

## **Postdoctoral position in ultrafast THz spectroscopy interfacing with quantum materials and devices**

Prof. Jun Xiao (jun.xiao@wisc.edu)  
Department of Materials Science & Engineering  
Department of Physics (affiliated), Department of Electrical and Computer Engineering  
(affiliated pending)  
University of Wisconsin – Madison  
<https://xiaolab.wisc.edu/>

One postdoctoral position is 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. The research experience in the group will help the members 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 candidates interested in the frontier of ultrafast and nonlinear spectroscopic technologies (especially ultrafast THz spectroscopy), quantum materials science, and nanoscale electronic devices. This position is particularly focusing on developing and using ultrafast THz spectroscopy to study nonequilibrium physics in thin films with magnetic, ferroelectric, or topological properties. The appointments are initially for one year with the expectation of being extended if the work is going well. Interested applicants should send (1) CV in PDF format and (2) contact information for three references to Prof. Jun Xiao at jun.xiao@wisc.edu. Review of applicants will begin immediately and will continue until the positions are filled.

**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/>.