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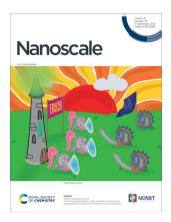
ISSN 2040-3372 CODEN NANOHL 15(33) 13475-13844 (2023)



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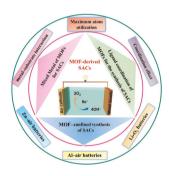
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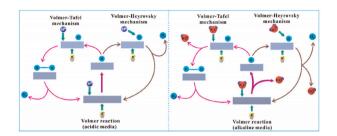


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Non-precious metal-based heterostructure catalysts for hydrogen evolution reaction: mechanisms, design principles, and future prospects

Mojie Sun, Yalin Li, Shijie Wang, Ziquan Wang, Zhi Li and Ting Zhang\*

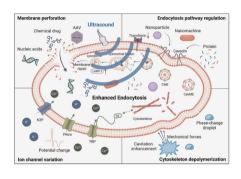


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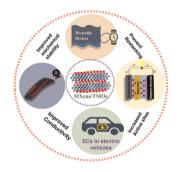
Zihao Wen, Chen Liu, Zihao Teng, Quanyi Jin, Zhihuan Liao, Xuan Zhu\* and Shuaidong Huo\*



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Shaqufi Naz Ansari, Mohit Saraf, Zahir Abbas and Shaikh M. Mobin\*

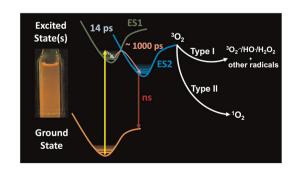


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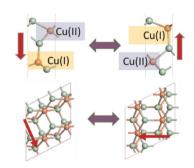
Photochemical synthesis of fluorescent Au<sub>16</sub>(RGDC)<sub>14</sub> and excited state reactivity with molecular oxygen

Parimah Aminfar, Goonay Yousefalizadeh, Emily Steele, Juan Chen, Gang Zheng and Kevin G. Stamplecoskie\*



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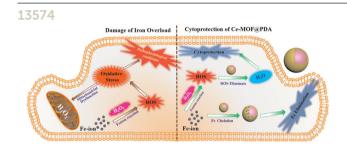
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# Exploitation of mixed-valency chemistry for designing a monolayer with double ferroelectricity and triferroic couplings

Yaxin Gao, Sha Li, Xiao Cheng Zeng\* and Menghao Wu\*

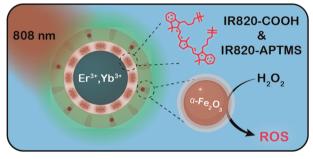
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# A Ce-MOF@polydopamine composite nanozyme as an efficient scavenger for reactive oxygen species and iron in thalassemia disease therapy

Yan Duan, Ling Liang, Fanggui Ye\* and Shulin Zhao\*

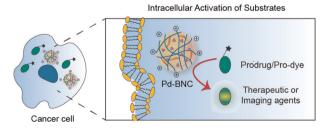
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# Achieving photostability in dye-sensitized upconverting nanoparticles and their use in Fenton type photocatalysis

Mannu Kaur, Steven L. Maurizio, Gabrielle A. Mandl and John A. Capobianco\*

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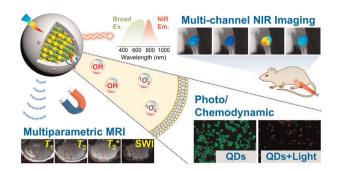
# Biodegradable nanoemulsion-based bioorthogonal nanocatalysts for intracellular generation of anticancer therapeutics

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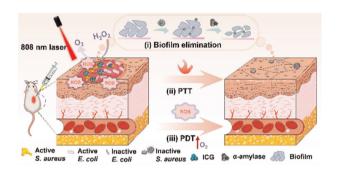
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Construction of mPt/ICG- $\alpha$ A nanoparticles with enhanced phototherapeutic activities for multidrug-resistant bacterial eradication and wound healing

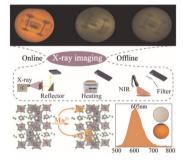
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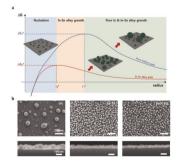
Sijian Wu, Lifang Yuan, Geng Chen, Chaoyue Peng and Yahong Jin\*



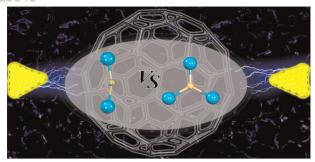
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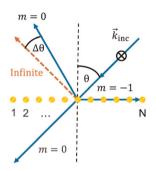
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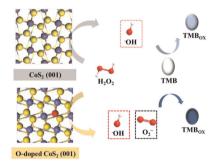
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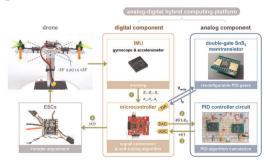
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# Revealing the intrinsic peroxidase-like catalytic mechanism of O-doped CoS<sub>2</sub> nanoparticles

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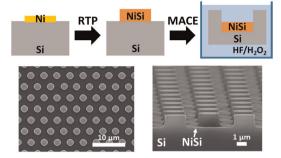
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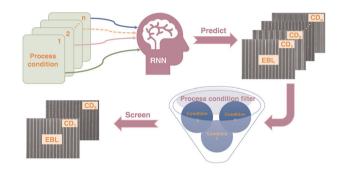
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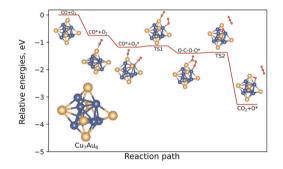
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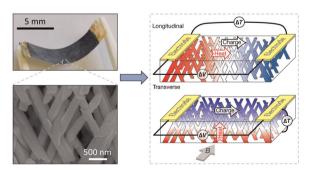
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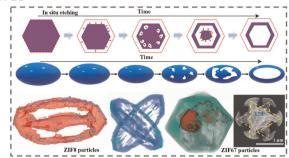
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# Polycrystalline bismuth nanowire networks for flexible longitudinal and transverse thermoelectrics

Luc Piraux,\* Nicolas Marchal, Pascal Van Velthem. Tristan da Câmara Santa Clara Gomes, Etienne Ferain, Jean-Paul Issi and Vlad-Andrei Antohe\*



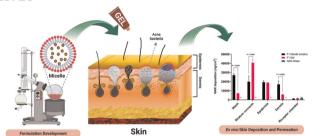
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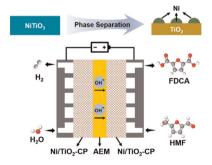
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# Metal—organic framework derived inverse opal type 3D graphitic carbon for highly stable lithium-ion batteries

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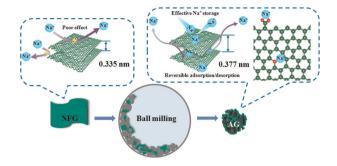
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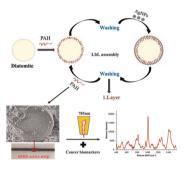
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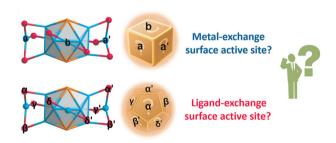
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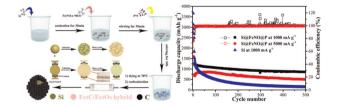
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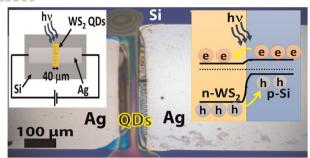
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High-performance Si@C anode for lithium-ion batteries enabled by a novel structuring strategy

Jian Song, Shengfeng Ke, Pengkai Sun, Dian Yang, Chengang Luo, Qinghua Tian,\* Cui Liang and Jizhang Chen



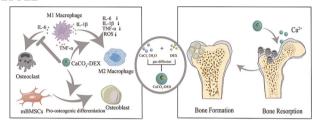
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# A fully printed ultrafast Si/WS2 quantum dot photodetector with very high responsivity over the UV to near-infrared region

Subhankar Debnath, Koushik Ghosh, M. Meyyappan and P. K. Giri\*

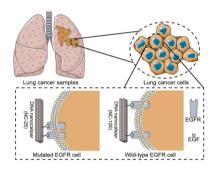
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# Ca-DEX biomineralization-inducing nuts reverse oxidative stress and bone loss in rheumatoid arthritis

Yaqing Liu, Zongzhang Wang, Yiru Wang, Yushuo Feng,\* Mengjiao Xu, Xiaoqian Ma, Qianqian Shi, Huaping Deng, Fangfang Ren, Yong Chen\* and Hongmin Chen\*

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