vo-Dinh, D. A. White, M. A. O'Malley, P. J. Seligman and R. C. Beier, "Fluorescence Detection of Phototoxic Psoralens in Vegetable Products," J. Agr. Food Chem., 36, 333, (1988).
91. T. Vo-Dinh and M. Lamotte, "Site-Selection Phosphorimetry Via Singlet-State Excitation," Appl. Spectr., 42, 65 (1988).
92. A. M. Alak and T. Vo-Dinh, "Surface-Enhanced Raman Spectroscopy of Chlorinated Pesticides," Anal. Chim. Acta., 206, 333 (1988).
93. B. J. Tromberg, M. J. Sepaniak, J. P. Alarie, T. Vo-Dinh, and R. M. Santella, "Development of Antibody-Based Fiberoptics Sensor for the Detection of Benzo(a)pyrene Metabolite," Anal. Chem., 60, 1901 (1988).
94. A. M. Alak and T. Vo-Dinh, "Silver-Coated Fumed Silica as New Substrate Materials for Surface-Enhanced Raman Scattering," Anal. Chem., 61, 656 (1989).
95. A. M. Alak and T. Vo-Dinh, "Selective Enhancement of Room Temperature Phosphorescence Using Cyclodextrin-Treated Cellulose Substrate," Anal. Chem., 60, 596 (1988).
96. M. J. Sepaniak, B. J. Tromberg, and T. Vo-Dinh, "Fiber Optic Affinity Sensors in Chemical Analysis," Progress in Analytical Instrumentation, 11, 481 (1988).
97. T. Vo-Dinh, G. H. Miller, J. Bello, R. Johnson, R. L. Moody, A. Alak, and W. H. Fletcher, "Surface-Active Substrates for Raman and Luminescence Analysis," Talanta, 36, 227 (1989).
98. A. M. Alak, N. Contolini and T. Vo-Dinh, "Analytical Studies of Cyclodextrin-Enhanced Room Temperature Phosphorescence," Anal. Chim. Acta., 217, 171 (1989).

99. J. W. Johnson, and T. Vo-Dinh,  
"Fumed Silica Substrates for Enhanced Fluorescence Spot Test Analysis of BP-DNA Adduct Products," Anal. Chem., **61**, 2766 (1989).
100. J. B. Bello, D. L. Stokes, T. Vo-Dinh,  
"A New TiO<sub>2</sub>-Based Substrate for Optical Monitors in Surface-Enhanced Raman Scattering Analysis," Anal. Chem., **61**, 1779 (1989).
101. J. B. Bello, D. L. Stokes, and T. Vo-Dinh,  
"Silver-Coated Aluminum as a New Medium for Surface-Enhanced Raman Scattering Analysis," Appl. Spectrosc., **43**, 1325 (1989).
102. M. J. Sepaniak, B. J. Tromberg, J. P. Alarie, J. R. Bowyer, A. M. Hoyt and T. Vo-Dinh,  
"Design Considerations for Antibody-Based Fiber Optic Chemical Sensors," in Sensors and Microinstrumentation, R. Murray, Ed., ACS Symposium Book Series No. 403, 318-330, American Chemical Society, Washington, DC (1989).
103. T. Vo-Dinh,  
"Applications of Lasers in Luminescence Spectroscopy," Analytica Quimica, **8**, 349 (1989).
104. T. Vo-Dinh,  
"Surface-Enhanced Raman Spectroscopy," Book Chapter in Chemical Analysis of Polycyclic Aromatic Compounds, edited by T. Vo-Dinh, Wiley, New York, NY, pp. 451-486 (1989).
105. T. Vo-Dinh,  
"Significance of Chemical Analysis of Homocyclic and Heterocyclic Polycyclic Aromatic Compounds," Polycyclic Aromatic Compounds, edited by T. Vo-Dinh, Wiley, New York, NY pp. 1-30 (1989).
106. A. R. Hawthorne, C. D. Dudney, R. L. Tyndall, T. Vo-Dinh, M. A. Cohen, J. D. Spengler, and J. P. Harper,  
"Case Study: Multipollutant Indoor Air Quality Study of 300 Homes in Kingston/Harriman, Tennessee," in Design and Protocol for Monitoring Indoor Air Quality, N. L. Nagda and J. B. Harper, Eds., ASTM SP 1002, Philadelphia, PA, pp. 129-147 (1989).
107. Y. F. Cheng, R. W. Johnson, and T. Vo-Dinh,  
"Novel Surface-Sensitized Fluorescence Detection of Polynuclear Aromatic Hydrocarbons Separated by Paper Chromatography," Anal. Lett., **22**, 2011 (1989).
108. T. Vo-Dinh, T. Nolan, Y. F. Cheng, M. J. Sepaniak, and J. P. Alarie,  
"Phase-Resolved Fiberoptics Fluoroimmunosensor," Appl. Spectrosc., **44**, 128 (1990).
109. J. Bello and T. Vo-Dinh,  
"Surface-Enhanced Raman Scattering Fiber-Optic Sensor," Appl. Spectrosc., **46**, 63 (1990).
110. J. P. Alarie, M. J. Sepaniak, and T. Vo-Dinh,  
"Evaluation of Antibody Immobilization Techniques for Fiberoptics Fluoroimmunosensor," Anal. Chim. Acta., **229**, 169 (1990).

111. H. F. Cheng and T. Vo-Dinh,  
"Paper Electrophoresis using Surface Sensitized Fluorimetric Detection," Anal. Chim. Acta., 229, 295 (1990).
112. T. Vo-Dinh,  
"Laser-Induced Luminescence Spectroscopy on Solid Substrates," in Laser Techniques in Luminescence Spectroscopy, T. Vo-Dinh and D. Eastwood, Eds., ASTM Publishers, pp. 133-143 (1990).
113. Y. F. Cheng, R. D. Piccard, and T. Vo-Dinh,  
"Charge-Coupled Device Fluorescence Detection for Capillary Zone Electrophoresis," Appl. Spectrosc., 44, 755 (1990).
114. J. M. Bello, D. L. Stokes, and T. Vo-Dinh,  
"Direct Characterization of Phthalic Acid Isomers in Mixtures Using Surface-Enhanced Raman Scattering," Anal. Chem., 62 1349 (1990).
115. Y. F. Cheng and T. Vo-Dinh,  
"Room Temperature Phosphorescence Detection for Paper Chromatography (RTP-PE)," Anal. Lett., 123, 941 (1990).
116. J. M. Bello, V. A. Narayanan, D. L. Stokes, and T. Vo-Dinh,  
"Fiberoptic Remote Sensor for In Situ Surface-Enhanced Raman Scattering Analysis," Anal. Chem., 62, 2437 (1990).
117. J. P. Alarie, J. R. Bowyer, M. J. Sepaniak and T. Vo-Dinh,  
"Fluorescence Monitoring of Benzo(a)pyrene Metabolite Using a Regenerable Immunochemical-Based Fiberoptic Sensor," Anal. Chim. Acta., 236, 237 (1990).
118. M. J. Sepaniak and T. Vo-Dinh,  
"Fiberoptic-Based Fluoroimmunosensors," Phil. Trans. R. Soc. London, 233, 85 (1990).
119. T. Vo-Dinh, B. J. Tromberg, G. D. Griffin, K. R. Ambrose, M. J. Sepaniak and J. P. Alarie,  
"Detection of Polyaromatic Compounds Using Antibody-Based Fiberoptics Fluoroimmunosensor," in Polynuclear Aromatic Hydrocarbons: Measurements, Means and Metabolism, Eds. M. Cooke, K. Loening and J. Merrill, Battelle Press, Columbus, Ohio, pp. 915-939, (1991).
120. R. Piccard and T. Vo-Dinh,  
"A Multi-Optical-Fiber Array with Charge-Coupled Device Image Detection for Parallel Processing of Light Signals and Spectra," Rev. Sci. Instrum., 62, 584 (1991).
121. T. Vo-Dinh, J. P. Alarie, R. W. Johnson, M. J. Sepaniak, and R. M. Santella,  
"Evaluation of the Fiberoptic Antibody-Based Fluoroimmunosensor in Human Placental Samples," Clin. Chem. 37, 532 (1991).
122. V. Anantha Narayanan, J. M. Bello, D. L. Stokes and T. Vo-Dinh,  
"Surface-Enhanced Raman Analysis of Vitamin B Complex," J. of Raman Spectr. 22, 327 (1991).
123. V. Anantha Narayanan, J. M. Bello, D. L. Stokes, and T. Vo-Dinh,

- "Determination of p-Aminobenzoic Acid in Presun-15 Lotion by Surface-Enhanced Raman Analysis, Analusis, 19, 307 (1991).
124. T. Vo-Dinh, G. D. Griffin, and M. J. Sepaniak,  
"Fiberoptic Immunosensors," Fiber Opt. Chem. Sen. Biosens., 2, 217 (1991).
125. J. P. Alarie and T. Vo-Dinh,  
"A Fiberoptic Cyclodextrin-Based Sensor," Talanta, 38, 529 (1991).
126. D. Eastwood, R. L. Lidberg, S. J. Simon, and T. Vo-Dinh,  
"An Overview of Advanced Spectroscopic Field Screening and In-Situ Monitoring Instrumentation and Methods," in Chemistry for the Protection of the Environment, L. Powlowski and D. D'Lugosz, Eds., Plenum Press, New York, pp. 97-111 (1991).
127. T. Vo-Dinh, G. D. Griffin, and M. J. Sepaniak,  
"Fiberoptics Immunosensors," in Fiberoptics Chemical Sensors, Vol. II, O. F. Wolfbeis, Ed., CRC Press, Boca Raton, FL, Chapter 17, pp. 218-248 (1991).
128. J. R. Bowyer, J. P. Alarie, M. Sepaniak, T. Vo-Dinh, and R. Q. Thompson,  
"Construction and Evaluation of Regenerable, Fluoroimmunochemical-Based Fiber Optic Biosensor," Analyst, 116, 117 (1991).
129. T. Vo-Dinh,  
"Chemiluminescence," in Encyclopedia of Applied Physics, G. Trigg, Ed., VCH Publishers, Brooklyn, NY, pp. 413-428 (1992).
130. T. Vo-Dinh, G. D. Griffin, J. P. Alarie, M. J. Sepaniak, and J. R. Bowyer,  
"Development of Fiber-Optic Immunosensors for Environmental Analysis," in Pollution Prevention and Industrial Processes, J. J. Breen and M. J. Dellarco, Eds., ACS Book No. 508, American Chemical Society, Washington, DC, pp. 270-283 (1992).
131. J. M. Bello, V. A. Narayanan, and T. Vo-Dinh,  
"Surface-Enhanced Raman Scattering Interaction of p-Aminobenzoic Acid on Silver-Coated Alumina Substrate," Spectrochim. Acta., 4, 563 (1992).
132. F. Baucel, J. M. Salmon, J. Vigo, T. Vo-Dinh, and P. Viallet,  
"Investigation of Non-Calcium Interactions of Fura-2 by Classical and Synchronous Fluorescence Spectroscopy," Anal. Biochem., 204, 231 (1992)
133. T. Vo-Dinh and T. Pal,  
"Development of a Spectrochemical Modification (SM) Technique for Measurement of Chemical Agents," Applied Spectroscopy, 46, 677 (1992).
134. M. L. Daugherty, A. P. Watson, and T. Vo-Dinh,  
"Permeability and Breakthrough Rates of Organophosphates and Warfare Agent Simulants in Materials Used for Civilian Protective Clothing," J. Hazardous Mat., 30, 243 (1992).
135. T. Pal, A. Pal, G. H. Miller, and T. Vo-Dinh,  
"A Passive Dosimeter for Monitoring Ammonia Vapor," Anal. Chim Acta, 263, 175 (1992).
136. A. Pal, W. Watts, J. Caraway, and T. Vo-Dinh,

- "Enhanced Room Temperature Phosphorescence Using Sodium Lauryl Sulfate-Treated Solid Substrate," Analisis, 20, 149 (1992).
137. D. L. Frazier, M. A. Barnhill, T. Vo-Dinh, A. M. Legendre, and B. F. Overholt, "Comparative Pharmacokinetics of the Photosensitizer Tin-Etiopurpurin in Dogs and Rats," J. Vet. Pharmacol. Therap., 15, 275 (1992).
138. Y. S. Li, D. L. Stokes, T. Vo-Dinh, and Y. Wang, "Surface-Enhanced Raman Analysis of p-Nitroaniline on Vacuum Evaporation and Chemically-Deposited Silver-Coated Alumina Substrate," Appl. Spectrosc., 46, 1354 (1992).
139. W. Watts, A. Pal, L. Ford, G. H. Miller, T. Vo-Dinh, D. Eastwood, and R. Lidberg, "Improved Methods for Screening PCBs using Room Temperature Phosphorescence," Appl. Spectroscopy, 46, 1235 (1992).
140. J. P. Alarie, D. L. Stokes, W. S. Sutherland, A. C. Edwards, and T. Vo-Dinh, "An ICCD-Based Fiberoptic Monitor for Rapid Remote SERS Sensing," Appl. Spectrosc. 46, 1608 (1992).
141. V. Anantha Narayanan, G. M. Begun, D. L. Stokes, W. S. Sutherland, and T. Vo-Dinh, "Normal Raman and SERS Spectra of Some Fungicides and Related Chemical Compounds," J. Raman Spectrosc., 23, 281 (1992).
142. M. Uziel, N. B. Munro, D. S. Katz, T. Vo-Dinh, E. A. Zeighami, M. D. Waters, and J. D. Griffith, "DNA Adducts Formation by 12 Chemicals with Populations Potentially Suitable for Molecular Epidemiological Studies," Mutation Research, 277, 35 (1992).
143. M. Uziel, G. H. Miller, R. Ward, W. Watts, and T. Vo-Dinh, "Screening Benzo(a)pyrene Metabolites in Urine Using Synchronous Room Temperature Phosphorescence," Polycyclic Aromatic Compounds, 3, 17 (1992).
144. V. A. Narayanan, G. M. Begun, N. A. Stump, D. L. Stokes, and T. Vo-Dinh, "Vibrational Spectra of Fluvalinate," J. Raman Spectrosc., 24, 123 (1993).
145. T. Pal, G. D. Griffin, G. H. Miller, A. P. Watson, M. L. Daugherty, and T. Vo-Dinh, "Permeation Measurements of Chemical Agent Simulants Through Protective Clothing Materials," J. Hazardous Mat., 33, 123 (1993).
146. A. M. Helmenstine, Y. S. Li, and T. Vo-Dinh, "Surface-Enhanced Raman Scattering Analysis of Etheno Adducts of Adenine," Vibrational Spectrosc., 4, 359 (1993).
147. V. Anantha Narayanan, D. L. Stokes, N. A. Stump, G. M. Begun, and T. Vo-Dinh, "Surface-Enhanced Raman Analysis of Some Polycyclic Aromatic Dyes Used in the Cosmetic and Food Industries," Polycyclic Aromatic Compounds, 3, 137 (1993).
148. V. Anantha Narayan, D. L. Stokes, G. M. Begun, and T. Vo-Dinh, "Analysis of the Plant Growth Regulation ALAR and its Hydrolysis Products Using Raman Spectroscopy," Analisis, 21, 107 (1993).
149. T. Vo-Dinh,

- "A Global Environment, a Common Future," Analisis, 21, M5 (1993).
150. C. L. Stevenson and T. Vo-Dinh,  
"Laser-Excited Synchronous Luminescence Spectroscopy," Appl. Spectrosc., 47, 430 (1993).
151. J. P. Alarie, T. Vo-Dinh, G. H. Miller, M. N. Ericson, S. R. Maddox, W. Watts, D. Eastwood,  
R. Lidberg, and M. Dominquez,  
"Development of Battery-operated Portable Synchronous Luminescence Spectrofluorometer," Rev. Sci. Instrum., 64, 2541 (1993).
152. C. Sagan, B. N. Khare, W. R. Thompson, G. D. McDonald, M. R. Wing, J. L. Bada, T. Vo-Dinh, and  
E. T. Arakawa,  
"Polycyclic Aromatic Hydrocarbons in the Atmospheres of Titan and Jupiter," J. Astrophysics, 414,  
399 (1993).
153. T. Vo-Dinh and D. L. Stokes,  
"Surface-Enhanced Raman Vapor Dosimeter," Appl. Spectrosc., 47, 1728 (1993).
154. A. Helmenstine, M. Uziel, and T. Vo-Dinh,  
"Measurement of DNA Adducts Using Surface-Enhanced Raman Spectroscopy," J. Toxicology and  
Envir. Health, 40, 195 (1993).
155. Y. F. Cheng, R. D. Piccard, and T. Vo-Dinh,  
"Subfemtomole Detection of Polycyclic Aromatic Compounds Using Charge-Coupled Device  
Detection (RTP-CCD)," Polycyclic Aromatic Compounds, 4, 71 (1994).
156. T. Vo-Dinh, J. P. Alarie, F. Hyder, and M. J. Sepaniak,  
"Laser-Based Fiberoptic Immunosensors for DNA-Adduct Measurements," in Polycyclic Aromatic  
Compounds: Synthesis, Properties, and Biological Effects, P. Garrigues and M. Lamotte, Eds.,  
Gordon and Breach, Publishers, Philadelphia, PA, p. 765-772 (1993).
157. T. Vo-Dinh, M. J. Sepaniak, G. D. Griffin, and J. P. Alarie,  
"Immunosensors: Principles and Applications," Immunomethods, 3, 85 (1993).
158. T. Vo-Dinh, A. Pal, and T. Pal,  
"A New Photo-activated Luminescence Method for Report Screening of PCBs," Anal. Chem., 66,  
1264 (1994).
159. T. Vo-Dinh, P. Viallet, L. Ramirez, and A. Pal,  
"Gel-Based Indo-1 Probe for Monitoring Calcium (II) Ions," Anal. Chem., 66, 813 (1994).
160. T. Vo-Dinh, P. Viallet, L. Ramirez, A. Pal, and J. Vigo,  
"Detection of Cadmium Ion Using the Fluorescence Probe Indo-1," Anal. Chim. Acta 295, 67,  
(1994).
161. C. L. Stevenson, R. W. Johnson, and T. Vo-Dinh,  
"Synchronous Luminescence: A New Detection Technique for Multiple Fluorescent Probes Used for  
DNA Sequencing," Biotechniques, 16, 1104 (1994).
162. G. Moreels, J. Clairemidi, P. Rousselot, B. Goidut, and T. Vo-Dinh,

- "Identification of Polycyclic Aromatic Molecules in the UV Spectrum of Comet Halley," Polycyclic Aromatic Compounds, 5, 107 (1994).
163. T. Vo-Dinh, P. Viallet, I.M. Del Olmo, D. Hueber, C.L. Stevenson, A.D. Campiglia  
"Laser-Excited Synchronous Fluorescence System for the Analysis of Polycyclic Aromatic Compounds", Polycyclic Aromatic Compounds, 9, 265-272 (1996).
164. D. S. Moore, T. Vo-Dinh, and B. Schrader,  
"Laser-Based Molecular Spectroscopy for Chemical Analysis: Fundamentals of Lasers," Pure and Applied Chemistry, 67, 1913 (1995).
165. T. Vo-Dinh,  
"Surface-Enhanced Raman Spectroscopy," in Photonic Probes of Surface, P. Halevi, Ed., Elsevier, Amsterdam, pp. 65-95 (1995).
166. T. Vo-Dinh,  
"SERS Chemical Sensors and Biosensors: New Tools for Environmental and Biological Analysis," Sensors and Actuators, 29, 183 (1995).
167. K. Laqua, B. Schrader, G.G. Hoffmann, D. S. Moore, and T. Vo-Dinh,  
"Detection of Radiation," Pure and Applied Chem., 67, 1745 (1995).
168. C. L. Stevenson and T. Vo-Dinh,  
"Signal Experience in Raman Spectroscopy," in Modern Techniques in Raman Spectroscopy, J. Laserna, Ed., Wiley, New York, pp. 1-40 (1996).
169. W. S. Sutherland, J. P. Alarie, D. L. Stokes, and T. Vo-Dinh,  
"A Portable Surface-Enhanced Raman Spectrometer," Instrum.. Sci. and Technol., 22, 231 (1994).
170. W. S. Sutherland, J. P. Alarie, A. Edwards, R. C. Tran, M. Hurtwitz, W. Selph, E. Margalith, and T. Vo-Dinh,  
"Mixture Analysis Using a Compact SERS Spectrometer," Analisis, 23, 45 (1995).
171. T. Vo-Dinh, M. Panjehpour, B. D. Overholt, C. Farris, and R. Sneed,  
"In-vivo Cancer Diagnostics in the Esophagus Using Differential Normalized Fluorescence (DNF) Indices," Laser in Surgery and Medicine, 16, 41 (1995).
172. C. L. Stevenson and Tuan Vo-Dinh,  
"Analysis of Polynuclear Aromatic Compounds Using Laser-Excited Synchronous Fluorescence," Analytica Chim. Acta, 303, 247 (1995).
173. T. Vo-Dinh and D. L. Stokes,  
"SERODS: A New Optical Monitoring with Three-Dimensional Data Storage," Rev. Sci. Instr., 65, 3766 (1994).
174. F. Moreau, S. Moreau, D. M. Hueber, and T. Vo-Dinh,  
"Fiberoptic Remote Multisensor System Based on AOTF," Appl. Spectr., 50, 1295 (1996).
175. V. A. Narayana, D. L. Stokes, and T. Vo-Dinh,  
"Vibrational Spectra Analysis of Eosin Y and Erythrosin B - Intensity Studies for Quantitative Detection of the Dye," J. Raman Spectrosc., 25, 415 (1994).

176. P. Jagasia, A. Belasquez, A. Knedik, T. Vo-Dinh and P.B. Oldham, "Enhanced Photoactivated Luminescence of Selected Polychlorinated Biphenyl Congers and Aroclor Mixtures," Microchemical Journal, 57, 350 (1997).
177. M. Panjehpour, B. F. Overholt, T. Vo-Dinh, C. Farris, R. Sneed, P. Buckley, J. L. Schmidhammer, "Spectroscopic Diagnosis of Esophageal Cancer: Improved System and Classification Model," Gastrointestinal Endosc., 41, 577 (1995).
178. Frédérick Moreau, Sandrine M. Moreau, Dennis M. Hueber and T. Vo-Dinh "Fiber-Optic Remote Multisensor System Based on an Acousto-Optic Tunable Filter (AOTF)," Applied Spectroscopy, 50, 10, (1996).
179. T. Vo-Dinh, K. Houck, and D. L. Stokes, "Surface-Enhanced Raman Gene Probes," Anal. Chem., 66, 3379 (1994).
180. T. Vo-Dinh, JDW and Molecular Spectroscopy," Spectrochimia Acta, 49B, 1225 (1994).
181. T. Vo-Dinh, N. H. Velthorst, D. S. Moore, and B. Schrader, "Laser-Based Molecular Spectroscopy for Chemical Analysis: Luminescence," Pure and Appl. Chem., 69, 1435-49, (1997).
182. J. P. Alarie and T. Vo-Dinh, "An Antibody-Based Submicron Biosensor for BaP," Polycyclic Aromatic Compounds, 8, 45 (1996)
183. D. M. Hueber, C. L. Stevenson, and T. Vo-Dinh, "A Fast Scanning Synchronous Spectrometer Based on Acousto-optic Tunable Filter," Appl. Spectrosc., 46, 1624 (1995).
184. A. Pal, D. L. Stokes, J. P. Alarie, and T. Vo-Dinh, "Selective Surface-Enhanced Raman Using Polymer-Coated Substrate," Anal. Chem., 67, 3154 (1995).
185. A. Sadana, J. P. Alarie, and T. Vo-Dinh, "A  $\beta$ -Cyclodextrin-Based Fiberoptic Chemical Sensor: A Fractal Analysis," Talanta, 42, 1567 (1995).
186. G. P. Vigo, D. M. Hueber, and T. Vo-Dinh, "Evaluation of Data Treatment Techniques for Improved Analysis of Fingerprint Images," J. Forens. Sci., 40, 825 (1995).
187. A. D. Campiglia, D. M. Hueber, and T. Vo-Dinh, "Analysis of Polycyclic Aromatic Compounds in Soil Samples Using Laser-Induced Phosphorimetry," Polycyclic Aromatic Compounds, 8, 117 (1996).
188. A. D. Campiglia, D. M. Hueber, and T. Vo-Dinh, Development of a Room Temperature Phosphorescence Fiber Optic Sensor, Anal. Chem. 68, 1599 (1996).

189. N. Taranenکو, J. P. Alarie, D. L. Stokes, and T. Vo-Dinh,  
"Surface-Enhanced Raman Detection of Nerve Agents Simulants (DMMP and DIMP) Vapor on Electrochemically Prepared Silver Oxide Substrates," J. Raman Spectrosc., 27, 379 (1996).
190. A. D. Campiglia, D. M. Hueber, J. P. Alarie, and T. Vo-Dinh,  
"Laser-Induced Solid-Surface Room Temperature Phosphorimetry of Polycyclic Aromatic Compounds," Appl. Spectrosc., 50, 252 (1996).
191. M. J. Sepaniak, T. Vo-dinh, V. Tropina and D.L .Stokes  
"Evaluation of a separation based fiber-optic sensor in a micellar electrokinetic capillary chromatography mode of operation", Anal. Chem., 69, 3806-3811 (1997).
192. T. Vo-Dinh, P. Viallet, D. Hueber, M. Iruela, and C. L. Stevenson, and A.D. Campiglia  
"Laser-Induced Synchronous Luminescence of Polycyclic Aromatic Compounds," Polycyclic Aromatic Compounds, 9, 265 (1996).
193. F. Moreau, D. M. Hueber, and T. Vo-Dinh,  
"Remote Spectral Imaging System (RSIS) Based on Acousto-Optic Tunable Filter," Instrum. Sci. and Technol., 24, 179 (1996).
194. B. Clark, T. Vo-Dinh, M.J. Sepaniak  
"Capillary Electrophoresis-Laser fluorometry Instrumentation for the Facile Optimization of DNA Separation Using In-situ Gradients and Adjustable Detection Zone", Anal. Chem. 67, 680-683 (1995).
195. T. Vo-Dinh, W. Watts, A. Pal, T. Pal, and D. Eastwood,  
"Provisional Standard Test Method for Screening, Quantification and Identification of Total Polychlorinated Biphenyls by Room Temperature Phosphorescence," ASTM, PS 47-95 (1995).
196. J. Bertie and T. Vo-Dinh,  
"The Spectroscopy Commissions of the International Union of Pure and Applied Chemistry," Appl. Spectrosc., 50, 12A (1996).
197. Masoud Panjehpour, Bergein F. Overholt, Tuan Vo-Dinh, Rodger C. Haggitt, Donna H. Edwards, and F. Paul Buckley, III,  
"Endoscopic Fluorescence Detection of High-Grade Dysplasia in Barrett's Esophagus," Gastroenterology, 111, 93-101\_ (1996).
198. V. Anantha Narayan, D. L. Stokes, and T. Vo-Dinh,  
"Vibrational Spectra of the Industrial Dyes, Cresyl Fast Violet, Phloxine B, and Saffron: Intensity Studies by Surface-Enhanced Raman Spectroscopy," Analisis, 24, 1 (1996).
199. A. D. Campiglia and T. Vo-Dinh,  
"Fiberoptic Sensor for Laser-Induced RTP Detection of Polycyclic Aromatic Compounds," Talanta, 143, 1805 (1996).
200. D. L. Stokes, M. J. Sepaniak, and T. Vo-Dinh,  
"Development of a New Capillary Electrophoresis-Based Fiberoptic Sensor," Biomedical Chromatogr., 11 187 (1997).
201. M. J. Sepaniak, T. Vo-Dinh, D. L. Stokes, V. Tropina, J. E. Dickens,

- “Demonstration of an Integrated Capillary Electrophoresis-Laser Induced Fluorescence Fiberoptic Sensor,” Talanta, **43**, 1889 (1996).
202. A. Ibrahim, P. Oldham, D. L. Stokes, and T. Vo-Dinh,  
"Determination of Enhancement Factors for Super-Enhanced Fourier Transform Raman Spectroscopy on Gold and Silver Surfaces," J. Raman Spectrosc., **27**, 887 (1996).
203. A. Sadana, J. P. Alarie, and T. Vo-Dinh,  
"Antigen Antibody Diffusion-treated Binding Kinetics for Biosensors: A Fractal Analysis," Sensors and Actuators B32, 195 (1996).
204. A. Sadana and T. Vo-Dinh,  
"Antibody-Antigen Binding Kinetics: A Model for Multi-Valency Antibodies for Large Antigen Systems," Applied Biochemistry and Biotechnology **67**, 1-22 (1997).
205. J.M. Salmon, M. Yassine, T. Vo-Dinh, N.R. Isola, X. Rebillard, and P. Viallet,  
“Discrimination between Tumour and Normal Cells by Staining with 3,4,5,6,16,17-Hexadehydro-16-(methoxycarbonyl)-19 $\alpha$ -methyl-20 $\alpha$ -oxayohimbanium: The Uracil Ring as a Target or the Specific Interaction between RNA(s) and the Fluorescent Probe,” Anticancer Res. **16**, 1886 (1996).
206. T. Vo-Dinh, J. Fetzer, and A. D. Campiglia,  
“Monitoring and Characterization of Polycyclic Aromatic Compounds in the Environment,” Talanta, **47**, 943-69 (1998).
207. L. F. Capitan-Vallvey, F. Ojeda, M. Del Olmo, R. Avidad, A. Navalon and T. Vo-Dinh,  
“Use of Transmitted Room Temperature Phosphorescence to Improve Nalidixic Acid Determination,” Appl. Spectrosc., **52**, 101-105 (1998).
208. P. Viallet, T. Vo-Dinh, J. Vigo, J.M. Salmon  
"Investigation of lysozyme-chitobiose interactions using synchronous luminescence and lifetime measurements" J. Luminescence, **12**, 57-63 (2002).
209. T. Vo-Dinh,  
“Remote Monitors for In Situ Characterization of Hazardous Waste,” Invited Chapter in Monitoring and Remediation Technologies for Solid Waste, I. Twardowska, H.E. Allen, A.F. Kettrup and W. Lacy., eds, Elsevier, NY, pp. 485-504 (2004).
210. T. Vo-Dinh, M. Panjehpour, B. F. Overholt, and P. Buckley, III,  
"Laser-Induced Differential Fluorescence for Cancer Diagnosis Without Biopsy," Appl. Spectr. **51**, 58-63 (1997).
211. A. D. Campiglia, D. M. Hueber, F. Moreau, and T. Vo-Dinh,  
"Phosphorescence Imaging System Using AOTF and Charge Coupled Device," Analytica Chim. Acta., **346**, 361 (1997).
212. T. Vo-Dinh, M. Panjehpour, and B. F. Overholt,  
“Laser-induced Fluorescence for Esophageal Cancer and Dysplasia Diagnosis,” Proceed. NY Acad. Sciences, **838**, 116 (1998).
213. D. Zeisel, V. Deckert, R. Zenobi, and T. Vo-Dinh,

- “Near-Field Surface-Enhanced Raman Spectroscopy of Dye Molecules Adsorbed on Silver Island Films,” Chem. Phys. Lett., 283, 381 (1998).
214. N. Isola, D. L. Stokes, and T. Vo-Dinh,  
“Surface-Enhanced Raman Gene Probes for HIV Detection,” Anal. Chem., 70, 1352 (1998).
215. A. D. Campiglia, T. Vo-Dinh,  
“Rapid Screening Method for Cocaine and Benzoylcegonine in Saliva Samples,” Anal. Chimica Acta, 372, 349 (1998).
216. T. Vo-Dinh,  
“Surface-Enhanced Raman Spectroscopy Using Metallic Nanostructures,” Trends in Anal. Chem., 17, 557-582 (1998).  
[https://doi.org/10.1016/S0165-9936\(98\)00069-7](https://doi.org/10.1016/S0165-9936(98)00069-7)
217. A. Pal, T. San, T. Pal, and T. Vo-Dinh,  
“Determination of Aluminum in Water through Formation of Fluorescent Complex,” J. Indian Chem., Soc., 75, 78 (1998).
218. P. Viallet, T. Vo-Dinh, T. Bunde, A. C. Ribou, J. Vigo, and J.M. Solomon,  
“Fluorescent Molecular Reporter for the 3-D Confirmation of Protein Sub-domain: The Mag-Indo System,” J. of Fluorescence, 9, 153 (1999).
219. T. Vo-Dinh,  
“Development of a DNA Biochip: Principle and Applications,” Sensors and Actuators, B51, 52 (1999).
220. V. Deckert, D. Zeisel, R. Zenobi, and T. Vo-Dinh,  
“Near-Field Surface-Enhanced Raman of DNA Probes,” Anal. Chem., 70, 2646 (1998).
221. T. Vo-Dinh, J. P. Alarie, N. Isola, D. Landis, A.L. Wintenberg, and M.N. Ericson,  
“DNA Biochip Using Phototransistor Integrated Circuit,” Anal. Chem., 71, 358 (1999).
222. A. Sadana and T. Vo-Dinh,  
“DNA Hybridization Binding Kinetics: A Single- and Dual-Fractal Analysis,” Biotechnology Progress, 14, 782 (1998).
223. T. Pal, V. Anana Narayan, D. L. Stokes, and T. Vo-Dinh,  
“Surface-Enhanced Raman Detection of Nicotinamide in Vitamin Tablets,” Anal. Chim. Acta, 368, 21 (1998).
224. S. J. Norton and T. Vo-Dinh,  
“Diffraction Tomographic Imaging with Photon Density Waves: An Explicit Solution,” J. Amer. Optical Soc. 15, 2670 (1998).
225. T. Pal and T. Vo-Dinh,  
“A New Photo-activated Fluorescence Detection Method for Trichloroethylene,” J. Indian Chem. Soc., 75, 470 (1998).
226. V. Anantha Narayan, N. A. Stump, G. D. Del Cul, and T. Vo-Dinh,

- “Vibrational Spectrum of Strycline: Detection and the Nanograms Level Using Raman Microscope,” J. of Raman Spectroscopy, 30, 435 (1999).
227. D. L. Stokes, M. J. Sepaniak, T. Vo-Dinh,  
“Demonstration of a Separations-Based Fiberoptic Sensor for Bioanalysis.” Anal. Chim. Acta, 399, 201 (1999).
228. M. Volkan, Yuan Lee, Tuan Vo-Dinh,  
“AOTF-Based Remote Sensor with Sol-Gel Probe,” Instrumentation Science & Technology, 27(5), 1 (1999).
229. David L. Stokes and Tuan Vo-Dinh,  
“Development of an Integrated Single-Fiber SERS Sensor,” Sensors and Actuators, 69, p. 28-36, (2000).
230. T. Vo-Dinh, D. L. Stokes, G. D. Griffin, M. Volkan, U.J. Kim, and M. I. Simon,  
“Surface-Enhanced Raman Scattering (SERS) Method and Instrumentation for Genomics and Biomedical Analysis,” J. Raman Spectrosc. 30, 785 (1999).
231. Wendi E. Watts, Narayana R. Isola, Donita Frazier, and Tuan Vo-Dinh,  
“Differentiation of Normal and Neoplastic Cells by Synchronous Fluorescence: Rat Liver Epithelial and Rat Hepatoma Cell Models,” Analytical Letters, 32, 2583 (1999).
232. David L. Stokes, Anjali Pal, V. Anantha Narayanan, and Tuan Vo-Dinh,  
“Evaluation of a Chemical Vapor Dosimeter Using Polymer-Coated SERS Substrates,” Anal. Chim. Acta, 399, 265 (1999).
233. T. Vo-Dinh and Praveen N. Mathur,  
“Optical Diagnostic and Therapeutic Technologies in Pulmonary Medicine,” in Advances in Interventional Pulmonology, Eds. P. N. Mathur, et al., Kager, Basel, Switzerland, Vol. 30, pp. 267-279 (2000).
234. T. Vo-Dinh and D. L. Stokes,  
“Surface-Enhanced Raman Detection of Chemical Vapors and Aerosols Using Personal Dosimeters,” Field Anal. Chem. and Technol., 3, 346 (1999).
235. M. Volkan, D. L. Stokes, and T. Vo-Dinh,  
“A New SERS Substrate Based on Nanoparticles in Sol-Gel,” J. Raman Spectrosc., 30, 1057 (1999).
236. D. H. Pui, J. R. Brock, D. R. Chen, H. Fissan, C. D. Frisbie, C. E. Lyman, J. C. Miller, G. H. Mulholland, R. Pecora, O. Prening, and T. Vo-Dinh,  
“Summary and Recommendation on Instrumentation and Measurement Issues for Nanometer Particles,” J. of Nanoparticle Research, 2, 103 (2000).
237. M. Morena-Bondi, J. Mobley, J. P. Alarie, and T. Vo-Dinh,  
“Antibody-Based Biosensor for Breast Cancer with Ultrasonic Regeneration,” J. Biomedical Optics” 5(3) 350 (2000).
238. T. Imasaka, D. Moore, and T. Vo-Dinh,  
“Use of Supersonic Jet Spectroscopy for Complex Mixture Analysis,” Pure and Applied Chem., 75, 975-998 (2003).

239. B. Cullum, J. Mobley, Z. Chi, D. L. Stokes, G. H. Miller, and T. Vo-Dinh, "Development of a Compact, Handheld Raman Instrument with No Moving Parts for use in Field Analysis," *Rev. Sci. Instrum.*, **71**, 1602 (2000).  
<https://doi.org/10.1063/1.1150504>
240. D.Y.H Pui, J. R. Brock, D.-R. Chen, H. Fissan, C. D. Frisbie, C. E. Lyman, J.C. Miller, G.W. Mulholland, R. Pecora, O. Preining, and T. Vo-Dinh, Instrumentation and Measurement Issues for Nanometer Particles, *Journal of Nanoparticle Research*, **2**, 103-112 (2000).
241. B. Cullum, Z. Chi, and T. Vo-Dinh, "High-Temperature Fluorescence Measurements and Instrumentation for Polycyclic Aromatic Compounds: A Review," *Polycyclic Aromatic Compounds*, **18**, 25 (2000).
242. P. Viallet, T. Vo-Dinh, A.C. Ribou, J. Vigo and J.-M. Salmon, "Native Fluorescence and Mag-Indo-1-Protein Interaction as Tools for Probing Unfolding and Refolding of Proteins: Study of Serum Albumin Sub-Domain in the Presence of Guanidine Hydrochloride," *Journal of Protein Chemistry*, **19**, 431 (2000).
243. B. Cullum, G. D. Griffin, G. H. Miller, and T. Vo-Dinh, "Intracellular Measurements in Mammary Carcinoma Cells using Fiberoptic Nanosensors," *Analytical Biochem.*, **277**, 25 (2000).
244. T. Vo-Dinh, G. D. Griffin, J. P. Alarie, B. Cullum, B. Sumpter, and D. Noid, "Development of Nanosensors and Bioprobes," *J. of Nanoparticle Research*, **2**, 17-27 (2000).
245. T. Vo-Dinh and B. Cullum, "Biosensors and Biochips, Advances in Biological and Medical Diagnostics," *Fresenius J. Anal. Chem.*, **366**, 540 (2000).
246. M. Moskovitch, G.W. Phillips, B.M. Cullum, J. Mobley, J.S. Bogard, D. Emfietzoglou, and T.Vo-Dinh, "Radiation Dosimetry Using Three-dimensional Optical Random Access Memories" *Radiation Protection Dosimetry*, **101**, 17-22 (2002).
247. Z. Chi, B. M. Cullum, D. L. Stokes, J. Mobley, G. H. Miller, M. R. Hajaligol, T. Vo-Dinh, "Laser-induced fluorescence studies of polycyclic aromatic hydrocarbons (PAH) vapors at high temperatures," *Spectrochimica Acta, Part A*, **57**, 1377-1384 (2001).
248. B. Cullum and T. Vo-Dinh, "Sample Collection and Treatment of Liquids and Solids," in *Handbook of Spectroscopy*, G. Gauglitz and T. Vo-Dinh, Eds., Wiley-VCH, New York, pp.17-35 (2003).
249. M. Volkan, D. L. Stokes, T. Vo-Dinh, "Surface-Enhanced Raman of Dopamine and Neurotransmitters Using Sol-Gel Substates and Polymer-Coated Fiber-Optic Probes," *Applied Spectroscopy.*, **54**, 1842-1848 (2001).
250. B. Cullum, Zhenhuan Chi, and T. Vo-Dinh,

- “High-Temperature Fluorescence Measurements and Instrumentation for Polyaromatic Hydrocarbons (PAH): A Review,” Polycyclic Aromatic Compounds, 18, 25-47 (2000)
251. B. Cullum, J. Mobley, J. Bogard, M. Moscovitch, G. Phillips, and T. Vo-Dinh, “Three-Dimensional Optical Random Access Memory Materials for Use as Radiation Dosimeters,” Analytical Chemistry, 72, 5612 (2000).
252. Maria-Cruz Morano-Bondi, J. Mobley, J.P. Alarie, T. Vo-Dinh, “Antibody-based Biosensor for Breast Cancer with Ultrasonic Regeneration,” Journal of Biomedical Optics, 5(3) 350-354 (2000)
253. T. Vo-Dinh and D. L. Stokes “Raman and SERS Probes,” Handbook of Vibrational Spectroscopy, P. Griffith, editor, Wiley, New York. Pp. 1303-1307 (2002).
254. T. Vo-Dinh, J. P. Alarie, B. Cullum, and G. D. Griffin, “Antibody-based Nanoprobe for Measurements in a Single Cell,” Nature Biotechnology 18: 764-767 (2000).
255. B. Cullum and T. Vo-Dinh, “Nanocapteurs Optiques et Mesures Biologiques,” Biofutur, 205, A1-A6 (2000).
256. B. Cullum and T. Vo-Dinh, “Development of Optical Nanosensors for Biological Measurements,” Trends in Biotechnology, 18, 388 (2000).
257. A. Sadana and T. Vo-Dinh, “Biomedical implications of protein folding and misfolding,” Biotechnol. Appl. Biochem, 33, 7-16 (2001).
258. B. M. Cullum and T. Vo-Dinh, “Nanosensors for biochemical analysis of single cells,” Chemica Oggi/Chemistry Today, January, 58 (2001).
259. A. Sadana and T. Vo-Dinh, “A kinetic binding using fractals of cellular analyte-receptor binding and dissociation,” Biotechnol. Appl. Biochem, 33, 17-28 (2001).
260. D.L. Stokes, G.D. Griffin, and T. Vo-Dinh, “Detection of *E. Coli* using a microfluidics-based antibody biochip detection system,” Fresenius J. Anal. Chem., 369, 295-301 (2001).
261. T. Vo-Dinh and M. Askari, “Microarrays and Biochips: Applications and Potential in Genomics and Proteomics,” J. of Current Genomics, 2 399 (2001).
262. L.R. Allain, M. Askari, D. L. Stokes, and T. Vo-Dinh, “Microarray sampling platform fabrication using bubble-jet technology for a biochip system,” Fresenius J. Anal. Chem., 372, 146 (2001).
263. M. Askari, G. H. Miller, and T. Vo-Dinh,

- “Synchronous Luminescence: The detection of the hydrolysis activity of the FHIT, human tumor suppressor protein,” Biotechnol. Lett., 23, 1697 (2001).
264. A. Sadana and T. Vo-Dinh,  
“A kinetic analysis using fractals of cellular analyte-receptor binding and dissociation,”  
Biotechnology and Applied Biochemistry 33, 7-16 (2001).
265. T. Vo-Dinh, B.M. Cullum, and D. L. Stokes,  
“Nanosensors and biochips: frontiers in biomolecular diagnostics.” Sensors and Actuators, B74, 2  
(2001)
266. M. Askari, J.P. Alarie, M. Moreno-Bondi, and T. Vo-Dinh,  
“Application of an Antibody Biochip for p53 Detection and Cancer Diagnosis.”  
Biotechnol. Prog., 17, 543-552 (2001).
267. K. Lange, Griffin, G., T. Vo-Dinh, and G. Gauglitz,  
“Characterization of antibodies against benzo(a)pyrene with thermodynamic and  
kinetic constants,” Talanta, 56(6): 1153-1161 (2002).
268. M. Sakami, K. Mitra, and T. Vo-Dinh,  
“Analysis of short-pulse laser photon transport through tissues for optical  
tomography,” Opt Lett, 27(5), 336-338 (2002).
269. Z. H. Chi, B. M. Cullum, D. L. Stokes, J. Mobley, G. H. Miller, M. R. Hajaligol,  
and T. Vo-Dinh,  
“High-temperature vapor detection of polycyclic aromatic hydrocarbon  
fluorescence,” Fuel, 80(12), 1819-1824 (2001).
270. T. Vo-Dinh  
“Basic Instrumentation in Photonics,” in Biomedical Photonics Handbook,  
T. Vo-Dinh, Ed., CRC Press, Boca Raton, FL, Chapter 6, pp. 6.1-6.30 (2003).
271. T. Vo-Dinh, B. Cullum, and G.D. Griffin,  
“Optical nanosensors for single-cell analysis,” Radiat Res., 156(4): 437-438 (2001)
272. J. Mobley and T. Vo-Dinh,  
“Optical Properties of Tissues,” in Biomedical Photonics Handbook,  
T. Vo-Dinh, Ed., CRC Press, Boca Raton, FL Chapter 2, pp. 2.1-2.7 (2003).
273. T. Vo-Dinh,  
“Biochips and Microarrays: Tools for the New Medicine,” in Biomedical Photonics Handbook, T.  
Vo-Dinh, Editor, CRC Press, Boca Raton, FL, Chapter 51, pp. 51.1-51.29-30 (2003).
274. S. Norton and T. Vo-Dinh,  
“Theoretical Models and Algorithms in Optical Tomography, in  
Biomedical Photonics Handbook, T. Vo-Dinh, Editor, CRC Press Boca Raton, FL, Chapter 4, pp.  
4.1-6.24 (2003).
275. T. Vo-Dinh, L. R. Allain, and D. L. Stokes,  
“Cancer gene detection using surface-enhanced Raman scattering (SERS),” J. of  
Raman Spectroscopy, 33: 511-516 (2002).

276. T. Vo-Dinh and L. Allain,  
 “Biosensors for Medical Application,” in Biomedical Photonics Handbook,  
 T. Vo-Dinh, Editor, CRC Press Boca Raton, FL, Chapter 20, pp. 20.1-20.40 (2003).
277. J.M. Song and T. Vo-Dinh,  
 “Integrated CMOS microchip system with capillary array electrophoresis,” Anal. Bioanal. Chem., 373, 399, 2002.
278. G. D. Griffin, M. W. Williams, D. Stratis-Cullum, T. Vo-Dinh,  
 “Amplification Technologies for Optical Detection,” in Biomedical Photonics Handbook, T. Vo-Dinh, Editor, CRC Press, Boca Raton, FL, Chapter 55, pp. 55.1-55.69 (2003).
279. M. Askari and T. Vo-Dinh,  
 “Simultaneous detection of the tumor suppressor FHIT gene and protein using the multi-functional biochip,” Cancer Detection and Prevention, 26, 331 (2002).
280. T. Vo-Dinh and B. M. Cullum,  
 “Fluorescence in Medical Applications,” in Biomedical Photonics Handbook,  
 T. Vo-Dinh, Editor, CRC Press, Boca Raton, FL, Chapter 28, pp.28.1-28.40 (2003).
281. J. M. Song, B. M. Cullum, J. Mobley, J. S. Bogard, M. Moscovitch, G. W. Phillips  
 and T. Vo-Dinh,  
 “Crossed-Beam Two-Photon Read-out System for Three-Dimensional Radiation  
 Dosimeter,” Rev. Scientific Instr., 73, 4214-4217 (2002).
282. N. Omenetto, J.M. Mermet, G.C. Turk, T. Vo-Dinh, L.P. Butler, A.M. Ure, G. Gauglitz, W.H.  
 Melhuish, J. N. Miller, N.S. Nogar, B. Schrader, C. Senemaud, N.H. Velthorst, M. Zander, et al.  
 “Laser-Based Atomic Spectroscopy: A New Notation for Spectrochemical Processes - (IUPAC  
 recommendations), Pure And Appl. Chem., 70, 517-526 (1998)
283. T. Vo-Dinh,  
 “Biomedical Photonics: A Revolution at the Interface of Science and Technology” in Biomedical  
 Photonics Handbook, T. Vo-Dinh, Editor, CRC Press, Boca Raton, FL, Chapter 1, pp. 1.1-1.18  
 (2003).
284. T. Vo-Dinh, G. D. Griffin, D. N. Stratis-Cullum, D. L. Stokes, M. Askari, and  
 A. L. Wintenburg,  
 “Multi-Functional Biochip for Medical Diagnostics and Pathogen Detection,” Chapter 6 in Optical  
 Sensors for Industrial, Environmental, and Clinical Applications, Eds., R. Narayanaswamy and O. S.  
 Wolfbeis, Springer Verlag, NY (2003).
285. J. Song, J. Mobley and T. Vo-Dinh,  
 “Detection of Bacterial Pathogen DNA Using Integrated Complementary Metal  
 Oxide Semiconductor (CMOS) Microchip System with Capillary Array Electrophoresis,” Journal of  
 Chromatography B, 783, 501 (2003).
286. T. Vo-Dinh and D. L. Stokes,  
 “Surface-enhanced Raman Scattering (SERS) for Biomedical Diagnostics,” in  
Biomedical Photonics Handbook, T. Vo-Dinh, Editor, CRC Press, Boca Raton, FL, Chapter 64, pp.  
 64.1-64.39 (2003).

287. T. Vo-Dinh,  
 “Nano-Biosensors: Probing the Sanctuary of Individual Living Cells.” Journal of Cellular Biochemistry, Suppl. Vol. 39, 154 (2002).
288. D. Stratis-Cullum, G. D. Griffin, J. Mobley, A. Vass, and T. Vo-Dinh,  
 “A Miniature Biochip System for the detection of aerosolized *Bacillus globigii* Spores,” Analytical Chemistry, 75, 275 (2003).
289. Champak Das, A. Trivedi, K. Mitra, and T. Vo-Dinh  
 “Experimental and Numerical Analysis of Short Pulse Laser Interaction with Tissue Phantoms Containing Inhomogeneities”, Applied Optics Vol. 42, No. 25, pp. 5173-5180 (2003).
290. M. Panjehpour, C. E. Julius, M. N. Pham, T. Vo-Dinh, and S. Overholt,  
 “Laser-induced Fluorescence Spectroscopy for In Vivo Diagnosis of Non-Melanoma Skin Cancers,” Lasers in Surgery and Medicine, 31, 367 (2002).
291. M. C. Moreno-Bondi, J. P. Alarie, T. Vo-Dinh,  
 “Multi-Analyte Analysis System using an Antibody-based Biochip,” Analytical Bioanalytical Chemistry, 3 75 (1): 120 (2003)
292. J.-M. Song, J. Mobley, T. Vo-Dinh,  
 “Integrated Circuit Microchip With Multiplex Capillary Electrophoresis Module for DNA Analysis”, Anal. Chim. Acta, 466, 187 (2002).
293. J.M. Song, R. Jagannathan, D.L. Stokes, T. Vo-Dinh and M.R. Hajaligol,  
 “Real-time Monitoring of Polycyclic Aromatic Hydrocarbons in Cigarette Smoke Using Time-Resolved Laser-Induced Fluorescence,” Polycyclic Aromatic Compounds, 23, 429 (2003).
294. P.M. Kasili., B.M. Cullum., G.D. Griffin, and T. Vo-Dinh  
 “Nanosensor for In-Vivo Measurement of the Carcinogen Benzo [a] Pyrene in a Single Cell”, J. Nanoscience and Nanotechnology, 6, 653 (2002).
295. T. Vo-Dinh  
 “Remote monitors for in situ characterization of hazardous wastes”, in *Solid Waste: Assessment, Monitoring and Remediation*, Analytical Techniques for Hazardous Wastes, I. Twardowska, H.E. Allen, A.F. Kettrup and W. J. Lacy, Eds, Elsevier, NY, pp. 485-504. (2004).
296. J. Mobley and T. Vo-Dinh  
 “Photoacoustic method for the simultaneous acquisition of optical and ultrasonic spectra,” Acoustic Research Letters, 4, 89-94 (2003).
297. L. R. Allain and T. Vo-Dinh  
 “Surface-enhanced Raman scattering detection of the breast cancer susceptibility gene *BRCA1* using a silver-coated microarray platform”, Analytica. Chimica Acta, 469, 149 (2002).
298. T. Vo-Dinh, F. Yan, and D.L. Stokes  
 “Plasmonics-Based Nanostructures for surface-enhanced Raman Scattering Bioanalysis”, in Protein Nanotechnology, T. Vo-Dinh, Ed., Humana Press, Totowa, NJ, pp. 255-284 (2005).
299. B. Cullum, and T. Vo-Dinh

- “Optical Nanosensors for Biological Applications – Spectroscopic Techniques at the Cellular Level”, in Advanced Semiconductor and Organic Nano-Techniques, H. Morcock, Ed, Elsevier Science, New York, 2003
300. T. Vo-Dinh,  
“Optical Nanosensors for Detecting Proteins and Biomarkers in Individual Living Cells” in Protein Nanotechnology, T. Vo-Dinh, Ed., Humana Press, Totowa, NJ, pp.383-402 (2005)
301. C. Das, A. Trivedi, K. Mitra and T. Vo-Dinh  
“Short Pulse Laser Propagation Through Tissues For Biomedical Imaging”, J. Physics D. Applied Physics, Vol. 36, 1714-1721 (2003).
302. B. M. Cullum and T. Vo-Dinh,  
“Nanosensors for Single-Cell Analysis” in Biomedical Photonics Handbook, T. Vo-Dinh, Editor, CRC Press, Boca Raton, FL, Chapter 60, pp. 60.1-60.20 (2003).
303. L. R. Allain, D. N. Stratis, B.M. Cullum, J. Mobley, M.R. Hajaligol and T. Vo-Dinh,  
“Real-time Detection of PAH mixtures in the Vapor Phase at High Temperatures”, J. Anal. Appl. Pyrolysis, 66, 145 (2003).
304. T. Vo-Dinh, B. Cullum, and P. Kasili  
“Development of a Multi-Spectral Imaging System for Medical Applications”, J. Physics D: Applied Physics, 36, 1663-1668 (2003)
305. J. Song G.D. Griffin and T. Vo-Dinh  
“Application of an Integrated Microchip System with Capillary Array Electrophoresis to Optimization of Enzymatic Reactions”, Analytica Chimica Acta, 487, 75-82 (2003).
306. M. Askari and T. Vo-Dinh  
“Implication of mitochondrial involvement in Apoptotic Activity of the FHIT Gene: Application of Synchronous Luminescence Spectroscopy”, Biopolymer, 73,510-523 (2004).
307. T. Vo-Dinh, G.D. Griffin, D.L. Stokes, and A. L. Wittenberg  
“Multi-functional Biochip for Medical Diagnostics and Pathogen Detection”, Sensors and Actuators B, 90, 104 (2003)
308. M. Culha, D.L. Stokes, and T.Vo-Dinh  
“Surface-Enhanced Raman Scattering for Cancer Diagnostics: Detection of the BLC2 Gene,” Expert Rev. Mol. Diagnostics, 3, 669-675 (2003)
309. P. Viallet and T. Vo-Dinh  
“Monitoring Intracellular Proteins using Fluorescence Technology: From Protein Synthesis and Localization to Protein Activity”, Current Protein and Peptide Science, 4, 375-388 (2003).
310. A. Pal, T. Pal, D.L. Stokes, and T. Vo-Dinh  
“Photochemically prepared gold nanoparticles: A substrate for surface-enhanced Raman scattering”, Current Science, 84, 1342-1346 (2003)
311. T. Imasaka, D. S. Moore, and T. Vo-Dinh  
“Critical Assessment: Use of Supersonic Jet Spectrometry for Complex Mixture Analysis,” Pure Appl. Chem. 75(7), 975 (2003).

312. M. Culha, D.L. Stokes, L. R. Allain, and T. Vo-Dinh  
Surface-enhanced Raman scattering (SERS) Substrate Based on Self-assembled Monolayer (SAM) for Use in Gene Diagnostics”, Anal. Chem., 75, 6196-6201 (2003).
313. T. Vo-Dinh  
“Nanosensor and Nanoprobe Systems for In Vivo Bioanalysis,” in Integrated Analytical Systems, Ed. S. Alegret, Elsevier, New York, pp. 685-700 (2003).
314. D.L. Stokes, Z. Chi, and T. Vo-Dinh  
“SERS-Inducing Nanoprobe for Spectrochemical Analysis”, Applied Spectroscopy, 58, 292-298 (2004).
315. S. J. Norton and T. Vo-Dinh  
“Optoacoustic Diffraction Tomography: Analysis of Algorithms,” J. Opt. Soc. Am. A, 20, 1859 (2003).
316. T. Vo-Dinh,  
“Photonics in Medical Applications”, in “*Handbook of Optoelectronics Volume II*” (edited by John P. Dakin and Robert G.W. Brown), Chapter C4.5, pp1501-1518. CRC Press, Boca Raton, FL. 2006
317. T. Vo-Dinh, D.L. Stokes, and F. Yan  
“Principles and Applications of Surface-Enhanced Raman Scattering”, in Topics in Fluorescence Spectroscopy, J. Lakowicz and C. Geddes, Eds, Plenum Press, 2006
318. A. Pal, D.L. Stokes and T. Vo-Dinh  
“Photochemically Prepared Gold Metal film in a Carbohydrate-based Polymer: a Practical Solid substrate for Surface-enhanced Raman Scattering, Current Science, 87, 486-491 (2004)
319. P. Kasili and T. Vo-Dinh  
“Detection of Polycyclic Aromatic Compounds in Single Living Cells Using Optical Nanoprobes, Polycyclic Aromatic Compounds, 24, 221-235 (2004).
320. L.R. Allain, D.N. Stratis-Cullum, D.N. and T. Vo-Dinh  
“Investigation of Microfabrication of Biological Sample Arrays Using Piezoelectric and Bubble-Jet Printing Technologies”, Analytica Chimica Acta, 518, 77-85 (2004).
321. P.M. Kasili, J. M. Song, and T. Vo-Dinh  
“Optical Sensor for the Detection of Caspase-9 Activity in a Single Cell”, J. Am. Chem. Soc., 126, 2799-2806 (2004).
322. T. Vo-Dinh,  
“Protein Nanotechnology: The New Frontier in Biosciences” in Protein Nanotechnology, T. Vo-Dinh, Ed, Human Press, Totowa, NJ, pp.1-12 (2005).
323. M. Culha, D. L. Stokes, G. D. Griffin, and T. Vo-Dinh  
“Application of a Miniature Biochip Using the Molecular Beacon Probe in Breast Cancer Gene BRCA1 Detection”, Biosensors & Bioelectronics, 19, 1007-1012 (2004).
324. J.M. Song and T. Vo-Dinh

- “Miniaturized Biochip system for Detection of E. coli )157:H7 based on antibody-immobilized Capillary Reactors and Enzyme-linked Immunoassay”, Analytica Chimica Acta, 507, 115-121 (2004).
325. J. Mobley, B. M. Cullum, A. L. Wintenberg, S. Frank, R. A. Maples, D. L. Stokes, and T. Vo-Dinh “Single-board Computer-based Control System for a Portable Raman Device with Integrated Chemical Identification”, Rev. Scientific Instrum, 75, 2016-2036 (2004).  
<https://doi.org/10.1063/1.1753670>
326. J. Song, M. Culha, P.M. Kasili, G. D. Griffin, and T. Vo-Dinh “A Compact CMOS Biochip Immunosensor Towards the Detection of a Single Bacteria”, Biosensors & Bioelectronics, 20, 2203-2209 (2005).
327. M. Culha, D. L. Stokes, G. D. Griffin, and T. Vo-Dinh “Screening for the Breast Cancer Gene (BRCA1) Using a Biochip and Molecular Beacon Probes Immobilized on Solid Surfaces”, J. Biomedical Optics, 9, 439-443 (2004).
328. J. M. Song, R. Jagannathan, D. L. Stokes, P. M. Kasili, M. Panjehpour, M. N. Phan, B. F. Overholt, R. C. DeNovo, X. Pan, R. J. Lee, and T. Vo-Dinh “Development of a Fluorescence Detection System Using Optical Parametric Oscillator (OPO) Laser Excitation for *In Vivo* Diagnosis”, Technology in Cancer Research and Treatment, 2, 1 (2003).
329. T. Vo-Dinh, F. Yan. “Surface-enhanced Raman Spectroscopy” in Optical Chemical Sensors-International School of Quantum Electronics, S. Martellucci ed. Kluwer Academic Publishers, (2004).
330. M. Culha, D.L. Stokes, G.D. Griffin and T. Vo-Dinh “Application of A Miniature Biochip Using Molecular Beacon Probes in Breast Cancer Gene BRCA1 Detection”, Biosensors & Bioelectronics, 19, 1007-1012 (2004).
331. J.M. Song, P.M. Kasili, G.D. Griffin and T. Vo-Dinh “Detection of Cytochrome c in a Single Cell Using an Optical Nanobiosensor”, Analytical Chemistry, 76, 2591-2594 (2004).
332. H. Butala, A. M. Doke, A. Ramakrishnan, A. Sadana, and T. Vo-Dinh, “Biosensor Surface Phenomena”, in Encyclopedia of Surface and Colloid Science, Second Edition; Taylor & Francis: New York, Vol.2, pp. 990 – 1003, 2006
333. P.M. Viallet and T. Vo-Dinh “Studying 3D Subdomains of Proteins at the Nanometer Scale Using Fluorescence Spectroscopy”, in Protein Nanotechnology, T. Vo-Dinh, Ed., Humana Press, Totowa, NJ, pp. 165-190 (2005).
334. M. Martin, M. Wabuye, M. Panjehpour, B. F. Overholt, R. Denovo, S. Kennel, G. Cunningham, and T. Vo-Dinh “An AOTF-Based Dual-modality Hyperspectral Imaging System Capable of Simultaneous Fluorescence and Reflectance Imaging”, Medical Engineering Physics, 28(2):149-55 (2006).
335. M. B. Wabuye, M. Culha, G.D. Griffin, P.M. Viallet and T. Vo-Dinh “Near-field Scanning Optical Microscopy for Bioanalysis at the Nanometer Resolution”, in Protein Nanotechnology, T. Vo-Dinh, Ed., Humana Press, Totowa, NJ, pp. 437-452 (2005).

336. P.M. Kasili and T. Vo-Dinh  
 “Optical Nanobiosensor for Monitoring an Apoptotic Signaling Process in a Single Living Cell Following Photodynamic Therapy”, J. Nanoscience and Nanotechnology, 5, 2057-2062(2005).
337. A. Giannetti, L. Citti, C. Domenici, L. Tedeschi, F. Baldini, M. Wabuyeleye, and T. Vo-Dinh  
 “FRET-Based Protein-DNA Binding Assay for Detection of Active NF-kB for Use in Biosensors”, Sensors and Actuators, 113, 221-226 (2006).
338. A. Ibrahim, P.B. Oldham, D.L. Stokes, T. Vo-Dinh T, and B.H. Loo  
 “A comparison of enhancement factors for surface-enhanced Raman scattering using visible and near-infrared excitations”, J. Mol. Struct., 735, 69-73 (2005).
339. T. Vo-Dinh and P.M. Kasili  
 “Fiber-optic Nanosensors for Single-Cell Monitoring” Anal.Biochem. Chem, 382, 918-925 (2005)
340. T. Vo-Dinh, D. L. Stokes, M. Wabuyeleye, M.E. Martin, J. M. Song, R. Jagannathan, E. Michaud, R. J. Lee, and X. Pan  
 “Hyperspectral Imaging System for *In Vivo* Optical Diagnostics”, IEEE Engineering in Medicine and Biology, 23, 40-59 (2004).
341. K. Chen, M. Leona, K.C. Vo-Dinh, F. Yan, M.B. Wabuyeleye, and T. Vo-Dinh  
 “Application of Surface-Enhanced Raman Scattering (SERS) for the Identification of Anthraquinone Dyes Used in Works of Art”, J. Raman Spectrosc., 37, 520-527 (2005).
342. T. Vo-Dinh, F. Yan, and M. B. Wabuyeleye  
 “Surface-Enhanced Raman Scattering for Medical Diagnostics and Biological Imaging”, J. Raman Spectroscopy, 36, 640-647 (2005)
343. A. Sadana, T. Vo-Dinh and N. S. Jeyashekar  
 “Protein Folding: Biomedical Applications”, in Encyclopedia of Chemical Processing, Ed. S.L. Lee, Taylor and Francis, New York, NY, pp. 2479-2488 (2006).
344. T. Vo-Dinh,  
 “Introduction to Fluorescence Sensors and Biosensors”, Introduction Chapter in Fluorescence Sensors and Biosensors, R. Thompson, Ed., CRC Publishers, Boca Raton, FL (2006)
349. F. Yan , S. Williams, G.D. Griffin, R. Jagannathan, S.E. Plunkett, K.H. Shafer, T., Vo-Dinh  
 “Near-Real-time Determination of Hydrogen Peroxide Generated From Cigarette Smoke”, J. Environ. Monitoring, 7, 681-687 (2005).
346. T. Vo-Dinh  
 “Nanobiosensors”, in Encyclopedia of Nanoscience and Nanotechnology, H.S. Nalwa, Ed., Am. Sci. Publishers, Vol. 6, pp. 53-60 (2004).
347. M. Volcan, D.L. Stokes, and T. Vo-Dinh  
 “A Sol-Gel Derived AgCl Photochromic Coating on Glass for SERS Chemical Sensor Application”, Sensors and Actuators B, 106, 660-667 (2005).
348. T. Vo-Dinh  
 “A Paradigm Shift at the Convergence of Nanotechnology, Molecular Biology and Biomedical Sciences”, NanoBiotechnology, 1, 3-6 (2005)

349. F. Yan F, M.B. Wabuye, G.D. Griffin, A.A Vass, and T. Vo-Dinh  
 “Surface-enhanced Raman Scattering for the Detection of Chemical and Biological Agent Simulants”, IEEE Sensors Journal, 5, 665-670 (2005).
350. P. Kasili, M. Wabuye, and T. Vo-Dinh  
 “Antibody-Based SERS Diagnostics of FHIT Protein Without Label, NanoBiotechnology, 2, 29 (2006)
351. P. Kasili and T. Vo-Dinh  
 “Liposome-Encapsulated Gold Nanoshells for NanoPhototherapy-Induced Hyperthermia”, International J. Nanotechnology, 2(4), 397 (2005)
352. M. Wabuye, F. Yan, G.D. Griffin, and T. Vo-Dinh  
 “Hyperspectral Surface-Enhanced Raman Imaging (HSERI) of Labeled Silver Nanoparticles in Single Cells”, Rev. Scientific Instrum., 76 (6): 063710-1 to 063710-7 (2005).
353. T. Vo-Dinh and P.M. Kasili  
 “Fiber-Optic Nanosensors For Single-Cell Monitoring”, Anal. Bioanal. Chem, 382, 918-925 (2005).
354. K. Teker, R. Sirdeshmukh, K. Sivakumar, S. Lu., E. Wickstrom, H. Wang, T. Vo-Dinh and B. Panchapakesan  
 “Applications of Carbon Nanotubes for Cancer Research”, NanoBiotechnology, 1, 171-182 (2005)
355. M. Wabuye and T. Vo-Dinh  
 “Detection of HIV Type 1 DNA sequence Using Plasmonics Nanoprobes”, Anal. Chem., 77, 7810-7815 (2005).
355. Q. Liu, K. Chen, M. Martin, A. Wintenberg, R. Lenarduzzi, M. Panjehpour, B. Overholt, and T. Vo-Dinh,  
 "Development of a Synchronous Fluorescence Imaging System and Data Analysis Methods," Optics Express, 15, 12583-12594 (2007)
356. T. Vo-Dinh, P. M. Kasili, M.B. Wabuye, “Nanoprobes and Nanobiosensors for Monitoring and Imaging Individual Living Cells”, Nanomedicine, 2, 22-30 (2006)
357. T. Vo-Dinh, P. Kasili and M. Wabuye  
 “Nanoprobes and nanobiosensors for monitoring and imaging individual living cells,” Nanomedicine, 2(1):22-30 (2006)
358. S. Panigrahi, S. Praharaj, S. Basu, S. K. Ghosh, S. Jana, S. Pande, T. Vo-Dinh, H. Jiang, and T. Pal  
 “Self-Assembly of Silver Nanoparticles: Synthesis, Stabilization, Optical Properties, and Application in Surface-Enhanced Raman Scattering”, J. Phys. Chem B, 110 (27), 13436-44 (2006).
359. T. Vo-Dinh, F. Yan, and M.B. Wabuye  
 “Surface-enhanced Raman Scattering for Biomedical Diagnostics and Molecular Imaging”, in Surface-Enhanced Raman Scattering: Physics and Applications, Eds: K. Kneipp, M. Moskovits, H. Kneipp, Springer, NY, pp. 409-426 (2006).
360. P Pal, M Basu, K. Mitra, T Vo-Dinh

- “Time-resolved optical tomography using short-pulse laser for tumor detection”, Appl Opt. 45, 6270-82 (2006)
361. A. Pal, N.R. Isola, J. P. Alarie, D.L. Stokes, T. Vo-Dinh  
Synthesis and characterization of SERS gene probe for BRCA-1 Breast Cancer.  
Faraday Discuss., 132, 293-301 (2006)
362. M.E. Martin, M.B. Wabuyele, K. Chen, P. Kasili, M. Panjehpour, M.F. Overholt, G. Cunningham, D. Wilson, R.C. Denovo, T. Vo-Dinh  
“Development of an advanced hyperspectral imaging (HSI) system with applications for cancer detection”, Ann Biomed Eng.;34(6):1061-8 (2006).
363. P. Kasili and T. Vo-Dinh  
“Hyperspectral Imaging System Using Acousto-Optic Tunable Filter for Flow Cytometry Applications”, Cytometry, 69A(8):835-841 (2006).
364. S. G. Kong, M.E. Martin, and T. Vo-Dinh  
“Hyperspectral Fluorescence Imaging for Mouse Skin Tumor Detection”, Electronics and Telecommunications Institute (ETRI) Journal, 28, 770-776 (2006).
365. T. Vo-Dinh  
“Nanotechnology: the New Frontier”, in Nanotechnology in Biology and Medicine, Ed. T. Vo-Dinh, Taylor and Francis Publishers, New York (2007).
366. K. Chen and T. Vo-Dinh,  
“Single-Molecule Detection Techniques for Monitoring Cellular Activity at the Nanoscale Level”, in Nanotechnology in Biology and Medicine, Ed. T. Vo-Dinh, Taylor and Francis Publishers, New York (2007).
367. S. Norton and T. Vo-Dinh  
“Imaging the Distribution of Magnetic Nanoparticles With Ultrasound”, IEEE Transactions on Medical Imaging, 26, 660-665. (2007)
368. T. Vo-Dinh,  
“Optical Nano-Biosensors and Nanoprobes”, in Nanotechnology in Biology and Medicine, Ed. T. Vo-Dinh, Taylor and Francis Publishers, New York (2007).
369. P. Viallet and T. Vo-Dinh,  
“Fluorescence Study of Protein 3-D Subdomains at the Nanoscale Level”, in Nanotechnology in Biology and Medicine, Ed. T. Vo-Dinh, Taylor and Francis Publishers, New York (2007).
370. M. Wabuyele, F. Yan, and T. Vo-Dinh,  
“Cellular Imaging and Analysis using SERS-Active Nanoparticles”, in Nanotechnology in Biology and Medicine, Ed. T. Vo-Dinh, Taylor and Francis Publishers, New York (2007).
371. P. Kasili and T. Vo-Dinh  
“Monitoring apoptosis and anticancer drug activity in single cells using nanosensors”, in Nanotechnology in Biology and Medicine, Ed. T. Vo-Dinh, Taylor and Francis Publishers, New York (2007).
372. M. Wabuyele and T. Vo-Dinh

- “Nanoimaging of biomolecules using Near-field Scanning Optical microscopy”, in Nanotechnology in Biology and Medicine, Ed. T. Vo-Dinh, Taylor and Francis Publishers, New York (2007).
373. F. Yan and T. Vo-Dinh,  
“Methods & Applications of Metallic Nanoshells and Semi-Nanoshells in Biology and Medicine”, in Nanotechnology in Biology and Medicine, Ed. T. Vo-Dinh, Taylor and Francis Publishers, New York (2007).
374. T. Vo-Dinh and F. Yan  
“Gene Detection and Multi-spectral Imaging Using SERS Nanoprobes and Nanostructures”, in Nanotechnology in Biology and Medicine, Ed. T. Vo-Dinh, Taylor and Francis Publishers, New York (2007).
376. T. Vo-Dinh  
Plasmonic SERS Molecular Sentinels: A New Biosensing Approach, in Optical Biosensors: Present and Future, F. Ligler and C. Taitt, Eds, Elsevier, Chapter 8, pp. 385-403. (2008)
377. G.W. Phillips, J.E. Spann, J.S. Bogard, T. Vo-Dinh, D. Emfietzoglou, R. T. Devine, M. Moscovitch.  
“Neutron spectrometry using CR-39 track etch detectors”, Radiation Protection Dosimetry, 120, 457-460 (2006).
378. S. J. Norton and T. Vo-Dinh  
“Plasmonic Resonances of Nanoshells of Spheroidal Shape”, IEEE Trans. Nanotechnology, 6, 627-638 (2007)
379. Q. Liu, S. Norton and T. Vo-Dinh  
"Modeling of non-phase mechanisms in ultrasonic modulation of light propagation," Applied Optics, 47, 3619-3630 (2008).
380. F. Yan and T. Vo-Dinh  
“Surface-Enhanced Raman Scattering Detection of Chemical and Biological Agents Using a Portable Raman Integrated Tunable Sensor”, Sensors and Actuators B, 121, 61-66 (2007).  
<https://doi.org/10.1016/j.snb.2006.09.032>
381. K. Chen, M. Leona, and T. Vo-Dinh  
Surface-Enhanced Raman Scattering for Identification of Organic Pigments and Dyes in Works of Art and Cultural Heritage Material “, Sensor Review, 27, 109-120 (2007).
382. T. Vo-Dinh  
“Nanobiosensing Using Plasmonics Nanoprobes”, IEEE J. Selected Topics in Quantum Electronics, 14, 1989-205 (2008).
383. D. Stratis-Cullum, G.D. Griffin, T. Vo-Dinh  
“Intensified Biochip System Using Chemiluminescence for the Detection of Bacillus globigii Spores”, Anal. Bioanal. Chem., 391, 1655-1660 (2008).
384. M. Panjehpour, D. Coppola, B.F. Overholt, T. Vo-Dinh, S. Overholt  
“Photodynamic Therapy of Barrett’s Esophagus: Ablation of Barrett’s Mucosa and Reduction in P53 Protein Expression After Treatment,” Anticancer Research, 28, 485-489 (2008).
384. Q. Liu, S. Norton, and T. Vo-Dinh,

- "Modeling of nonphase mechanisms in ultrasonic modulation of light propagation," Appl. Optics, 47, 3619-3630 (2008).
385. F. Yan, Y. Zhang, H. Yuan, M. K. Gregas and T. Vo-Dinh,  
"Apoferitin Q1 protein cages: a novel drug nanocarrier for photodynamic therapy", Chemical Comm., 38, 4579-4581 (2008).
386. S. J. Norton and T. Vo-Dinh,  
"Optical response of linear chains of metal nanospheres and nanospheroids", J. Opt. Soc. Amer., 25, 2767 (2008).
387. C. Khoury and T. Vo-Dinh,  
"Gold Nanostars for Surface-Enhanced Raman Scattering: Synthesis, Characterization and Applications", J. Phys. Chem C, 112, 18849-18859 (2008)
388. A. Dhawan, M. D. Gerhold, T. Vo-Dinh  
"Theoretical Simulation and Focused Ion Beam Fabrication of Gold Nanostructures for Surface-Enhanced Raman Scattering (SERS)," NanoBiotechnology, 3, 164-171 (2007).
389. A. Dhawan, J. F. Muth, D. N. Leonard, M. D. Gerhold, J. Gleeson, T. Vo-Dinh, P. E. Russell  
"Fabrication of Metallic Nanostructures on End-Faces of Cleaved Optical Fibers for Chemical Sensing Applications", J. of Vacuum Science and Technology (JVST) B, 26, 2168-2173 (2008).
390. T. Vo-Dinh  
"Fiberoptics Nanosensing at the Single Cell Level", Spectrochimia Acta B, 63, 95-103 (2008)
391. S. J. Norton, T. Vo-Dinh,  
"Spectral bounds on plasmon resonances for Ag and Au prolate and oblate nanospheroids", J. Nanophotonics, 2, 029501 (2008).
392. H.N. Wang and T. Vo-Dinh  
"Multiplex Detection of Breast Cancer Biomarkers Using Plasmonic Molecular Sentinel Nanoprobes", Nanotechnology, 20, 065101. (2009)
393. J. Scaffidi, M. Gregas and T. Vo-Dinh  
"SERS Fiberoptics Nanoprobe for pH Sensing in a Single Living Cell", Anal. Bioanal. Chem, 393, 1135-1141 (2009)
394. A. Dhawan, M. Gerhold, A. Madison, J. Fowlkes, P. Russell, T. Vo-Dinh, D. Leonard  
"Fabrication of Nanodot Plasmonic Waveguide Structures Using FIB Milling and Electron Beam-Induced Deposition", Scanning, 31, 139-146 (2009).
395. A. Dhawan, S.J. Norton, M.D. Gerhold, and T.Vo-Dinh  
"Comparison of FDTD Numerical Methods to Analytical Multipole Expansions for Plasmonics-Active Nanosphere Dimers", Optics Express, 17, 9688-9703 (2009)
396. P. C. Wu, C. G. Khoury, T.-H. Kim, Y. Yang, M. Losurdo, G. V. Bianco, T. Vo-Dinh, A. S. Brown, and H. O. Everitt  
"Demonstration of Surface-Enhanced Raman Scattering by Tunable, Plasmonic Gallium Nanoparticles," J. Am. Chem Soc., 131, 12032-12033 (2009)

397. T. Vo-Dinh, J.S. Scaffidi, M. Gregas, Y. Zhang, and V. Seewaldt  
 “Applications of Fiberoptics-based Nanosensors to Drug Discovery”, Expert Opinion on Drug Discovery, 4, 889-900 (2009)
398. K. Skorupska, H.J. Lewerenz, T. Vo-Dinh  
 “Scanning Probe Characterization of Enzymes Deposited onto Step-bunched Silicon Nanostructures”, Physical Scripta, 76, 065801-4 (2009)
399. S.J. Norton, T. Vo-Dinh  
 “Plasmonics enhancement of a luminescent or Raman-active layer in a multilayered metallic nanoshell”, Applied Optics, 48, 5040-5049 (2009)
400. Q. Liu and T. Vo-Dinh  
 “Spectral filtering modulation method for estimation of hemoglobin concentration and oxygenation based on a single fluorescence emission spectrum in tissue phantoms”, Medical Physics, 36, 4819-4829 (2009).
401. C.G. Khoury, S.J. Norton, T. Vo-Dinh  
 “Plasmonics of 3-D Nanoshell Dimers Using Multipole Expansion and Finite Element Method, ACS Nano, 3, 2776-2788 (2009)
402. C. Gopal Reddy, F. Yan, Y. Zhang, and T. Vo-Dinh  
 "A highly sensitive Raman method for selective cyanide detection based on evaporated cuprous iodide substrate", Analytical Methods, 2, 458-462 (2010).
403. T. Vo-Dinh and Y. Zhang  
 “Optical Nanosensors for Medicine and Health Effects Studies”, in Handbook of Nanophysics, K. Sattler, Ed. Taylor and Francis (2010)
404. F. Yan, Y. Zhang, K. S. Kim, H-K. Yuan, and T. Vo-Dinh  
 "Cellular Uptake and Photodynamic Activity Of Protein Nanocages Containing Methylene Blue Photosensitizing Drug", Photochemistry and Photobiology, 86, 662-666 (2010).
405. T. Vo-Dinh, A. Dhawan, S. J. Norton, C. G. Khoury, H-N. Wang, V. Misra, and M. Gerhold  
 “Plasmonic Nanoparticles and Nanowires: Design, Fabrication, and Application in Sensing”, J. Phys. Chem. C, 114 (16), pp 7480–7488 (2010)
406. Q. Liu, and T. Vo-Dinh  
 "Investigation of Synchronous Fluorescence Method in Multi-Component Analysis in Tissue," IEEE Journal of Selected Topics in Quantum Electronics, 16, 927-940 (2010).
407. M.K. Gregas, J.P. Scaffidi, B. Lauly, and T. Vo-Dinh  
 “Surface-Enhanced Raman Scattering Detection and Tracking of Nanoprobes: Enhanced Uptake and Nuclear Targeting in Single Cells”, Applied Spectrosc., 64, 858-866 (2010).
407. C.G. Khoury, S.J. Norton, T. Vo-Dinh  
 “Investigating the plasmonics of a dipole-excited silver nanoshell: Mie theory versus finite element method”, Nanotechnology, 21, Issue, Article Numer 315203 (2010).

408. H. J. Lewerenz, C. Heine, K. Skorupska, N. Szabo, T. Hannappel, T. Vo-Dinh, S. A. Campbell, H. W. Klemm and A. G. Muñoz  
“Photoelectrocatalysis: principles, nanoemitter applications and routes to bio-inspired systems”, Energy Environ. Sci., 3, 748 – 760 (2010).
409. J.P. Scaffidi, M.K. Gregas, B. Lauly, J. C. Carter, S. M. Angel, and T. Vo-Dinh  
“Trace Molecular Detection via Surface-Enhanced Raman Scattering and Surface-Enhanced Resonance Raman Scattering at a Distance of 15 Meters”, Applied Spectrosc., 64, 485-492 (2010)  
<https://doi.org/10.1366/000370210791211763>
410. A. Dhawan, Y. Du, F. Yan, M.D. Gerhold, V. Misra, and T. Vo-Dinh  
“Methodologies for Developing Surface-Enhanced Raman Scattering (SERS) Substrates for Detection of Chemical and Biological Molecules”, IEEE Sensors Journal, 10, 608-616 (2010).
411. Y. Zhang, A. Dhawan and T. Vo-Dinh  
“Design and Fabrication of Fiberoptic Nanoprobes for Optical Sensing”, Nanoscale Research Lett., 6, DOI 10.1007/s11671-010-9744-5 (2010)
412. M. Lublow, K. Skorupska, S. Zoladek, P.J. Kulesza, T. Vo-Dinh, and H.J. Lewerenz  
“On the behaviour of Au plasmonic nanoparticles during hydrogen evolution at p-Si”, Electrochemistry Communications, 12, 1298-1310 (2010)
413. M.B. Wabuye, F. Yan, and T. Vo-Dinh  
“Plasmonics nanoprobes: detection of single-nucleotide polymorphisms in the breast cancer BRCA1 gene”, Anal Bioanal Chem, 398:729–736 (2010).
414. T. Vo-Dinh, H. N. Wang and J. Scaffidi  
“Plasmonic Nanoprobes for SERS Biosensing and Bioimaging”, J. Biophotonics, 3, 89–102 (2010).
415. F. Yan, C.V. Reddy, Y. Zhang, T. Vo-Dinh  
“A novel cyanide ion sensing approach based on Raman scattering for the detection of environmental cyanides”, Ecotoxicity and Environment Safety, 73, 1490-1494 (2010).
416. A. Dhawan, A. Duval, M. Nakkach, G. Barbillon, J. Moreau, M. Canva, T. Vo-Dinh  
“Deep UV nano-microstructuring of substrates for surface plasmon resonance imaging”, Nanotechnology, 22, 165301 (2011).
417. T. Vo-Dinh, Y. Zhang  
“Single-cell monitoring using fiberoptic nanosensors, Willey Interdisciplinary review – Nanomedicine and Nanobiotechnology, 3, 79-85 (2011)
418. A. Dhawan, M. Canva, T. Vo-Dinh  
“Narrow groove plasmonic nano-gratings for surface plasmon resonance sensing”, Optics Express, 19, 787-813 (2011).
419. M.K. Gregas, J.P. Scaffidi, B. Lauly, and T. Vo-Dinh  
“Characterization of nanoprobe uptake in single cells: spatial and temporal tracking via SERS labeling and modulation of surface charge”, Nanomedicine, 7, 115-122 (2011).
420. Q. Liu, G. Grant, J. Li, Y. Zhang, F. Hu, S. Li, C. Wilson, K. Chen, D. Bigner, T. Vo-Dinh

- “Compact point-detection fluorescence spectroscopy system for quantifying intrinsic fluorescence redox ratio in brain cancer diagnostics.” J. Biomedical Optics, 16, 037004 (2011)
421. H. D. Duong, C.V. Gopal Reddy, J.I. Rhee, T. Vo-Dinh  
 “Amplification of fluorescence emission of CdSe/ZnS QDs entrapped in a sol-gel matrix, a new approach for detection of trace level of PAHs”, Sensors and Actuators B, 157, 139-145 (2011)
422. J.P. Scaffidi, M.K. Gregas, B. Lauly, Y. Zhang, and T. Vo-Dinh  
 “Activity of Psoralen-Functionalized Nanoscintillators against Cancer Cells upon X-ray Excitation”, ACS Nano, 5, 4679-4687 (2011)
422. A.M. Fales, H. Yuan and T. Vo-Dinh  
 “Silica-Coated Gold Nanostars for Combined Surface-Enhanced Raman Scattering (SERS) Detection and Singlet-Oxygen Generation: A Potential Nanoplatfom for Theranostics”, Langmuir, 27, 12186-12190 (2011).
423. A. Dhawan, Y. Du, Y. D. Batchelor, H-N. Wang, Hsin-Neng, D. Leonard, V. Misra, Veena, M. Ozturk, M. Gerhold, T. Vo-Dinh  
 “Hybrid Top-Down and Bottom-Up Fabrication Approach for Wafer-Scale Plasmonic Nanoplatfoms”, Small, 7, 727-731 (2011)
424. S.J. Norton and T. Vo-Dinh  
 “Plasmonics Quenching and Enhancement of a Fluorescing Molecule Outside and Inside a Silver Metallic Nanoshell”, IEEE Transactions of Nanotechnology, 10, 1264-1274 (2011)
425. H.-N. Wang and T. Vo-Dinh  
 “Plasmonic Coupling Interference (PCI) Nanoprobes for Nucleic Acid Detection”, Small, 7, 3067-3074 (2011)
426. Lewerenz, HJ; Skorupska, K; Munoz, AG; Stempel, T; Nusse, N; Lublow, M; Vo-Dinh, T; Kulesza, P  
 “Micro-and nanotopographies for photoelectrochemical energy conversion. II: Photoelectrocatalysis - Classical and advanced systems”, Electrochimica Acta, 56, 10726-10736 (2011)  
 DOI: 10.1016/j.electacta.2011.05.028
427. H. Yuan, C.G. Khoury, H.N. Wang, C.M. Wilson, G.A. Grant, T Vo-Dinh  
 “Gold nanostars: surfactant-free synthesis, 3D modeling, and two-photon photoluminescence imaging”, Nanotechnology, 23, 075102 (2012)  
 DOI: 10.1088/0957-4484/23/7/075102
428. B. Li, K. Claytor, H. Yuan, T. Vo-Dinh, W.S. Warren, and M.C. Fischer  
 “Multicontrast nonlinear optical microscopy with a compact and rapid pulse shaper”  
Optics Letters, 37, 2763-2765 (2012)
429. Panjehpour, M; Overholt, BF; Vo-Dinh, T; Coppola, D  
 “The effect of reactive atypia/inflammation on the laser-induced fluorescence diagnosis of non-dysplastic Barrett's esophagus”, Lasers in Surgery and Medicine, 44, 390-396 (2012)  
 DOI: 10.1002/lsm.22033

430. H. Yuan, C.G. Khoury, C.M. Wilson, G.A. Grant, A.J. Bennett, T. Vo-Dinh  
 “In Vivo Particle Tracking and Photothermal Ablation using Plasmon Resonant Gold Nanostars.”  
*Nanomedicine: Nanotechnology, Biology, and Medicine*, 8, 1355-1363 (2012)  
 DOI: 10.1016/j.nano.2012.02.005
431. S.J. Norton and T. Vo-Dinh  
 “Imaging a spatially confined photoacoustic source defined by a distribution of plasmonic nanoparticles”, *J. Applied Physics*, 111, 094305 (2012).  
 DOI: 10.1063/1.4709394
432. Ludovic S., Dhawan, A, Gibson, KF, Poirier-Richard, HP; Graham, D; Canva, M; Tuan Vo-Dinh; Masson, JF.  
 “Angle-dependent resonance of localized and propagating surface plasmons in microhole arrays for enhanced biosensing”, *Anal. Bioanal. Chem.*, 404, 2859-2868 (2012).
433. Li, BL; Cheng, YW (; Liu, J; Yi, CW; Brown, AS; Yuan, HK; Vo-Dinh, T (Tuan Vo-Dinh; Fischer, MC; Warren, WS  
 “Direct Optical Imaging of Graphene In Vitro by Nonlinear Femtosecond Laser Spectral Reshaping”, *Nanoletters*, 12, 5936-5940 (2012).
434. Correia-Ledo, D;Gibson, KF; Dhawan, A; Couture, M; Vo-Dinh, T; Graham, D; Masson, JF  
 “Assessing the Location of Surface Plasmons Over Nanotriangle and Nanohole Arrays of Different Size and Periodicity”, *J. Phys. Chem C*, 116, 6884-6892 (2012)  
 DOI: 10.1021/jp3009018
435. Dhawan, A; Canva, M; Vo-Dinh, T  
 “Bimodal behavior and isosbestic transition pathway in surface plasmon resonance sensing”  
*Optics Express*, 20, 23630-23642 (2012)
436. Yuan, H; Fales, AM; Vo-Dinh, T  
 “TAT Peptide-Functionalized Gold Nanostars: Enhanced Intracellular Delivery and Efficient NIR Photothermal Therapy Using Ultralow Irradiance”, *J. Am. Chem. Soc.*, 134, 11358-11361 (2012).  
 DOI: 10.1021/ja304180y
437. C. Khoury and T. Vo-Dinh  
 “Nanowave” Substrates for SERS: Fabrication and Numerical Analysis”, *J. Phys. Chem. C*, 116, 7534-7545 (2012)  
 DOI: 10.1021/jp2120669
438. Yuan H, Liu Y, Fales AM, Li YL, Liu J, Vo-Dinh T.  
 “Quantitative Surface-Enhanced Resonant Raman Scattering Multiplexing of Biocompatible Gold Nanostars for in Vitro and ex Vivo Detection”, *Anal Chem.*, 85, 208-12. (2013).
439. H. N. Wang, A. Dhawan, Y. Du, D. Batchelor, D.N. Leonard, V. Misra, and T. Vo-Dinh  
 "Molecular sentinel-on-chip for SERS-based biosensing”, *Phys. Chemistry Chem Physics*, 15, 6—8-6015 (2013)  
 DOI: 10.1039/c3cp00076a
440. H. K. Yuan, A. M. Fales, C.G. Khoury, J. Liu, T. Vo-Dinh  
 Spectral characterization and intracellular detection of Surface-Enhanced Raman Scattering (SERS)-encoded plasmonic gold nanostars”, *J. Raman Spectroscopy*, 44, 234-239 (2013).

DOI: 10.1002/jrs.4172

441. Y. Liu, H. Yuan, T. Vo-Dinh  
“Spectroscopic and vibrational analysis of the methoxy psoralen system: A comparative experimental and theoretical study”, J. Mol. Structure, 1035, 13-18 (2013).  
DOI: 10.1016/j.molstruc.2012.08.047
442. A. Fales, H. Yuan, T. Vo-Dinh  
“Cell-penetrating Peptide enhanced intracellular Raman imaging and photodynamic therapy.”  
Molecular Pharmaceutics, 10, 6, 2291-8 (2013)  
DOI: 10.1021/mp300634b
443. H. N. Wang, A. M. Fales, A. K. Zaas, C. W. Woods, T. Burke, G. Ginsburg, T. Vo-Dinh  
“SERS Molecular Sentinel Nanoprobes for Viral Infection Diagnostics”, Analytica Chimica Acta, 786, 153-158 (2013).  
<http://www.sciencedirect.com/science/article/pii/S0003267013006843>
444. H. T. Ngo, H. N. Wang, A. Fales, and T. Vo-Dinh  
“Label-free DNA Biosensor Based on SERS Molecular Sentinel on Nanowave Chip”, Anal. Chem., 85, 6378–6383 (2013)  
<http://pubs.acs.org/doi/ipdf/10.1021/ac400763c>
445. Y Liu, H Yuan, AM Fales, T Vo-Dinh  
“pH-sensing nanostar probe using surface-enhanced Raman scattering (SERS): theoretical and experimental studies”, J. Raman Spectrosc., 44, 980-986 (2013)  
DOI: 10.1002/jrs.4302
446. Y. Liu, Z. Chang, H. Yuan, A.M. Fales and T. Vo-Dinh  
“Quintuple-modality (SERS-MRI-CT-TPL-PTT) plasmonic nanoprobe for theranostics”, Nanoscale, 5, 12126-12131 (2013)  
DOI: 10.1039/c3nr03762b
447. H. Yuan, J.K. Register, H. N. Wang, A.M. Fales, Y. Liu, T. Vo-Dinh  
“Plasmonic nanoprobes for intracellular sensing and imaging”, Anal Bioanal Chem., 405, 6165-80 (2013).  
DOI: 10.1007/s00216-013-6975-1
448. T. Vo-Dinh, A. M. Fales, G.D. Griffin, C. G. Khoury, Y. Liu, H. Ngo, S. J Norton, J. K. Register, H. N. Wang, H. Yuan  
“Plasmonic nanoprobes: from chemical sensing to medical diagnostics and therapy”, Nanoscale, 5, 10127-10140 (2013)  
DOI: 10.1039/c3nr03633b
449. J. Zhao, Y. Liu, A. M. Fales J. Register, H. Yuan, Vo-Dinh  
"Direct Analysis of Traditional Chinese Medicines Using Surface-Enhanced Raman Scattering (SERS)", Drug Testing and Analysis, 6, 1063-1068 (2014)  
DOI: 10.1002/dta.1612
450. M Chamtouri, A Dhawan, M Besbes, J Moreau, H Ghalila, T Vo-Dinh, Michael Canva  
“Enhanced SPR Sensitivity with Nano-Micro-Ribbon Grating—an Exhaustive Simulation Mapping”, Plasmonics 9 (1), 79-92 (2014)

451. H.T. Ngo, H-N Wang, T. Burke, G.S. Ginsburg, T. Vo-Dinh  
 “Multiplex detection of disease biomarkers using SERS molecular sentinel-on-chip”  
Analytical and Bioanalytical Chemistry, 406 (14), 3335-3344 (2014)
452. H. Yuan, C.M. Wilson, J. Xia, S.L. Doyle, S. Li, A.M. Fales, Y. Liu, E. Ozaki, K. Mulfaul, G. Hanna, G. M. Palmer, L. V. Wang, G. A. Grant and T. Vo-Dinh  
 “Plasmonics-enhanced and optically modulated delivery of gold nanostars into brain tumor”,  
Nanoscale, 6 (8), 4078-4082 (2014)  
 DOI: 10.1039/C3NR06770J
453. A.M. Fales, H. Yuan, T. Vo-Dinh  
 “Development of Hybrid Silver-Coated Gold Nanostars for Non-Aggregated Surface-Enhanced Raman Scattering”, J. Phys. Chem. C, 118 (7), 3708–3715 (2014)  
 DOI: 10.1021/jp4091393
454. M. Chamtouri, A. Dhawan, M. Besbes, J. Moreau, H. Ghalila, T. Vo-Dinh, M. Canva  
 “Enhanced SPR sensitivity with nano-micro-ribbon grating—an exhaustive simulation mapping”  
Plasmonics, 9, 79-92 (2014)
454. H. T. Ngo, H-N. Wang, A. Fales, B.P. Nicholson, C.W. Woods, T. Vo-Dinh  
 “DNA Bioassay-on-Chip using SERS Detection for Dengue Diagnosis”, Analyst, 139 (22), 5656-5660 (2014)  
 DOI: 10.1039/C4AN01077A
455. T. Vo-Dinh, Y. Liu, A. M. Fales, H. Ngo, H-N. Wang, J.K. Register, H. Yuan, S. J. Norton, G.D. Griffin  
 “SERS Nanosensors and Nanoreporters: Golden Opportunities in Biomedical Applications”, WIREs Nanomedicine and Nanobiotechnology, 7, 17-33 (2015)
456. Y Liu, H Yuan, FR Kersey, JK Register, MC Parrott, T Vo-Dinh  
 “Plasmonic Gold Nanostars for Multi-Modality Sensing and Diagnostics”, Sensors, 15 (2), 3706-3720 (2015)
457. Y. Liu, J. R. Ashton, E. J. Moding, H. Yuan, J. K. Register, J. Choi, M. J. Whitley, X. Zhao, Y. Qi, Y. Ma, G. Vaidyanathan, M. R. Zalutsky, D. G. Kirsch, C. T. Badea, T. Vo-Dinh  
 “A Plasmonic Gold Nanostar Theranostic Probe for *In Vivo* Tumor Imaging and Photothermal Therapy”, Theranostics, 5(9):946-960. (2015)
458. N. Gandra, C. Portz, S. Z. Nergiz, A. Fales, T. Vo-Dinh and S. Singamaneni  
 “Inherently Stealth and Highly Tumor-Selective Gold Nanoraspberries for Photothermal Cancer Therapy”. Nature Scientific Reports, 5:10311 (2015)  
 DOI: 10.1038/srep10311
459. X. Zhang, A. Fales, T. Vo-Dinh  
 “Time-Resolved Synchronous Fluorescence for Biomedical Diagnosis”. Sensors, 15, 21746-59 (2015)  
 doi:10.3390/s150921746
460. H. Yuan, J.A. Gomez, J.S. Chien, L. Zhang, C.M. Wilson, S. Li, A.M. Fales, Y. Liu, G.A. Grant, M. Mirosou, V.J. Dzau, T. Vo-Dinh,

- “Tracking Mesenchymal Stromal Stem Cells using TAT peptide-Functionalized Plasmonic Gold Nanoprobes”, *J. Biophotonics*, 1–8 (2015)  
DOI 10.1002/jbio.201500173
461. Y. Liu, H. Yuan, A.M. Fales, J.K. Register, T.Vo-Dinh  
“Multifunctional Gold Nanostars for Molecular Imaging and Cancer Therapy”, *Frontiers in Chemistry*, 3,1-7 (2015)  
<http://dx.doi.org/10.3389/fchem.2015.00051>
462. J.K. Register, A.M. Fales, H. Wang, E.H. Cho, A. Boico, S. Pradhan, J. Kim, Thies Schroeder, N.A. Wisniewski, B. Klitzman, T. Vo-Dinh  
“*In Vivo* Detection of SERS-Encoded Plasmonic Nanostars in Human Skin Grafts and Live Animal Models”, *Anal. Bioanal. Chem.*, 407 (27), 8215-8224 (2015)  
DOI 10.1007/s00216-015-8939-0
463. A.M. Fales, S.J. Norton, B.M. Crawford, B.G. DeLacy and T. Vo-Dinh  
“Fano Resonance in a Gold Nanosphere With a J-Aggregate Coating”, *Physical Chemistry Chemical Physics*, 17, 24931 (2015)  
DOI: 10.1039/C5CP03277F
464. H.N. Wang, AM Fales, T Vo-Dinh  
“Plasmonics-based SERS nanobiosensor for homogeneous nucleic acid detection”, *Nanomedicine: Nanotechnology, Biology and Medicine*, 11 (4), 511-520 (2015)  
doi:10.1016/j.nano.2014.12.012
465. A.M. Fales, T. Vo-Dinh  
“Silver embedded nanostars for SERS with internal reference (SENSIR)”  
*Journal of Materials Chemistry C* 3 (28), 7319-7324 (2015)
466. H.T. Ngo, H.N. Wang, A.M. Fales, T. Vo-Dinh  
“Plasmonic SERS biosensing nanochips for DNA detection”, *Anal Bioanal Chem.*, 408, 1773-11781 (2016)  
DOI 10.1007/s00216-015-9121-4
467. S.J. Norton, T Vo-Dinh  
“Photothermal effects of plasmonic metal nanoparticles in a fluid”, *Journal of Applied Physics*, 119 (8), 083105 (2016)
468. N. Gandra, H.C. Hendargo, S.J. Norton, A.M. Fales, G.M. Palmer, T Vo-Dinh  
“Tunable and amplified Raman gold nanoprobes for effective tracking (TARGET): in vivo sensing and imaging”, *Nanoscale*, 8 (16), 8486-8494 (2016)
469. S.J. Norton, T. Vo-Dinh  
“Optical Fano resonances in a nonconcentric nanoshell”, *Applied Optics*, 55, 2611-2618 (2016)
470. O. Bibikova, A. Popov, A. Bykov, A. Fales, H. Yuan, I. Skovorodkin, M. Kinnunen, S. Vainio, T. Vo-Dinh, V. V. Tuchin, I. Meglinski  
“ Plasmon-Resonant Gold Nanostars With Variable Size as Contrast Agents for Imaging Applications”, *IEEE J. Selected Topics in Quantum Electronics*. 22 (3), 1-8 (2016)
471. H. T. Ngo, N. Gandra, A.M. Fales, S.M. Taylor, T. Vo-Dinh

- “Sensitive DNA detection and SNP discrimination using ultrabright SERS nanorattles and magnetic beads for malaria diagnostics”, Biosensors and Bioelectronics, 81, 8-14 (2016)
472. C. Chang, M. Mao, Y. Liu, M. Wu, T. Vo-Dinh, F. Yuan  
“Improvement in Electrotransfection of Cells Using Carbon-Based Electrodes”, Cellular and Molecular Bioengineering, 9, 538-545 (2016)  
DOI: 10.1007/s12195-016-0452-9
473. H.N. Wang, B. Crawford, A.M. Fales, M.L. Bowie, V.L. Seewaldt, T. Vo-Dinh  
“Multiplexed Detection of MicroRNA Biomarkers Using SERS-based Inverse Molecular Sentinel (iMS) Nanoprobes”, J. Phys. Chem. C, 120 (37), 21047–21055 (2016)  
DOI: 10.1021/acs.jpcc.6b03299
474. C. Zaffino, H.T. Ngo, J. Register, S. Bruni, T. Vo-Dinh  
“Dry-state” surface-enhanced Raman scattering (SERS): toward non-destructive analysis of dyes on textile fibers”, Applied Physics A, 122, 1-9 (2016)
475. C.G. Khoury, A.M. Fales, T. Vo-Dinh  
“Reversible Gating of Plasmonic Coupling for Optical Signal Amplification”, ACS Applied Materials & Interfaces, 8, 18157–18164 (2016)  
DOI: 10.1021/acsami.6b04623
476. R. L. Shamma, A. M. Fales, B. M. Crawford, A. J. Wisdom, G. R. Devi, T. Vo-Dinh, S. T. Hollenbeck  
“Human Adipose-Derived Stem Cells Labeled with Plasmonic Gold Nanostars for Cellular Tracking and Photothermal Cancer Cell Ablation”, Plastic & Reconstructive Surgery, 139, 900e–910e (2017)  
doi: 10.1097/PRS.0000000000003187
477. A.M. Fales, B.M. Crawford, T. Vo-Dinh  
“Folate Receptor-Targeted Theranostic Nanoconstruct for Surface-Enhanced Raman Scattering Imaging and Photodynamic Therapy”, ACS Omega 1 (4), 730-735(2016)
478. B. M. Crawford, R. Shamma, A. Fales, D. Brown, S. Hollenbeck, T. Vo-Dinh, G. Devi  
“Photothermal ablation of inflammatory breast cancer tumor emboli using plasmonic gold nanostars”, Int. J. of Nanomedicine, 12, 6259-6272 (2017)
479. P. Vohra, H.T. Ngo, W.T. Lee, T. Vo-Dinh  
“Squamous cell carcinoma DNA detection using ultrabright SERS nanorattles and magnetic beads for head and neck cancer molecular diagnostics”, Analytical Methods, 9 (37), 5550-5556 (2017)
480. Y. Liu, P. Maccarini, G. M. Palmer, W. Etienne, Y. Zhao, C.-T. Lee, X. Ma, B. A. Inman, and T. Vo-Dinh  
“Synergistic Immuno Photothermal Nanotherapy (SYMPHONY) for the Treatment of Unresectable and Metastatic Cancers”, Scientific Reports 7, Article number: 8606 (2017)  
doi:10.1038/s41598-017-09116-1
481. T. Vo-Dinh, B.A. Inman  
“What potential does plasmonics-amplified synergistic immuno photothermal nanotherapy have for treatment of cancer?”, Nanomedicine, 13(2):139-144 (2018).  
doi: 10.2217/nmm-2017-0356.

482. T. Vo-Dinh  
 “Research In Optics And Photonics: Shaping Human Destiny”, Chapter in *Light Beyond 2015*, A. M . Cetto and M.T. J. de Celis Herrero, Eds, UNAM Publishers (2017).
482. T. Vo-Dinh, Y. Liu, B.M. Crawford, H.N. Wang, H. Yuan, J. K. Register, and C. G. Khoury  
 “Shining Gold Nanostars: From Cancer Diagnostics to Photothermal Treatment and Immunotherapy”, J. Immunological Sci.,2(1): 1-8 (2018).
483. H.N. Wang, J.K. Register, A.M. Fales, N. Gandra, E.H. Cho, A. Boico, G. M Palmer, B. Klitzman, T. Vo-Dinh  
 “Surface-enhanced Raman scattering nanosensors for in vivo detection of nucleic acid targets in a large animal model”, Nano Research, 1-12 (2018)
484. P. Strobbia, R.A. Odion, T. Vo-Dinh  
 “Spectroscopic Chemical Sensing and Imaging: From Plants to Animals and Humans”, Chemosensors, 6 (1), 11 (2018)
485. A.S.D.S. Indrasekara, SF Johnson, RA Odion, T Vo-Dinh  
 “A Systematic Bottom-Up Synthesis: Manipulation of the Geometry and Modulation of the Optical Response of Surfactant-Free Gold Nanostars”, ACS Omega, 3 (2), 2202 (2018)
486. H.T. Ngo, E. Freedman, R.A. Odion, P. Strobbia, A.S.D.S. Indrasekara, P. Vohra, T. Vo-Dinh  
 “Direct Detection of Unamplified Pathogen RNA in Blood Lysate using an Integrated Lab-in-a-Stick Device and Ultrabright SERS Nanorattles”, Scientific Reports, 8 (1), 4075 (2018)
487. R.A. Odion, P. Strobbia, B.M. Crawford, T. Vo-Dinh  
 “Inverse Surface-Enhanced Spatially Offset Raman Spectroscopy (SESORS) Through a Monkey Skull”, J. Raman Spectroscopy, 49, 1452-1460 (2018)
488. F. Yan, C. V. Gopal Reddy, Y. K. Shrestha, C. L. Spurgeon, A. B. Kummarapurugu, B. M. Fischer and T. Vo-Dinh  
 “Determination of ferric ions using surface-enhanced Raman scattering based on desferrioxamine-functionalized silver nanoparticles”, Chem. Commun., 54, 11053 (2018)
489. P. Vohra, P. Strobbia, H. T. Ngo, W. T. Lee & T. Vo-Dinh  
 “Rapid Nanophotonics Assay for Head and Neck Cancer Diagnosis”, Scientific Reports, 8, 12989 (2018)
490. J. Register, M. Maiwald, A. Fales, P. Strobbia, B. Sumpf, T. Vo-Dinh  
 “Shifted-excitation Raman difference spectroscopy for the detection of SERS-encoded gold nanostar probes”, J. Raman Spectroscopy, 49:1961–1967 (2018)  
 DOI:10.1002/jrs.5482
491. Y. Liu, B.M. Crawford, T. Vo-Dinh  
 “Gold nanoparticles-mediated photothermal therapy and immunotherapy”, Immunotherapy, 10 (13), 1175-1188 (2018).
492. A. S. D. S. Indrasekara, S. J. Norton, N. K. Geitner, B. M. Crawford, M. R. Wiesner, T. Vo-Dinh

- “Tailoring the Core-Satellite Nanoassembly Architectures by Tuning inter-nanoparticle Electrostatic Interactions”, Langmuir, 34 (48), pp 14617–14623 (2018)  
DOI: 10.1021/acs.langmuir.8b02792
493. H. D. Duong, T. Vo-Dinh, J. Il Rhee  
“Synthesis and functionalization of gold nanostars for singlet oxygen production”, J. Industrial and Engineering Chemistry, 69, 233-240 (2019)
494. S. O. Piryani, Y. Jiao, A.Y.F. Kam, Y. Liu, T. Vo-Dinh, B.J. Chen, N. J. Chao, P. L. Doan  
“Endothelial Cell-Derived Extracellular Vesicles Mitigate Radiation-Induced Hematopoietic Injury”, International J. of Radiation Oncology- Biology\*Physics, 104, 291-301 (2019)
494. B.M. Crawford, P. Strobbia, H.N. Wang, R. Zentella, M.I. Boyanov, Z.M. Pei, T-P. Sun, K.M. Kemner, T. Vo-Dinh  
“Plasmonic nanoprobe for in vivo multimodal sensing and bioimaging of microRNA within plants”, ACS Appl. Mater. Interfaces, 11 (8), 7743–7754 (2019)  
DOI: 10.1021/acsami.8b19977
495. P Strobbia, T Sadler, RA Odion, T Vo-Dinh  
“SERS in Plain Sight: A Polarization Modulation Method for Signal Extraction”, Anal. Chem., 91 (5), 3319–3326 (2019)  
DOI: 10.1021/acs.analchem.8b04360
496. Y. Liu, A.B. Carpenter, C. Pirozzi, H. Yuan, M. Waitkus, Z. Zhou, L. Hansen, M. Seywald, R. Odion, P. K. Greer, T. Hawk, B.B. Chin, G. Vaidyanathan, M.R. Zalutsky, H. Yan and T. Vo-Dinh  
“ Non-invasive sensitive brain tumor detection using dual-modality bioimaging nanoprobe”, Nanotechnology, Volume 30, Number 27 (2019)
497. P. Strobbia, Y. Ran, B.M. Crawford, V. Cupil-Garcia, R. Zentella, H.N. Wang, T.P. Sun, T. Vo-Dinh  
“Inverse Molecular Sentinel-Integrated Fiberoptics Sensor for Direct and In Situ Detection of miRNA Targets”, Analytical Chemistry, 91 (9), 6345-6352 (2019)  
DOI: 10.1021/acs.analchem.9b01350
498. Y. Ran, P. Strobbia, V. Cupil-Garcia, T. Vo-Dinh  
“Fiber-optrode SERS probes using plasmonic silver-coated gold nanostars”, Sensors and Actuators B: Chemical 287, 95-101 (2019)
499. B. Crawford, T. Vo-Dinh  
“Plasmonic Nanoparticles for Cancer Bioimaging, Diagnostics, and Therapy”, Chapter in 21<sup>st</sup> Century Nanoscience-A Handbook, Klaus Sattler, Editor, Taylor & Francis Publishers, 18-1-18-26 (2020)
500. Y. Jiu, W. Huang, C. Xiong, Y. Huang, B. J. Chen, L. Racioppi. N. Chao, T. Vo-Dinh

- “Biodistribution and sensitive tracking of immune cells with plasmonic gold nanostars”, *Int. J. of Nanomedicine*, 14, 3403—3411 (2019)  
DOI: <https://doi.org/10.2147/IJN.S192189>
501. Y. Liu, P. Chongsathidkiet, B. M. Crawford, R. Odion, C. A. Dechant, H. R. Kemeny, X. Cui, P. F. Maccarini, C. D. Lascola, P. E. Fecci, T. Vo-Dinh  
“Plasmonic gold nanostar-mediated photothermal immunotherapy for brain tumor ablation and immunologic memory”, *Immunotherapy*, 11, 1293-1302 (2019)  
DOI: <https://doi.org/10.2217/imt-2019-0023>
502. H. N. Wang, B. M. Crawford, S. J. Norton, T. Vo-Dinh  
“Direct and Label-Free Detection of MicroRNA Cancer Biomarkers using SERS-Based Plasmonic Coupling Interference (PCI) Nanoprobes”, *J. Phys. Chem. B*, 123, 48, 10245-10251 (2019)  
<https://doi.org/10.1021/acs.jpcc.9b06804>
503. Z. Jiang, X. Zhou, M. Tao, F. Yuan, L. Liu, F. Wu, X. Wu, Y. Xiang, Y. Niu, F. Liu, C. Li, R. Ye, B. Byeon, Y. Xue, H. Zhao, H-N. Wang, B.bM. Crawford, D. M. Johnson, C. Hu, C. Pei, W. Zhou, G. B. Swift, H. Zhang, T. Vo-Dinh, Z. Hu, J. N. Siedow, Z-M. Pei  
“Plant cell-surface GIPC sphingolipids sense salt to trigger Ca<sup>2+</sup> influx”, *Nature*, 572, 341–346 (2019).  
DOI: <https://doi.org/10.1038/s41586-019-1449-z>
504. J. Langer, D. J. de Aberasturi, J. Aizpurua, R. A. Alvarez-Puebla, B. Auguie, J. J. Baumberg, G. C. Bazan, S. E.J. Bell, A. Boisen, A. G. Brolo, J. Choo, D. Cialla-May, V. Deckert, L. Fabris, K. Faulds, F. J. G. de Abajo, R. Goodacre, D. Graham, A. J. Haes, C. L. Haynes, C. Huck, T. Itoh, M. Käll, J. Kneipp, N. A. Kotov, H. Kuang, E. C. Le Ru, H. K. Lee, J. Li, Xing Y. Ling, S. Maier, T. Mayerhoefer, M. Moskovits, K. Murakoshi, J. Nam, S. Nie, Y. Ozaki, I. Pastoriza-Santos, J. Perez-Juste, J. Popp, A. Pucci, S. Reich, B. Ren, G. C. Schatz, T. Shegai, S. Schlücker, T. Li-Lin, K. G. Thomas, Z. Tian, R. P. Van Duyne, T. Vo-Dinh, Y. Wang, K. A. Willets, C. Xu, H. Xu, Y. Xu, Y. S. Yamamoto, B. Zhao, L. M. Liz-Marzán,  
“Present and Future of Surface Enhanced Raman Scattering”, *ACS Nano*, 14, 1, 28-117 (2020)  
<https://doi.org/10.1021/acsnano.9b04224>
505. P. Strobbia, R.A. Odion, M. Maiwald, B. Sumpf, T. Vo-Dinh  
“Direct SERDS sensing of molecular biomarkers in plants under field conditions”. *Anal. and Bioanal. Chem.*, 412, 3447- 3466 (2020)  
<https://doi.org/10.1007/s00216-020-02544-5>
506. B.M. Crawford, H.N. Wang, C. Stolarchuk, R. Von Furstenberg, P. Strobbia, D. Zhang, X. Qin, K. Owzar, K.S. Garman, T. Vo-Dinh  
“Plasmonic Nanobiosensors for Detection of MicroRNA Cancer Biomarkers in Clinical Samples”, *Analyst*, 145, 4587 - 4594 (2020)  
DOI: 10.1039/D0AN00193G

507. B.M. Crawford, H.N. Wang, P. Strobbia, R. Zentella, Z.M. Pei, T.P. Sun, T. Vo-Dinh, “Plasmonic Nanobiosensing: from in situ plant monitoring to cancer diagnostics at the point of care”. J Physics Photonics, 2, 034012 (2020)
508. A.D. Sung, R.C. Yen, Y. Jiao, A. Bernanke, D.A. Lewis, S.E. Miller, Z. Li, J.R. Ross, A. Artica, S. Piryani, D. Zhou, Y. Liu, T. Vo-Dinh, M. Hoffman, T.L. Ortel, N.J. Chao, B.J. Chen  
“Fibrinogen-Coated Albumin Nanospheres Prevent Thrombocytopenia-Related Bleeding  
Radiation Research, 194 (2): 162–172 (2020)
509. AM Fales, P Strobbia, T Vo-Dinh, IK Ilev, TJ Pfefer  
“3D-printed phantoms for characterizing SERS nanoparticle detectability in turbid media”  
Analyst, 145 (18), 6045-6053 (2020)
510. PV Dukes, P Strobbia, HT Ngo, RA Odion, D Rocke, WT Lee, T Vo-Dinh  
“Plasmonic assay for amplification-free cancer biomarkers detection in clinical tissue samples”, Analytica Chimica Acta, 1139, 111-118 (2020)
511. V. Cupil-Garcia, P. Strobbia, B. M. Crawford, H-N. Wang, H. Ngo, Y. Liu, T. Vo-Dinh  
“Plasmonic nanoplatforms: From surface-enhanced Raman scattering sensing to biomedical applications”, J. Raman Spectroscopy, 52, 541-553 (2021)  
<https://doi.org/10.1002/jrs.6056>
512. R Odion, Y Liu, T Vo-Dinh  
“Plasmonic Gold Nanostar-Mediated Photothermal Immunotherapy”, IEEE Journal of Selected Topics in Quantum Electronics, 27 (5), 1-9 (2021)
512. P. Strobbia, V. Cupil-Garcia, B. M. Crawford, A.M. Fales, T. J. Pfefer, Y. Liu, M. Maiwald, B. Sumpf, T. Vo-Dinh  
“Accurate in vivo tumor detection using plasmonic-enhanced shifted-excitation Raman difference spectroscopy (SERDS)”, Theranostics, 11 (9), 4090 (2021)
512. T. Vo-Dinh  
“The New Frontier of Medicine at the Convergence of Nanotechnology and Immunotherapy”, in Nanoparticle-Mediated Immunotherapy, T. Vo-Dinh, Ed., Springer (2021).
513. T. Vo-Dinh, B. Inman, P. Maccarini, G. Palmer, Y. Liu, W. Etienne  
“Plasmonic Gold Nanostars for Immuno Photothermal Nanotherapy To Treat Cancers and Induce Long-Term Immunity in Nanoparticle-Mediated Immunotherapy, T. Vo-Dinh, Ed., Springer (2021)
514. Y. Liu, S. Indrasekara, T. Vo-Dinh  
“Development of Gold Nanostars for Photothermal and Immunotherapy Applications”, Chapter 14, in World Scientific Reference on Plasmonic Nanomaterials (in press)

515. S. J. Norton and T. Vo-Dinh  
Nanoparticle-Mediated Heating: A Theoretical Study for Photothermal Treatment and Photo Immunotherapy, in Nanoparticle-Mediated Immunotherapy, T. Vo-Dinh, Ed., Springer (2021).
516. V. Cupil-Garcia, B. Crawford, T. Vo-Dinh  
“Nanoparticle Systems Applied to Immunotherapy in Various Treatment Modalities”, in Nanoparticle-Mediated Immunotherapy, T. Vo-Dinh, Ed., Springer (2021).
517. Y. Liu, P. Chongsathidkiet, R. Odion, P. E. Fecci, T. Vo-Dinh  
“Multifunctional Gold Nanostars for Sensitive Detection, Photothermal Treatment and Immunotherapy of Brain Tumor, in Nanoparticle-Mediated Immunotherapy, T. Vo-Dinh, Ed., Springer (2021).
518. Y. Liu, E. Chorniak, R. Odion, W. Etienne, S.K Nair, P. Maccarini, G. M. Palmer, B. A. Inman, T. Vo-Dinh  
“Plasmonic gold nanostars for synergistic photoimmunotherapy to treat cancer”, Nanophotonics, 10, 3295-3302 (2021).
519. Y. Chi, C. Wang, M. Wang, D. Wan, F. Huang, Z. Jiang, B. M. Crawford, T. Vo-Dinh, F. Yuan, F. Wu, Z-M Pei  
Flg22-induced Ca<sup>2+</sup> increases undergo desensitization and resensitization”, Plant, Cell & Environment, 44, 3793-3805 (2021): <https://doi.org/10.1111/pce.14186>
520. D. Bennet, T. Vo-Dinh, F. Zenhausern  
“Current and emerging opportunities in biological medium-based computing and digital data storage” Nano Select, 1-20 (2021); <https://doi.org/10.1002/nano.202100275>
521. Y. Liu, Z. Zhou, Y. Feng, X. Zhao, G. Vaidyanathan, M. R. Zalutsky, T. Vo-Dinh  
“Gold Nanostars: A Novel Platform for Developing 211At-Labeled Agents for Targeted Alpha-Particle Therapy”, Int. J. Nanomedicine, 16, 7297-7305 (2021):  
doi: 10.2147/IJN.S327577.
522. T. Krishnan, H.N. Wang, T. Vo-Dinh  
“Smartphone-Based Device for Colorimetric Detection of MicroRNA Biomarkers Using Nanoparticle-Based Assay”, Sensors, 21 (23), 8044 (2021)
523. J. Workman Jr, T. Vo-Dinh  
“An Adventure with Light and Reflections on Science”, Spectroscopy, 36, 34-37 (2021)
524. S, Pei, Y, Liu, W, Li, B Krichilsky, S. Dai, Y. Wang, X. Wang, D. M. Johnson, B. M. Crawford, G. B. Swift, T. Vo-Dinh, Z-M Pei, F. Yuan  
“OSCA1 is an Osmotic Specific Sensor: A Method To Distinguish Ca<sup>2+</sup>-Mediated Osmotic And Ionic Perception”, New Phytologist, 235(4), 1665-1678 (2022)  
<https://doi.org/10.1111/nph.18217>

DOI: 10.1111/nph.18217

525. D. Bennet, T. Vo-Dinh, F. Zenhausern  
“Current and emerging opportunities in biological medium-based computing and digital data storage”, Nano Select, 3 (5), 883-902 (2022)
526. Y. Liu, S. Indrasekara, T. Vo-Dinh,  
“Development of Gold Nanostars for Photothermal and Immunotherapy Applications”.  
Chap. 14 in World Scientific Reference on Plasmonic Nanomaterials: Principles, Design and Bio-applications, Volume 5, pp. 555-575 (2022)  
[https://doi.org/10.1142/9789811235252\\_0014](https://doi.org/10.1142/9789811235252_0014)
527. E Chorniak, Y Liu, RA Odion, W Etienne, A Canning, SK Nair, P Maccarini, G. Palmer, B.A. Inman, T. Vo-Dinh  
“Intravital Optical Imaging for Immune Cell Tracking after Photoimmunotherapy with Plasmonic Gold Nanostars”, Nanotechnology, 33, 475101 (2022)
528. S Atta, T Vo-Dinh  
“Bimetallic Gold Nanostars Having High Aspect Ratio Spikes for Sensitive Surface Enhanced Raman Scattering Sensing”, ACS Applied Nano Materials, 5 (9), 12562-12570 (2022)  
<https://doi.org/10.1021/acsnm.2c02234>
529. A.J. Summers, J.P. Devadhasan, J. Gu, D.C. Montgomery, B. Fischer, M.A. Gates Hollingsworth, K.J. Pflughoeft, T. Vo-Dinh, D.P. AuCoin, F. Zenhausern  
“Optimization of an Antibody Microarray Printing Process Using a Designed Experiment”.  
ACS Omega, 7 (36), 32262-32271 (2022)  
<https://doi.org/10.1021/acsomega.2c03595>
530. J.Q. Li, P.V. Dukes, W. Lee, M. Sarkis, T. Vo-Dinh  
“Machine learning using convolutional neural networks for SERS analysis of biomarkers in medical diagnostics”, Journal of Raman Spectroscopy, 53, 2044-2057 (2022)  
DOI: 10.1002/jrs.6447 (2022)
531. R.A. Odion, Y. Liu, T. Vo-Dinh  
“Nanoplasmonics Enabling Cancer Diagnostics and Therapy”, Cancers, 14 (23), 5737 (2022)
532. R.A. Odion, T. Vo-Dinh  
“Optical Recognition Of Constructs Using Hyperspectral Imaging And Detection (ORCHID)”, Scientific Reports, 12 (1), 1-12 (2022)
533. Y. Sharma, E. Cakmak, H. Yuan, R. Garcia, D. Batchelor, T. Vo-Dinh, T. Ghosh, A. Dhawan

- “Voltage-Tunable Surface-Enhanced Raman Scattering Substrates Based On Electroactive Polymeric Membranes Containing Plasmonic Nanoparticles”, Optics Continuum, 1 (12), 2426-2433 (2022)
534. J.P. Devadhasan, A.J. Summers, J. Gu, S. Smith, B. Thomas, A. Fattahi, J. Helton, S.G. Pandit, M.Gates-Hollingsworth, D. Hau, K.J. Pflughoeft, D.C. Montgomery, S. Atta, T. Vo-Dinh, D. AuCoin, F. Zenhausern  
“Point-Of-Care Vertical Flow Immunoassay System For Ultra-Sensitive Multiplex Biothreat-Agent Detection In Biological Fluids”, Biosensors and Bioelectronics, 219, 114796 (2023)
535. A.J. Canning, X. Chen, J.Q. Li, W.R. Jeck, H.N. Wang, T. Vo-Dinh  
“miRNA Probe Integrated Biosensor Platform Using Bimetallic Nanostars For Amplification-Free Multiplexed Detection Of Circulating Colorectal Cancer Biomarkers In Clinical Samples”. Biosensors and Bioelectronics, 220, 114855 (2023)
536. V. Cupil-Garcia, J.Q. Li, S.J. Norton, R.A. Odion, P. Strobbia, L. Menozzi, C. Ma, J. Hu, R. Zentella, M.I. Boyanov, Y.Z. Finfrock, D. Gursoy, D.S. Douglas, J. Yao, T.P. Sun, K.M. Kemner, T. Vo-Dinh  
“Plasmonic nanorod probes’ journey inside plant cells for in vivo SERS sensing and multimodal imaging”, Nanoscale, 15 (13), 6396-6407 (2023)
537. S. Atta, T. Vo-Dinh  
“A hybrid plasmonic nanoprobe using polyvinylpyrrolidone-capped bimetallic silver–gold nanostars for highly sensitive and reproducible solution-based SERS sensing”, Analyst, 148 (8), 1786-1796 (2023)
538. S. Atta, T. Vo-Dinh  
“Solution-Based Ultra-Sensitive Surface-Enhanced Raman Scattering Detection of the Toxin Bacterial Biomarker Pyocyanin in Biological Fluids Using Sharp-Branched Gold Nanostars”, Analytical Chemistry, 95 (5), 2690-2697 (2023)
539. S. Atta, A.J. Canning, R. Odion, H. Wang, D. Hau, J.P. Devadhasan, A.J. Summers, M.A. Gates-Hollingsworth, K.J. Pflughoeft, J. Gu, D.C. Montgomery, D.P. AuCoin, F. Zenhausern, T. Vo-Dinh  
“Sharp Branched Gold Nanostar-Based Lateral-Flow Immunoassay for Detection of *Yersinia pestis*”, ACS Applied Nano Materials, 6 (5), 3884-3892 (2023)
540. S. Atta, T. Vo-Dinh  
“Ultra-trace SERS detection of cocaine and heroin using bimetallic gold–silver nanostars (BGNS-Ag)” Analytica Chimica Acta, 1251, 340956 (2023)
541. E.S. Srinivasan, Y. Liu, R.A. Odion, P. Chongsathidkiet, L.P. Wachsmuth, A.P. Haskell-Mendoza, R.M. Edwards, A.J. Canning, G. Willoughby, J. Hinton, S.J. Norton, C.D. Lascola, P.F. Maccarini, C.L. Mariani, T. Vo-Dinh, P.E. Fecci

- “Gold nanostars obviate limitations to laser interstitial thermal therapy (LITT) for the treatment of intracranial tumors’, Clinical Cancer Research, CCR-22-1871 (2023)
542. S. Li, I.J. Anwar, A.J. Canning, T. Vo-Dinh, A.D. Kirk, H. Xu  
“Xenorecognition and costimulation of porcine endothelium-derived extracellular vesicles in initiating human porcine-specific T cell immune responses, American Journal of Transplantation, 23 (7), 904 (2023)
543. H.N. Wang, T. Vo-Dinh  
“Cascade Amplified Plasmonics Molecular Biosensor for Sensitive Detection of Disease Biomarkers”, Biosensors 13 (8), 774 (2023)
544. S. Atta, J. Q. Li, T. Vo-Dinh  
“Multiplex SERS detection of polycyclic aromatic hydrocarbon (PAH) pollutants in water samples using gold nanostars and machine learning analysis”, Analyst, 20, 5105 (2023)
545. T. Vu, P. Klippel, A.J. Canning, C. Ma, H. Zhang, L.A. Kasatkina, Y. Tang, J. Xia, V.V. Verkhusha, T. Vo-Dinh, Y. Jing, J. Yao  
“On the importance of low-frequency signals in functional and molecular photoacoustic computed tomography”, IEEE Transactions on Medical Imaging, 43, 771 (2024)
546. J.Q. Li, H.N. Wang, A.J. Canning, A. Gaona, B.M. Crawford, K.S. Garman, T. Vo-Dinh  
“Surface-Enhanced Raman Spectroscopy-Based Detection of Micro-RNA Biomarkers for Biomedical Diagnosis Using a Comparative Study of Interpretable Machine Learning Algorithms”, Applied Spectroscopy, 78 (1), 84-98 (2024)
547. S. Atta, A.J. Canning, T. Vo-Dinh  
“Rapid SERS Assay for Determination of the Opioid Fentanyl Using Silver-Coated Sharply-Branched Gold Nanostars”, Microchimica Acta, 191 (2), 110 (2024)
548. A. J. Canning, T. Vo-Dinh  
“Caged gold nanostars: a novel plasmonic nanoplatform with potential theranostic applications”, Nanoscale, 16, 8828-8835 (2024)  
DOI: 10.1039/d3nr04130a
549. S. Atta, Y. Zhao, J.Q. Li, T. Vo-Dinh  
“Dual-Modal Colorimetric and Surface-Enhanced Raman Scattering (SERS)-Based Lateral Flow Immunoassay for Ultrasensitive Detection of SARS-CoV-2 Using a Plasmonic Gold Nanocrown”, Analytical Chemistry, 96, 12, 4783–4790 (2024)
550. T.D. Naquin, A.J. Canning, Y. Gu, J. Chen, C.M. Naquin, J. Xia, B. Lu, S. Yang, A. Koroza, K. Lin, H.N. Wang, W. R. Jeck, L. P. Lee, T. Vo-Dinh, T. J. Huang.  
“Acoustic separation and concentration of exosomes for nucleotide detection: ASCENDx”, Science Advances, 10 (10), eadm8597 (2024)
551. S. Atta, T. Sharaf, T. Vo-Dinh

- “Rapid Solution-Based SERS Detection of Pesticides Using Graphene Oxide-Coated Silver–Gold Nanostars”, *ACS Applied Nano Materials*, May 8, 2024  
<https://doi.org/10.1021/acsnm.4c01122>
552. S Atta, AJ Canning, T Vo-Dinh  
“A simple low-cost flexible plasmonic patch based on spiky gold nanostars for ultra-sensitive SERS sensing”, *Analyst*, 149 (7), 2084-2096 (2024).
553. A.P. Haskell-Mendoza, E.S. Srinivasan, T. Vo-Dinh, P.E. Fecci  
“Leveraging gold nanostars for precision laser interstitial thermal therapy”, *Oncotarget*, 15, 389 (2024).
554. S Pei, Q Tao, W Li, G Qi, B Wang, Y Wang, S Dai, Q Shen, X Wang, X Wu, S. Xu, L. Theprungsirikul, J. Zhang, L. Liang, Y. Liu, K. Chen, Y. Shen, B. M. Crawford, M. Cheng, Q. Zhang, Y. Wang, H. Liu, B. Yang, B. Krichilsky, J. Pei, K. Song, D. M. Johnson, Z. Jiang, F. Wu, G. B. Swift, H. Yang, Z. Liu, X. Zou, T. Vo-Dinh, F. Liu, Z.-M. Pei, F. Yuan  
“Osmosensor-mediated control of Ca<sup>2+</sup> spiking in pollen germination”, *Nature*, 1-8 (2024).
555. J. Li, V. Cupil-Garcia, H.N. Wang, P. Strobbia, B. Lai, J. Hu, M. Maiwald, B. Sumpf, T.P. Sun, K. M. Kemner, T. Vo-Dinh  
“Plasmonics Nanorod Biosensor for In Situ Intracellular Detection of Gene Expression Biomarkers in Intact Plant Systems”, *Biosensors and Bioelectronics*, 116471 (2024).
556. S Atta, T Vo-Dinh  
“Improved Solution-based SERS Detection of Creatinine by Inducing Hydrogen-Bonding Interaction for Effective Analyte Capture”, *Talanta*, 126373 (2024).
557. S. Atta, Y. Zhao, S.V. Yampolsky, S. Sanchez, T. Vo-Dinh  
“Nanoengineered plasmonics-enhanced photothermal tags for sensitive detection of cardiac biomarker troponin I using lateral flow immunoassay”, *Chemical Engineering Journal*, 153327 (2024)
558. S Atta, Y Zhao, S Sanchez, H.N Wang, T Vo-Dinh  
“A Simple and Sensitive Wearable SERS Sensor Utilizing Plasmonic-Active Gold Nanostars, ACS Omega, 2024/9/5, <https://doi.org/10.1021/acsomega.4c05140> (2024)
559. J. Q. Li, S Atta, Y. Zhao, A. Canning, K. Hoang, P. Strobbia, J. Canick, J. Cho, D. Rocke, W. Lee, T. Vo-Dinh.  
“Plasmonics-Enhanced Spikey Nanorattle-Based Biosensor for Direct SERS Detection of mRNA Cancer Biomarkers’, *Analytical and Bioanalytical Chemistry*, inpress (2024)
560. A. Canning, J.Q. Li, S. Atta, H.N. Wang, T. Vo-Dinh  
“Nanoplasmonics Biosensors: At the Frontiers of Biomedical Diagnostics”, *Trends in Analytical Chemistry*, in press (2024)

## **CITATIONS**

Source: *Google Scholar Citations*

(<https://scholar.google.com/citations?user=OVka5AMAAAAAJ&hl=en>)

**TOTAL NUMBER OF CITATIONS > 41,200**

**CITATION H-INDEX = 106**

### **BOOKS**

1. T. Vo-Dinh  
***Room Temperature Phosphorimetry for Chemical Analysis***, J. Wiley, New York, New York (1984).
2. T. Vo-Dinh, Editor  
***Chemical Analysis of Polycyclic Compounds***, Wiley, New York, New York (1989).
3. T. Vo-Dinh and D. Eastwood, Editors  
***Laser-Based Approaches in Luminescence Analysis***, American Society for Testing and Materials (ASTM), STP 1066, Philadelphia, Pennsylvania (1990).
4. G. Gauglitz and T. Vo-Dinh, Editors-in-Chief,  
***Handbook of Spectroscopy***, Wiley-VCH, New York (2003).
5. T. Vo-Dinh, Editor-in-Chief,  
***Biomedical Photonics Handbook***, CRC Press, Boca Raton, Florida (2003).
6. T. Vo-Dinh, Editor  
***Protein Nanotechnology***, Humana Press, New York (2005);
7. T. Vo-Dinh, Editor  
***Nanotechnology in Biology and Medicine, 1<sup>st</sup> Edition***, CRC Press, Boca Raton, FL (2007).
8. T. Vo-Dinh, Editor  
***Protein Nanotechnology, (Russian Language Translation)***, Humana Press, New York (2012)
9. T. Vo-Dinh, Editor  
***Biomedical Photonics Handbook, 2<sup>nd</sup> Edition***, CRC Press, Taylor and Francis, Boca Raton, London, New York (2015), 3 volumes:  
*Volume I: Fundamentals, devices and Techniques*  
*Volume II: Biomedical Diagnostics*  
*Volume III: Therapeutics and Advanced Biophotonics*
10. T. Vo-Dinh, Editor  
***Nanotechnology in Biology and Medicine: Methods, Devices, and Applications, 2<sup>nd</sup> Edition***, CRC Press / Taylor & Francis, Boca Raton, FL (2017)

<https://www.taylorfrancis.com/books/edit/10.4324/9781315374581/nanotechnology-biology-medicine-tuan-vo-dinh>

11. T. Vo-Dinh, Editor  
*Nanoparticle-Mediated Immunotherapy*  
Springer Publisher (2021)

<https://www.springer.com/gp/book/9783030783372>

### C. PROCEEDING BOOKS

1. T. Vo-Dinh, Editor  
Environmental and Process Control Monitoring Technologies, The International Society for Optical Engineering, Vol. 1637, Bellingham, Washington (1992).
2. T. Vo-Dinh and K. Camman, Editors  
Monitoring Toxic Chemicals and Biomarkers, SPIE Publishers, Vol. 1716, Bellingham, Washington (1993).
3. R. Lieberman, H. Pobielska, and T. Vo-Dinh, Editors  
Biomedical Sensing, Imaging, and Tracking Technologies I, SPIE Publishers, Vol. 2676, Bellingham, Washington (1996).
4. T. Vo-Dinh, Editor  
Advanced Technologies for Environmental Monitoring and Remediation, SPIE Publishers, Vol. 2835, Bellingham, WA (1996).
5. T. Vo-Dinh, R. Liebermann, and G. Vurvek, Editors  
Biomedical Sensing, Imaging, and Tracking Technologies, II, SPIE Publishers, Vol. 2976, Bellingham, WA (1997).
6. R. Lieberman and T. Vo-Dinh, Editors  
Biomedical Sensing, Imaging and Tracking Technologies III, SPIE Publishers, Vol. 8011, Bellingham, WA (1998).
7. T. Vo-Dinh and R. L. Spellicy, Editors  
Environmental Monitoring and Remediation Technologies, SPIE Publishers, Vol. 3534, Bellingham, WA (1999).
8. T. Vo-Dinh, W. S. Grundfest and D. A. Benaron, S.T. Charles, R. D. Bucholz, M.W. Vannier, Editors  
Biomedical Diagnostic, Guidance and Surgical Assist Systems, SPIE Publishers, Vol. 3595, Bellingham, WA (1999)
9. T. Vo-Dinh, W. S. Grundfest and D. A. Benaron, Editors  
Biomedical Diagnostic, Guidance and Surgical Assist Systems II, SPIE Publishers, Vol. 3911, Bellingham, WA (2000)
10. T. Vo-Dinh and R. L. Spelling, Editors,  
Water, Ground and Air Pollution Monitoring and Remediation, SPIE Publishers, Vol. 4199 (2000)
11. T. Vo-Dinh, W. D. Grundfest and D. A. Benaron, Editors,

- Biomedical Diagnostics, Guidance and Surgical Assist System III, SPIE Publishers, Vol. 4254, Bellingham, WA (2001).
12. T. Vo-Dinh, W. D. Grundfest and D. A. Benaron, Editors, Biomedical Diagnostics, Guidance and Surgical Assist System IV, SPIE Publishers, Vol.4615, Bellingham, WA (2002).
  13. T. Vo-Dinh, W. D. Grundfest, D. A. Benaron and G.E. Cohn, Editors, Advanced Biomedical Diagnostics and Clinical Systems II, SPIE Publishers, Vol. 4958, Bellingham, WA (2004).
  14. T. Vo-Dinh, Z. Gryczynski, and J. Lakowicz Plasmonics in Biology and Medicine, SPIE Publishers, Vol.5327, Bellingham, WA (2004).
  15. T. Vo-Dinh, Z. Gryczynski, and J. Lakowicz, Editors Plasmonics in Biology and Medicine II, SPIE Publishers, Bellingham, WA (2005)
  16. G.E. Cohn, W.S. Grunfest, D.A. Benaron and T. Vo-Dinh Advanced Biomedical and Clinical Diagnostics Systems III, SPIE Publishers, Bellingham, WA (2005)
  17. T. Vo-Dinh, Z. Gryczynski, and J. Lakowicz, Editors Plasmonics in Biology and Medicine III, SPIE Publishers, Bellingham, WA (2006)
  18. G.E. Cohn, W.S. Grunfest, D.A. Benaron and T. Vo-Dinh Advanced Biomedical and Clinical Diagnostics Systems IV, SPIE Publishers, Bellingham, WA (2006)
  19. T. Vo-Dinh, W.S. Grunfest, D.A. Benaron and G.E. Cohn Advanced Biomedical and Clinical Diagnostics Systems V, SPIE Publishers, Bellingham, WA (2007)
  20. T. Vo-Dinh and J. Lakowicz, Editors Plasmonics in Biology and Medicine IV, SPIE Publishers, Bellingham, WA (2007)
  21. T. Vo-Dinh, Z. Gryczynski, and J. Lakowicz, Editors, Plasmonics in Biology and Medicine V, SPIE Publishers, Bellingham, WA (2008)
  22. T. Vo-Dinh, Grunfest, D.A. Benaron, Editors, Advanced Biomedical and Clinical Diagnostics Systems VI, SPIE Publishers, Bellingham, WA (2008)
  23. T. Vo-Dinh, and J. Lakowicz, Editors, Plasmonics in Biology and Medicine VI, SPIE Publishers, Bellingham, WA (2009)
  24. A. Mahadevan-Jansen, T. Vo-Dinh, W. Grundfest, Editors, Advanced Biomedical and Clinical Diagnostics Systems VII, SPIE Publishers, Bellingham, WA (2009)
  25. T. Vo-Dinh, and J. Lakowicz, Editors, Plasmonics in Biology and Medicine VII, SPIE Publishers, Bellingham, WA (2010)

26. A. Mahadevan-Jansen, T. Vo-Dinh, W. Grundfest, Editors, Advanced Biomedical and Clinical Diagnostics Systems VIII, SPIE Publishers, Bellingham, WA (2010)
27. T. Vo-Dinh, and J. Lakowicz, Editors, Plasmonics in Biology and Medicine VIII, SPIE Publishers, Bellingham, WA (2011)
28. A. Mahadevan-Jansen, T. Vo-Dinh, W. Grundfest, Editors, Advanced Biomedical and Clinical Diagnostics Systems IX, SPIE Publishers, Bellingham, WA (2011)
29. T. Vo-Dinh, and J. Lakowicz, Editors, Plasmonics in Biology and Medicine IX, SPIE Publishers, Bellingham, WA (2012)
30. T. Vo-Dinh, A. Mahadevan-Jansen, W. Grundfest, Editors, Advanced Biomedical and Clinical Diagnostics Systems X, SPIE Publishers, Bellingham, WA (2012)
31. T. Vo-Dinh, and J. Lakowicz, Editors, Plasmonics in Biology and Medicine X, SPIE Publishers, Bellingham, WA (2013)
32. T. Vo-Dinh, A. Mahadevan-Jansen, W. Grundfest, Editors, Advanced Biomedical and Clinical Diagnostics Systems XI, SPIE Publishers, Bellingham, WA (2013)
33. T. Vo-Dinh, and J. Lakowicz, Editors, Plasmonics in Biology and Medicine XI, SPIE Publishers, Bellingham, WA (2014)
34. T. Vo-Dinh, A. Mahadevan-Jansen, W. Grundfest, Editors, Advanced Biomedical and Clinical Diagnostics Systems XII, SPIE Publishers, Bellingham, WA (2014), Proc. of SPIE Vol 8935, 893501-1
33. T. Vo-Dinh, and J. Lakowicz, Editors, Plasmonics in Biology and Medicine XII, Proc. of SPIE Vol 9340, SPIE Publishers, Bellingham, WA (2015)
34. A. Mahadevan-Jansen, T. Vo-Dinh, W. Grundfest, Editors, Advanced Biomedical and Clinical Diagnostics Systems XIII, Proc. of SPIE Vol 9313, SPIE Publishers, Bellingham, WA (2015)
35. T. Vo-Dinh, and J. Lakowicz, Editors, Plasmonics in Biology and Medicine XIII, Proc. of SPIE Vol 9724, SPIE Publishers, Bellingham, WA (2016)
36. T. Vo-Dinh, A. Mahadevan-Jansen, W. Grundfest, Editors, Advanced Biomedical and Clinical Diagnostics Systems XIV, Proc. of SPIE Vol 9698, SPIE Publishers, Bellingham, WA (2016)
37. T. Vo-Dinh, and J. Lakowicz, Editors, Plasmonics in Biology and Medicine XIV, Proc. of SPIE Vol 10080, SPIE Publishers, Bellingham, WA (2017)
38. T. Vo-Dinh, RA Lieberman, Advanced Environmental, Chemical, and Biological Sensing Technologies XIV, Proc. of SPIE Vol 10215, 1021501-1 (2017)
39. T. Vo-Dinh, and J. Lakowicz, Editors, Plasmonics in Biology and Medicine XV, Proc. of SPIE Vol 10509, SPIE Publishers, Bellingham, WA (2018)
40. T. Vo-Dinh, H-P A. Ho, and K. Ray, Editors, Plasmonics in Biology and Medicine XVI, Proc. of SPIE Vol 10894, SPIE Publishers, Bellingham, WA (2019)

41. T. Vo-Dinh, H-P A. Ho, and K. Ray, Editors, Plasmonics in Biology and Medicine XVII., Proc. of SPIE Vol 11257, SPIE Publishers, Bellingham, WA (2020)
43. T. Vo-Dinh, H-P A. Ho, and K. Ray, Editors, Plasmonics in Biology and Medicine XVIII, Proc. of SPIE Vol 11661, SPIE Publishers, Bellingham, WA (2021)
44. T. Vo-Dinh, H-P A. Ho, and K. Ray Editors, Plasmonics in Biology and Medicine XIX, Proc. of SPIE PC11978, SPIE Publishers, Bellingham, WA (2022)
45. Tuan Vo-Dinh, Ho-Pui A Ho, and Krishanu Ray, Editors, Plasmonics in Biology and Medicine XX, Proc. of SPIE Vol PC 12396, SPIE Publishers, Bellingham, WA (2023)

**D. REPORTS, PROCEEDINGS, NON PEER-REVIEWED PAPERS**

In addition to the above publications in peer-reviewed journals, Dr. Vo-Dinh has authored and co-authored over 300 symposium proceedings papers and technical reports.

**E. PATENTS**

Dr. Vo-Dinh holds 64 US and international patents and has 5 patents pending.

**LIST OF PATENTS**

1. T. Vo-Dinh,  
"Dosimeter for Monitoring Vapors and Aerosols of Organic Compounds," U.S. Patent No. 4,680,165 (1987).
2. T. Vo-Dinh,  
"Practical Substrate and Apparatus for Static and Continuous Monitoring by Surface-Enhanced Raman Spectroscopy," U.S. Patent No. 4,674,878 (1987).
3. T. Vo-Dinh,  
"Surface-Enhanced Raman Optical Data Storage," U.S. Patent No. 4,999,810 (1991).
4. M. J. Sepaniak and T. Vo-Dinh,  
"Fiber Optic-Based Regenerable Biosensor," U.S. Patent No. 5,176,881 (1993).
5. T. Vo-Dinh,  
"Enhanced Photo Activated Luminescence for Screening Polychlorobiphenyls (PCBs) and Other Related Compounds," U.S. Patent 5,272,089 (1993).
6. T. Vo-Dinh,  
"Raman-Based System for DNA Sequencing, Mapping and Other Separations," U.S. Patent 5,306,403 (1994).
7. T. Vo-Dinh,  
"Improved Surface-Enhanced Raman Optical Data Storage System," U.S. Patent 5,325,342 (1994).
8. T. Vo-Dinh,  
"Apparatus and Methods for Detecting Chemical Permeation," US Patent 5,376,554 (1994).

9. T. Vo-Dinh,  
EPAL Apparatus for Screening Polychlorinated Biphenyls (PCBs), and Other Chlorinated Compounds," US Patent 5,318,751 (1994).
10. T. Vo-Dinh,  
"Surface-Enhanced Raman Scattering (SERS) Dosimeter and Probe," U.S. Patent 5,400,136 (1995).
11. T. Vo-Dinh,  
"Article of Protective Clothing Adapted for Detecting Chemical Permeation and Methods Therapy,"  
US Patent 5,493,730 (1996).
12. T. Vo-Dinh,  
"Photo-activated Luminescence Sensor and Method for Detecting Trichloroethylene and Related  
Volatile Organochloride Compounds," US Patent 5,525,520 (1996).
13. T. Vo-Dinh and P. Viallet,  
"Biosensor and Chemical Sensors Probes for Calcium and Other Metal Ions," US Patent 5,496,522  
(1996).
14. T. Vo-Dinh, M. Panjehpour and B.F. Overholt,  
"Laser-Induced Differential Normalized Fluorescence Method for Cancer Diagnosis," US Patent  
5,579,773 (1996).
15. T. Vo-Dinh,  
"Advanced Synchronous Luminescence System for Medical Diagnostics," US Patent 5,599,717  
(1997).
16. T. Vo-Dinh,  
"Raman and Surface-Enhanced Raman Gene Probe and Detection System," US Patent 5,721,102  
(1998).
17. T. Vo-Dinh,  
"Advanced Surface-Enhanced Raman Gene Probes and Method Thereof," US Patent 5,783,389  
(1998)
18. T. Vo-Dinh,  
"Advanced Surface-Enhanced Raman Gene Probes and Method Thereof," US Patent 5,814,516  
(1998).
19. T. Vo-Dinh,  
"Surface-Enhanced Raman Medical Probes and System for Disease Diagnostics and Drug Testing,"  
US Patent 5,864,397 (1999).
20. T. Vo-Dinh,  
"Advanced Synchronous Luminescence System for the Detection of Biological Agents and  
Infectious Pathogens," US Patent 5,938,617 (1999).
21. T. Vo-Dinh,  
"Advanced Surface-enhanced Raman Gene Probe Systems and Methods thereof," US Patent  
6,174,677 (2001).

22. T. Vo-Dinh, N. Erickson, and A.L. Wintenberg,  
“Integrated Circuit Biochip Microsystem Containing Lens,” US Patent 6,197,503 (2001).
23. T. Vo-Dinh and S. Norton,  
“Method and apparatus of spectro-acoustically enhanced ultrasonic detection for diagnostics,” US Patent 6,212,421 (2001).
24. T. Vo-Dinh,  
“Nanoprobe for surface-enhanced Raman spectroscopy in medical diagnostic and drug screening,” US Patent 6,219,137 (2001).
25. T. Vo-Dinh and A. Sadana,  
“Fractal Analysis of Time-Varying Data,” US Patent 6,422,998 (2002).
26. T. Vo-Dinh, N. Erickson, and A.L. Wintenberg,  
“Integrated Circuit Biochip Microsystem” US Patent 6,448,064 B1 (2002)
27. T. Vo-Dinh  
“SERODS Optical Data Storage with Parallel Signal Transfer”, US Patent 6,583,397 (2003).
28. T. Vo-Dinh  
“SERODS Optical Data Storage with Parallel Signal Transfer”, US Patent 6,614,730 (2003).
29. T. Vo-Dinh  
“Multifunctional and Multispectral Biosensor and Methods of Use”, US Patent 6,743,581 (2004).
30. T. Vo-Dinh and M. Hajaligol  
“Monitoring of Vapor Phase Polycyclic Aromatic Hydrocarbons”, US Patent 6,744,503 (2004).
31. T. Vo-Dinh and A.L. Wintenberg  
“Integrated Tunable Optical System”, US Patent 6,965,431 (2005)
32. T. Vo-Dinh et al  
“Advanced Synchronous Luminescence Imaging for Chemical and Medical Diagnostics” US Patent 7,103,402 (2006).
33. T. Vo-Dinh  
“SERS diagnostic platforms, methods and systems microarrays, biosensors and biochips”, US Patent 7,267,948 (2007).
34. T. Vo-Dinh  
“SERS Molecular Probe for Diagnostics and Therapy and Methods of Use Thereof”, US Patent 7,951,535 (2011)
35. T. Vo-Dinh, J.P. Scaffidi, V.K.R. Gopal, B. Lauly, Y. Zhan, M.K. Gregas, I.N. Stanton, J.T. Stecher, M.J. Therien, F. A. Bourke, Jr., Z. Fsthi, J.A., J. Ayres, Z. Zhang, J.H. Simmons, S. J. Norton

- “Up and Down Conversion Systems for Production of Emitted Light from Various Energy Sources”, US Patent 8,389,958 B2 (2013)
36. F. A. Bourke, Jr., and T. Vo-Dinh  
“Plasmonic-Assisted Systems and Methods for Interior Energy-Activation From an Exterior Source”, US Patent 8,376,013 B2 (2013)
  37. E. Toone, D. Gooden, T. Vo-Dinh, F.A. Bourke, Jr.  
“Methods and Systems for Treating Cell Proliferation Disorders with Psoralen Derivatives”, US Patent US 8,383,836 B2 (2013)
  38. E. Toone, D. Gooden, T. Vo-Dinh, F.A. Bourke, Jr.  
“Methods and Systems for Treating Cell Proliferation Disorders with Psoralen Derivatives”, US Patent 8,791,275 (2014)
  39. Frederic A. Bourke, Jr., Tuan Vo-Dinh  
“Advanced methods and systems for treating cell proliferation disorders”. US Patent 8,770,203 B2 (2014)
  40. E. Toone, D. Gooden, T. Vo-Dinh, F.A. Bourke, Jr.  
“Methods and Systems for Treating Cell Proliferation Disorders with Psoralen Derivatives”, US Patent 8,907,109(2014)]
  41. F. A. Bourke, Jr., and T. Vo-Dinh  
“Plasmonic-Assisted Systems and Methods for Interior Energy-Activation From an Exterior Source”, US Patent 8,927,615 (2015)
  42. F. A. Bourke, Jr., and T. Vo-Dinh  
“Plasmonic-Assisted Systems and Methods for Interior Energy-Activation From an Exterior Source”, US Patent 9,004,131 (2015)
  43. T Vo-Dinh, FA Bourke Jr.  
“Methods And Systems For Treating Cell Proliferation Disorders Using Plasmonics Enhanced Photospectral Therapy (PEPST) and Exciton-Plasmon Enhanced Phototherapy (EPEP)”, US Patent 9,283,275 (2016)
  44. T. Vo-Dinh, H. Yuan, A. Fales, C. Khoury  
“Nanostars And Nanoconstructs For Detection, Imaging, And Therapy”, US Patent 9,561,292 (2017)
  45. T Vo-Dinh, FA Bourke Jr  
“Methods and systems for treating cell proliferation disorders using plasmonics enhanced photospectral therapy (PEPST) and exciton-plasmon enhanced phototherapy (EPEP)”, US Patent 9,662,388 (2017)
  46. T Vo-Dinh, J Scaffidi, M Gregas, B Lauly  
“Functionalized metal-coated energy converting nanoparticles, methods for production thereof and methods for use”, US Patent 9,662,389 (2017)
  47. T Vo-Dinh, H Yuan, A Fales  
“Plasmonics-active metal nanostar compositions and methods of use.”, US Patent 9,789,154 (2017)

48. F.A. Bourke, T.Vo-Dinh  
“Advanced methods and systems for treating cell proliferation disorders”, US Patent 9,833,634 (2018)
49. T. Vo-Dinh, H Yuan, A. Fales, C. Khoury  
“Nanostars and nanoconstructs for detection, imaging, and therapy”, US Patent 9,987,358 (2018)
50. T. Vo-Dinh, H.N. Wang  
“Nano-plasmonic molecular probes for plasmonics coupling interference”, US Patent 10,358,680 (2019)
51. F.A. Bourke Jr, T .Vo-Dinh, H. Walder  
“Non-invasive systems and methods for in-situ photobiomodulation”, US Patent 10,391,330 4 (2019)
52. T. Vo-Dinh, J. P. Scaffidi, V. G. Reddy Chada, B. Lauly, Y. Zhang, M. K. Gregas, I.N. Stanton, J. T. Stecher, M.J. Therien, F. A. Bourke Jr, H. Walder, Z. Fathi, J. A. Ayres, Z. Zhang, J. H. Simmons, S. J. Norton  
“Non-invasive energy upconversion methods and systems”, US Patent 10,384,071 (2019)
53. F.A. Bourke Jr, T. Vo-Dinh, H. Walder  
Non-invasive systems and methods for in-situ photobiomodulation”, US Patent 10,391,330 (2019)
54. T. Vo-Dinh, J. P. Scaffidi, V. G. Reddy Chada, B. Lauly, Y. Zhang, M. K. Gregas, I.N. Stanton, J. T. Stecher, M.J. Therien, F. A. Bourke Jr, H. Walder, Z. Fathi, J. A. Ayres, Z. Zhang, J. H. Simmons, S. J. Norton  
“Non-invasive energy upconversion methods and systems”, US Patent 10,493,296 (2019)
55. FA Bourke Jr, T Vo-Dinh  
“Plasmonic assisted systems and methods for interior energy-activation from an exterior source”, US Patent 10,682,624 (2020)
56. FA Bourke Jr, T Vo-Dinh  
“Plasmonic assisted systems and methods for interior energy-activation from an exterior source”, US Patent 10,717,062 (2020)
57. FA Bourke Jr, T Vo-Dinh  
“Advanced methods and systems for treating cell proliferation disorders” US Patent 10,835,756 (2020)
58. T. Vo-Dinh, N. Gandra, H. Ngo  
“ Nanoprobe Compositions and Methods of Use Thereof”, ” US Patent 10,876,150 B2 (2020)
59. T. Vo-Dinh, H.N. Wang, A. Fales  
“Nano-plasmonic molecular probes and methods of use”, US Patent 10,633,695 (2020)
60. T. Vo-Dinh, B. A. Inman, P. Maccarini, G. M. Palmer, Y. Liu, D. Wetzel  
“Synergistic Nanotherapy Systems and Methods of Use Thereof”, US Patent 11,260,128 (2022)
61. F.A. Bourke Jr, T. Vo-Dinh

- “Plasmonic assisted systems and methods for interior energy-activation from an exterior source”, US Patent 11,278,861 (2022)
62. T. Vo-Dinh, J. P. Scaffidi, V. G. Reddy Chada, B. Lauly, Y. Zhang, M. K. Gregas, I. N. Stanton, J. T. Stecher, M. J. Therien, F. A. Bourke Jr, H. Walder, Z. Fathi, J. A. Ayres, Z. Zhang, J. H. Simmons, S.N. Norton  
“Non-invasive energy upconversion methods and systems, US Patent 11,324,965 (2022)
63. T. Vo-Dinh, H. Yuan, A. Fales  
“Plasmonics-active metal nanostar compositions and methods of use”, US Patent 11,324,797 (2022)
64. T. Vo-Dinh, J.P. Scaffidi, V.G.R. Chada, B. Lauly, Y. Zhang, M.K. Gregas, I.N. Stanton, J.T. Stecher, M.J. Therien, F.A. Bourke Jr, H. Walder, Z. Fathi, J.A. Ayres, Z. Zhang, J.H. Simmons, S.J.Norton.  
“Non-invasive energy upconversion methods and systems for in-situ photobiomodulation”, US Patent 11,383,098 (2022)