Abstract Submitted
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Controllable Goos-Hanchen shift in Graphene ribbons array.[1] XIAODONG ZENG, M. AL-AMRI, M. SUHAIL ZUBAIRY, Institute for Quantum Science and Engineering (IQSE) and Department of Physics and Astronomy, Texas AM University, College Station, Texas 77843-4242 — The Goos- Hanchen (GH) shift of light beam incident on Graphene ribbons array is investigated. Due to the resonance effects of leaky surface plasmons on the ribbons, the zeroth-order reflection field shows both large positive and negative GH shifts even for single layer ribbons. Taking advantage of the strong electro-optical tunability of Graphene plasmons, we can control the shift conveniently. This effect paves a promising way to manipulate terahertz and mid-infrared light beam via Graphene.

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