

标题: Graphene plasmonics

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摘要: Two rich and vibrant fields of investigation-graphene physics and plasmonics-strongly overlap. Not only does graphene possess intrinsic plasmons that are tunable and adjustable, but a combination of graphene with noble-metal nanostructures promises a variety of exciting applications for conventional plasmonics. The versatility of graphene means that graphene-based plasmonics may enable the manufacture of novel optical devices working in different frequency ranges-from terahertz to the visible-with extremely high speed, low driving voltage, low power consumption and compact sizes. Here we review the field emerging at the intersection of graphene physics and plasmonics.

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