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A. Education

University of Florida, Ph.D., Analytical Chemistry, May 1995

Nanjing University, China, M.S., Chemistry, July 1989

Nanjing University, China, B.S., Chemistry, July 1986

B. Professional Appointments

Professor, Dept. of Chemistry and Environmental Toxicology, University of California, Riverside, July 2010-

Visiting Professor, University of Cambridge, UK, 2024; University of Tokyo, Japan, 2024 (JSPS Fellow)

Guest Professor, ETH Zurich, Switzerland, 2014; EPFL Lausanne, Switzerland, 2014

Associate Professor, Department of Chemistry, UC Riverside, July 2007- June 2010

Assistant Professor, Department of Chemistry, UC Riverside, July 2001 - June 2007

Staff Scientist and Group Leader, Materials Sciences Division, Lawrence Berkeley National Laboratory (LBNL), June 1997-June 2001

Postdoctoral Fellow, Department of Chemistry, University of California Berkeley, April 1995-May 1997

C. Professional Services, Awards and Honors

Specialty Chief Editor, *Frontiers in Analytical Science (Frontiers)*

Editorial Board, *Journal of Analysis and Testing (Springer Nature)*

Eli Lilly Young Analytical Chemist Award/Grantee, 2002, 2003

Regents' Faculty Fellowship, University of California, 2004

Regents' Faculty Development Award, University of California, 2006

Chancellor's Award for Excellence in Undergraduate Research, UC Riverside, 2011

Invitational Fellowship, The Japan Society for the Promotion of Science (JSPS), 2024

D. Publications (140+ Peer-reviewed journal papers, some recent shown here)

1. Lambert AS, Valiulis SN, Malinick AS, Stuart DD, Cheng Q. "Plasmonic Aluminum Thin Films as Substrate Materials for Label-Free Optical Detection and Surface-Enhanced MALDI MS", *ACS Appl. Eng. Mater.*, **2025**, 3, 357–367.
2. Stuart DD, Pike, CD, Malinick AS, Cheng Q. "Characterization of a Charged Biomimetic Lipid Membrane for Unique Antifouling Effects against Clinically Relevant Matrices in Biosensing", *ACS Appl. Mater. Interfaces*, **2024**, 16, 56438–56447.
3. Malinick AS, Stuart DD, Lambert AS, Cheng Q. "Curved Membrane Mimics for Quantitative Probing of Protein-Membrane Interactions by Surface Plasmon Resonance", *ACS Appl. Mater. Interfaces*, **2024**, 16, 84–94.
4. Abouhajar F, Chaudhuri R, Valiulis SN, Stuart DD, Malinick AS, Xue M, Cheng Q. "Label-Free Analysis of Binding and Inhibition of SARS-Cov-19 Spike Proteins to ACE2 Receptor with ACE2-Derived Peptides by Surface Plasmon Resonance", *ACS Appl. Bio Mater.* **2023**, 6, 182–190.
5. Yang Z, Li B, Stuart DD, Cheng Q. "Three-dimensional printed microfluidic mixer/extractor for cell lysis and lipidomic profiling by matrix-assisted laser desorption/ionization mass spectrometry", *VIEW* **2022**, 20220041.
6. Li B, Stuart DD, Shanta PV, Pike CD, Cheng Q. "Probing Herbicide Toxicity to Algae (*S. capricornutum*) by Lipid Profiling with Machine Learning and Microchip/MALDI-TOF MS", *Chem. Res. Toxicol.* **2022**, 35, 606–615.
7. Malinick AS, Stuart DD, Lambert AS, Cheng Q. "Surface plasmon resonance imaging (SPRi) in combination with machine learning for microarray analysis of multiple sclerosis biomarkers in whole serum", *Biosens. Bioelectron* **2022**, 10, 100127.
8. Burris AJ, Cheng Q. "Plasmon-Enhanced Fluorescence in Electrospun Nanofibers of Polydiacetylenes Infused with Silver Nanoparticles", *Langmuir*, **2021**, 37, 14920-14929.
9. Shanta PV, Li B, Stuart DD, Cheng Q. "Lipidomic Profiling of Algae with Microarray MALDI-MS toward Ecotoxicological Monitoring of Herbicide Exposure", *Environ. Sci. Technol.* **2021**, 55 (15), 10558–10568.
10. Malinick AS, Lambert AS, Stuart DD, Li B, Puente E, Cheng Q. "Detection of Multiple Sclerosis Biomarkers in Serum by Ganglioside Microarrays and Surface Plasmon Resonance Imaging", *ACS Sens.* **2020**, 5 (11), 3617–3626.
11. Lambert AS, Valiulis SN, Malinick AS, Tanabe I, Cheng Q. "Plasmonic Biosensing with Aluminum Thin Films under the Kretschmann Configuration", *Anal. Chem.* **2020**, 92, 8654–8659.
12. Shanta PV, Li B, Stuart DD, Cheng Q. "Plasmonic Gold Templates Enhancing Single Cell Lipidomic Analysis of Microorganisms", *Anal. Chem.* **2020**, 92, 6213–6217.