



## Contributors to the *Sensors & Diagnostics* Emerging Investigators Collection 2025

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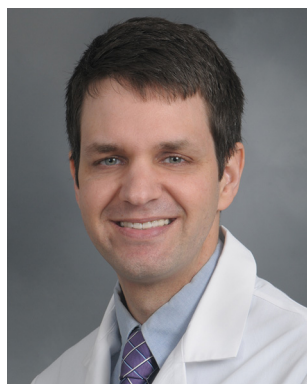
rsc.li/sensors



### Kaho Leung

Kaho Leung received his BSc (2011) and PhD (2015) from the Hong Kong Baptist University. He then pursued postdoctoral research in Prof. Yamuna Krishnan's lab at the University of Chicago, advancing DNA nanotechnology and subcellular imaging. In 2021, he started his independent research at Clarkson University and later transitioned to the University of South Carolina. His research focuses on developing imaging tools for organelle chemotype profiling. Through precise localization and chemical assessment of subcellular entities, these tools provide deeper insights into complex cellular processes. In 2022, he received the NIH Maximizing Investigators' Research Award to develop imaging tools for investigating chloride physiology.

His contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D5SD00086F>.



### Ryan Williams

Ryan Williams is a SUNY Empire Innovation Associate Professor of Medicine in the Division of Nephrology & Hypertension at Stony Brook University. Prior to 2025, he was an assistant professor of biomedical engineering at The City College of New York. He completed his training at Memorial Sloan Kettering Cancer Center in the lab of Dr. Daniel Heller. Williams earned a PhD in pharmaceutical sciences from West Virginia University and a BA in biology from the University of Virginia. Williams's lab focuses on the design and characterization of nanomedicines for implantable optical diagnostics and targeted drug delivery systems.

His contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D5SD00085H>.



### Andrea Locke

Andrea Locke is an assistant professor of biomedical engineering and chemistry at Vanderbilt University. Her research advances non-invasive, portable, and rapid diagnostic technologies for point-of-care use. At Vanderbilt, Locke's team develops optical spectroscopy-based biosensors—including fluorescence and Raman platforms—to detect biomarkers of chronic inflammation and infectious disease in pediatric, women's, and global health contexts.

Her contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D5SD00092K>.





### Ying Zhu

Ying Zhu is a senior lecturer in the School of Biomedical Engineering at the University of Technology Sydney. She is the group leader of the Laboratory of In-vitro NanoDiagnostics, working on advancing *in vitro* diagnostic technologies by translating frontier nanoscale tools. She received her PhD in the School of Chemistry at UNSW Sydney in 2015 and was a postdoc fellow at the Thayer School of Engineering at Dartmouth College. Zhu was the recipient of the Cancer Institute NSW Early Career Fellowship in 2017 and is currently supported by the Australian Research Council Discovery Early Career Researcher Award.

Her contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D5SD00119F>.



### Venkata Suresh Mothika

Venkata Suresh Mothika obtained his PhD in 2016 from the Jawaharlal Nehru Centre for Advanced Scientific

Research (JNCASR), Bangalore, India. He was subsequently awarded with an Alexander von Humboldt (AvH) postdoctoral fellowship and worked on conjugated microporous polymer (CMP) thin film chemical sensors at the University of Wuppertal, Germany. He then moved to the University of York, UK, as a Newton International postdoc fellow, where he worked on redox-active helicenes. Since 2022, he has been an assistant professor at the Department of Chemistry, Indian Institute of Technology (IIT) Kanpur, India, and his research interests are functional CMPs for sensing and photocatalysis applications.

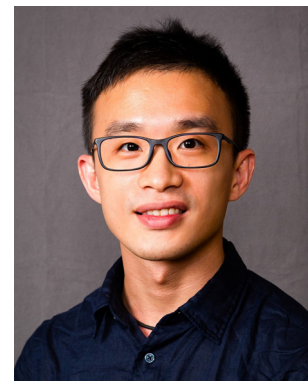
His contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D5SD00097A>.



### Qingshan Wei

Qingshan Wei is an associate professor in the Department of Chemical and Biomolecular Engineering at NC State. He received his PhD in chemistry from Purdue University in 2012, and completed postdoctoral training in the Departments of Electrical Engineering and Bioengineering at UCLA between 2012–2016. His research interests focus on developing novel diagnostic assays and sensors for point-of-care detection of human and plant diseases. He is a University Faculty Scholar (2024), and is also the recipient of the Goodnight Early Career Innovator Award (2023), the NSF CAREER Award (2020), and the *Nano Research* Young Innovator Award in NanoBiotech (2018).

His contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D5SD00057B>.



### Chong-You Chen

Chong-You Chen is an assistant professor in the Department of Chemistry at the National Taiwan Normal University (NTNU). He received his PhD from the National Taiwan University in 2018. After conducting research at the Keio University and Industrial Technology Research Institute, he joined the National Changhua University of Education and later moved to NTNU in 2023. His research focuses on interface-driven chemistry to develop target-responsive nanozymes and thermal-based patterning for analytical applications.

His contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D5SD00070J>.



### Serhiy Korposh



Serhiy Korposh received both his undergraduate and postgraduate degrees in 2001 and 2002 respectively in physics from Uzhgorod National University, Transcarpathia (Ukraine) and PhD from Cranfield University (UK) in 2007. After 5 years as a post-doctoral researcher at the University of Kitakyushu (Japan) and Cranfield University, he started his lectureship in 2013 at the University of Nottingham and since 2023 he has been a professor of photonics instrumentation. His research focuses on development of fibre-optic bio-chemical sensors and their applications in healthcare and environmental monitoring. He has published over 140 peer-reviewed papers and has a research funding portfolio of over £8m.

His contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D5SD00043B>.



#### Hnin Yin Yin Nyein

Hnin Yin Yin Nyein is an assistant professor of chemical and biological engineering at the Hong Kong University of Science and Technology. She earned her BSc and PhD in materials science and engineering from UC Berkeley and completed postdoctoral training at Stanford University. Her group develops wearable and point-of-care bioelectronics by combining advanced materials engineering with precise fluid manipulation to enable personalized health monitoring. Her work has been published in leading journals including *Nature*, *Nature Communications*, and

*Advanced Materials*, and recognized internationally with the MIT Technology Review Innovator Under 35 Asia Pacific (2021) and the CBMS Young Innovator Award (2025).

Her contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D3SD00165B>.



#### Sebastián Díaz

Sebastián Díaz received his Licentiate in chemistry from the University of Buenos Aires (Argentina) and a PhD in chemistry from the Georg-August Universität Göttingen (Germany) while working at the Max Planck Institute for Biophysical Chemistry. He is currently a research chemist at the Center for Bio/Molecular Science and Engineering at the U.S. Naval Research Laboratory in Washington, D.C. His research focuses on the functionalization of nanoparticles for probe development, controlling energy transfer pathways at the nanoscale, and interfacing nanotechnology with biology and soft matter for novel materials and catalysis.

His contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D3SD00149K>.



#### You Yu

You Yu is an assistant professor in the School of Biomedical Engineering at ShanghaiTech University. He received his PhD at Changchun Institute of Applied Chemistry, Chinese Academy of Sciences. After that, he worked as a postdoctoral research associate in the Department of Medical Engineering at California Institute of Technology. He is a recipient of the MINE Young Scientist Award, CAST Young Scientist Award, and Shanghai S&T under 35. His research is concentrated on the development and application of wearable bioelectronics, flexible human-machine interface, and medical robotics.

His contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D3SD00284E>.



#### Maral Mousavi

Maral Mousavi joined the Department of Biomedical Engineering at USC in 2019 as an assistant professor.



## Profile

She received her BS from Sharif University of Technology and completed her PhD studies at the University of Minnesota. Before joining USC, Mousavi was a postdoctoral fellow in the research group of Prof. George Whitesides at Harvard University and Wyss Institute for Biologically Inspired Engineering, working on affordable diagnostic devices to make healthcare and analysis accessible to all. Mousavi's research experiences and interests span from point-of-care diagnostics, to electrochemical sensors, wearable devices, neural probes, and tools for precision medicine.

Her contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D3SD00296A>.

**Xiaojiang Xie**

Xiaojiang Xie obtained his Bachelor's degree from Nanjing University, he pursued his Master's degree and PhD at the University of

Geneva in Switzerland, under the guidance of Prof. Eric Bakker. After postdoctoral research at ENS Paris, collaborating with Prof. Ludovic Jullien and Prof. Thomas Le Saux, he started to work at the Department of Chemistry at the Southern University of Science and Technology, from Oct. 2016 as a principle investigator. He moved to the Department of Chemistry at The Hong Kong University of Science and Technology in 2025. His current research is focused on developing novel biochemical sensing interfaces.

His contribution to the 2025 *Sensors & Diagnostics* Emerging Investigators collection can be read at <https://doi.org/10.1039/D3SD00275F>.

