

■ ROYA MABOUDIAN



Image courtesy of Roya Maboudian

Current Position. Professor of Chemical & Biomolecular Engineering, and Co-Director of Berkeley Sensor & Actuator Center, University of California at Berkeley.

Education. B.S. Electrical Engineering, Catholic University of America, and M.S. and Ph.D. Applied Physics, Caltech.

Nonscientific Interests. Spending time with my family and traveling.

My research interest is in the surface/interface and materials science and engineering of micro/nanosystems, with applications in harsh-environment sensing, health and environmental monitoring, biomimetics and energy technologies. (Read Maboudian's letter; DOI: [10.1021/acssensors.5b00302](https://doi.org/10.1021/acssensors.5b00302).)

■ XIN ZHANG

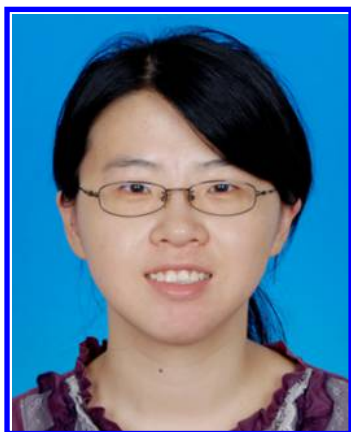


Image courtesy of Shuyao Bao

Current Position. Ph.D. student, School of Chemistry and Chemical Engineering, Southeast University, P.R. China (Advisor: Prof. Shou-Nian Ding).

Education. M.S. Organic Chemistry, Nanjing Technical University, P.R. China (2013, Advisor: Prof. Su Jing).

Nonscientific Interests. Helping stray pets, spending time with family and friends, hiking, and watching movies.

My research interests focus on the design and preparation of biochemical sensors based on functional nanomaterials. As a member of Prof. Shou-Nian Ding's lab, I feel enthusiastic about

our group's aims to design the most sensitive and facile sensors to detect tumor biomarkers. Our main detection methods include electrochemiluminescence assays, electrochemical assays, and fluorescence assays. My doctoral research centers on improving the efficiency of electrochemiluminescence reagents. Now my goal is to design potential mediators for electron transfer between quantum dots and electrode surface in a microenvironment. My article in this issue describes a sandwich-type electrochemiluminescence immunosensor based on magnetic nanoparticles as matrix and optimized core-shell quantum dots as label. Magnetic manipulation and high electrochemiluminescence quantum yield endow the sensor with outstanding sensitivity. (Read Zhang's article; DOI: [10.1021/acssensors.5b00242](https://doi.org/10.1021/acssensors.5b00242).)

■ INDRANI CHOUDHURI



Image courtesy of Arpan Bhattacharya

Current Position. Senior research fellow (SRF), Indian Institute of Technology Indore, India.

Education. B.Sc. and M.Sc. in Chemistry, University of Calcutta (2010 and 2012) and Ph.D. in Applied Computational Material Chemistry, Indian Institute of Technology Indore, India (2013 to present, Advisor: Dr. Biswarup Pathak).

Nonscientific Interests. Cooking, watching movies (animated and sci-fi), and hiking.

I am interested in designing two-dimensional materials for semiconductor based gas sensors. Our Computational Materials Designing Group (CMDG) focuses on 2D materials to improve the sensitivity and selectivity of the semiconductor based gas sensors, using first-principles calculations. Presently, we are working on graphene-based gas sensors, where dopants are introduced to improve the sensitivity and selectivity of the gas sensor. Earlier we demonstrated that co-doping graphene improves the sensitivity and selectivity of graphene-based gas sensors. In this issue, we have adopted the idea of the Lewis acid-base adduct, which can improve the sensitivity and selectivity of the graphene-based gas sensor. We sincerely hope that our work will be a major influence for improving semiconductor-based electronic gas sensing devices for future applications. (Read Choudhuri's article; DOI: [10.1021/acssensors.6b00031](https://doi.org/10.1021/acssensors.6b00031).)

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■ FROM OUR EDITORIAL ADVISORY BOARD: BORIS MIZAIKOFF



Image courtesy of Christine Kranz

Current Position. Prof. Dr. Boris Mizaikoff, Director and Chair, Institute of Analytical and Bioanalytical Chemistry, Ulm University, Germany.

Education. Dipl. Eng. and Ph.D., Vienna University of Technology, Austria and Postdoc, University of Texas, Austin, TX.

Nonscientific Interests. Ultra-Trail Running (50k... 100k... and more... Credo: any step is a step closer to the finish line!).

Current research interests focus on optical chem/biosensors, tailored (bio)molecular recognition interfaces, molecularly imprinted materials, system miniaturization and integration, and multifunctional (nano)analytical techniques with applications in environmental analysis, process monitoring, and biomedical diagnostics. (Read Mizaikoff's article; DOI: [10.1021/acssensors.5b00246](https://doi.org/10.1021/acssensors.5b00246).)