

Journal of Materials Chemistry C

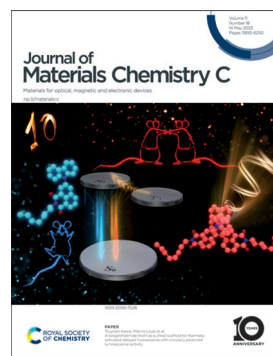
Materials for optical, magnetic and electronic devices

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EDITORIAL

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Circularly polarized luminescence: a themed collection

Jeanne Crassous,* Lorenzo Di Bari,* Wai-Yeung Wong*
and You-Xuan Zheng*

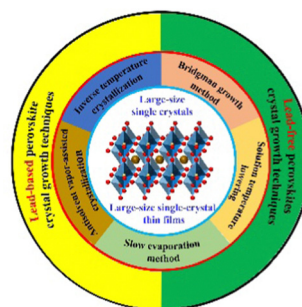


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Advances of metal halide perovskite large-size single crystals in photodetectors: from crystal materials to growth techniques

Meiyu Yang, Zhiguo Nie, Xinyi Li, Rui Wang, Yang Zhao*
and Huan Wang*



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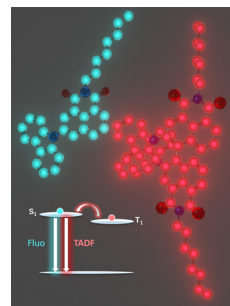
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A binaphthalimide motif as a chiral scaffold for thermally activated delayed fluorescence with circularly polarized luminescence activity

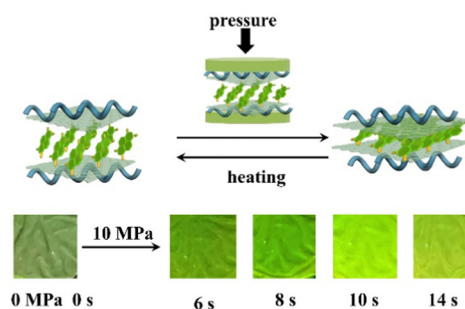
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A metastable molecular array guided by the synergy of confinement and charge repulsion for piezochromic sensors

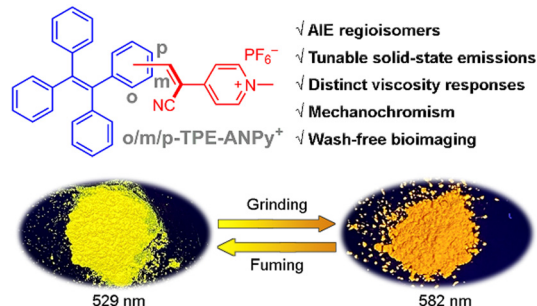
Jing Liu, Ruixing Wang, Xinrui Wang, Kaixiang Liang, Wenying Shi* and Chao Lu



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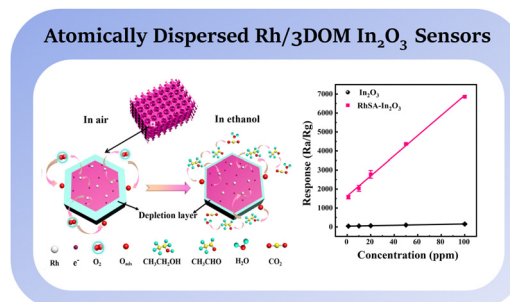
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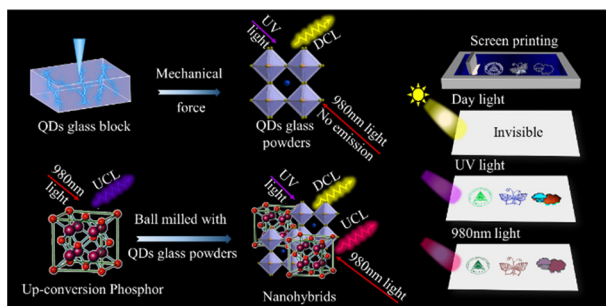
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Atomically dispersed rhodium on ordered macroporous In_2O_3 for the highly sensitive detection of ethanol and the sensing mechanism

Fubo Gu, Lanlan Zhang, Song Hong, Dongmei Han and Zhihua Wang*



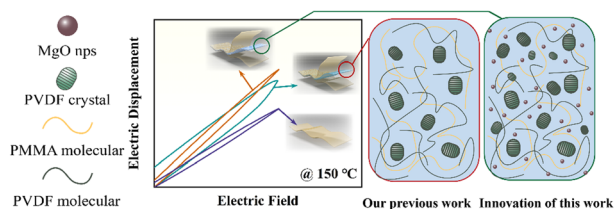
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Nano-hybrids with switchable multi-colour emission for anticounterfeiting

Yongmin Duan, Siyuan Fu, Zehui Wang, Shiqing Xu and Junjie Zhang*

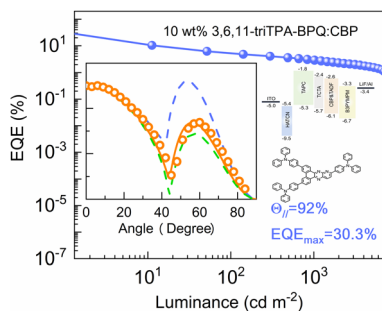
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Achieving high energy density at a low electric field of high-temperature sandwich-structured polymer dielectric composite by PVDF crystallinity regulation

Tianran Zhang, Qinzhao Sun, Zepeng Wang, Ruirui Kang, Fang Kang, Rong Xue, Jiping Wang* and Lixue Zhang*

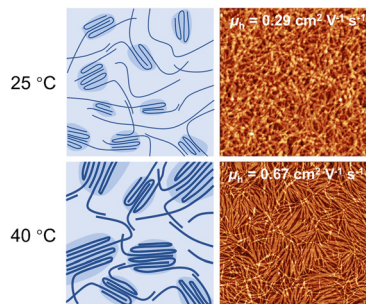
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An electroluminescence efficiency of 30.3% for a yellow thermally activated delayed fluorescence emitter with a high horizontal emitting dipole ratio

Yan-Qing Tang, Jing-Xiong Zhou, Yan-Qing Li,* De-Zhi Yang, Xin-Yi Zeng, Kai Zhang, Yi-Hui He, Hao Ren, Dong-Ge Ma* and Jian-Xin Tang*

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Structural control of charge transport in polymer monolayer transistors by a thermodynamically assisted dip-coating strategy

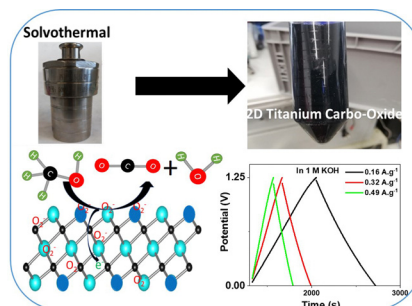
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Ti₃AlC₂ MAX phase conversion to a novel 2D titanium carbo-oxide by an eco-friendly and low-cost method: highly selective gas sensing and supercapacitor evaluations

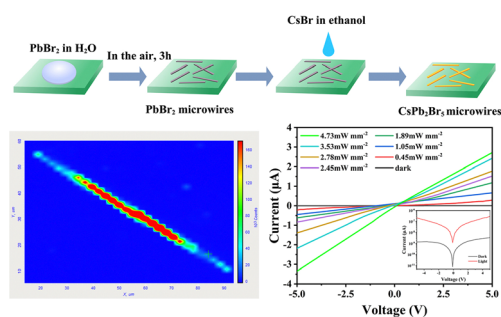
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Phase evolution and fluorescence stability of CsPb₂Br₅ microwires and their application in stable and sensitive photodetectors

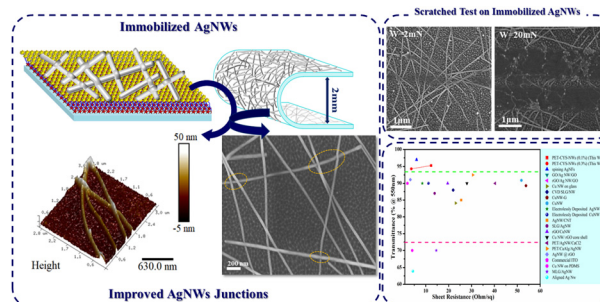
Ning Jiang, Jinwei Wei, Mingjie Lv, Youzhuang Rong, Changmin Wang, Yao Liu, Gongxiang Wei, Xin Han, Yuzhu Wang, Yunyan Liu* and Huiqiang Liu*



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Microwave-assisted immobilized silver nanowires on arbitrary substrates: an eco-friendly technique for next-generation transparent, flexible and robust electronics

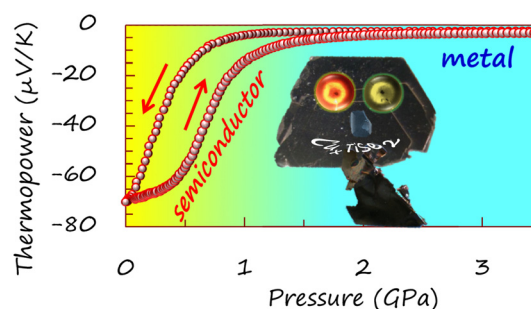
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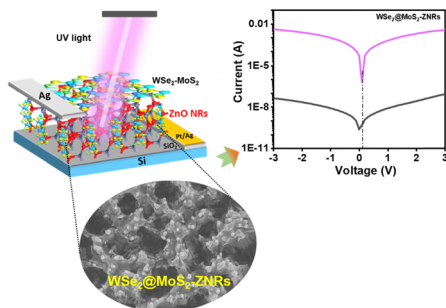
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Natalia V. Morozova,* Aleksandr Yu. Usik, Igor V. Korobeinikov, Alexander N. Titov and Sergey V. Ovsyannikov



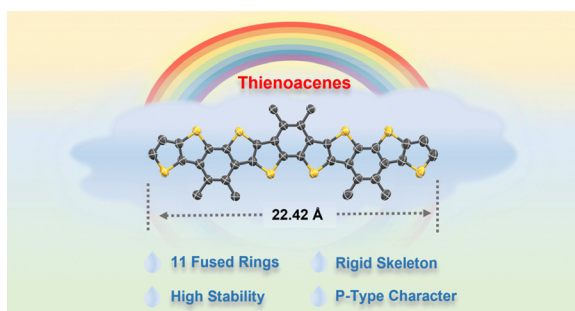
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Tunable defect-engineered nano-hybrid heterostructures: exfoliated 2D WSe₂-MoS₂ nano-hybrid sheet covered on 1D ZnO nanostructures for self-powered UV photodetectors

Adhimoorthy Saravanan,* Bohr-Ran Huang,*
Deepa Kathiravan, Shikha Sakalley and Sheng-Chi Chen*

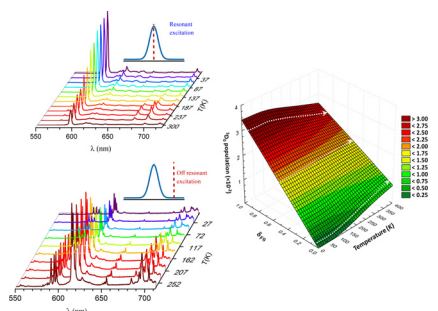
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Shihui Liu, Debin Xia,* Jinghao Wang, Congwu Ge,
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Arnab De, Miguel A. Hernández-Rodríguez,
Albano N. Carneiro Neto,* Vivek Dwij, Vasant Sathe, Luís
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Controlling ions and electrons in aqueous solution: an alternative point of view of the charge-transport behavior of eumelanin-inspired material

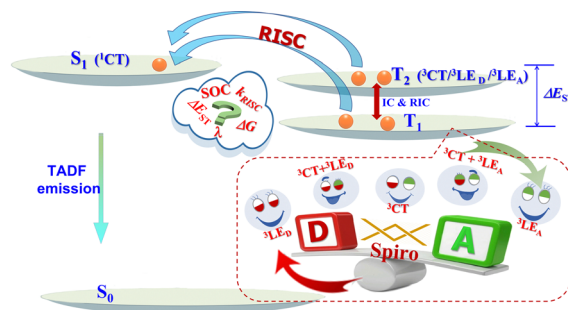
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João P. Cachaneski-Lopes, Carlos F. O. Graeff,
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Importance of spin-triplet excited-state character in the reverse intersystem crossing process of spiro-based TADF emitters

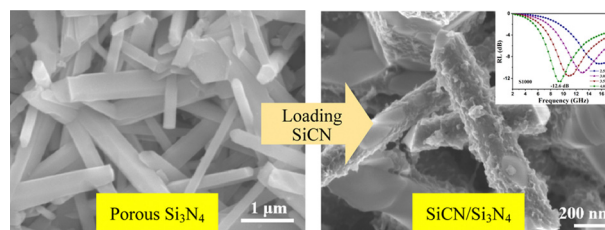
Jiaqi Li, Tian Tian, Dongxue Guo, Tingyu Li, Mingfan Zhang and Houyu Zhang*



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Increased microwave absorption property of porous Si_3N_4 ceramics by loading polymer-derived SiCN for a multifunctional design

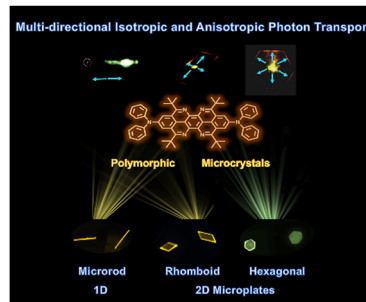
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Diphenylamine substituted 5,6,12,13-tetraazaperopyrene based polymorphic microcrystals versatile in multi-directional isotropic and anisotropic photon transport

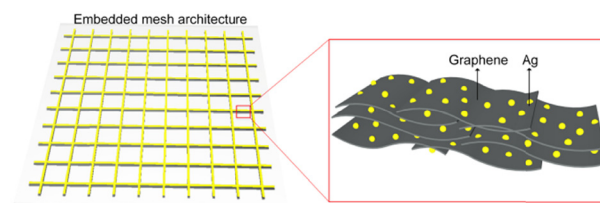
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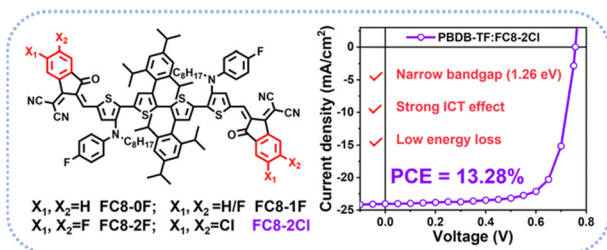
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Micro–nano dual-scale embedded graphene/Ag architectures for flexible low-voltage-driven transparent electrothermal films

Bangbang Nie, Huiqian Song, Benkun Lv, Xinyi Xiong, Guochen Qi, Yudong Zhang, Jingjiang Qiu, Xiangming Li,* Jinyou Shao and Zonhan Wei*



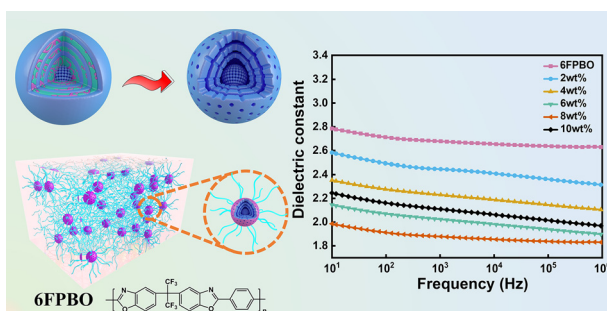
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Completely non-fused ring acceptors with low non-radiative energy loss enabled by end-group modulation

Hao Li, Jiayao Li, Chenyi Yang, Jingwen Wang, Du Hyeon Ryu, Lijiao Ma, Yi Yang, Won Suk Shin, Shaoqing Zhang* and Jianhui Hou

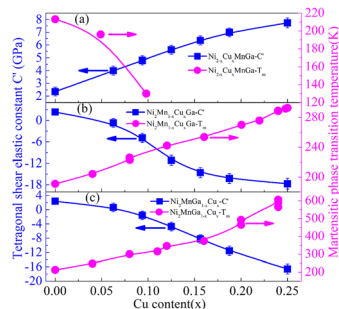
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An ultralow- k dielectric derived from a fluorinated polybenzoxazole composite film with yolk-multishell mesoporous silica nanostructures

Zhe Zhang, Peng He, Wenjun Ma, Peiyuan Zuo,* Xiaoyun Liu and Qixin Zhuang*

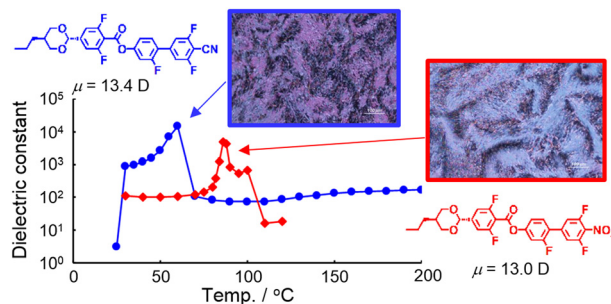
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A unified physical mechanism for martensitic phase transition and ductility in Ni–Mn-based ferromagnetic shape memory alloys: the case of Cu-doped Ni_2MnGa

Guijiang Li,* Lei Xu and Zhenhua Cao

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Synthesis of liquid crystals bearing 1,3-dioxane structures and characterization of their ferroelectricity in the nematic phase

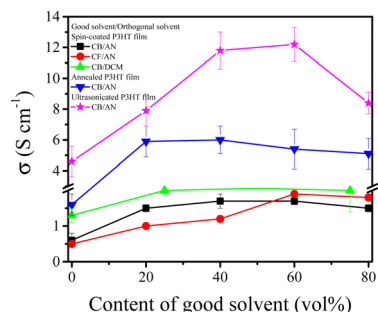
Hiroyuki Matsukizono, Koki Iwamatsu, Sota Endo, Yasushi Okumura, Shizuka Anan and Hirotsugu Kikuchi*



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The importance of a good solvent of conjugated polymers for preparing dopant solution on the electrical and mechanical properties of sequentially doped conjugated polymer films

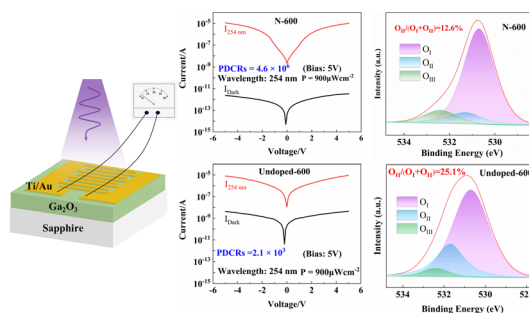
Jiaxin He, Hongtao Shan, Bingyan Zhu, Jianjun Zhou and Hong Huo*



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Regulation of oxygen vacancies in nitrogen-doped Ga₂O₃ films for high-performance MSM solar-blind UV photodetectors

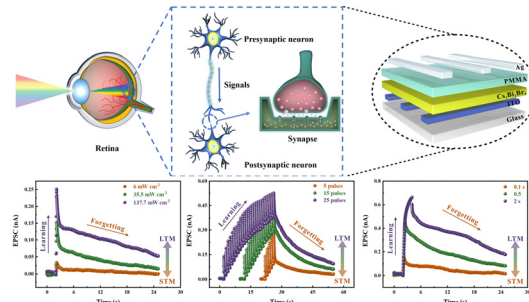
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Self-powered optoelectronic artificial synapses based on a lead-free perovskite film for artificial visual perception systems

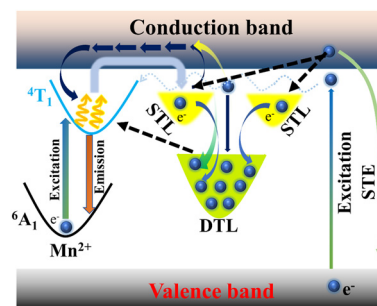
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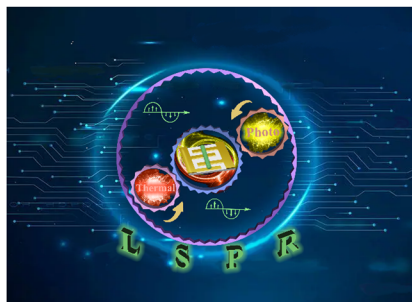
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Effect of Mn²⁺ doping on exciton recombination and carrier trapping in the Cs₂CdCl₄ metal halide

Dayu Huang, Ziyong Cheng, Qiuyun Ouyang,* Hongzhou Lian* and Jun Lin*



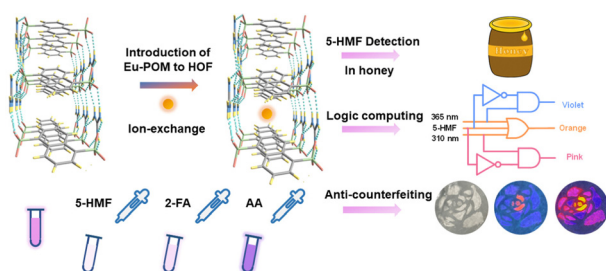
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A high-performance UV photodetector with superior responsivity enabled by a synergistic photo/thermal enhancement of localized surface plasmon resonance

Luxia Zheng, Yang Yang,* Chris R. Bowen, Lan Jiang, Zhan Shu, Yun He, Hongli Yang, Zongzhuo Xie, Taixu Lu, Feng Hu* and Weiyu Yang

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A multifunctional fluorescent platform based on polyoxometalate-functionalized HOFs for 5-hydroxymethylfurfural, 2-furaldehyde and ascorbic acid sensing, logic computing and anti-counterfeiting

Zishuo Zhang, Xin Xu and Bing Yan*

