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See Xianlong Zhang, Chunming Lyu *et al.*, pp. 2781-2793. Image reproduced by permission of Chunming Lyu from *Mater. Adv.*, 2025, 6, 2781.

EDITORIAL

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Introduction to advances in emerging thermoelectric materials and devices

Krishna Nama Manjunatha,* Shashi Paul,* Satyajit Sahu and Mona Zebarjadi

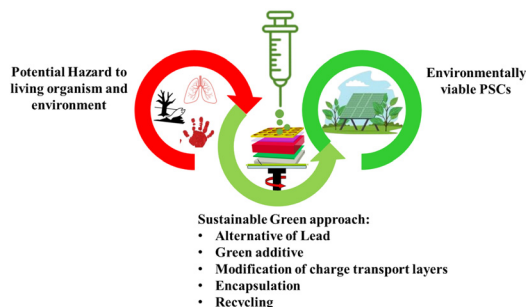


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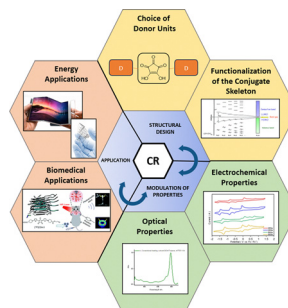


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Croconic acid-based compounds: synthesis, structural characteristics, properties and applications of an intriguing class of functional organic materials

Maria Montrone, Umberto Berardi,* Antonio Cardone* and Maria Annunziata M. Capozzi*

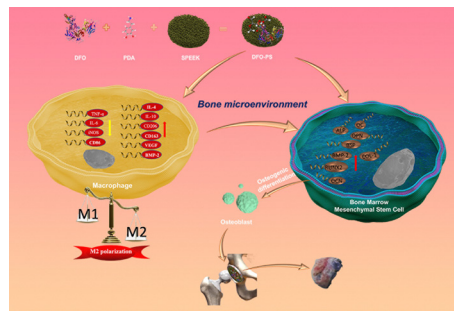


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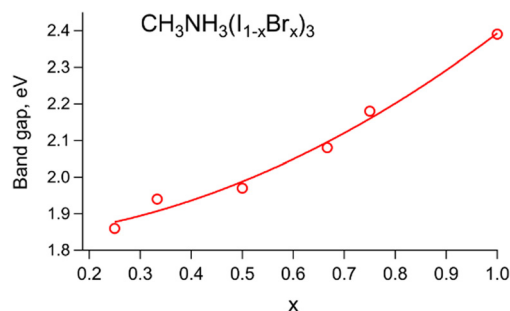
Shengjie Wang, Wei Liu, Chao Yang, Xianlong Zhang* and Chunming Lyu*



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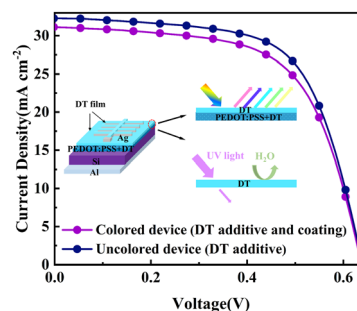
Sergei M. Butorin



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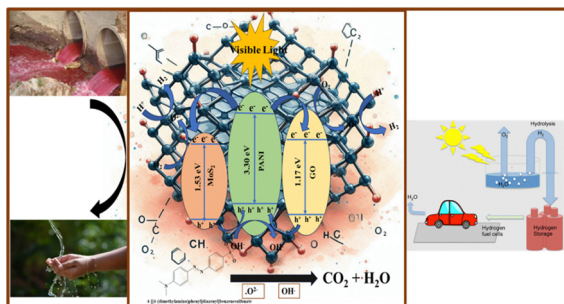
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Zheng Zhou, Shibo Chen, Yingming Shen, Juan Wang, Guijun Zhang, Yang Shi, Haixia Wu, Jingjing Luo, Xiaohong Cheng* and Yu Yang*



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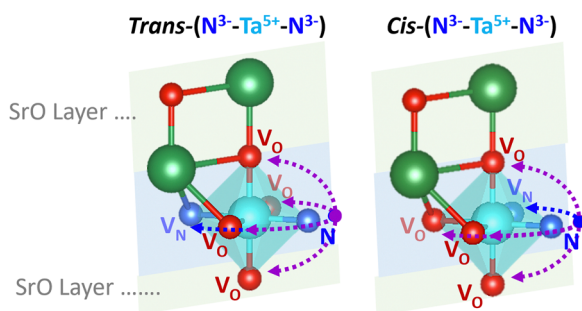
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Design and synthesis of PANI/GO/MoS₂ nanocomposites *via* oxidative polymerization for efficient photocatalytic applications: organic pollutant degradation and hydrogen generation

Pritam Hait, Rajeev Mehta and Soumen Basu*

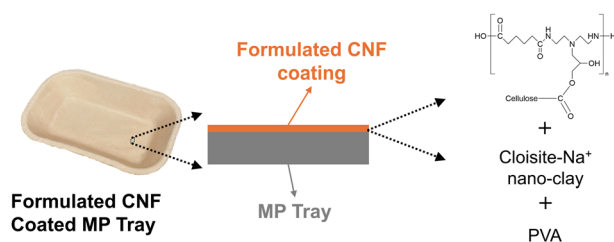
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Joshua J. Brown* and Alister J. Page

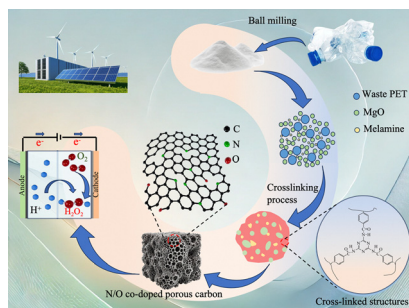
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Jingxuan Zhang and Jeffrey P. Youngblood*

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N/O co-doped porous carbon derived from polyester waste for electrochemical production of H₂O₂

Mingsheng Luo, Chupeng Wang, Shiqi Song, Maochong Tang, Xiao Xia Wang* and Min Wu

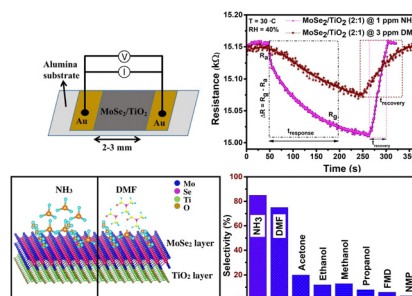


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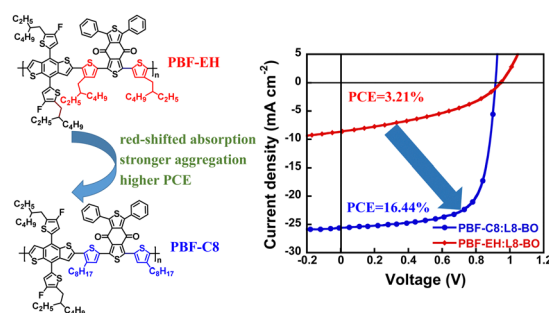
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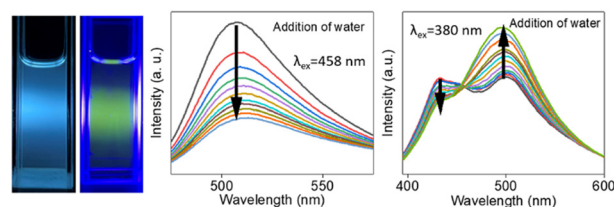
Baitian He, WenZheng Zhang, Jinming Zhang, Yan Liu,* Guiting Chen,* Manjun Xiao* and Chuanbo Dai



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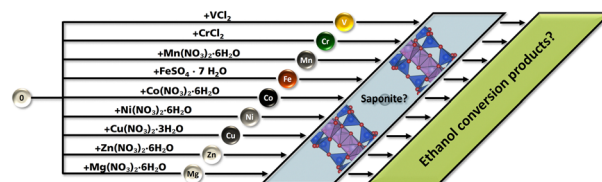
Koki Sekioka, Nazanin Mosleh, Dan Boice, Richard Hailstone and Xiangcheng Sun*



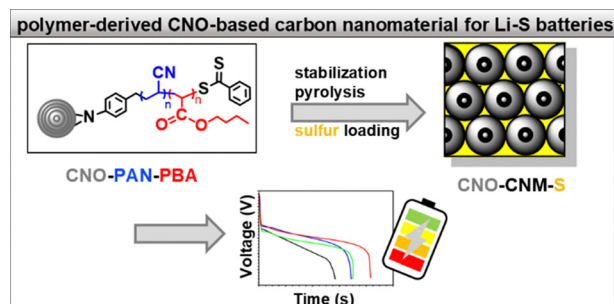
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The conversion of ethanol over 3d-metal saponite-like smectites

Marc Greuel, Clara Maria Watermann, Heiko Lohmann, Stefan Kaluza, Ulf-Peter Apfel* and Barbara Zeidler-Fandrich*



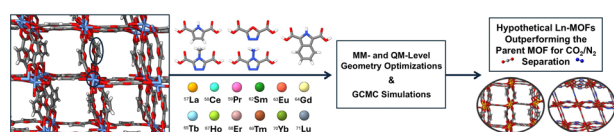
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Polymer-derived N-doped carbon nanomaterials containing carbon nano-onions and their potential applicability

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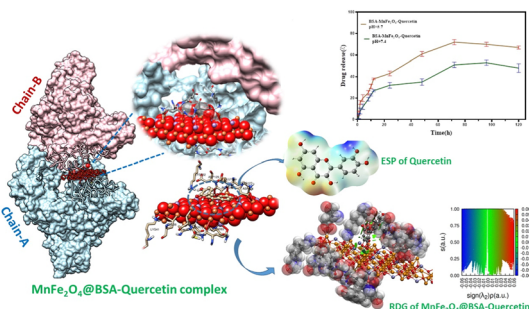
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Zeynep Pinar Haslak, Hasan Can Gulbalkan and Seda Keskin*

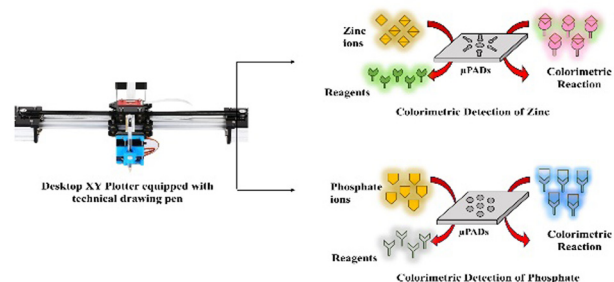
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An integrated computational and experimental study of BSA-coated MnFe₂O₄ nanoparticles as a drug delivery platform for quercetin

Negin Hashemi, Shabnam Naderlou, Ali Mohammadi and Hossein Danafar*

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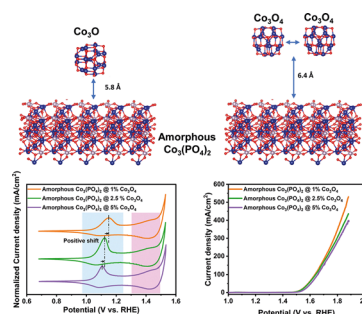


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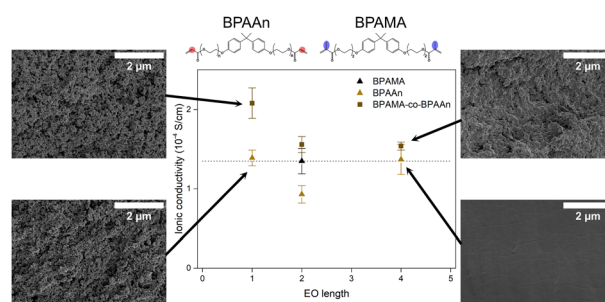
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Effect of monomer composition on the formation of hybrid polymer-liquid electrolytes for lithium-ion batteries

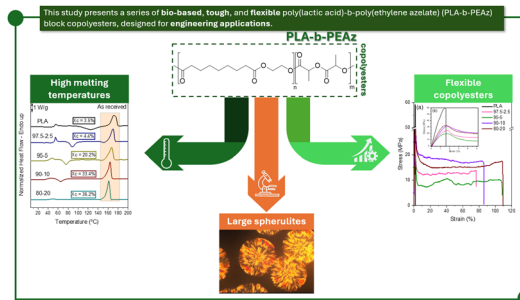
Samuel Emilsson, Gabriele Maffei, Martina Cattaruzza and Mats Johansson*



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Exploring a new synthesis route to lithium-excess disordered rock salt (DRX) cathode materials

Matthew S. Chambers,* Tianyu Li, Zhilin Liang, Jong Keum, Kevin H. Stone, Raphaële J. Clément, Beth L. Armstrong* and Ethan C. Self*

