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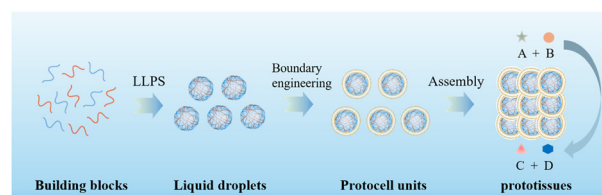
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Recent advances in membranized coacervates as functional compartments: synthetic strategies and mechanisms for prototissues

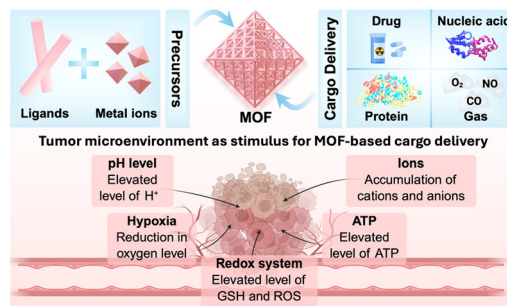
Yue Lv, Xiaoyang Wang, Jian Yang, Xiaofei Chen* and Manzar Abbas*



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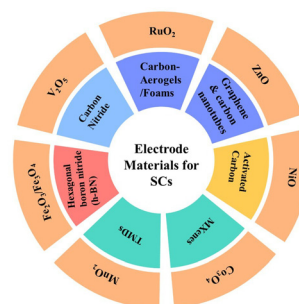


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Recent developments in supercapacitor electrode materials: design, performance, and future perspectives

Amina Afreen, Mohamed Bechir Ben Hamida, Muhammad Nasir Hussain,* Muhammad Javaid, Nashmi Alrasheedi, Javed Iqbal, Ali Haider and Syed Mujtaba Shah*

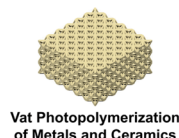


PERSPECTIVE

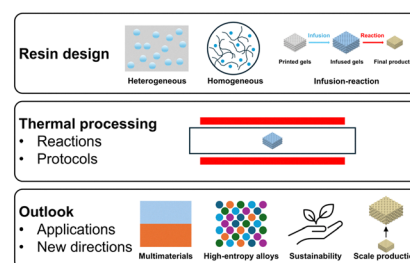
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Strategies for vat photopolymerization additive manufacturing of metals and ceramics

Jie Zeng and Max A. Saccone*



Vat Photopolymerization of Metals and Ceramics

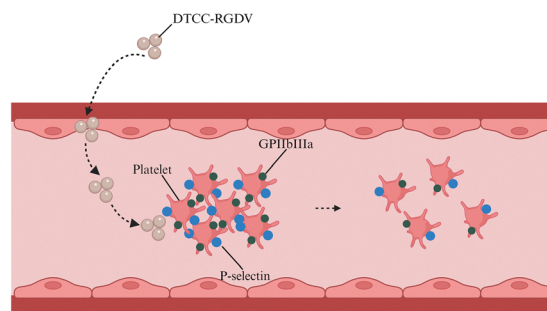


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DTCC–RGDV: a nano-scaled conjugate capable of targeting arterial thrombi and releasing anti-thrombotic pharmacophore DTCC

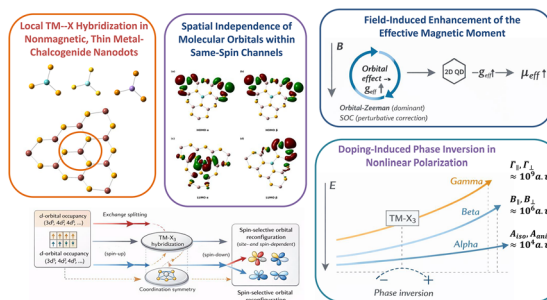
Xiaoyi Zhang, Yifan Yang, Dongxu Wu, Yaonan Wang, Shurui Zhao, Jianhui Wu, Ming Zhao* and Shiqi Peng*



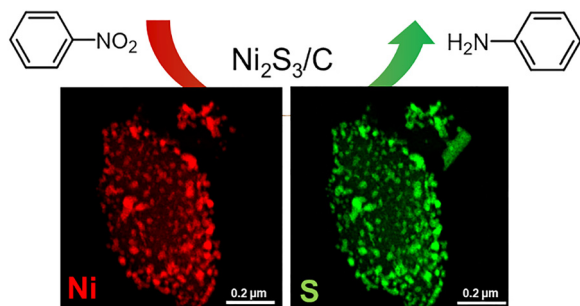
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Spin-selective orbital reconfiguration and colossal nonlinear anisotropy in defect-engineered atomically thin quantum dots

Saraf Mohaimen Chowdhury and Salena Akther*



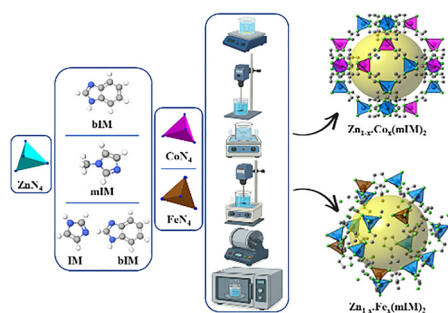
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Carbon-supported NiS catalysts for sustainable transfer-hydrogenation reactions of nitroarenes

Ankit Kumar, Pascal A. Roll, Anna Stephan, Claus Feldmann, Arjun Neyyathala, Paolo Dolcet and Schirin Hanf*

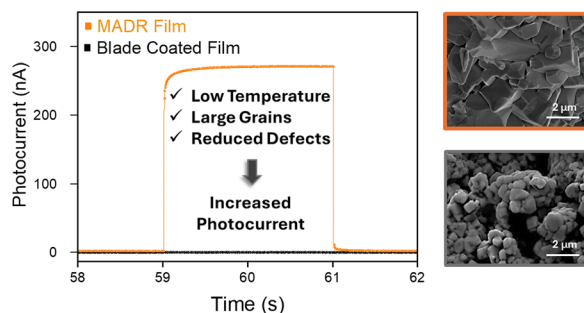
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Unveiling the oxygen adsorption potential of ZIFs: investigating the impact of organic ligands, metal centres, and synthesis methods

Hamidreza Mahdavi,* Leena Melag, Abdollah Khosravanian, Joydip Mondal, Zongli Xie,* Benny D. Freeman* and Matthew R. Hill*

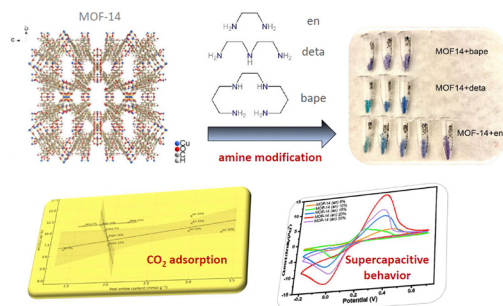
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Optimized grain growth in CsPbBr₃ thick films using mist-assisted dissolution–recrystallization for enhanced optoelectronic performance

Monet Brown, Susana Borbon-Rojas, Leunam Fernandez-Izquierdo, Ross Haroldson and Manuel Quevedo-Lopez*

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Amine-modified MOF-14 as a tunable platform for CO₂ adsorption and supercapacitor energy storage

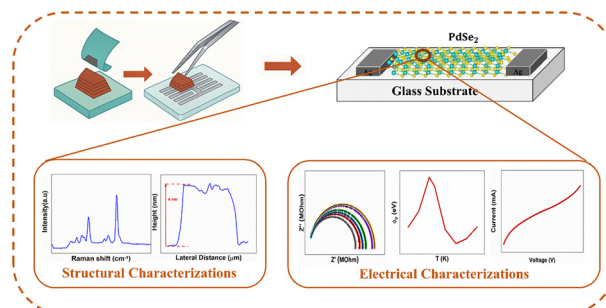
Pooja Sharda, Manisha, Anshu Sharma, Miroslav Almqšić* and Ankur Jain*



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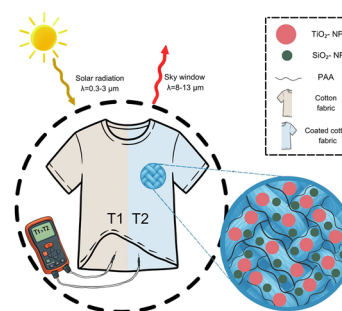
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Robust and biocompatible radiative cooling textiles based on a synergistic TiO₂ and SiO₂ nanoparticle coating

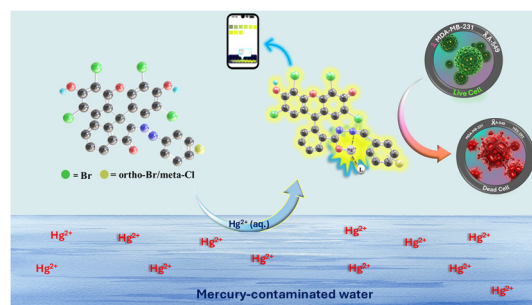
Rayan Ghazi, Fatimah Samman, Tadd Truscott and Dana Alsulaiman*



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Eosin Y-derived fluorescent sensors: selective Hg²⁺ detection and targeted biomedical applications

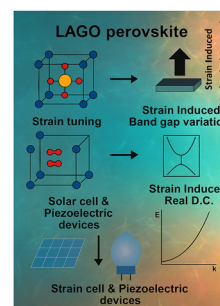
Biplove Kumar, Venkatesh Muthukumar, Arnab Chakraborty, Asha Mahato, Balam Ghosh* and Neeladri Das*



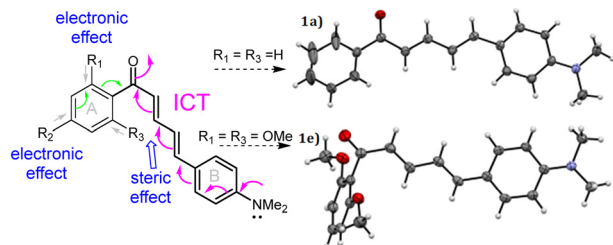
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Strain-tunable mechanical, electronic and optical properties of La₂AlGaO₆ hybrid perovskites: a first-principles investigation

Chaithanya Purushottam Bhat, Jyoti Dagar, Ashwin K. Godbole and Debashis Bandyopadhyay*



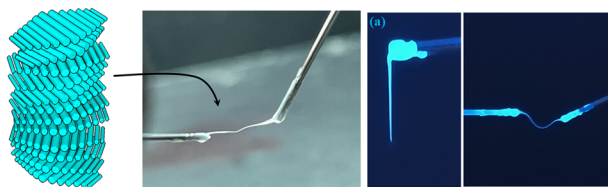
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Structure–property relationships in chalcones with extended π -conjugation: ICT perturbation and red fluorescence

Brian Corbin, Paityn Houglan, Wei-Yuan Chen, Christopher J. Ziegler and Yi Pang*

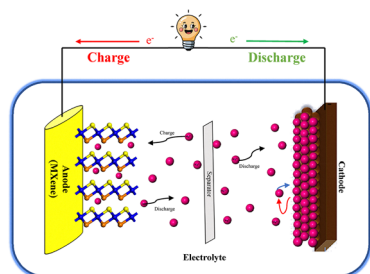
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Luminous nematic threads: single-component liquid crystals self-assemble into fluorescent fibers

D. Megha, B. Venugopal, Anjali Ganjiwale, H. T. Srinivasa, Arun Roy and G. Shanker*

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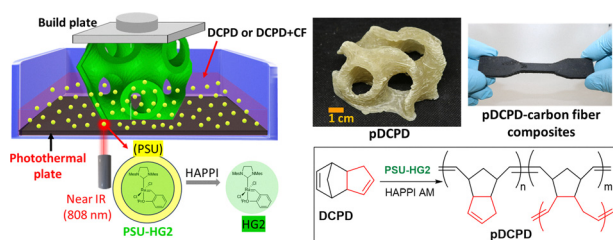


Janus ScMoN as anode materials for Mg-ion battery

Revealing the anodic performance of Janus Mxenes (ABN, A = Sc; B = Zr, Nb, Mo) for magnesium-ion batteries: a first-principles study

Aditi Ahmed Ananna, Bivas Kumar Dash, Afiya Akter Piya, Obaidullah and Siraj Ud Daula Shamim*

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Additive manufacturing of poly(dicyclopentadiene) and carbon-fiber composites via heating at a patterned photothermal interface

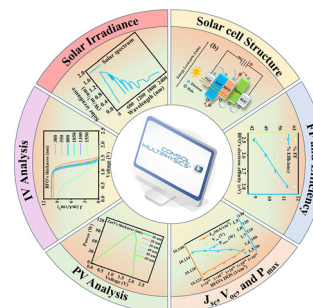
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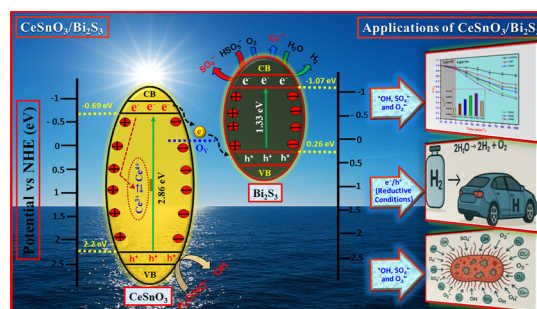
Qayyum ul Hassan, Syed Aqib Abbas Shah, Muhammad Umar Salman, Muhammad Luqman, Muhammad Mehak, Muhammad Javaid Iqbal and Shahid Atiq*



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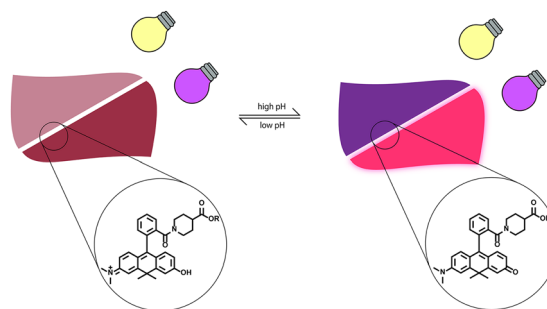
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pH-Responsive carborhodol-coupled chitosan-based hydrogels for the detection of wound infection-relevant pH changes

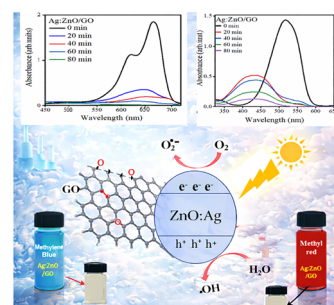
Aswathi Syam, Nicola Cusick, Alexander Zilles and Holger Schönherr*



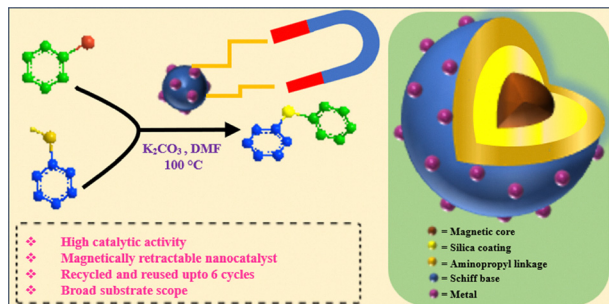
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Enhanced photocatalytic organic dye removal by Ag-doped ZnO/GO nanocomposites: a combined experimental and DFT study

Kassa Belachew, Newayemedhin A. Tegegne,* Mesfin Abayneh Kebede, Dinsefa Mensur Andoshe, Qinfang Zhang and Fekadu Gashaw Hone*



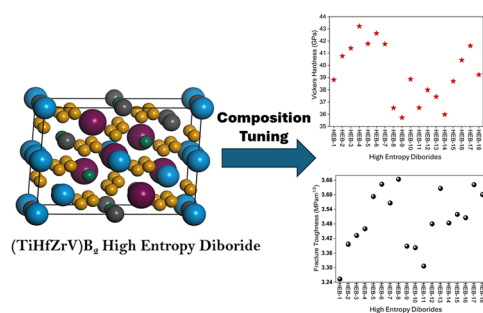
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Copper immobilized on a layered magnetite-based nanocatalyst for sustainable Ullmann cross-coupling reaction

Eden Sinchana D Souza and Aatika Nizam*

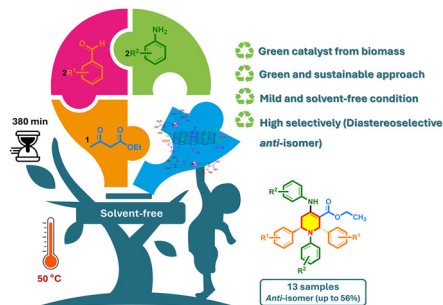
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Tailoring the properties of (TiZrHfV)₂ high-entropy diborides via elemental concentration tuning: a first-principles approach

Nabila Tabassum and Yamini Sudha Sistla*

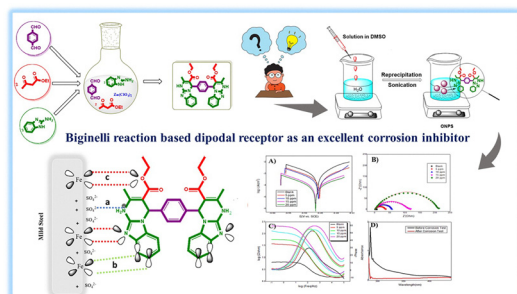
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Nitrogen-rich dicyandiamide-grafted graphene oxide catalyst for the synthesis of 1,2,5,6-tetrahydropyridine-3-carboxylates

Tuan Minh Dang, The-Anh Trinh Duong, Trung-Nhan Dong Tran and Hai Truong Nguyen*

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Designing a nanostructured Biginelli reaction-based dipodal receptor for effective corrosion control of mild steel in 1 M H₂SO₄

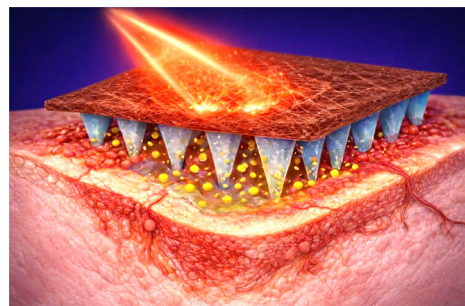
Amisha Yadav, Jasdeep Kaur, Amanpreet Singh,* Ankush Kumar Tangra* and Gurjaspreet Singh



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A microneedle with a photoactive electrospun backing layer enables multitherapy and combined drug delivery to the skin wound

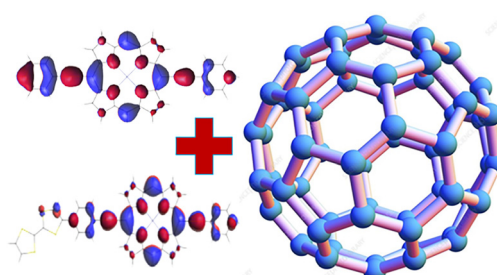
Maryam Toolabi, Yuewen Zhu, Mahsa Akbari, Mohammad Reza Eskandari, Narges Forouzideh, Hélder A. Santos* and Mohammad-Ali Shahbazi*



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In silico design to explore the effect of the metalloporphyrin and C₆₀ cage on non-linear optical (NLO) properties

Shama Rafiq, Nimra Sultan and Muhammad Ramzan Saeed Ashraf Janjua*

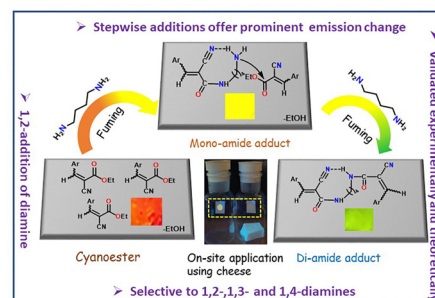


Metalloporphyrin + C₆₀ = Efficient NLO Materials

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Tunable optical responses in cyanoester-based organic π -conjugates for selective sensing of aliphatic diamine vapors

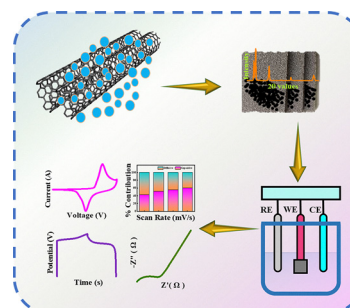
Akshita Jain, Syed Noushin, Pralok K. Samanta and Manab Chakravarty*



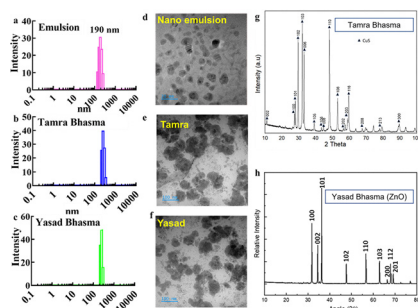
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Dual redox-active bi-metallic oxide/nanoporous carbon nanotube hybrid architectures: probing diffusion dynamics and ionic conductivity for advanced supercapacitors

Muhammad Luqman,* Muhammad Mehak, Muhammad Umar Salman, Umair Ali, Shahid M. Ramay, M. Younis and Shahid Atiq*



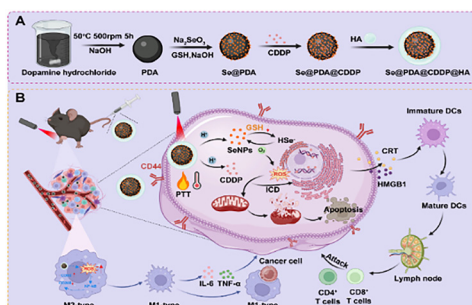
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Synergistic Tamra-Yasad Bhasma and cinnamaldehyde nano-shield hydrogels for diabetic wound repair

Suhela Tyeb,* Nitesh Kumar, Vivek Verma, Ashok Kumar and Sanjana Kaul

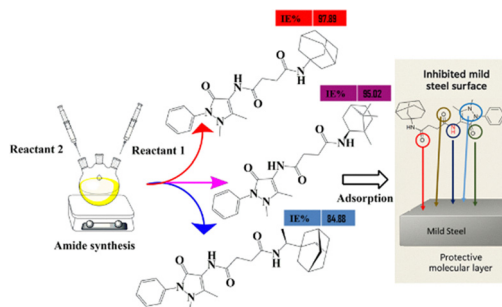
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Hyaluronic acid-modified Se@PDA@CDDP nanoplatform for synergistic chemo-photothermal therapy and immune activation *via* redox modulation

Yong Huang, Hong Hong, Lan Xia, Lifang Huang, Chuqi Shao, Manli Qu, Wenjun He, Suqiong Liang, Cunchuan Wang* and Yanping Qiu*

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Enhanced anticorrosion performance of antipyrene derivatives on mild steel in an acidic environment: an experimental and theoretical analysis

Adil Afaq, Muhammad Aamir,* Shahid Aziz,* Simon Woodward, Muhammad Haroon, Zaron Sajid, Md. Akhtaruzzaman,* Md. Shahiduzzaman, Qamar Wali, Jean-Michel Nunzi* and It Ee Lee*

