

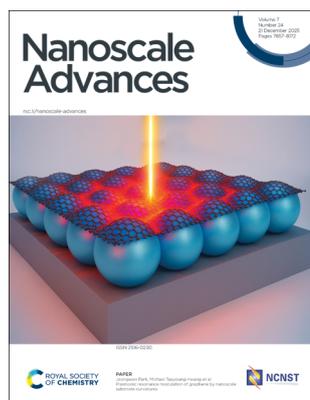
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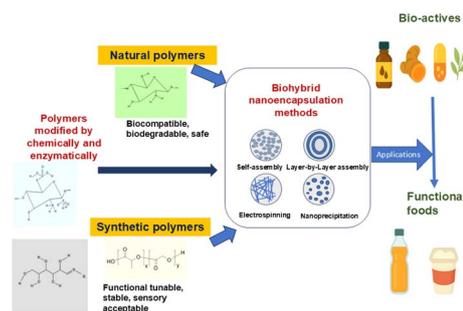
See Jeongwon Park, Michael Taeyoung Hwang *et al.*, pp. 7899–7912. Image reproduced by permission of Jeongwon Park from *Nanoscale Adv.*, 2025, 7, 7899. Cover image generated using Blender and Google Gemini.

REVIEW

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Hybrid nanoencapsulation systems: integrating natural polymers with synthetic nanomaterials for enhanced delivery of bioactive compounds in functional foods

Maheshika Sethunga, S. C. Rangani, Imalka Munaweera* and K. K. D. S. Ranaweera

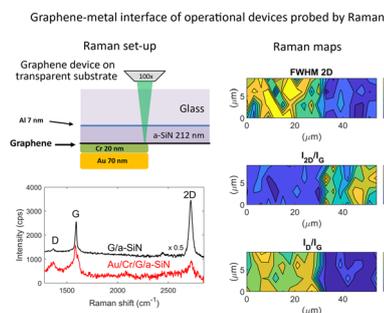


COMMUNICATION

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Direct access to the graphene–metal interface using Raman spectroscopy to study the origin of contact resistance in operational devices

Alessandro Kovtun,* Leonardo Martini and Piera Maccagnani*



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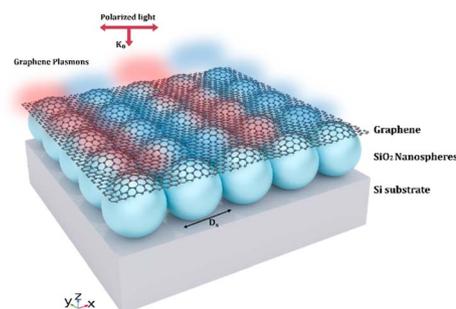
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Plasmonic resonance modulation of graphene by nanoscale substrate curvatures

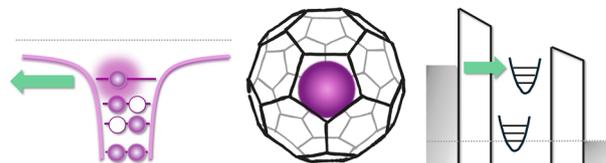
Vahid Faramarzi, Sareh Vatani, Mohsen Heidari, Jeongwon Park* and Michael Taeyoung Hwang*



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Charge transfer dynamics in noble gas endofullerenes: intra- and extramolecular tunnelling

Ali Sufyan, Tyler James, Connor Fields, Shabnam Naseri, Filipe Junqueira, Sofia Alonso-Perez, Sally Bloodworth, Gabriela Hoffman, Mark C. Walkey, Elizabeth S. Marsden, Richard J. Whitby, Yitao Wang, David A. Duncan, Tien-Lin Lee, James N. O'Shea, J. Andreas Larsson, Brian Kiraly and Philip Moriarty*



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Greening of coffee waste through its transformation into clean and structurally stable activated carbon for energy storage applications

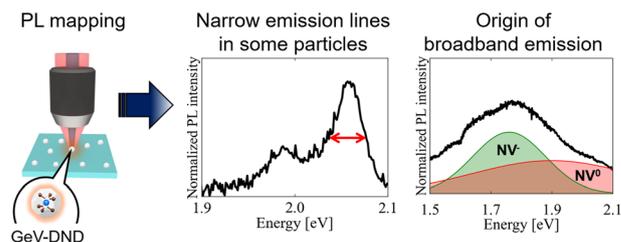
Zain Ul Abideen,* Rasoul Khayyam Nekouei, Mohsen Hajian-Foroushani, Samane Maroufi and Veena Sahajwalla



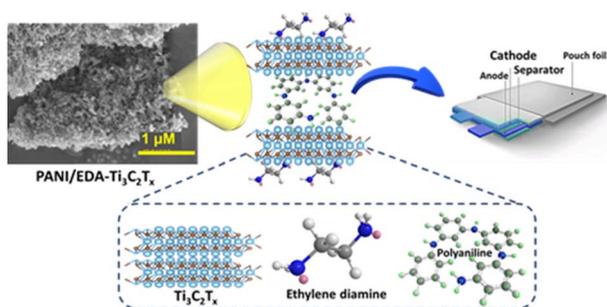
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Micro-photoluminescence spectroscopy of detonation nanodiamonds containing germanium-vacancy centres

Yoshiki Saito, Yushi Okuda, Yoshihiro Tomoi, Taiki Shimamura, Takuya Matsuda, Yuto Makino and Masaaki Ashida*



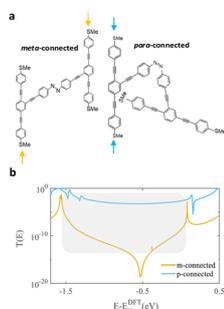
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Architecturally robust design of ethylenediamine-assisted polyaniline/MXene nanohybrids for symmetric pouch-cell supercapacitors

Sithara Radhakrishnan, Subhashree Mohapatra, P. S. Anagha, Akshaya Shibu, K. Namsheer, Manasi Pathak, Sang Mun Jeong and Chandra Sekhar Rout*

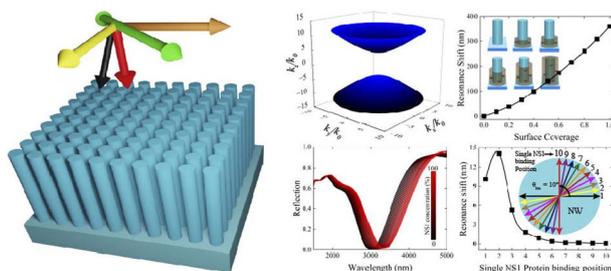
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Light-driven molecular switching achieves 6-order magnitude conductance change in OPE dimers

Asma Alajmi, Bashayer Alanazi, Karimah Alresheedi, Kholood Alharbi, William D. J. Tremlt, Nicholas J. Long, Colin Lambert* and Ali Ismael*

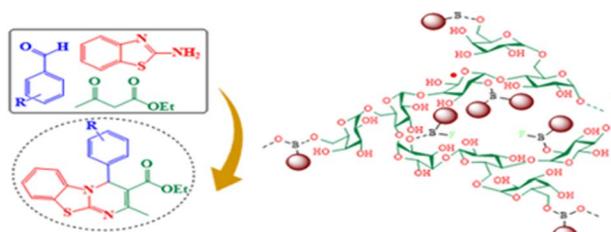
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Silicon nanowire based angle robust ultrasensitive hyperbolic metamaterial biosensor

Badhan Golder, Zahidul Salman, Rony Das and Arif Ahammad*

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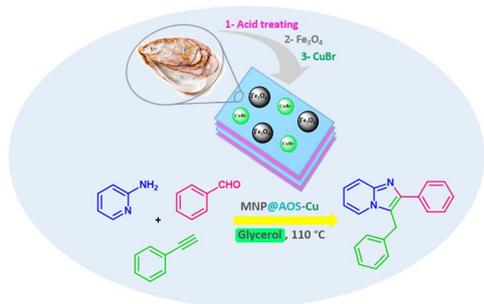


Preparation and characterization of nano guar gum/ $\text{BF}_3/\text{Fe}_3\text{O}_4$ as a novel bio-based Lewis acid catalyst for the one-pot green synthesis of pyrimido benzothiazoles under solvent-free conditions

Motahare Hajjhasani Bafghi, Abdolhamid Bamoniri* and Bi Bi Fatemeh Mirjalili



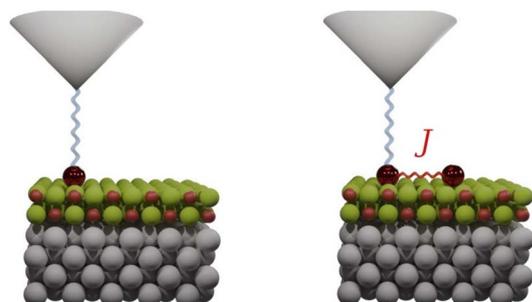
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A copper bromide-decorated magnetic oyster shell biosupport as a sustainable catalyst for heterogeneous synthesis of imidazo[1,2-a]pyridines in glycerol

Samane Ansari, Arefe Salamatmanesh,^{*}
Maryam Kazemi Miraki and Akbar Heydari^{*}

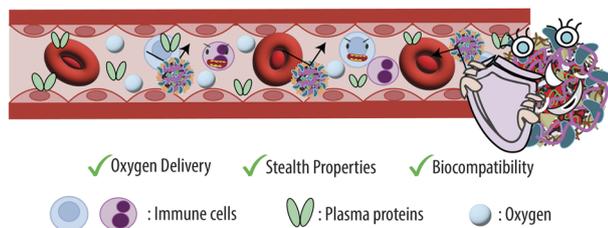
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Unraveling spin entanglement using quantum gates with scanning tunneling microscopy-driven electron spin resonance

Eric D. Switzer,^{*} Jose Reina-Gálvez, Géza Giedke,
Talat S. Rahman, Christoph Wolf, Deung-Jang Choi
and Nicolás Lorente^{*}

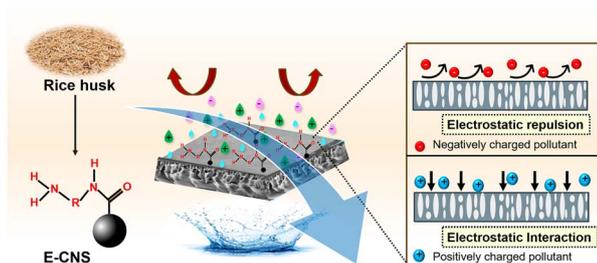
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Hemoglobin-loaded ZIF-8 nanoparticles functionalized with human serum albumin as stealth, stable, and biocompatible oxygen carriers

Despoina Douka, Arnau Dieste-Izquierdo,
Clara Coll-Satue, Eva Jakljevič, Fernando
Enrique Farfán-Esponda, Ana María Pablo Sainz-Ezquerro
and Leticia Hosta-Rigau^{*}

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Ethylenediamine modified carbon nanospheres from biomass for selective membrane filtration

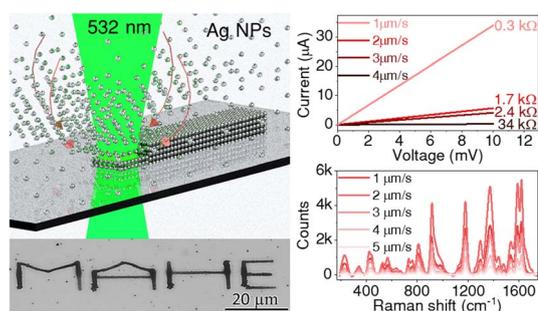
B. G. Maya Patel, Sk Safikul Islam, Samir Mandal,
Suryasarathi Bose and Gurumurthy Hegde^{*}



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Continuous bubble-free laser printing of plasmonic nanostructures enabling annealing-free ohmic conduction and multifunctional trapping/spectroscopy studies

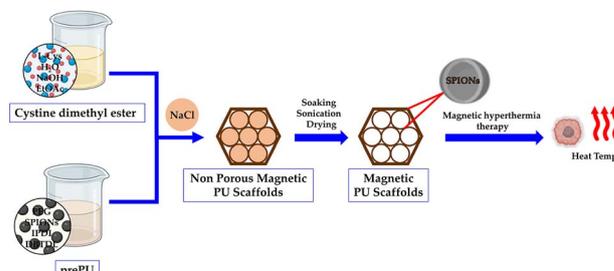
K. Monisha, Bharath Bannur, Shreyas M. S. and Sajan D. George*



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Surface-modified iron oxide nanoprobe in biomedical scaffolds

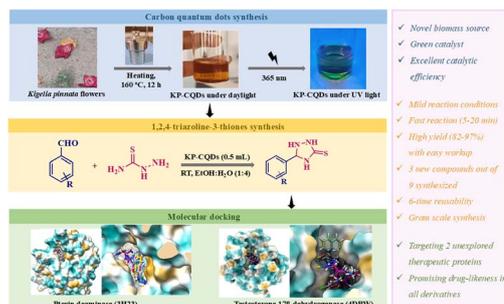
M. A. González-Gómez,* Á. Arnosá-Prieto, P. García-Acevedo, P. Díaz-Rodríguez, L. de Castro-Alves, Y. Piñeiro and J. Rivas*



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From botanical waste to a biocatalyst: *Kigelia pinnata* flower-derived CQDs for triazolidine-3-thione synthesis and their *in silico* evaluation

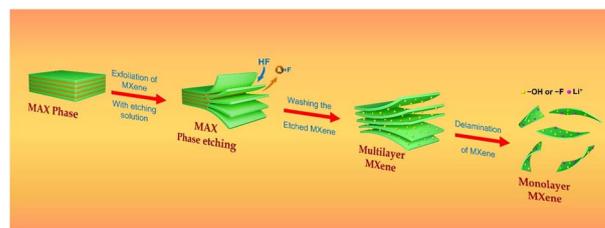
Sunita Teli, Shivani Soni, Nisarg Rana, Anu Manhas and Shikha Agarwal*



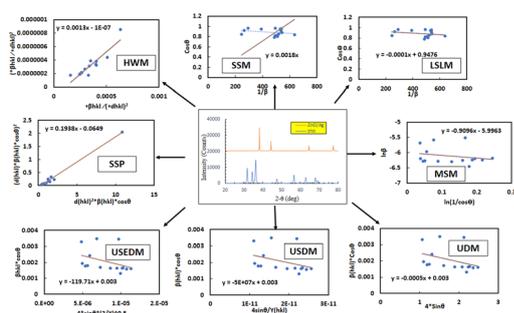
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Tailored synthesis and morphological analysis of Mo_2CT_x and $\text{Ti}_3\text{C}_2\text{T}_x$ MXenes: a study on multilayered and delaminated architectures

Vasanth Magesh, Raji Atchudan, Sandeep Arya, Surendra H. Mahadevegowda and Ashok K. Sundramoorthy*



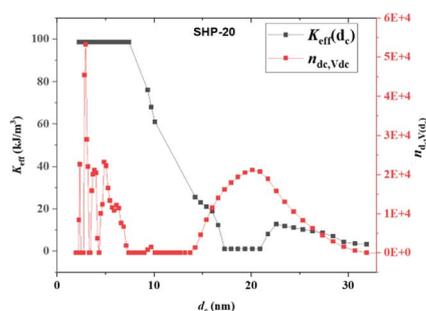
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Structural insights into zinc oxide–silver nanocomposite *via* different XRD models: rapid synthesis with photocatalytic & antibacterial applications

Md. Abdus Samad Azad, Md. Shahadat Hossain, Shassatha Paul Saikat, Md. Rifat Hasan and Shukanta Bhowmik*

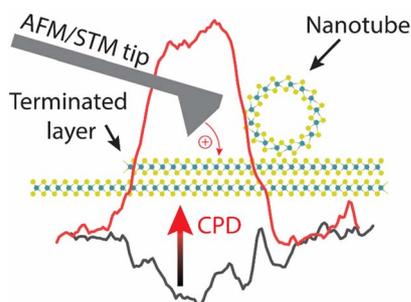
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Estimation of effective anisotropy constant distribution of magnetic nanoparticles based on magnetic particle spectroscopy

Haochen Zhang,* Yi Sun, Haozhe Wang, Zhongzhou Du, Teruyoshi Sasayama and Takashi Yoshida

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Edge and defect effects on charge distribution in collapsed MoS₂ nanotubes

Matjaž Malok,* Janez Jelenc, Anja Pogačnik Krajnc and Maja Remškar

