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Inside cover

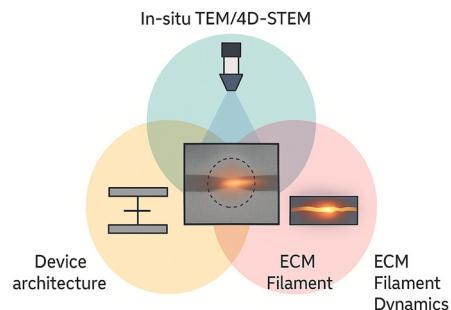
See Koon-Yang Lee et al.,
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Advances in resistive switching memory: comprehensive insights into ECM mechanisms through TEM observations and analysis

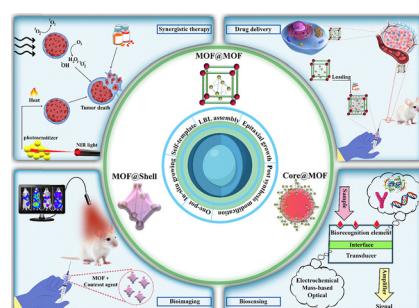
Woonbae Sohn, Hyerim Kim, Jung Hun Lee,
Young-Seok Shim, Cheon Woo Moon* and
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A review of core–shell metal–organic frameworks: preparation and biomedical applications

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Amir Kashtiaray, Zahra Yazdi, Haniyehalsadat Amirkhosseini
and Ali Maleki*



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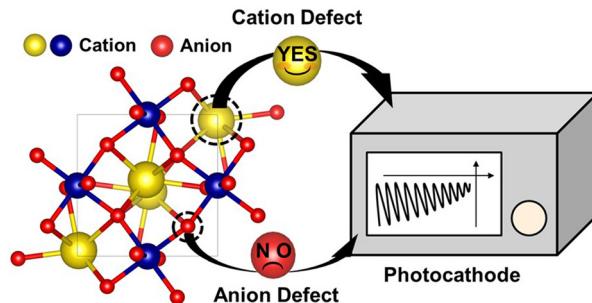


COMMUNICATION

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Utilization of neural network potential for determining perovskite-type metal oxide photocathodes capable of producing hydrogen

Shuya Masuda, Yosuke Harashima, Tomoaki Takayama,* Shogo Takasuka and Mikiya Fujii*

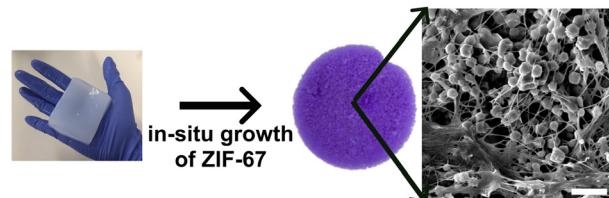


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Zeolithic imidazolate framework decorated bacterial cellulose coating for enhancing particulate filtration and adsorption from liquid and vapour phases of woven fabric

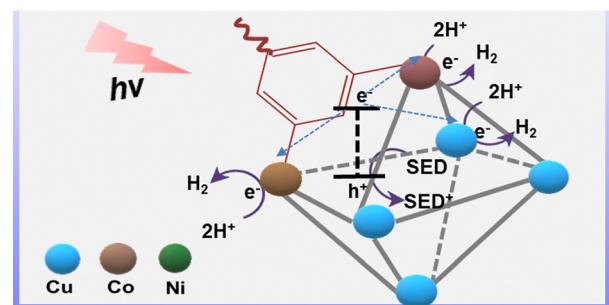
Joanne Li, Armando Garcia, Anett Kondor, Corinne Stone, Martin Smith, Mike Dennis and Koon-Yang Lee*



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***In situ* decorated Ni and Co in a CubTC MOF for synergistic photocatalytic hydrogen generation**

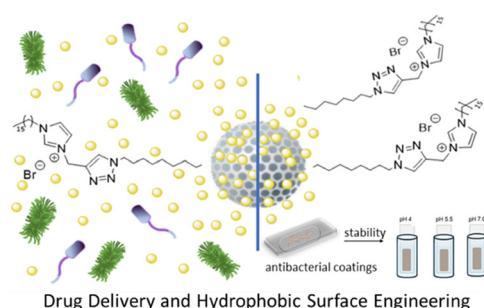
Bhavya Jaksani, Janardhan Abburi, Hafijul Islam, Spandana Gonuguntla, Tinku Baidya and Ujjwal Pal*



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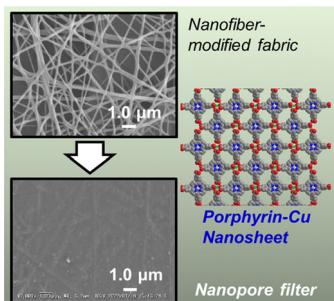
Ionic liquid modified mesoporous silica nanocarriers for efficient drug delivery and hydrophobic surface engineering

Annika Szymura, Shaista Ilyas,* Florian Grohmann and Sanjay Mathur



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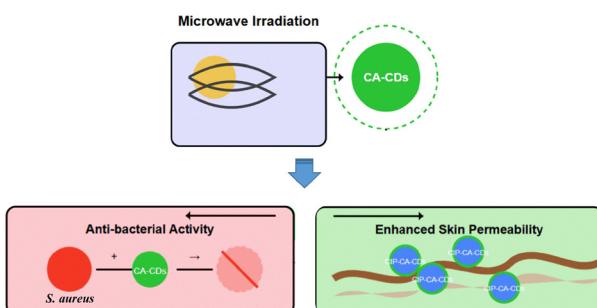
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Yusuke Kuramochi, Yuna Aoki, Kyoko Enomoto, Seiji Nakamura, Hideyuki Tanaka, Keiichiro Ozawa, Miki Hasegawa, Osamu Ohsawa, Kei Watanabe* and Kazuyuki Ishii*

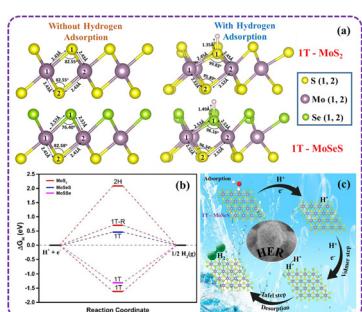
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Cinnamic acid-derived carbon dots by microwave irradiation synergise the ciprofloxacin effect against *Staphylococcus aureus* and promote its skin permeability

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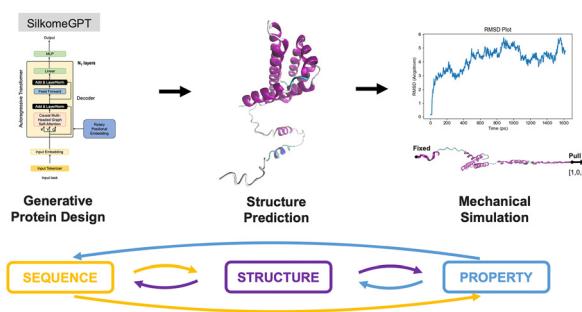
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Generative design and molecular mechanics characterization of silk proteins based on unfolding behavior

Wei Lu and Markus J. Buehler*

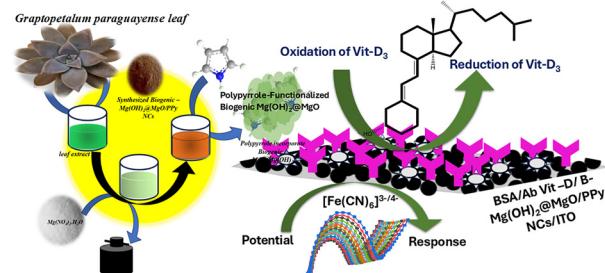


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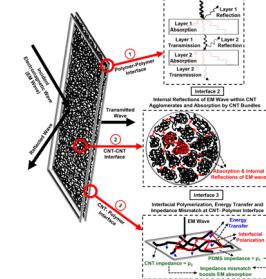
Sarita Shaktawat, Surendra K. Yadav and Jay Singh*



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Tailoring electromagnetic interference shielding properties in sandwich architectures made with low-concentration multi-walled CNT-reinforced PDMS

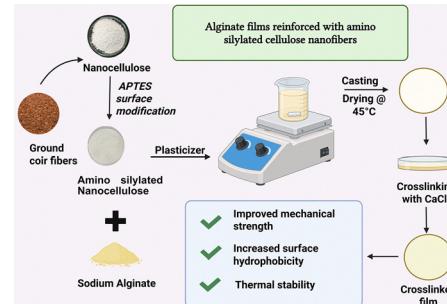
Pavithra Ananthasubramanian, Pritom J. Bora, Chandana Gadadasu, Praveen C. Ramamurthy and Nagarajan Raghavan*



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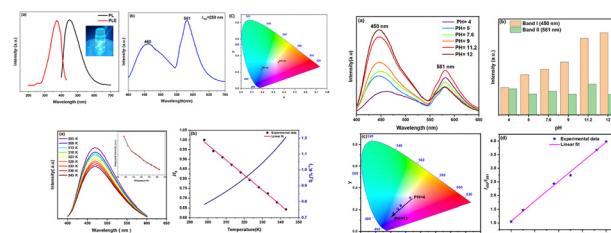
Shenbagaraman Akshaya and A. Joseph Nathanael*



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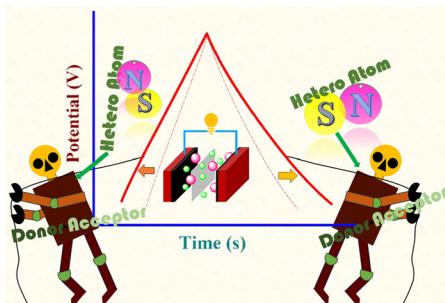
Highly photoluminescent carbon dots: a multifunctional platform for pH sensing, nano thermometry, and mercury(II) detection

Mouna Fhouda, Ikhlas Kchaou, Christian Hernández-Álvarez, Mohamed Dammak,* Sami Boufi and Inocencio R. Martín



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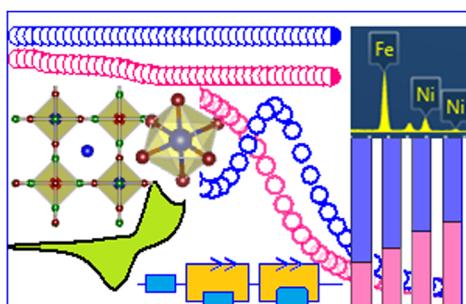
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Enhanced electrochemical performance of S,N-containing carbon materials derived from covalent triazine-based frameworks with a tetrathiafulvalene core

Arijit Maity, Anupam Jana, Sandeep Kumar Dey, Christoph Janiak* and Asamanjoy Bhunia*

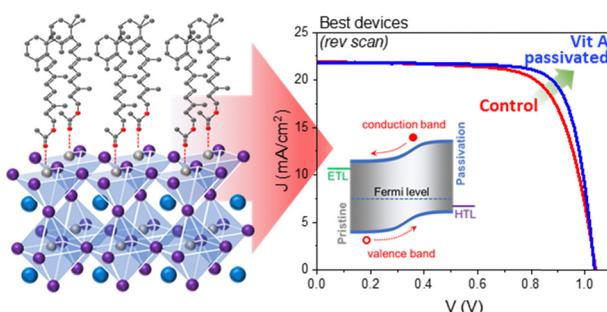
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Investigation of energy storage performance in organic molecule-stabilized nickel ferrocyanide nanoparticles for supercapacitor applications

Pooja Kumari, Lungelo Lekokotla, Chandan Saha, Sarit K Ghosh, Harishchandra Singh and Kaushik Mallick*

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Vitamin A as a simple, dual-role agent for the band bending-induced passivation of perovskite solar cells

James C. Solano, Itaru Raifuku,* Hidenori Kawanishi and Yukiharu Uraoka

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Chitosan–acrylic acid biomaterial with an antimicrobial nature supports biomineralization and is suitable for bone tissue regeneration

Sweta Agarwal, Abhishek Singh, Satish Kumar, Tejas Pravin Rokade, Chandan Goswami and Luna Goswami*

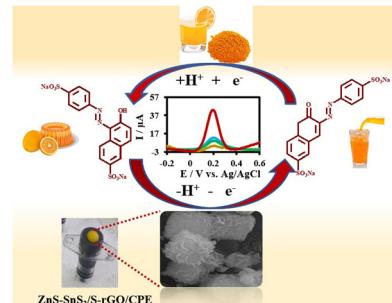


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Hanieh Ghaedi, Khadijeh Ghanbari* and Sepideh Bonyadi



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A naphthalimide-derived chemosensor for ratiometric detection of sulphide ions: insights into the S²⁻-driven reduction cascade, real-time applications and live cell imaging of bacterial cells

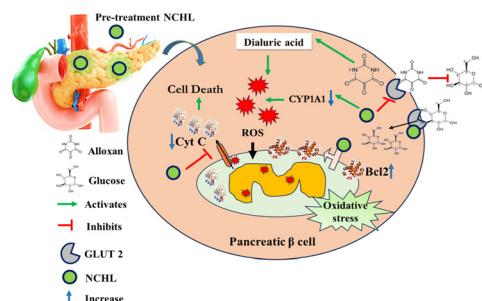
Saurabh Gupta, Gulshan Kumar, Vijay Luxami and Kamaldeep Paul*



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Unveiling the nano-particle enabled synergistic mitigation of the Bcl2/Cyt c/CYP1A1 signaling axis as a protective therapeutic route in mitochondrial dysfunction associated diabetes

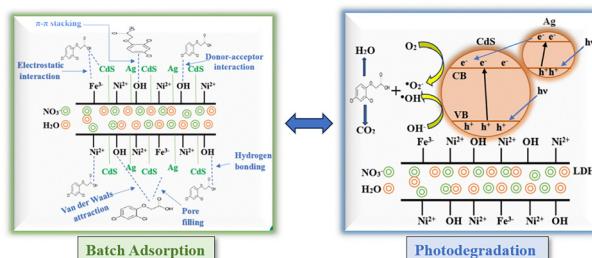
Sudatta Dey, Rishita Dey, Priyanka Sow, Banani Bhattacharjee, Arnob Chakraborty, Sujan Sk, Manindranath Bera, Sisir Nandi, Pradeepa Guptaroy and Asmita Samadder*



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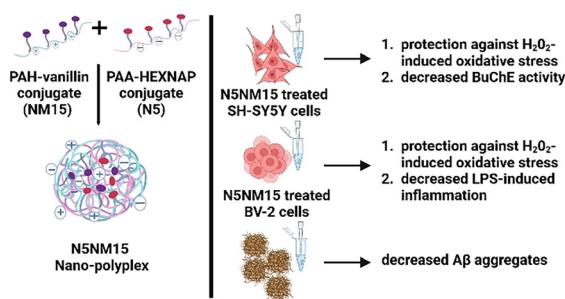
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Walaa A. Shaltout,* Asaad F. Hassan, Maha S. Elsayed and H. Hafez



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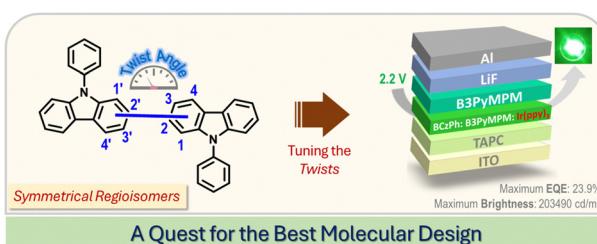
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Development, characterisation and neuroprotective effects of polymer–drug conjugate nano-polyplex: working towards a multi-target treatment for neurodegenerative diseases

Nuruddin Mahadik, Gemma A. Barron, Paul Kong Thoo Lin and Colin J. Thompson*

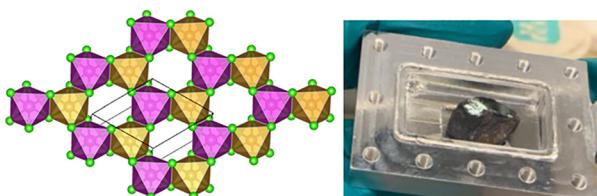
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Connectivity and twist: engineering high-performance green phosphorescent OLEDs using unipolar symmetric bicarbazole regioisomers

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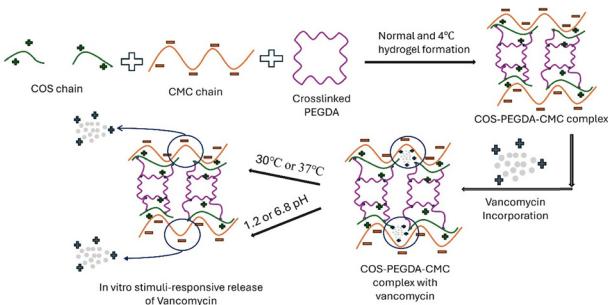
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Magnetic properties of a non-centrosymmetric polymorph of FeCl_3

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Mohammad Muhtasim Ittisaf, Md. Rakid-Ul-Haque, Nishat Tabassum, Mehedi Hasan Pritom, Md. Shad Hossain Tanvir, M. Azam Ali and Shoeb Ahmed*

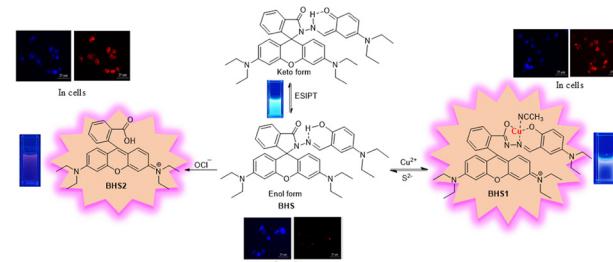


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Fluorescence switching via competitive ESIPT and spirolactam ring opening in a multifunctional rhodamine B probe for selective detection of Cu^{2+} and OCl^- : theoretical insights with anticancer and biosensor activity

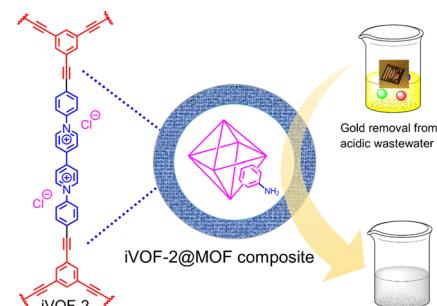
Vishnu S, Avijit Kumar Das,* Gouri Karan and Sujata Maiti Choudhury



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Gold recovery from acidic wastewater using ionic viologen organic and metal–organic framework composites

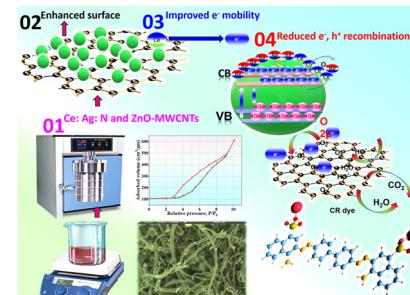
Sk Abdul Wahed, Atikur Hassan* and Neeladri Das*



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Synergistic Ce/Ag/N-doped ZnO–MWCNT nanocomposites for efficient photocatalytic wastewater remediation with visible light

Manisha Dagar, Suresh Kumar, Amit Jain,* Anil Vohra, Manohar Singh, Jasvir Dalal,* Sanjeev Kumar and Sandeep Kaushal



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Ni–NiCr nanoparticles incorporated carbon nanofibers as robust electrocatalysts for efficient glycerol oxidation

Nasser A. M. Barakat,* Shimaa Hamada, Ibrahim Mustafa and Hesham Alhumade

