

Dr. Seongsin Margaret Kim University of Alabama

http://eng.ua.edu/people/skim/

Seongsin Margaret Kim is an Associate Professor of the Electrical and Computer Engineering department at the University of Alabama. She received her B.S in Physics from Yonsei University, Seoul, South Korea, in 1992, M.S in Physics, and a Ph. D in Electrical and Computer Engineering from Northwestern University in 1994 and 1999. From 1999 to 2000, she was a senior research engineer at Samsung Electronics, Corporate R&D laboratory, Korea, and from 2000 to 2002, she was a device research engineer at Agilent Technologies (former Hewlett-Packard). After that Dr. Kim pursued Academia career and joined the Electrical Engineering department at the Stanford University as a Research Associate and stayed until she joined at the UA.

Prof. Kim has more than a decade of experience in the area of semiconductor optoelectronics devices based on quantum dots and nanostructures, including epitaxial materials growth by MOVPE and MBE, extensive characterization of nanostructures, device fabrication and measurement. She was one of the pioneers in the field of MOVPE growth of InGaAs quantum dots for infrared photodetectors and quantum dots lasers at 1.3 μ m. She also has extensive experience in developing III-V dilute nitride devices for near Infrared and Infrared optoelectronics, and vertical cavity surface emitting lasers.

Prof. Kim's current research interests and activities focus on light interactions with matters in the range of UV to THz frequencies for sensing and imaging, exploring new hybrid nanostructures for electronics, photonics, and sensing architectures. It includes THz biomedical imaging, near field microscopy for biosensing, THz metamaterials and novel devices, THz source and detectors, developing the optical and terahertz spectroscopy of nanomaterials including 2D materials. Dr. Kim has authored or co-authored more than 125 peer reviewed publications, 6 book chapters, and holds two US patent. She is the recipient of the NSF CAREER award (2010), Departmental Meritorious Research Award (2010), the first prize of IEEE SoutheastCon Undergraduate Research Paper Competition (2011), IEEE-HKN Outstanding Instructor Award (2014), and the Best Poster Award at META2015, 6th International Conference on Metamaterials, Photonics Crystals and Plasmonics (2015). She was also invited to White House representing NSF, on "New work place flexibility policies to support America's scientists and their families" (2011). She is the executive board member of Women in Science and Engineering (WiSE) at UA.