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Abstract for an Invited Paper for the MAR12 Meeting of the American Physical Society

Tunable optical properties of graphene¹ FENG WANG, UC Berkeley

Graphene, a single layer of carbon atoms, exhibits novel two-dimensional electronic behavior. Optical spectroscopy provides a powerful toolkit study graphene physics. In this talk, I will show how we can use infrared spectroscopy to probe gatedependent interband transitions as well as intraband transitions. I will also discuss how we can use electrical gating to control inelastic light scattering processes in graphene.

¹DOE, ONR, NSF, Packard foundation