

Journal of Materials Chemistry C

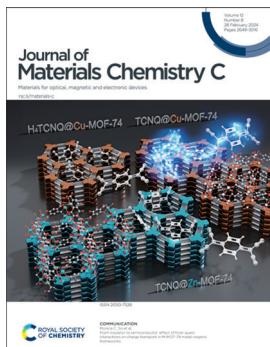
Materials for optical, magnetic and electronic devices

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ISSN 2050-7526 CODEN JMCCCX 12(8) 2649–3016 (2024)



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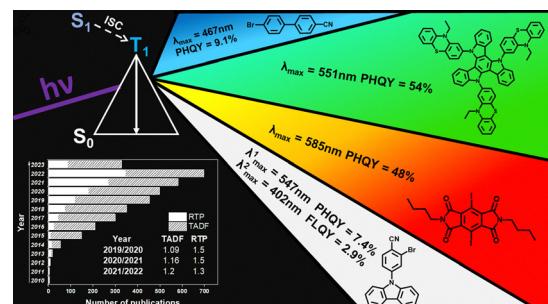
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REVIEW

2662

Molecular design, synthesis, properties, and applications of organic triplet emitters exhibiting blue, green, red and white room-temperature phosphorescence

Mariia Stanitska, Dmytro Volyniuk, Boris Minaev,
Hans Agren and Juozas V. Grazulevicius*

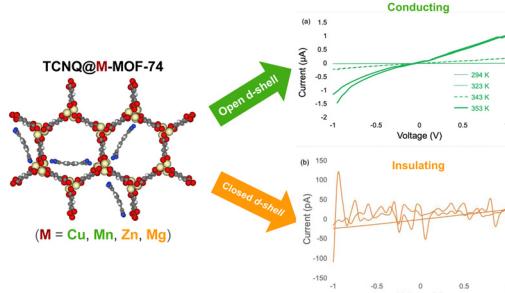


COMMUNICATIONS

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From insulator to semiconductor: effect of host–guest interactions on charge transport in M-MOF-74 metal–organic frameworks

Sydney M. Angel, Nicholas S. Barnett, A. Alec Talin,
Michael E. Foster, Vitalie Stavila, Mark D. Allendorf and
Monica C. So*





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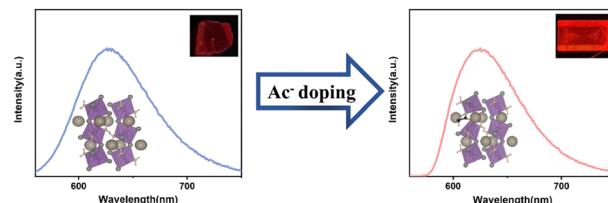


COMMUNICATIONS

2705

Modulating luminescence properties of CsMnBr_3 -based lead-free single crystals by pseudohalide doping

Yang Yang, Zisheng Wang, Jiahao Jie, Chunqing Hou, Yilong Song, Yuhao Fu,* Lijun Zhang and Qingfeng Dong*

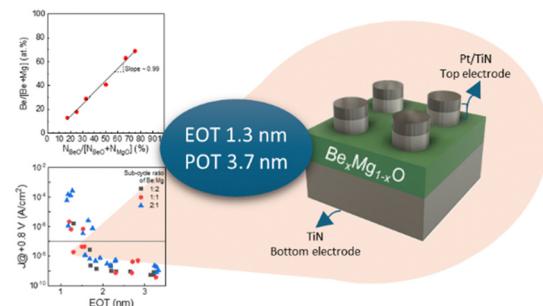


PAPERS

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Improved electrical performance of ultra-thin $\text{Be}_x\text{Mg}_{1-x}\text{O}$ films using super-cycle atomic layer deposition

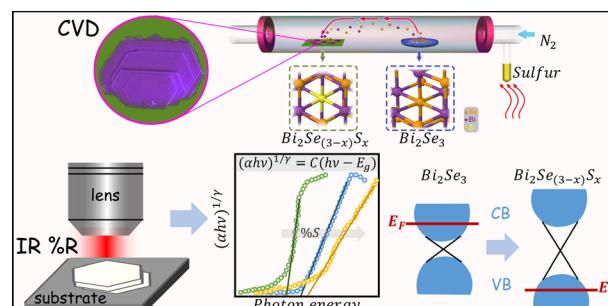
Haewon Song, Bowen Wang, Jonghoon Shin, Yu-Kyung Park, Tae Kyun Kim, Heewon Paik, Haengha Seo, Junil Lim, Daeson Kwon, Keonuk Lee, Young Sin Kim, Dong Hoon Shin and Cheol Seong Hwang*



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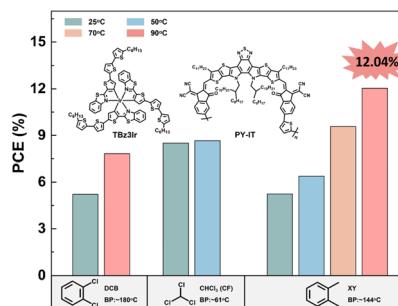
Michal Poplinger, Dimitris Kaltsas, Chen Stern, Pilkhaz Nanikashvili, Adi Levi, Rajesh K. Yadav, Sukanta Nandi, Yuxiao Wu, Avinash Patsha, Ariel Ismach, Ashwin Ramasubramaniam, Amaia Pesquera, Amaia Zurutuza, Ioanna Zergioti, Leonidas Tsetseris, Tomer Lewi and Doron Naveh*



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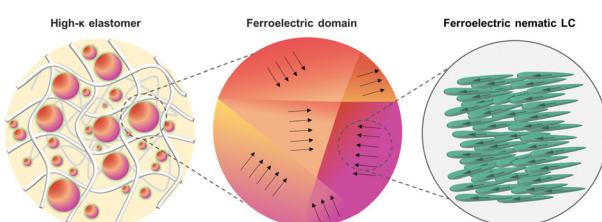
Green solvent-processed organic solar cells based on a small-molecule Ir(III) complex as electron donor materials

Duoquan You, Tianjian Yang, Yeting Tao, Jingsheng Wang, Jian Wang, Aihua Zhou and Youtian Tao*



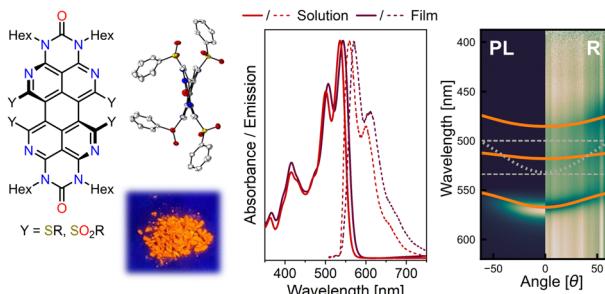
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**High- κ elastomer with dispersed ferroelectric nematic liquid crystal microdroplets**

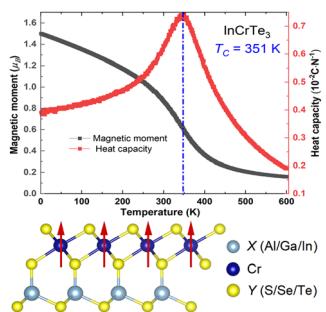
Fan Ye, Chen Yang, Xinxin Zhang, Xiang Huang, Yongmei Zhu, Satoshi Aya* and Mingjun Huang*

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Xiao-Feng Wang, Chen-Yan Xu, Rui-Lian Lin,* Wen-Qi Sun, Ming-Fu Ye,* Li-Xin Xu and Jing-Xin Liu*

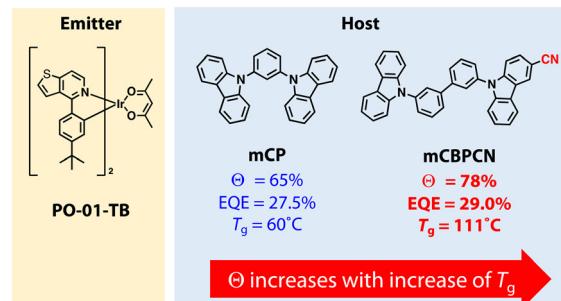


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Fundamental guidelines for the active control of the molecular orientation of heteroleptic iridium complexes enabled by carbazole-based host materials

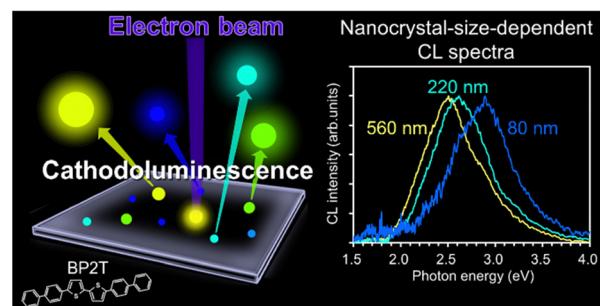
Hiroki Arai, Naoto Yoshida, Hisahiro Sasabe,* Yuki Sagae, Keigo Hoshi, Daisuke Yokoyama and Junji Kido*



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Size-dependent cathodoluminescence properties of 5,5'-di(4-biphenylyl)-2,2'-bithiophene nanocrystals

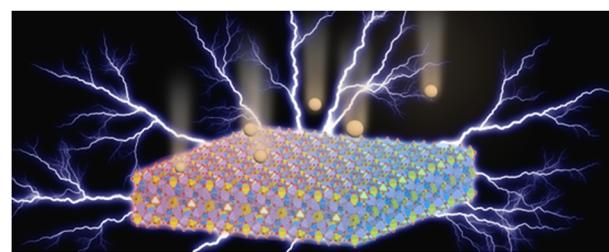
Tomomi Jinjyo,* Hitoshi Mizuno* and Fumio Sasaki



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Structure, luminescence properties, and valence-induced spectral behavior of a bismuth-activated garnet phosphor

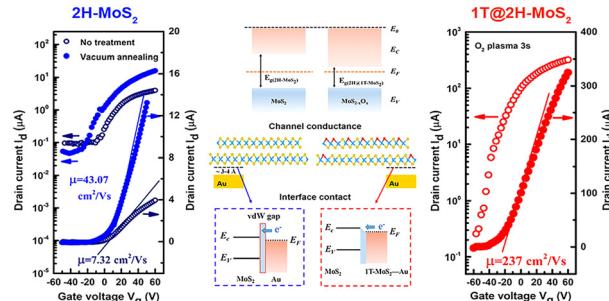
Gongli Chen, Yonghong Qin, ZhenHua Li,* Xicheng Wang* and Yuhua Wang*



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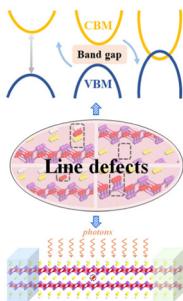
Improving electron mobility in MoS₂ field-effect transistors by optimizing the interface contact and enhancing the channel conductance through local structural phase transition

Zhaofang Cheng, Shaodan He, Xiaona Han, Xudong Zhang, Lina Chen, Shijun Duan, Shimin Zhang and Minggang Xia*



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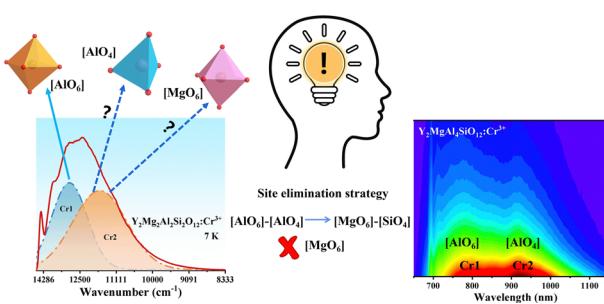
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The line defects in two-dimensional $\text{Bi}_2\text{O}_2\text{S}$: enhanced photocurrents in the infrared region

Yaoyu He, Wenhui Hu, Zhi Yang,* Li-Chun Xu, Lin Xue,* Ruiping Liu and Xuguang Liu

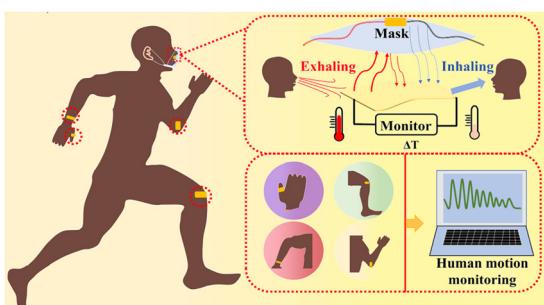
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Efficient and stable near-infrared $\text{Y}_2\text{Mg}_2\text{Al}_2\text{Si}_2\text{O}_{12}:\text{Cr}^{3+}$ phosphor: analysis of the luminescence source by a site elimination strategy

Xixin Sun, Mengmeng Shang,* Yining Wang, Yiyi Zhu, Xiaole Xing, Peipei Dang and Jun Lin*

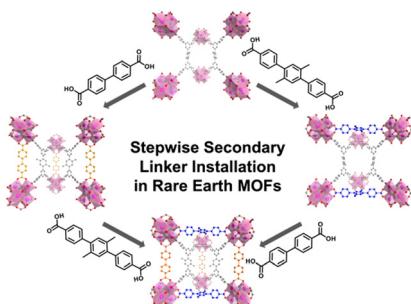
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Temperature- and pressure-sensitive ionic conductive elastomer for respiratory monitoring and human motion sensing

Kai Yan,* Hua Chen, Jun Wang, Qunna Xu, Yinsong Si and Yi Wu*

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Stepwise post-synthetic linker installation in rare-earth metal-organic frameworks

Yuchen Hu, Rebecca Shu Hui Khoo, Aiying Pang,* Sizhuo Yang, Christian Fiankor, Xu Zhang* and Jian Zhang*

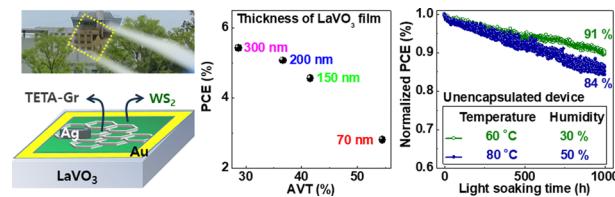


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Highly stable semitransparent solar cell employing graphene/WS₂/LaVO₃ vertical-heterostructure

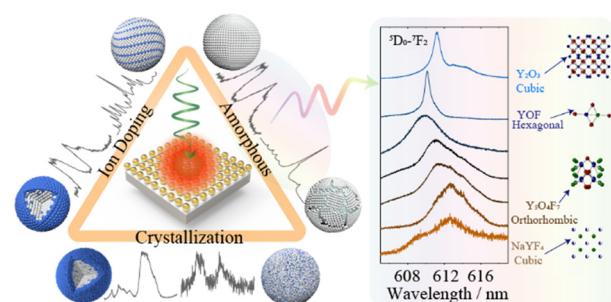
Da Hee Kim, Dong Hee Shin, Dae Ho Jung, Si Duck Oh, Eun Ji Kim and Hosun Lee*



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Thermo-plasmonic assisted structural optimization of micro/nanocrystals based on single-particle spectroscopy

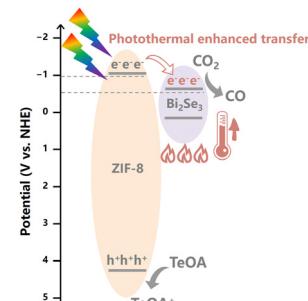
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Facile construction of metal–organic frameworks/topological insulator heterostructure for photothermal catalytic CO₂ reduction

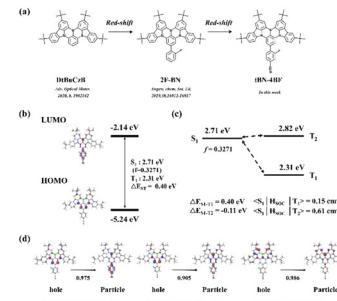
Jing Sun, Xunfeng Yuan, Baoying Liu, Shang Ma and Chengfang Qiao*



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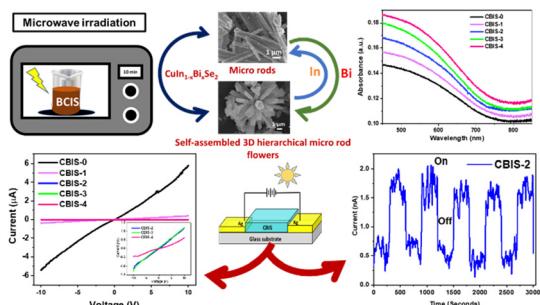
Colour-tuning of multiple resonance thermally activated delayed fluorescence emitters for hyperfluorescence with long-lifetime device characteristics

Tae Hoon Ha, Jeong Yeol Yoo, Seung Wan Kang and Chil Won Lee*



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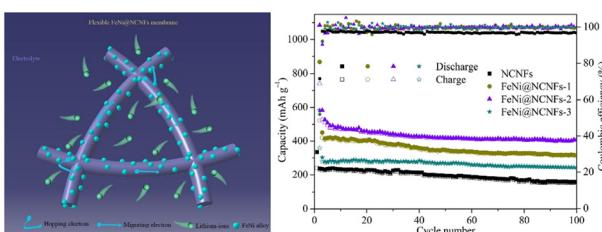
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Morphological evolution of individual microrods to self-assembled 3D hierarchical flower architectures of CuBi_xIn_{1-x}Se₂ for photo response applications

Priyanka Priyadarshini, Subrata Senapati,* Ashutosh Mohapatra, Monalisa Pradhan, Devarajan Alagarasan and Ramakanta Naik*

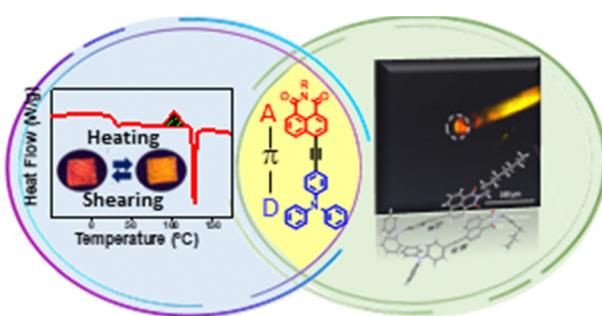
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Well-dispersed FeNi nanoparticles embedded in N-doped carbon nanofiber membrane as a self-supporting and binder-free anode for lithium-ion batteries

Xiaoqiang Li, Guangguang Guan, Bingjie Cheng, Xueke Zhang, Kaiyin Zhang and Jun Xiang*

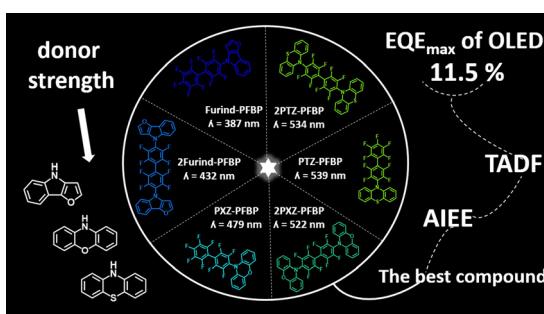
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Self-assembled D- π -A multifunctional systems with tunable stimuli-responsive emission and optical waveguiding behaviour

R. Martín, A. Sánchez-Oliva, A. Benito, I. Torres-Moya, A. M. García, J. Álvarez-Conde, J. Cabanillas-González,* P. Prieto* and B. Gómez-Lor*

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Effects of the nature of donor substituents on the photophysical and electroluminescence properties of derivatives of perfluorobiphenyl: donor-acceptor versus donor-acceptor-donor type AIEE/TADF emitters

Iryna Danyliv, Yan Danyliv, Mariia Stanitska, Oleksandr Bezvikonnyi, Dmytro Volyniuk, Roman Lytvyn, Yuriy Horak, Vitaly Matulis, Dmitry Lyakhov, Dominik Michels, Pavlo Stakhira and Juozas Vidas Grazulevicius*

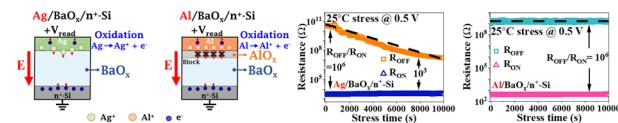


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Barium oxide write-once read-many-times memory with a high resistance window

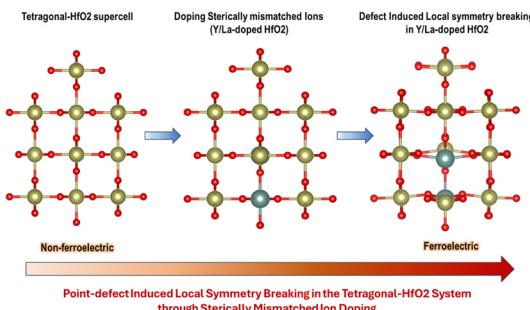
Chih-Chieh Hsu,* Zong-Lin Cai, Pei-Xuan Long, Min-Yi Hsu, Bo-Ruei Huang, Wun-Ciang Jhang and Umakanta Nanda



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Harnessing point-defect induced local symmetry breaking in a tetragonal-HfO₂ system through sterically mismatched ion doping

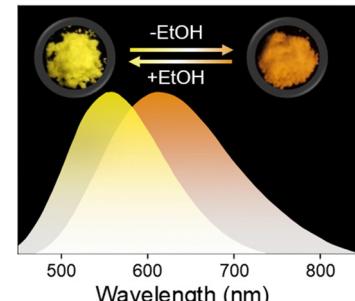
Syed Ul Hasnain Bakhtiar, Pu Ai, Harse Sattar, Sharafat Ali, Ahmed Sadeq Al-Fatesh, Junlei Zhao,* Dong Wen* and Qiuyun Fu*



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Highly efficient self-trapped exciton luminescence of Sb³⁺-doped (CH₆N₃)₃BiCl₆ for ethanol detection

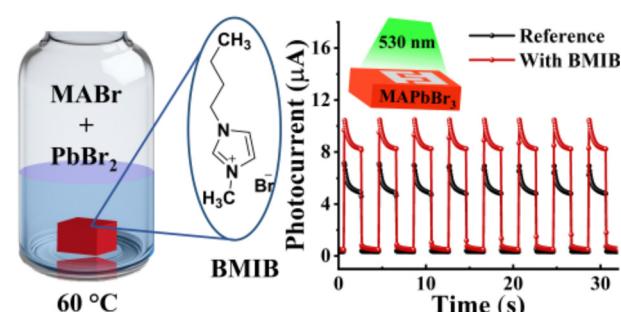
Bo Lian, Jiandong Yao, Miao Ren, Bingsuo Zou, Binbin Luo* and Ruosheng Zeng*



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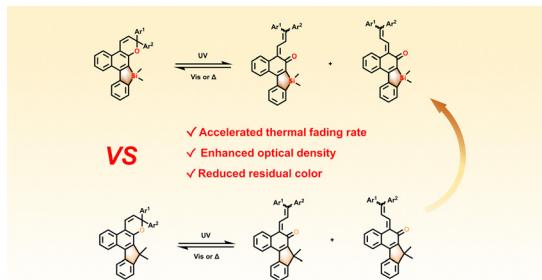
Ionic liquid-assisted growth of high-quality methylammonium lead bromide single crystals for photodetection applications

Apurba Mahapatra, Vishnu Anilkumar, Joanna Kruszyńska, Nada Mrkyykova, Peter Siffalovic, Pankaj Yadav and Daniel Prochowicz*



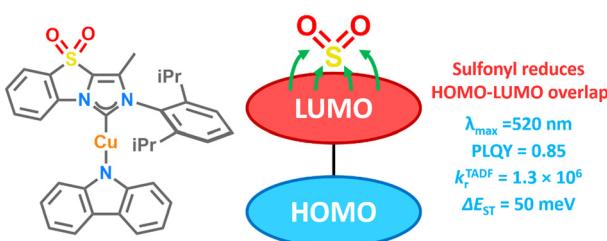
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**Silindeno-fused 3H-naphthopyrans with fast thermal fading rate and high optical density**

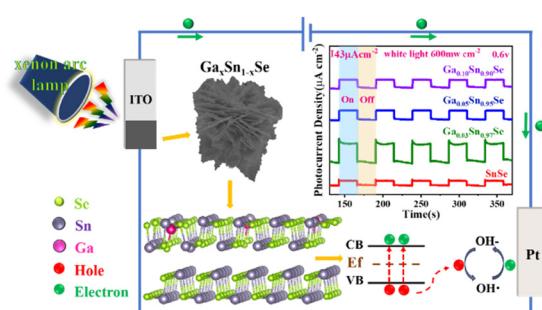
Zheng Xu, Juanjuan Sun, Taishan Yan, Huacheng Zhang* and Jie Han*

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**Sulfonyl-functionalized benzo[d]imidazo[5,1-b]thiazole-based carbenes as building blocks for two-coordinate Cu(I) complexes exhibiting fast and efficient thermally activated delayed fluorescence**

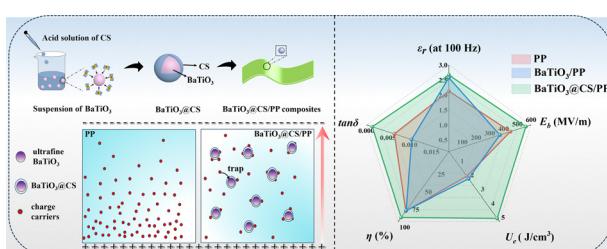
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**Enhancing the photo-response performance of a SnSe-based photoelectrochemical photodetector via Ga doping**

Zhiping Liang, Run Hao, Hualong Luo, Zhenming He, Liumei Su* and Xing Fan*

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**Improved energy storage properties of polypropylene-based composite dielectrics by introducing surface-charged BaTiO3@chitosan ultrafine constructions**

Yujie Wu, Hang Zhao,* Na Zhang, Huiqin Wang, Chuying Zhang, Lei Yin and Jinbo Bai*

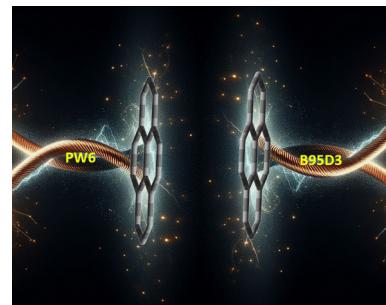


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Triphasic circularly polarized luminescence switch quantum simulation of a topologically chiral catenane

Giovanni Bella,* Marco Milone, Giuseppe Bruno and Antonio Santoro



CORRECTION

3013

Correction: Magnetic response of photonic crystals based on nucleating agents of binuclear complexes

Mengdong Tu, Mengying Xu, Xi Wei, Depeng Gong, Jun Chen and Chaocan Zhang*

