

Graduate student positions in quantum materials and devices

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One to two graduate research assistant positions are available in Prof. Jun Xiao's research lab in the Department of Materials Science and Engineering at the University of Wisconsin-Madison. Prof. Xiao's group focus on the investigation of fundamental structure-property relationships and UV-THz light-matter interactions in 2D quantum materials, complex oxides and Heusler compounds for next-generation information and energy technologies.

Members of the group are exposed to a broad range of optical and electrical characterization and engineering techniques as well as device fabrication approaches. Students are encouraged to identify new research opportunities beyond their core projects and collaborate with each other. The research experience in the group will help the students to find jobs ranging from faculty positions at universities to leading quantum technology, photonics, and electronics industries.

Academic background in materials science, physics, or a related field is required. The group welcome motivated students interested in the frontier of quantum materials science, laser and spectroscopy technologies, and nanoscale electronic devices. Applicants are strongly encouraged to contact Prof. Jun Xiao at jun.xiao@wisc.edu with their CVs and start the application accordingly.

Bio: Dr. Xiao is an assistant professor in the Department of Materials Science and Engineering at the University of Wisconsin-Madison from August 2021. He is the recipient of the prestigious NSF CAREER award. Prior to joining Madison, Dr. Jun Xiao worked as a postdoctoral scholar with Prof. Aaron Lindenberg and Prof. Tony Heinz at Stanford University and SLAC National Accelerator Laboratory. He earned his Ph.D. in Applied Science and Technology from UC Berkeley (2018) under Prof. Xiang Zhang's supervision. He received his bachelor's degree in physics from Nanjing University (2012). His research experience and interests focus on structure-property relationships and light-matter interactions in quantum materials for robust quantum computing, efficient energy conservation and THz sensing. His group website is <https://xiaolab.wisc.edu/>.