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See Roland A. Fischer *et al.*,
pp. 17162–17168.

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Inside cover

See Peter C. Burns *et al.*,
pp. 17169–17178.

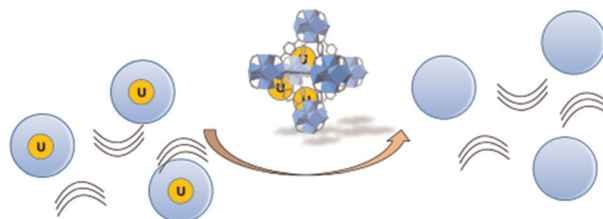
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PERSPECTIVE

17110

Uranium extraction by metal–organic frameworks: advanced materials for new sorption possibilities

Mathéo Henry, Damien Rinsant, Jérôme Maynadié and
Michaël Carboni*

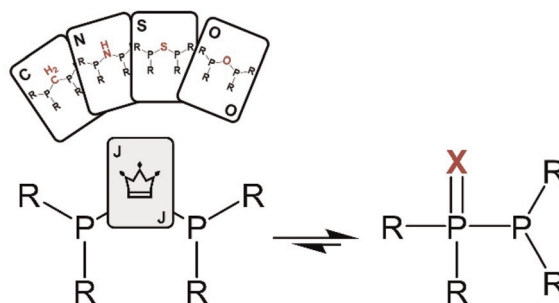


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PPX/PXP-type ligands (X = O and S) and their transition metal complexes: synthesis, properties and applications

Franziska Flecken and Schirin Hanf*



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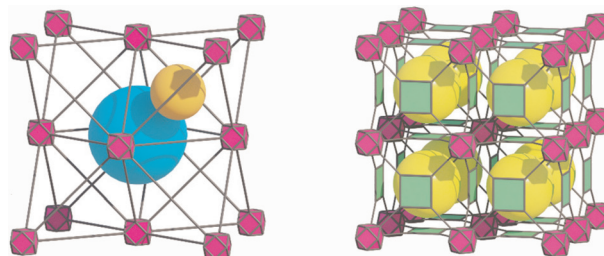
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Yttrium-based metal–organic frameworks built on hexanuclear clusters

Shenfeng Li, Tao Shen,* Manglai Gao* and Hao Wang*

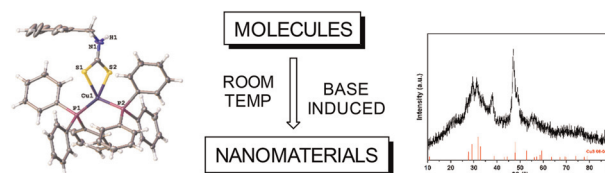


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A chemically induced, room temperature, single source precursor to CuS (covellite) nanomaterials: synthesis and reactivity of $[\text{Cu}(\text{S}_2\text{CNHBz})]_n$

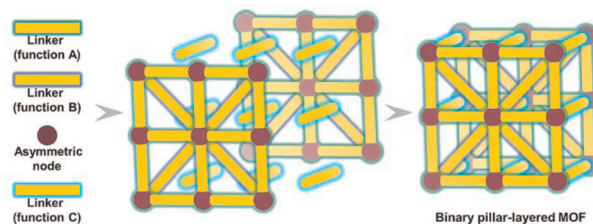
Siqiao Huang, Xiang Xu, Jagodish C. Sarker, David Pugh and Graeme Hogarth*



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One ligand, two roles: novel pillar-layered metal–organic frameworks built with a 3D ligand and asymmetric inorganic nodes

Chaozhuang Xue,* Yingying Zhang, Kai Zhu, Suyun Deng, Konggang Qu, Shuwen Gong* and Huajun Yang*

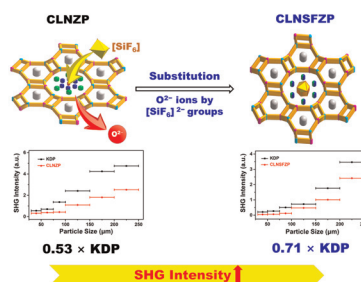


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Approach for quality deep-ultraviolet nonlinear optical crystals *via* a substitution strategy of channel species in zeolite

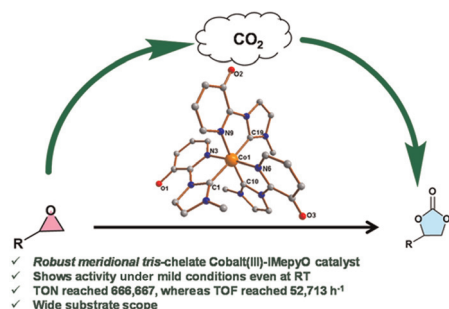
Mingfeng Liu, Jin-Xiao Mi, Yinggan Zhang, Shuaihua Wang, Shaofan Wu and Ya-Xi Huang*

Optical Properties Tuned by Channel Species in Zeolite



COMMUNICATIONS

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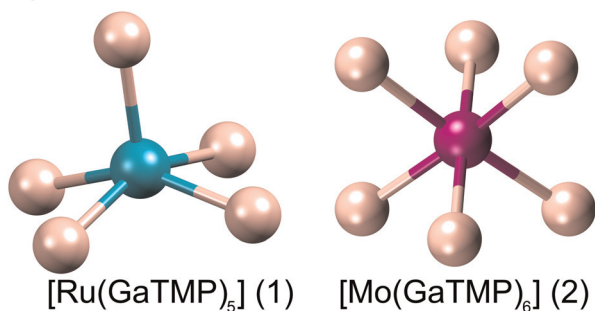


Not so inert *mer*-tris-chelate cobalt(III) complex of a hydroxy-pyridine functionalized NHC ligand for cyclic carbonate synthesis

Rhitwika Chowdhury, Irshad Ahmad Bhat, Sharad Kumar Sachan and Ganapathi Anantharaman*

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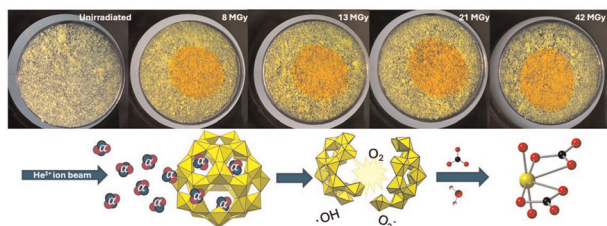
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Homoleptic hexa- and penta-coordinated gallium(I) amide complexes of ruthenium and molybdenum

Raphael Bühler, Richard J. J. Weininger, Johannes Stephan, Maximilian Muhr, Balasai M.-T. Bock, Christian Gemel and Roland A. Fischer*

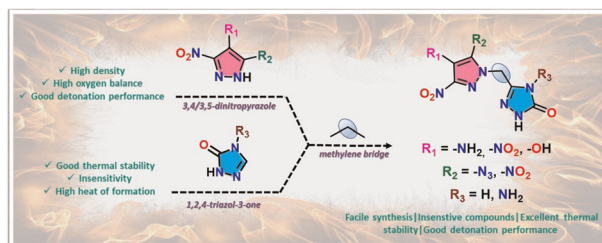
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Activation of uranyl peroxides by ionizing radiation prior to uranyl carbonate formation

Zoe C. Emory, Jay A. LaVerne and Peter C. Burns*

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N-Methylene-*C*-linked nitropyrazoles and 1,2,4-triazol-3-one: thermally stable energetic materials with reduced sensitivity

Krishna Pandey, Priyanka Das, Meera Khatri and Dheeraj Kumar*

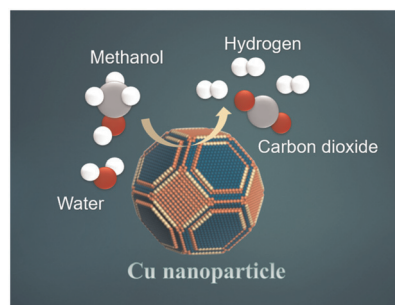


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First-principles-based microkinetic modeling of methanol steam reforming over Cu(111) and Cu(211): structure sensitive activity and selectivity

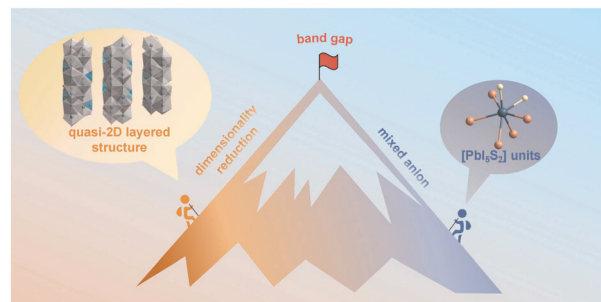
Xinyi Zhang and Bo Yang*



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Pb₆Ba₃Si₂S₈I₁₀: a new thiohalide with a quasi-two-dimensional structure and wide band gap

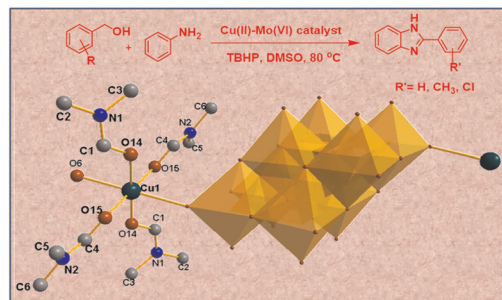
Wang Zhao, Jiazheng Zhou, Linan Wang, Wenqi Jin, Yingying Kong, Yu Chu* and Junjie Li*



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Polyoxometalate-supported transition metal complexes for the oxidative cross-coupling of amines and alcohols

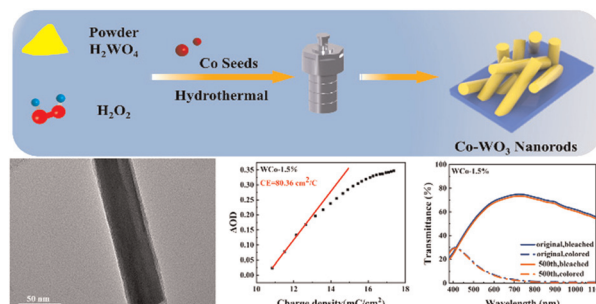
Ankita Pardiwala, Meghal A. Desai and Ritambhara Jangir*



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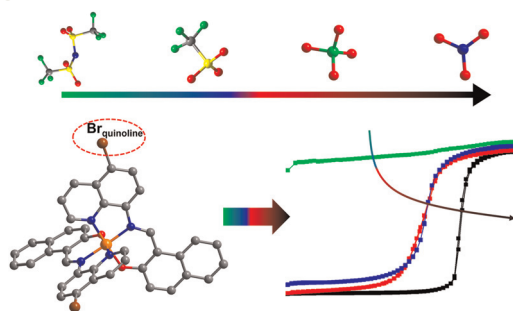
Effect of Co-doping on the electrochromic performance of hexagonal phase WO₃ nanorods

Zhaozhu Qu, Ankang Li, Ming Gao, Xiaohui Sun, Xuyang Zhang,* Guohua Wu* and Xiangwei Wang*



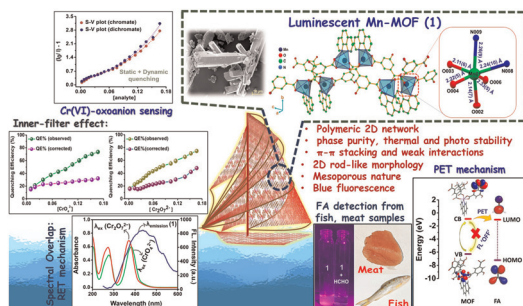
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Spin crossover Fe^{III} complexes with a substituted Hqnal ligand: effects of anions and solvents

Feng-Li Chen, Xin-Li Liu, Yue Zhao, Gang Li, Bo-Hong Gao and Xin-Yi Wang*

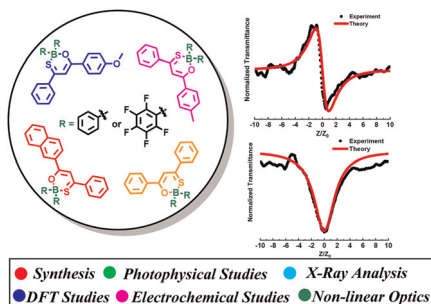
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Mixed-ligand based water-stable Mn(II)-MOF for quick, sensitive, and reusable IFE-PET-RET facilitated detection of formaldehyde and Cr(VI)-oxoanions in real-field samples like food and industrial water: experimental and theoretical insights

Udayan Mondal, Somrita Nag, Rajeshwari Pal and Priyabrata Banerjee*

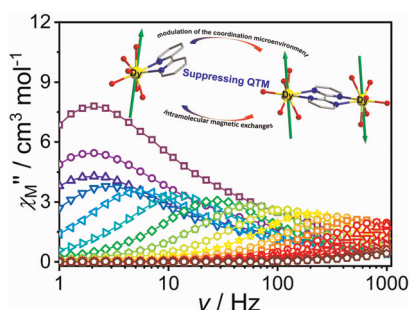
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O,S-Chelated bis(pentafluorophenyl)boron and diphenylboron-β-thioketonates: synthesis, photophysical, electrochemical and NLO properties

Anna Chandrasekar Murali, Rudrashish Panda, Ramkumar Kannan, Ritwick Das* and Krishnan Venkatasubbaiah*

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Enhancing the single-molecule magnetic performance of β-diketonate Dy(III) complexes by modulating the coordination microenvironment and magnetic interaction: from a mononuclear to a dinuclear structure

Yafu Wang, Zhaopeng Zeng, Shuchang Luo,* Yan Guo and Xiangyu Liu*

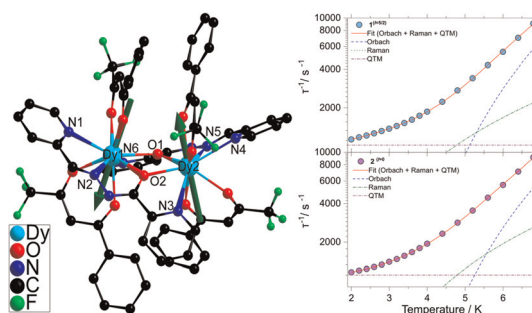


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Modulating quantum tunnelling of magnetization in Dy isotopologue dimers

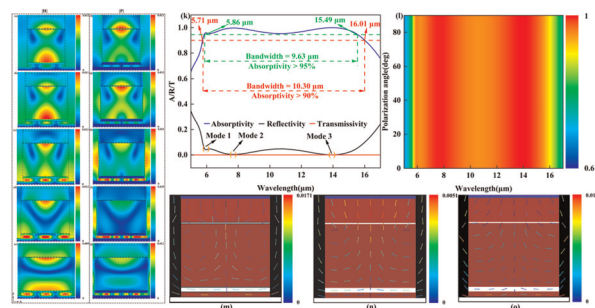
Ting-Ting Ruan, Eufemio Moreno-Pineda,* Sagar Paul, Michael Schulze, Sören Schlittenhardt, Asato Mizuno, Wolfgang Wernsdorfer* and Mario Ruben*



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Three peak metamaterial broadband absorbing materials based on ZnSe-Cr-InAs stacked disk arrays

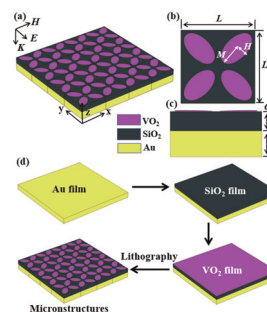
Boyi Chen, Can Ma, Tangyou Sun, Qianju Song, Liang Bian, Zao Yi,* Zhiqiang Hao, Chaojun Tang, Pinghui Wu and Qingdong Zeng



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Temperature-tunable terahertz metamaterial device based on VO₂ phase transition principle

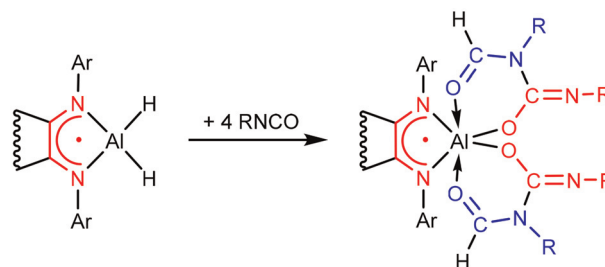
Hao Sun, Tangyou Sun, Qianju Song, Liang Bian, Zao Yi,* Jianguo Zhang, Zhiqiang Hao, Chaojun Tang, Pinghui Wu and Qingdong Zeng



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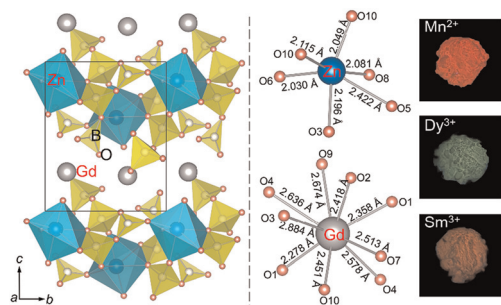
Hydro-coupling of isocyanates promoted by 1,2-bis(arylimino)acenaphthene aluminum hydrides

Tatyana S. Koptseva, Alexandra A. Skatova, Mikhail V. Moskalev, Roman V. Rumyantsev and Igor L. Fedushkin*



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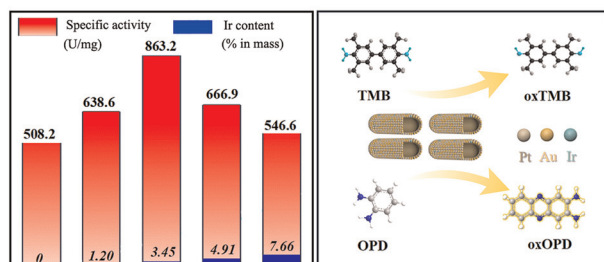
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Host-sensitized borate phosphors ZnGdB₅O₁₀: Mn²⁺/Dy³⁺/Sm³⁺

Yu Chen, Yan Gao, Rihong Cong* and Tao Yang*

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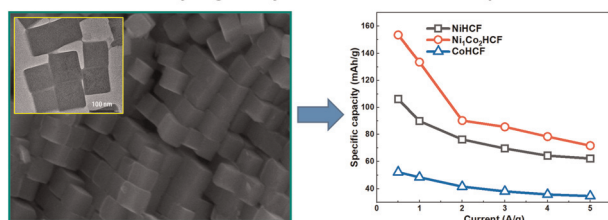


A low iridium content greatly improves the peroxidase-like activity of noble metal nanozymes for sensitive colorimetric detection

Jian Hao, Rui Shang, Miaotian Shi,* Jincheng Yuan, Yi Tan, Jiawei Liu* and Kai Cai*

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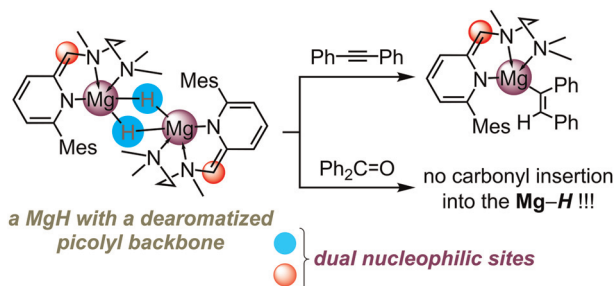
Mixed Ni/Co PBA: Synergistically enhanced electrochemical performance



Novel mixed nickel/cobalt hexacyanoferrate microcubes with synergistic effects for aqueous hybrid supercapacitors

Vu Van Thuy, Nguyen Si Hieu and Tran Viet Thu*

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Synthesis and reactivity of a heteroleptic magnesium hydride on a dearomatized picolyl-based NNN-chelator

Chhotan Mandal, Subham Sarkar, Sourav Panda, Dibyendu Mallick* and Debabrata Mukherjee*

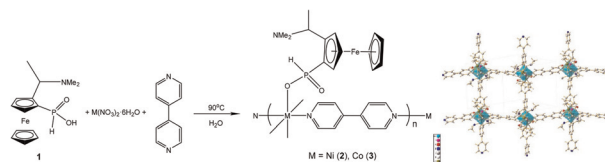


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Ugi's amine based coordination polymers as synergistic catalysts for the electrocatalytic reduction of carbon dioxide

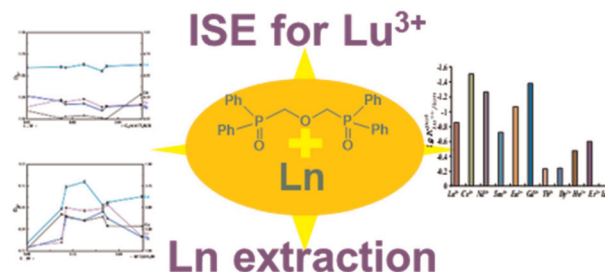
Mikhail N. Khrizanforov,* Farida F. Naileva, Kamil A. Ivshin, Almaz A. Zagidullin, Anastasiia P. Samorodnova, Polina V. Milyukova, Ruslan P. Shekurov, Artem I. Laskin, Alexander S. Novikov and Vasily A. Miluykov



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Effect of the stability of 1,3-bis(diphenylphosphoryl)-2-oxapropane complexes on the separation of lanthanide ions and their detection

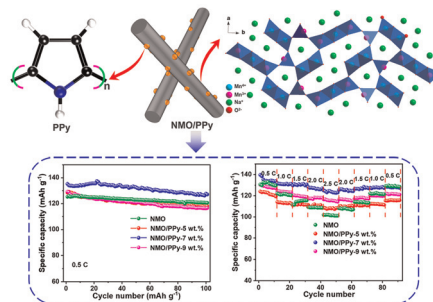
Serafima S. Slobodskaya,* Galina S. Tsebrikova, Vitaly P. Solov'ev, Irina S. Ivanova, Elena N. Pyatova, Vladimir E. Baulin, Alfiya M. Safiulina and Aslan Yu. Tsivadze



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Boosting sodium storage performance of Na_{0.44}MnO₂ through surface modification with conductive polymer PPy utilizing sonication-assisted dispersion

Lingling Xie,* Xinwei Wang, Changle Xia, Huilin Huang, Limin Zhu, Qing Han, Xuejing Qiu and Xiaoyu Cao



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Exploring improved strategies for therapeutic studies and biological activities of novel zinc and indium phthalocyanines

Kevser Celep, Gökür Yaşa Atmaca,* Pelin Demir Aydoğmuş, Kumsal Eroğlu, Ömer Tahir Günkara, Gülay Giray, Gülşah Tolly, Sadin Özdemir and Ali Erdoğan

