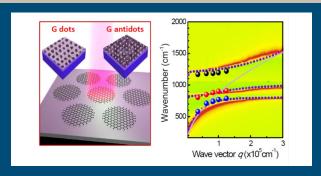


CNG NEWSLETTER

Dec, 2013

NEWS OF THE MONTH



Strong hybridization of graphene plasmons and SiO2 substrate phonons.

Strong plasmon-phonon coupling in graphene disk and antidot arrays

Xiaolong Zhu and co-workers from CNG have explored strong plasmon-phonon coupling in the mid-infrared regime. Unprecedented large-area graphene nanodot and antidot optical arrays are fabricated by nanosphere lithography, with structural control down to the sub-100 nanometer regime. The interaction between graphene plasmon modes and the substrate phonons is experimentally demonstrated and structural control is used to map out the hybridization of plasmons and phonons, showing coupling energies of the order 20 meV. Read the whole news at our webpage or see arXiv:1312.2400

OTHER NEWS



Peter Bøggild appointed Professor

Peter Bøggild was recently appointed Professor at DTU Nanotech. With this appointment DTU Nanotech consolidates and strengthens its activities on carbon-based nanotechnology and especially these within fabrication,

characterization, and applications of graphene.

EVENTS

CNG 2-day seminar, Nov 2013

CNG repeated the great success from last year and held our second 2-day seminar on Nov 6-7, 2013. This year the seminar was held at Sørup Herregaard in Ringsted and around 50 people participated.

New meeting series - CNG CAFÉ

CNG is starting up a new meeting series to boost collaboration between the different research groups within CNG, with focus on the 'early stage' researchers. Each Café will include 2 scheduled talks and one free spot and will occur every month.

Talk by Jose Caridad

At the next CNG Café in January Jose Caridad from Trinity College Dublin will give a talk "Controlled scattering as an alternative method for graphene electronics". Jose will be joining Peter Bøggilds group 'Nanocarbon' as a postdoc in January 2014.



UPCOMING LECTURES

.... By CNG faculty

Professor N. Asger Mortensen, DTU Photonics, gives an invited talk at the <u>44th Winter Colloquium on</u> Physics of Quantum Electronics, Utah, 5-9 Jan 2014

NEW PUBLICATIONS



Mads L. Trolle, Ulrik S. Møller and Thomas G. Pedersen, <u>Large and stable band gaps in spin-polarized graphene</u> <u>antidot lattices</u>, Physical Review B 88, 195418 (2013)