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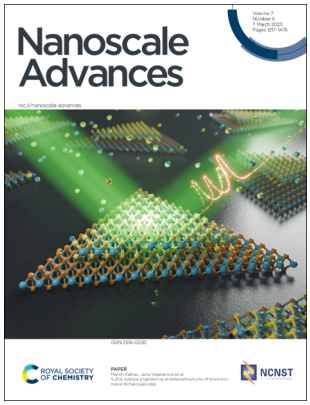
IN THIS ISSUE

ISSN 2516-0230 CODEN NAADAI 7(5) 1217–1476 (2025)



Cover
See Martin Kalbac, Jana Vejpravova *et al.*, pp. 1276–1286. Image reproduced by permission of Jana Kalbáčová Vejpravová from *Nanoscale Adv.*, 2025, **7**, 1276.

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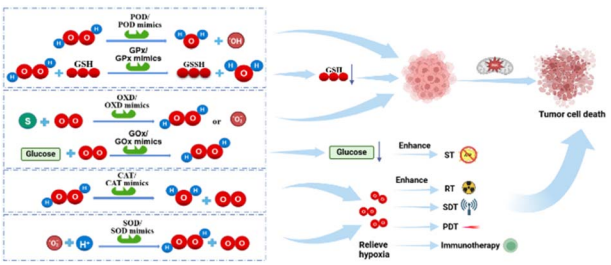

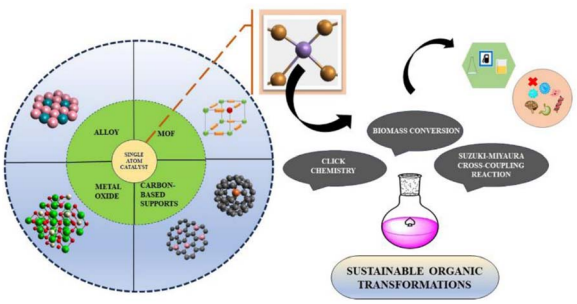

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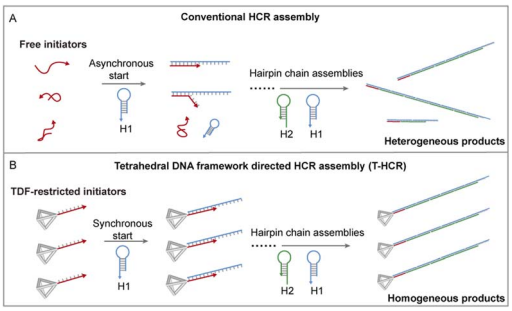

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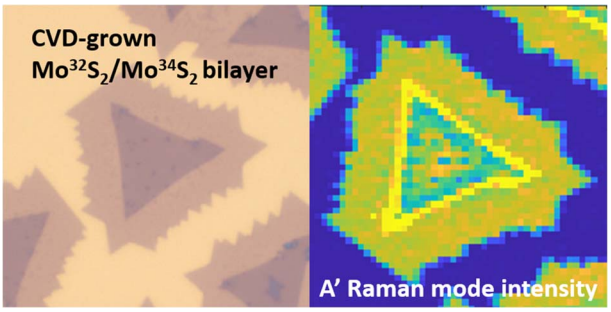

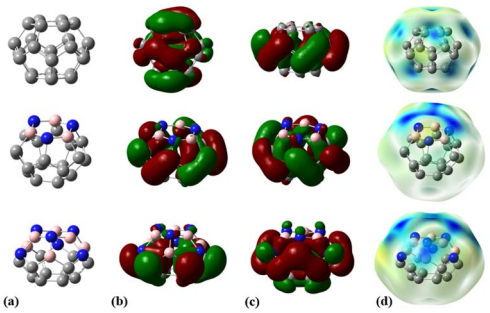

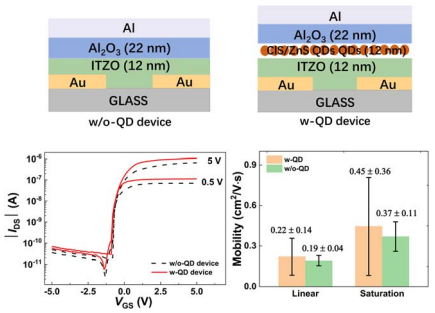

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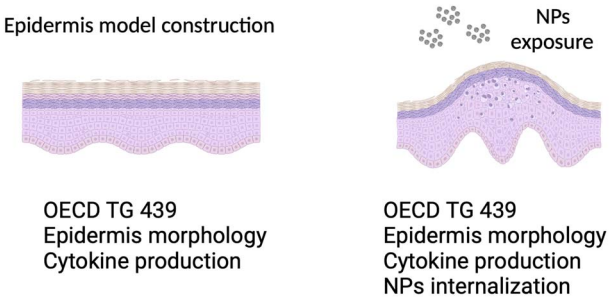

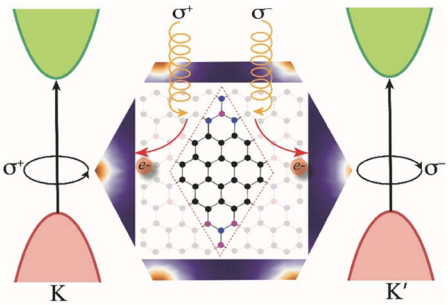

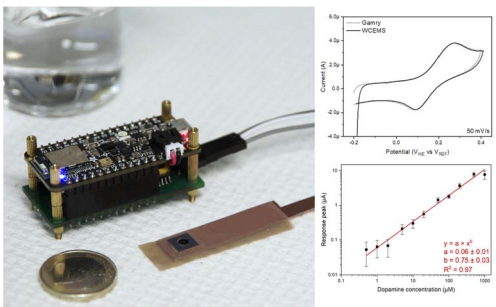

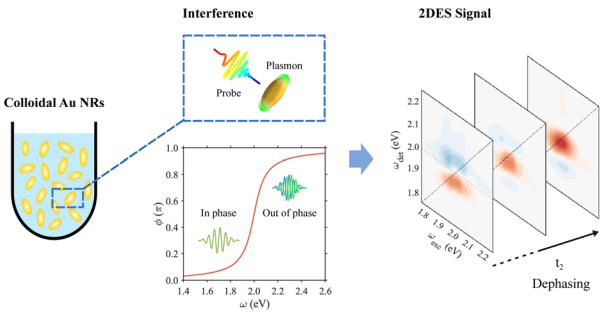

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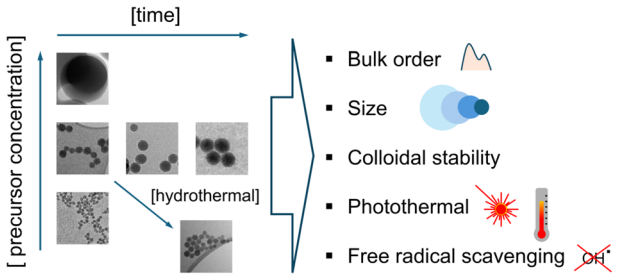
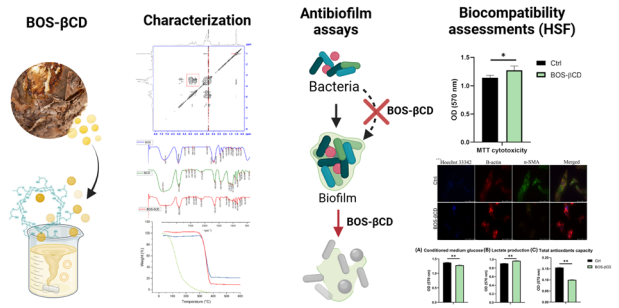


Hydrothermal carbonization synthesis of amorphous carbon nanoparticles (15–150 nm) with fine-tuning of the size, bulk order, and the consequent impact on antioxidant and photothermal properties

Francesco Barbero,* Elena Destro, Aurora Bellone, Ludovica Di Lorenzo, Valentina Brunella, Guido Perrone, Alessandro Damin and Ivana Fenoglio

1405



A biocompatible β-cyclodextrin inclusion complex containing natural extracts: a promising antibiofilm agent

Obaydah Abd Alkader Alabrahim, Mostafa Fytory, Ahmed M. Abou-Shanab, Jude Lababidi, Wolfgang Fritzsche, Nagwa El-Badri* and Hassan Mohamed El-Said Azzazy*

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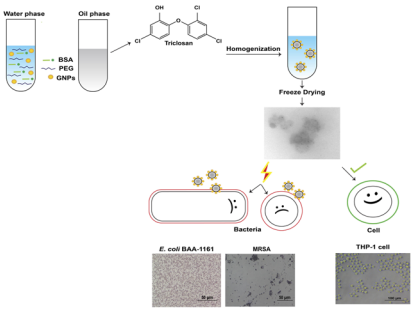

Improving the aqueous solubility and antibacterial activity of triclosan using re-dispersible emulsion powder stabilized with gold nanoparticles

Arathy J. Nair and Dakrong Pissuwan*

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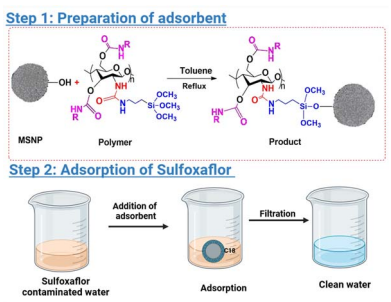

Synthesis of chiral mesoporous silica nanoparticles for the adsorptive removal of the chiral insecticide sulfoxaflor from water

Sarah Alharthi, Ashraf Ali* and Eman Y. Santali

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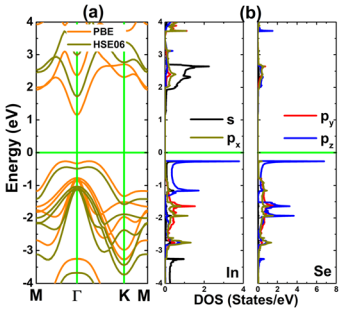
Band structure and magnetism engineering of InSe monolayers through doping with IVA- and VA-group atoms: role of impurities

Nguyen Thi Han, J. Guerrero-Sanchez and D. M. Hoat*



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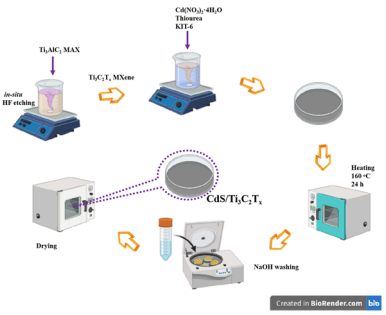
Highly selective ethanol gas sensor based on CdS/$Ti_3C_2T_x$ MXene composites

Ly Tan Nhiem, Jianbin Mao, Qui Thanh Hoai Ta* and Soonmin Seo*



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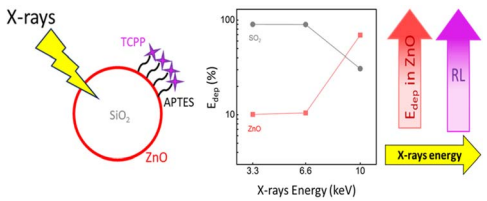
The role of energy deposition on the luminescence sensitization in porphyrin-functionalized SiO_2/ZnO nanoparticles under X-ray excitation

Irene Villa,* Roberta Crapanzano, Silvia Mostoni, Anne-Laure Bulin, Massimiliano D'Arienzo, Barbara Di Credico, Anna Vedda, Roberto Scotti and Mauro Fasoli



Upon X-ray irradiation, the dense ZnO-related enhancement of energy deposition in TCPP-functionalized SiO_2/ZnO nanoparticles is the mechanism that cooperates to activate the sensitization of TCPP luminescence (RL).