

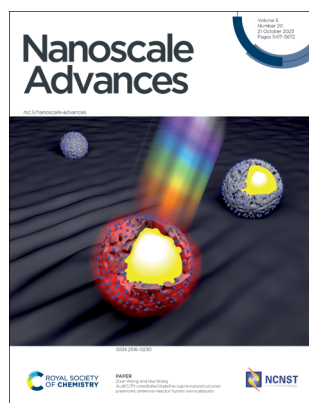
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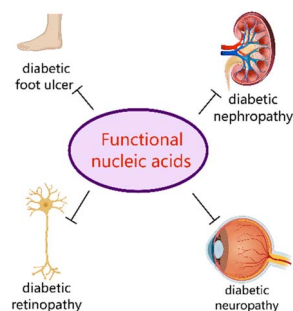
Inside cover
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REVIEW

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Functional nucleic acids for the treatment of diabetic complications

Wen Wen, Yuzi Wei and Shaojingya Gao*

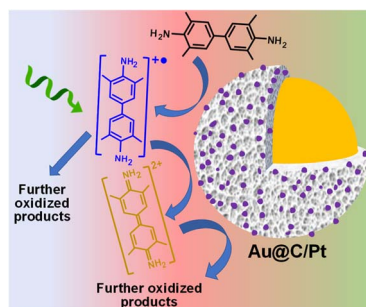


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Au@C/Pt core@shell/satellite supra-nanostructures: plasmonic antenna–reactor hybrid nanocatalysts

Zixin Wang and Hui Wang*



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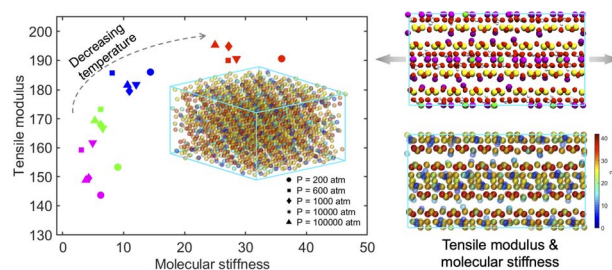
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Molecular insights into the temperature and pressure dependence of mechanical behavior and dynamics of Na-montmorillonite clay

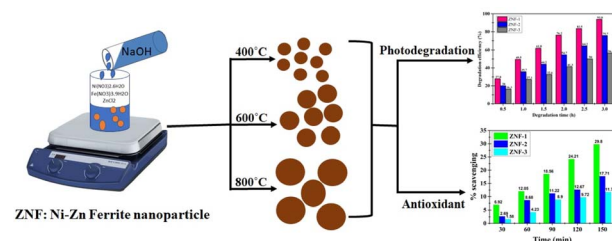
Sarah Ghazanfari, Amirhadi Alesadi, Yangchao Liao, Yida Zhang and Wenjie Xia*



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Nanocrystalline Ni–Zn spinel ferrites: size-dependent physical, photocatalytic and antioxidant properties

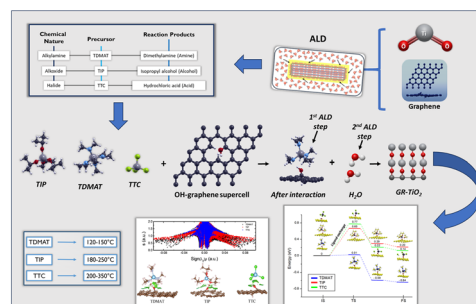
Nur Jalal Mondal, Rahul Sonkar, Bitopan Boro, Mritunjoy Prasad Ghosh* and Devasish Chowdhury*



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Atomic-scale study of TiO₂-GR nanohybrid formation by ALD: the effect of the gas phase precursor

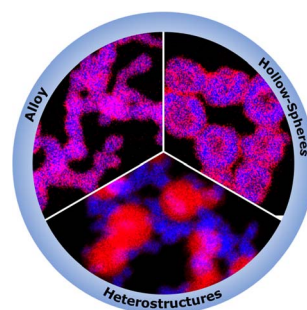
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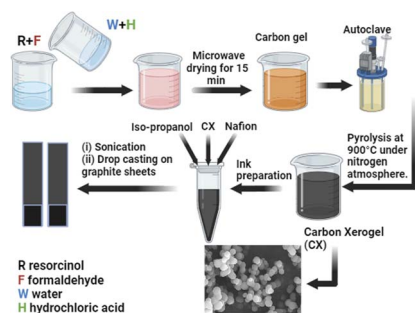
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Structural investigations of Au–Ni aerogels: morphology and element distribution

Johannes Kresse, Maximilian Georgi, René Hübner and Alexander Eychmüller*



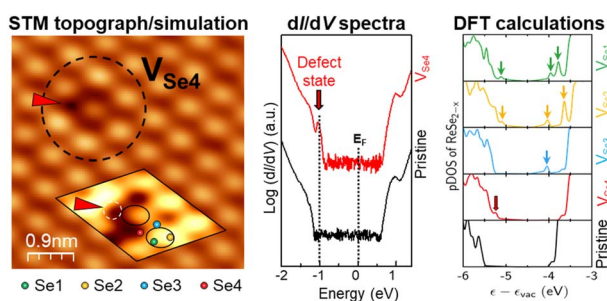
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Novel preparation of metal-free carbon xerogels under acidic conditions and their performance as high-energy density supercapacitor electrodes

Karim Ahmed Abbas, Abdalla Abdelwahab,*
Hesham S. Abdel-Samad, Sayed Sabet Abd-El Rehim
and Hamdy H. Hassan*

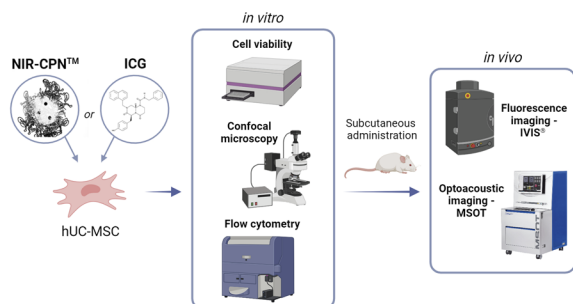
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Direct characterization of intrinsic defects in monolayer ReSe₂ on graphene

Nguyen Huu Lam, Jae-Hyeok Ko, Byoung Ki Choi,
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Aloysius Soon* and Jungdae Kim*

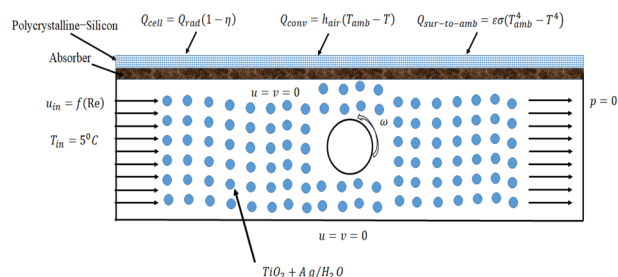
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Near infrared conjugated polymer nanoparticles (CPN™) for tracking cells using fluorescence and optoacoustic imaging

Ana Muñoz-García, Alejandra Hernandez Pichardo,
James Littlewood, Suzannah Tasker, Jack Sharkey,
Bettina Wilm, Hannah Peace, Dermott O'Callaghan,
Mark Green, Arthur Taylor* and Patricia Murray*

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Investigation of a two-dimensional photovoltaic thermal system using hybrid nanofluids and a rotating cylinder

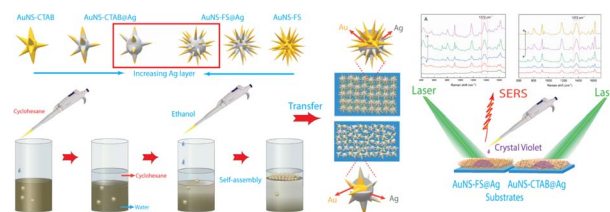
Mohammad Akram, Abid A. Memon, M. Asif Memon,
A. M. Obalalu and Umair Khan*



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Differences between surfactant-free Au@Ag and CTAB-stabilized Au@Ag star-like nanoparticles in the preparation of nanoarrays to improve their surface-enhanced Raman scattering (SERS) performance

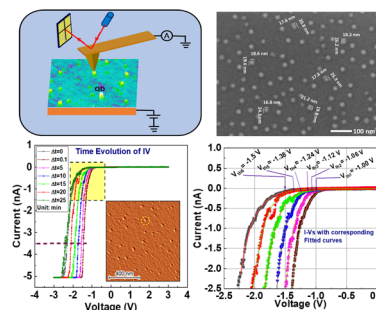
Sy Van Vu, Anh-Thu Nguyen, Anh-Thi Cao Tran, Viet-Ha Thi Le, Tien Nu Hoang Lo, Thi H. Ho, Nguyet. N. T. Pham, In Park* and Khuong Quoc Vo*



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Physical probing of quantum energy levels in a single indium arsenide (InAs) quantum dot

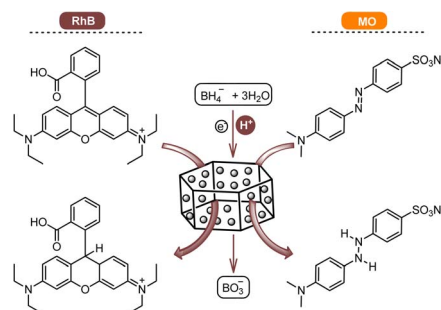
Moh'd Rezeq,* Yawar Abbas, Boyu Wen, Zbig Wasilewski and Dayan Ban*



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Pd nanoparticles decorated on a porous Co(BDC-NH₂) MOF as an effective heterogeneous catalyst for dye reduction

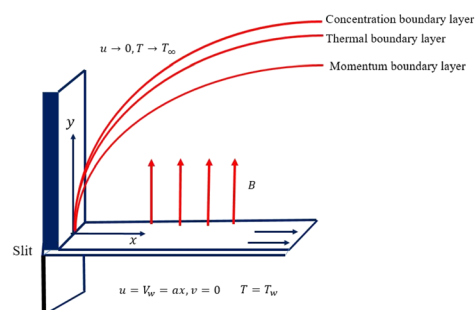
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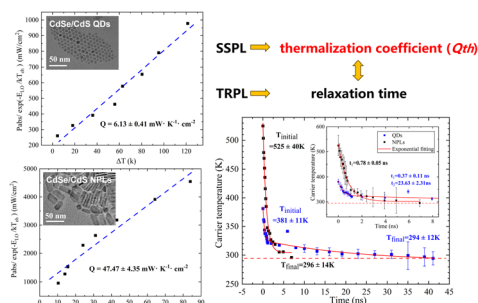
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Entropy production with the flow of nanomaterials through the permeable stretched surface with heterogeneous–homogenous chemical reaction

Hashim, Sohail Rehman,* Serhan Alshammari, Ahmed Osman Ibrahim and Naeem Ullah



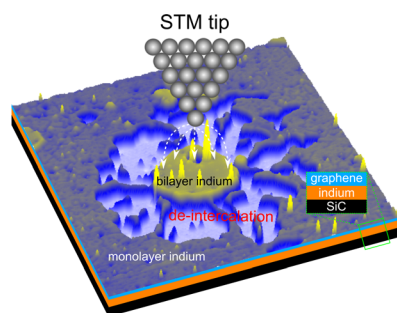
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Study of the mechanisms of the phonon bottleneck effect in CdSe/CdS core/shell quantum dots and nanoplatelets and their application in hot carrier multi-junction solar cells

Yi Zhang,* Wenbin Xiang, Rui Wang, Jiayu Zhang* and Gavin Conibeer*

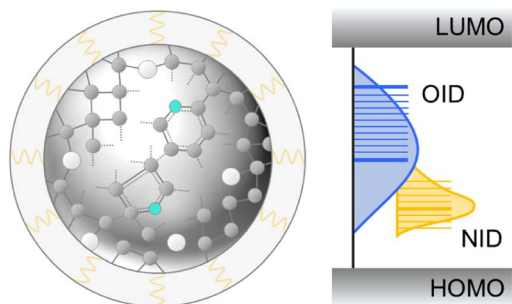
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Atomic structures and interfacial engineering of ultrathin indium intercalated between graphene and a SiC substrate

Van Dong Pham,* Chengye Dong and Joshua A. Robinson

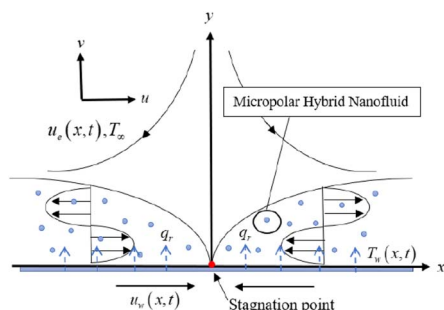
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Predictable incorporation of nitrogen into carbon dots: insights from pinacol rearrangement and iminium ion cyclization

Soohyun Cho, Chan-Woo Jung, Dajin Lee, Yerim Byun, Hyemin Kim, Hyunho Han, Ji-Hee Kim* and Woosung Kwon*

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Stability analysis for heat transfer flow in micropolar hybrid nanofluids

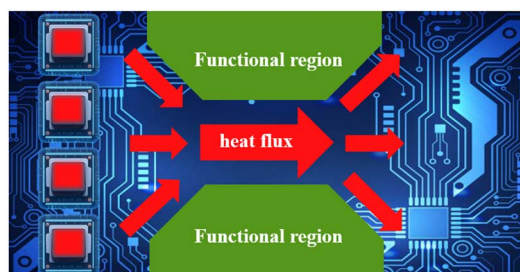
Nur Hazirah Adilla Norzawary, Siti Khuzaimah Soid, Anuar Ishak, Muhammad Khairul Anuar Mohamed, Umair Khan,* El-Sayed M. Sherif and Ioan Pop



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Heat flux concentrators based on nanoscale phononic metastructures

Jian Zhang, Haochun Zhang,* Weifeng Li and Gang Zhang*

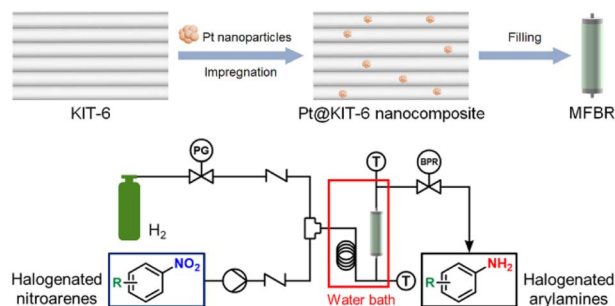


Functional regions are amorphous or perforated nanomesh

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A high activity mesoporous Pt@KIT-6 nanocomposite for selective hydrogenation of halogenated nitroarenes in a continuous-flow microreactor

Kejie Chai, Xilin Yang, Runqiu Shen, Jianli Chen, Weike Su* and An Su*



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A Prussian blue analog as a decorporation agent for the simultaneous removal of cesium and reactive oxygen species

Tingyu Xue, Fang Liu, Bin Lu, Qingrong Dong, Bin Zhao, Tianqing Chen, Kun Zhang, Jianguo Li* and Jiangfeng Du*

