

**Ultrafast Laser Spectroscopy of Two-Dimensional Materials  
and Their Heterostructures**

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**Abstract**

Starting with the discovery of graphene in 2004, the interest in two-dimensional (2D) materials has been exponentially growing. Across many disciplines, their exceptional electrical, chemical, thermal, and optical properties have drawn considerable attention that created an entire field within a decade of their discovery. Ultrafast lasers are powerful tools to control and probe transient processes in 2D materials and study their optical properties. This seminar focuses on recent studies of 2D materials using ultrafast