

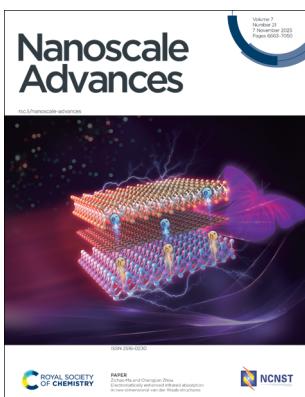
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See Zichao Ma and Changjian Zhou, pp. 6819–6827. Image reproduced by permission of Zichao Ma from *Nanoscale Adv.*, 2025, 7, 6819.

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Introduction to Advances in nanophotonics, plasmonics, and nano-optics

Viktoria E. Babicheva,* Yu-Jung Lu, Alexander Shalin and Dattatray Late

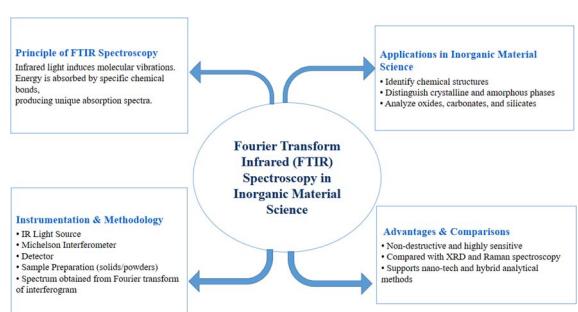


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Fourier transform infrared spectroscopic technique for analysis of inorganic materials: a review

Kazi Al-Amin, Md. Kawsar,* Md. Tariqur Rahaman, Bhuiyan Mamun and Md. Sahadat Hossain*



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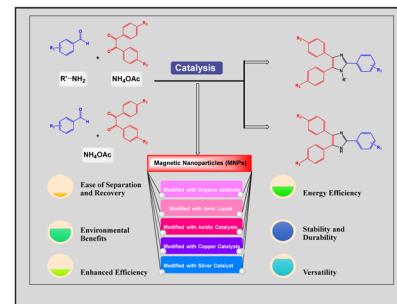
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Magnetic catalyst marvels: a sustainable approach to highly substituted imidazole synthesis

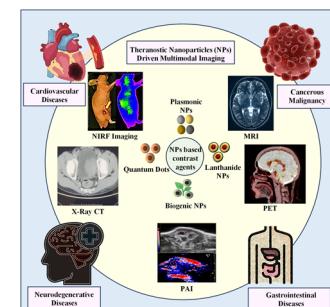
Mosstafa Kazemi,* Ramin Javahershenas,* Jayanti Makasana, Suhas Ballal, Munther Kadheem, Abhayveer Singh, Kattela Chennakesavulu and Kamal Kant Joshi



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Harshita Tiwari, Swati Singh, Rajiv Kumar, Abhijit Mandal, Abhishek Pathak, Navin Kumar Verma,* Lalit Kumar and Vibhav Gautam*

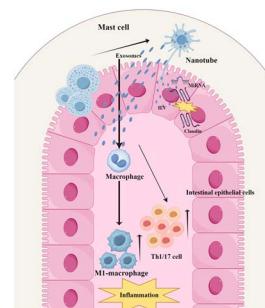


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Mast cell-derived exosomes and claudin regulation in ulcerative colitis: emerging insights and therapeutic potential

Shao-han Li, Hao-ming Xu, Hong-li Huang* and Yong-jian Zhou*



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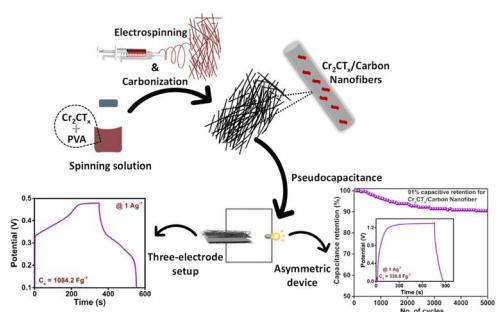
A simple method to distinguish light scattering from light absorption by nanoparticles

Arianna Menichetti, Dario Mordini, Enrico Rampazzo, Agata Pane, Silvia Vicenzi, Vasilis Petropoulos, Giulio Cerullo, Fabrizio Mancin* and Marco Montalti*



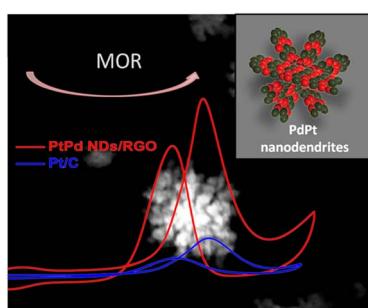
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R. Madhushree, K. R. Sunajadevi,* K. P. Chaithra, T. P. Vinod* and B. Saravanakumar

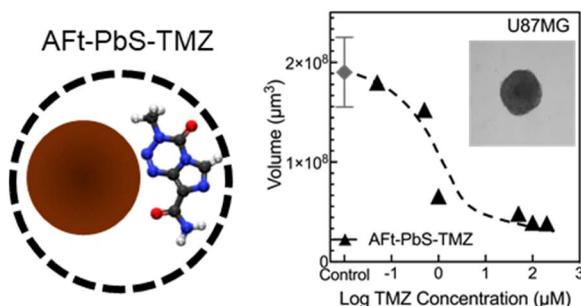
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Lattice add-ons with low-content Pd incorporated into Pt nanodendrites revealed active methanol oxidation via the fast removal of poisonous intermediates

Ammar Bin Yousaf,* Asad Ali and Peter Kasak*

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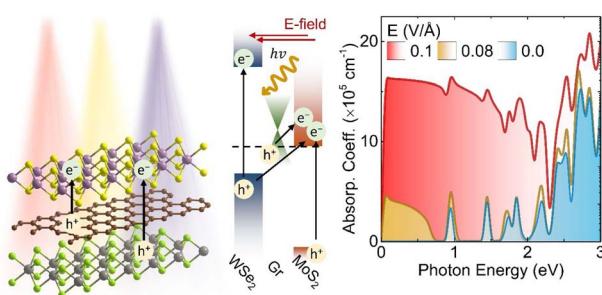


Co-encapsulation of temozolomide and PbS quantum dots in apoferitin for transferrin receptor 1 targeting, imaging and treatment of glioblastoma

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Electrostatically enhanced infrared absorption in two-dimensional van der Waals structures

Zichao Ma and Changjian Zhou*

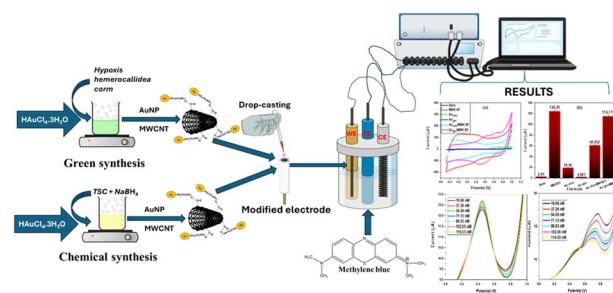


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A nano-powered green and chemically synthesized Au/MWCNT modified electrochemical sensor for methylene blue detection in river water

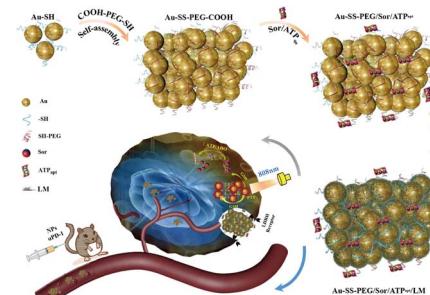
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A stepwise responsive Au-SS-PEG/Sor/ATP_{aptamer}/LHRH-MPG^{ΔNLS} drug delivery vector system for overcoming drug resistance in immunotherapy of hepatocellular carcinoma

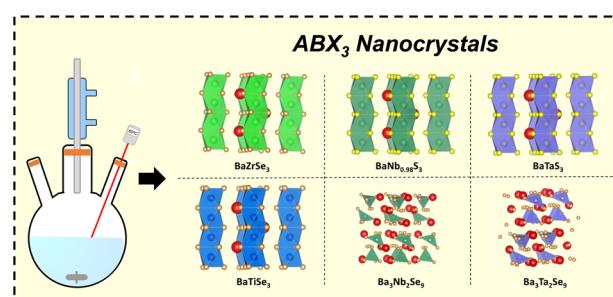
Mengting Tong, Guangpeng Chen, Yong Dong, Yubin Pan, Yanan Xue and Da Li*



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Hexagonal ABX₃ nanocrystals: rod-shaped BaNbS₃ and BaTaS₃; BaTiSe₃, BaZrSe₃, and other selenide derivatives for optoelectronic applications

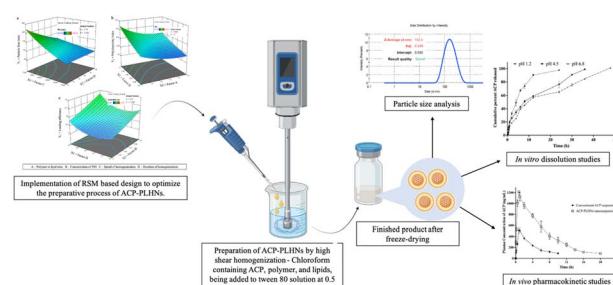
Shubhanshu Agarwal, Sofia Rodriguez Perilla, Matheus Rios Marques, Daniel C. Hayes, Kiruba Catherine Vincent and Rakesh Agrawal*



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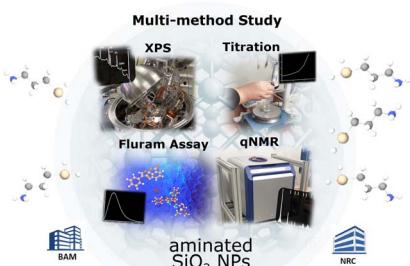
Improving oral bioavailability of acalabrutinib using polymer–lipid hybrid nanoparticles: design, optimization, and *in vivo* pharmacokinetic evaluation

Swagata Sinha, Punna Rao Ravi,* Sahadevan Rajesh Rashmi and Lakshmi Koumudi Devaraju



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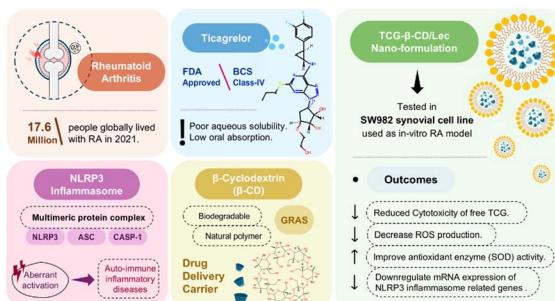
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Quantifying surface groups on aminated silica nanoparticles of different size, surface chemistry, and porosity with solution NMR, XPS, optical assays, and potentiometric titration

Isabella Tavernaro,* Isabelle Rajotte, Marie-Pier Thibeault, Philipp C. Sander, Oltion Kodra, Gregory Lopinski, Jörg Radnik, Linda J. Johnston, Andreas Brinkmann* and Ute Resch-Genger*

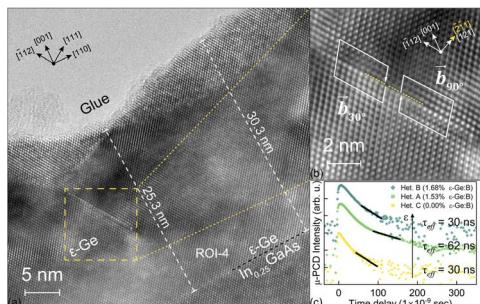
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Synthesis, characterization and *in vitro* evaluation of ticagrelor and its nano-formulation targeting the NLRP3 inflammasome pathway in synovial cells

Zainab Najam, Anum Gul,* Muhammad Kawish,
Muhammad Raza Shah, Tooba Aslam and Nida Dastagir

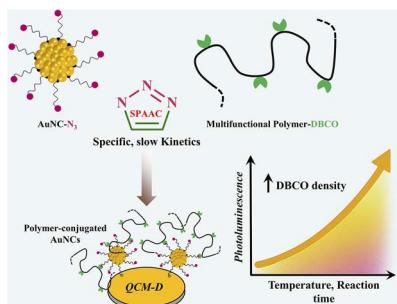
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Heavy boron doping effects on biaxially tensile strained germanium ($>1.5\%$) investigated via structural characterization, effective lifetime assessment and atomistic modeling

Shuvodip Bhattacharya, Steven W. Johnston
and Mantu K. Hudait*

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Bioorthogonal conjugation of NIR luminescent gold nanoclusters with multifunctional polymers: insights into binding efficiency, kinetics, and optical properties

Furhan Abdul Rezak, Pelin Catal, Lola Mantout, Fernande Da Cruz, Didier Boturyn, Jean-Luc Coll, Arnaud Favier, Galina V. Dubacheva* and Xavier Le Guével*

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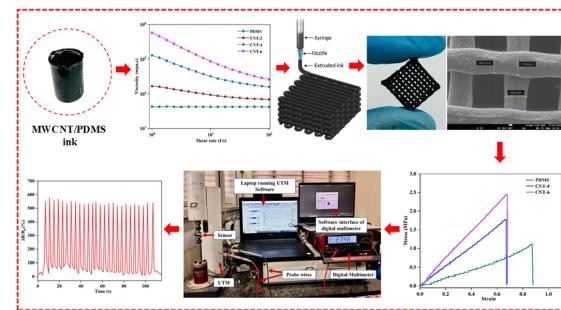
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Development of flexible piezoresistive pressure sensors *via* direct ink writing of MWCNT/PDMS nanocomposite inks: rheological and electromechanical characterization

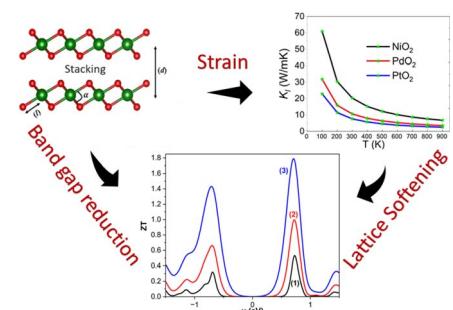
Jashanpreet Singh Sidhu,* Aviral Misra and Arvind Bhardwaj



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Enhanced thermoelectric performance, inter-layer coupling effects and reduced lattice thermal conductivity in two-dimensional transition metal oxides

Aadil Fayaz Wani, Kulwinder Kaur,* Baljinder Kaur, Sikander Iqbal, Shobhna Dhiman and Shakeel Ahmad Khandy*

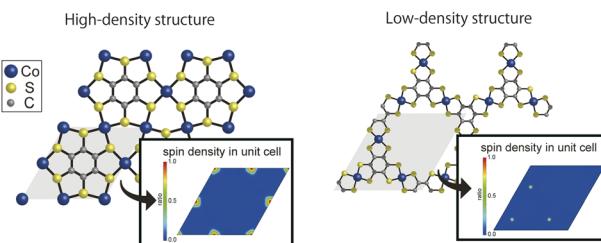


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Strain effects on the electronic properties of cobalt-based coordination nanosheets

Kento Nishigomi, Yu Yi, Souren Adhikary, Kazuhito Tsukagoshi and Katsunori Wakabayashi*

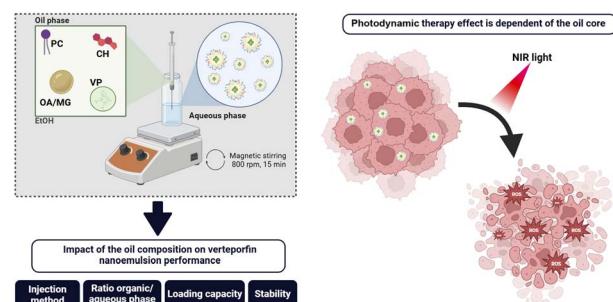
Cobalt-Based Coordination Nanosheets



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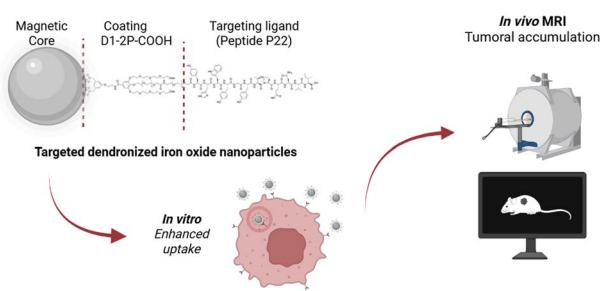
Impact of oil phase composition on the efficacy of nanoemulsions for verteporfin-mediated photodynamic therapy in ovarian cancer

Laura Fuentes Varela, María Emilia Vasquez, Carmen Abuín Redondo, Andrea Estrella Arias-Díaz, Miguel Abal, Clotilde Costa, Roberto Piñeiro, Irene Villa, Ekaterina A. Kukushkina, Lucia Lama, Antía Cabezas, Rafael López López* and Ana B. Dávila-Ibáñez*



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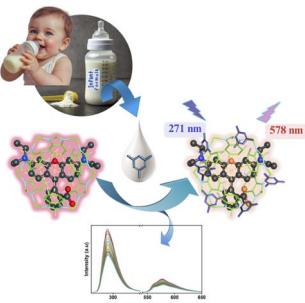
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***In vitro* and *in vivo* validation studies of optimized iron oxide nanoparticles carrying targeting ligands for a new therapeutic strategy in head and neck cancers**

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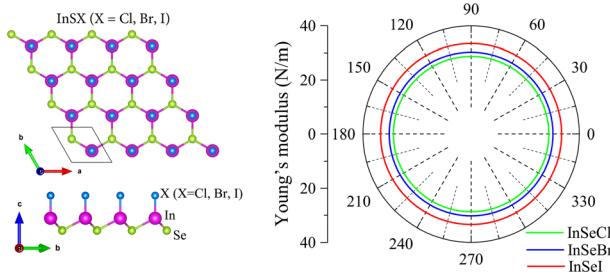
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Hierarchically porous RhB-encapsulated ZIF-7 as a dual-emission fluorescence probe for ultrasensitive detection of melamine in infant formulations

Sreevidhya K. B. and Suvardhan Kanchi*

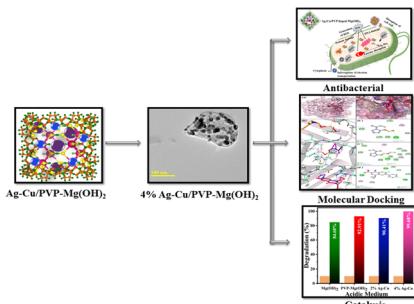
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First-principles investigation of the electronic, piezoelectric and transport properties of InSeX ($\text{X} = \text{Cl, Br, I}$) monolayers

D. Vo Dat, Tuan V. Vu, A. I. Kartamyshev, Thi H. Ho, Hoang-Thinh Do, Vu Khac Hoang Bui, Phan T. H. Linh and Nguyen D. Hien*

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Synergistic catalytic and antibacterial activity, along with *in silico* molecular docking of bimetallic silver-copper-doped PVP-Mg(OH)_2 nanostructures

Zarqa Altaf, Muhammad Imran,* Ali Haider,* Iram Shahzadi, Zernab Mateen, Anwar Ul-Hamid, Ahmed M. Fouda and Muhammad Ikram



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A Pitstop-2 analog impairs viability of aggressive lung cancer cells by disrupting nuclear pore integrity

Silvio Terra Stefanello,* Caren Rigon Mizdal, Christian Paul Konken, Günter Haufe and Victor Shahin*

