

Journal of Materials Chemistry C

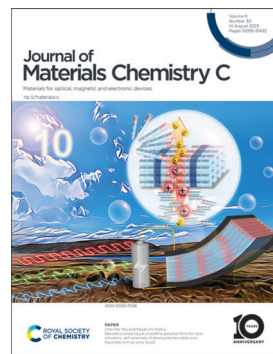
Materials for optical, magnetic and electronic devices

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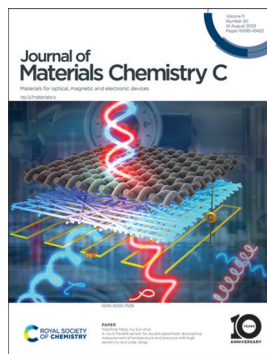
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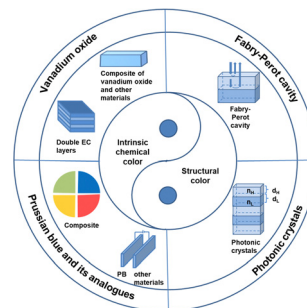
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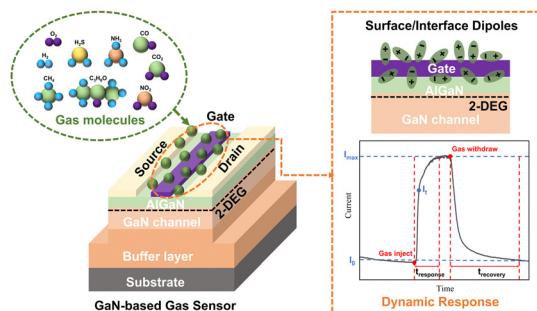
Lin Huang, Sheng Cao,* Yi Liang, Junyao Chen, Tao Yang, Jialong Zhao and Bingsuo Zou*



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A comprehensive review of gallium nitride (GaN)-based gas sensors and their dynamic responses

Yang Jiang, Wenmao Li, Fangzhou Du, Robert Sokolovskij, Yi Zhang, Shuhui Shi, Weiguo Huang, Qing Wang,* Hongyu Yu* and Zhongrui Wang*



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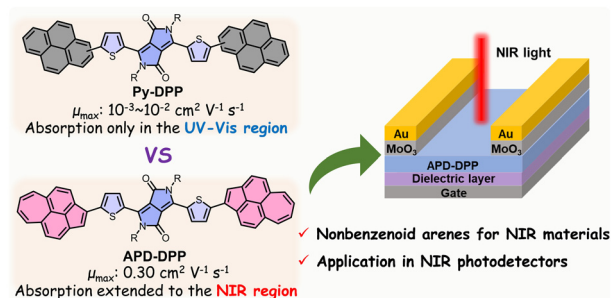


COMMUNICATION

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A nonbenzenoid acepleiadylene derivative with small band gap for near-infrared organic phototransistors

Pengcai Liu, Lin Fu, Xiao-Yu Tang, Rui Xue, Lijuan Zhang, Jiawen Cao and Xiao-Ye Wang*

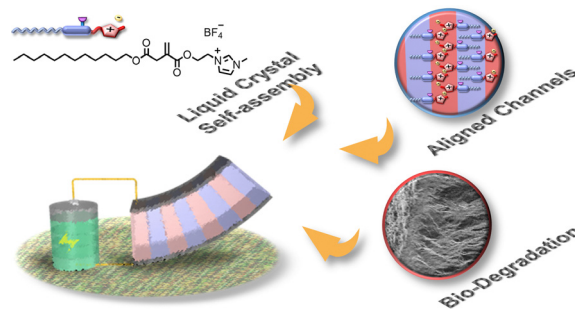


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Nanostructured liquid-crystalline polymer films for ionic actuators: self-assembly of photopolymerizable ionic itaconate with an ionic liquid

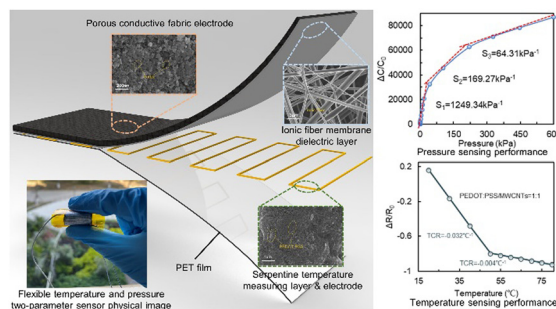
Che-Hao Wu and Masafumi Yoshio*



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A novel flexible sensor for double-parameter decoupling measurement of temperature and pressure with high sensitivity and wide range

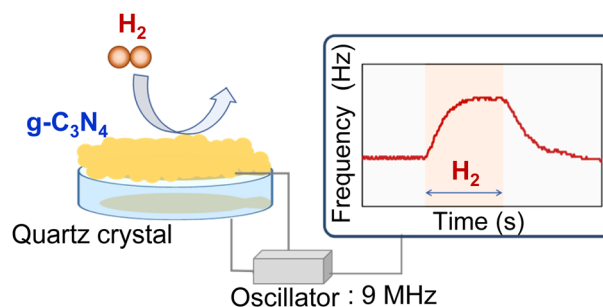
Leijin Fan, Xiaofeng Yang* and Hu Sun*



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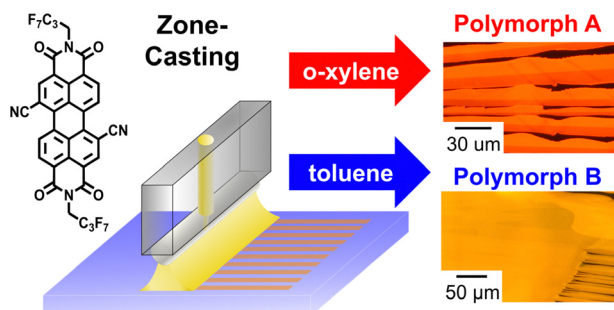
A graphitic carbon nitride-coated quartz crystal microbalance gas sensor for H₂ detection

Yasushi Ishiguro,* Taira Nishitani, Can Li and Kenji Hirakuri



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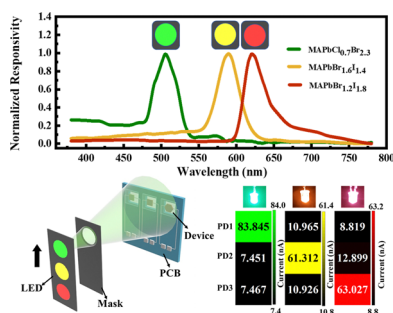
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Optical and electronic properties of different thin-film polymorphs of PDIF-CN₂ controlled by zone-casting conditions

Niklas J. Herrmann, Nadine von Coelln, Robin M. Teichgreber, Sebastian Höfener, Christian Huck, Farhad Ghalami, Simon Settele, Manuel Hertzog, Marcus Elstner, Petra Tegeder, Eva M. Herzig and Jana Zaumseil*

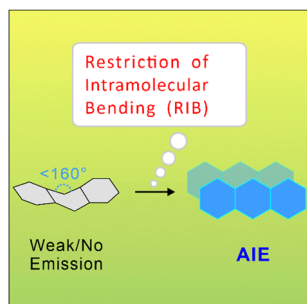
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MAPbBr_{3-n}X_n (X = Cl, I) single-crystal narrowband photodetectors for potential application in traffic light recognition

Feng-Xia Liang, Shi-Fu Li, Jie Yu, Liang-Liang Zhou, Jiang Wang, Can Fu, Xiang An, Jian-An Huang, Li Wang* and Lin-Bao Luo*

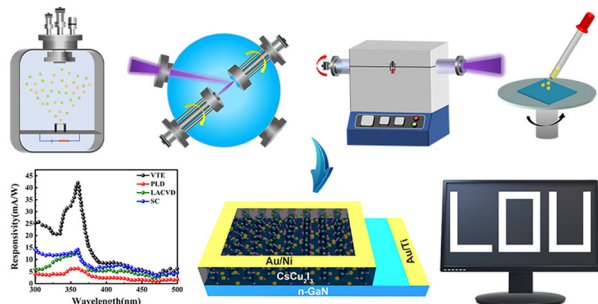
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Restriction of intramolecular bending (RIB) enables the quantitative design of AIEgens

Weijie Chi, Jianfeng Dai, Chengxu Yan, Davin Tan, Zhiqian Guo* and Xiaogang Liu*

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CsCu₂I₃ thin films prepared by different deposition methods for ultraviolet photodetectors with imaging capability

Xiaoxuan Li, Bin Xia, Lichun Zhang,* Feifei Wang and Fengzhou Zhao*

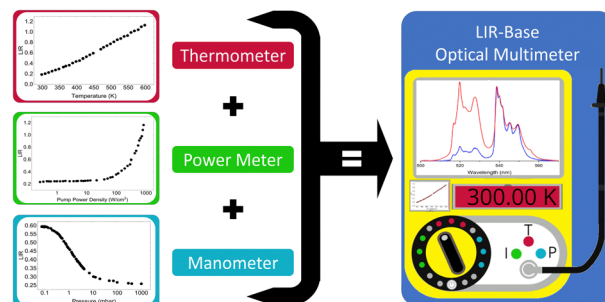


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Multifunctional optical sensing platform of temperature, pressure (vacuum) and laser power density: NaYF₄: Gd³⁺, Yb³⁺, Er³⁺ nanomaterial as luminescent thermometer, manometer and power meter

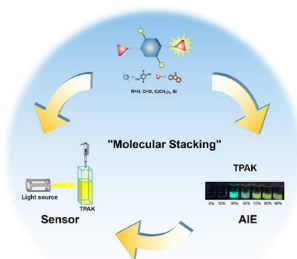
Christian Hernández-Álvarez,* Gabriela Brito-Santos, Inocencio R. Martín, Joaquín Sanchiz, Kamel Saidi, Kevin Soler-Carracedo, Łukasz Marciniak and Marcin Runowski*



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Tuning the aggregation-induced emission behavior of novel luminescence probes for DNP and Fe³⁺ sensing by molecular stacking

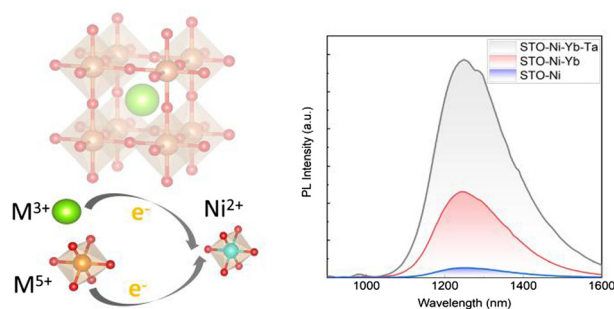
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Synergistic enhancement of the near-infrared luminescence properties of Ni²⁺-doped SrTiO₃ perovskite phosphors and their application

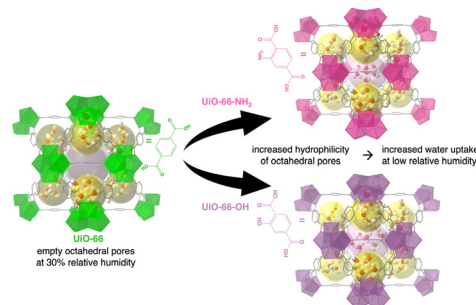
Fengmei Zhu, Yuan Gao,* Junjie Ding and Jianbei Qiu*



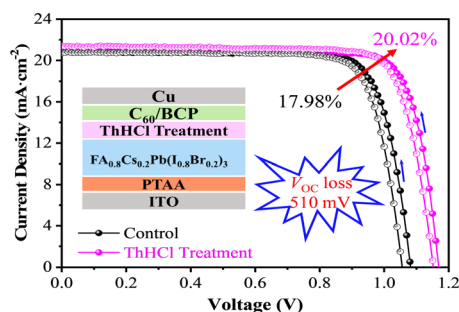
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Jierui Zhang, Francesco Paesani* and Martina Lessio*



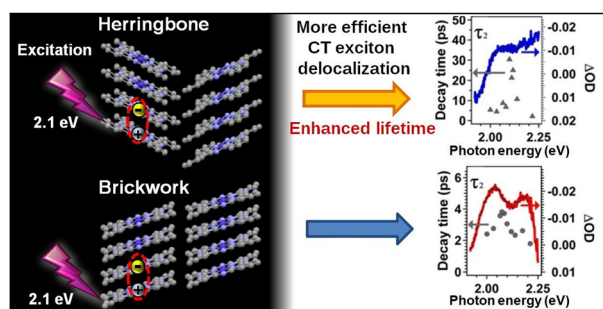
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Guangyao Cui, Xue Zhang, Yu Zhu, Cong Chen,* Zhiyu Gao, Juncheng Wang, Guo Xie, Hao Huang,* Bingsuo Zou and Dewei Zhao*

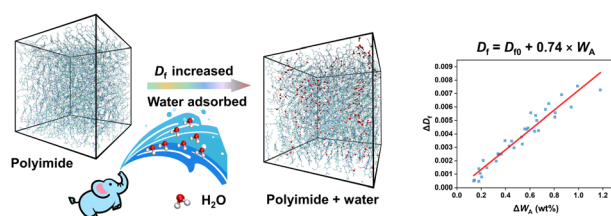
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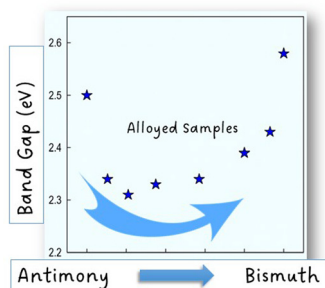
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A systematic study of the relationship between the high-frequency dielectric dissipation factor and water adsorption of polyimide films

Runxin Bei, Kaijin Chen, Yanwei He, Chuying Li, Zhenguo Chi, Siwei Liu,* Jiarui Xu and Yi Zhang*

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Giulia Giovilli, Benedetta Albini, Virginia Grisci, Sara Bonomi, Marco Moroni, Edoardo Mosconi, Waldemar Kaiser, Filippo De Angelis, Pietro Galinetto and Lorenzo Malavasi*

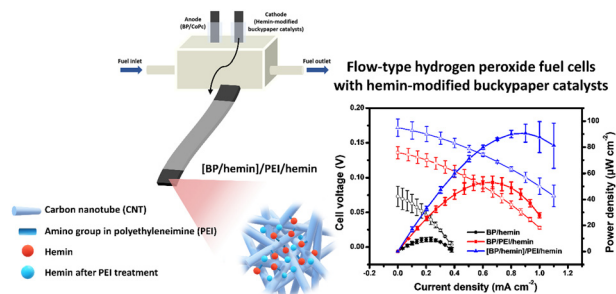


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Flow-type hydrogen peroxide fuel cells with hemin-modified buckypaper catalysts

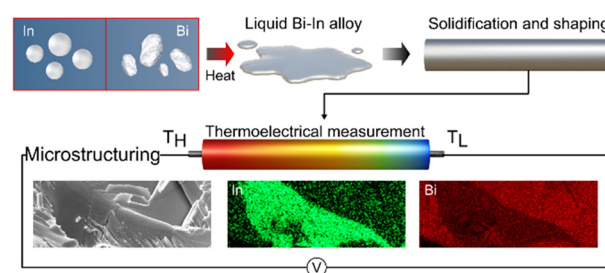
Seon-Min Jeon, Jungyeon Ji and Yongchai Kwon*



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A liquid metal-based process for tuning the thermoelectric properties of bismuth indium systems

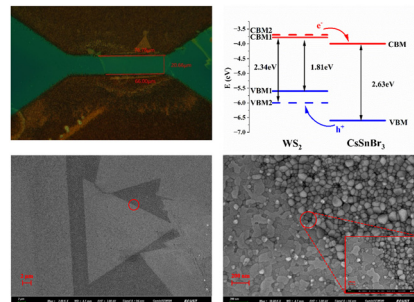
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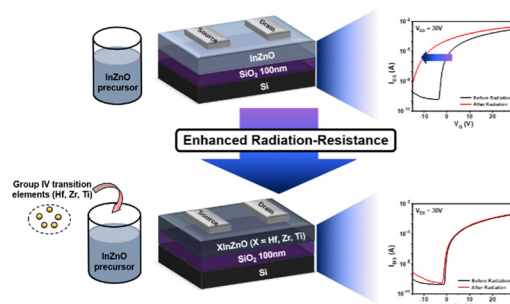
Haichuan Mu,* Jingjian Tang, Ruibin Wang,* Min Qian and Qi Guo



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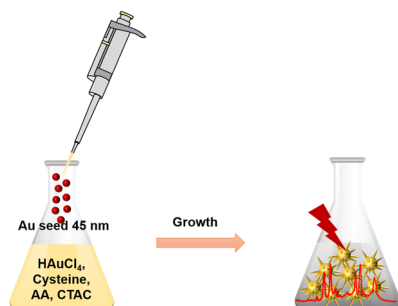
Enhancing radiation-resistance of amorphous indium–zinc-oxide thin-film transistors by group IV transition element doping

Youngseok Kim, Myung-Gil Kim and Choongik Kim*



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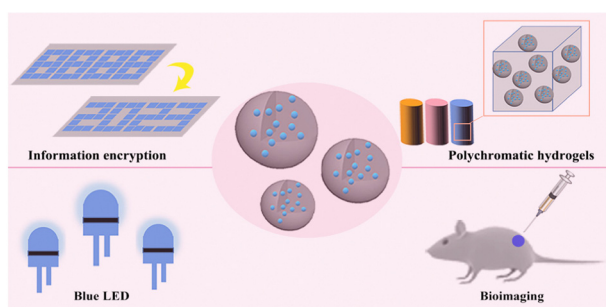
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Facile synthesis of multibranched gold nanostars with precisely tunable sizes for surface-enhanced Raman scattering

Cuixia Bi,* Zhixiu Wang, Hongyan Zhao and Guangqiang Liu*

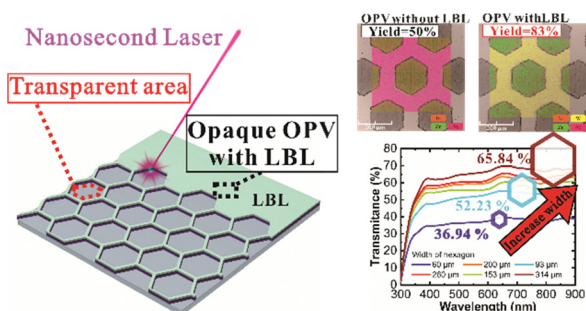
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Developing single silane-derived delayed fluorescent carbon dots as donors for energy transfer-based aqueous-phase multicolor afterglow application

Kang Shao,* Hongxi Zhang, Qingqing Ling, Wuyan Xie, Danyu Gu, Yuanjie Teng, Xiufang Yuan, Shiyi Ye* and Zaifa Pan*

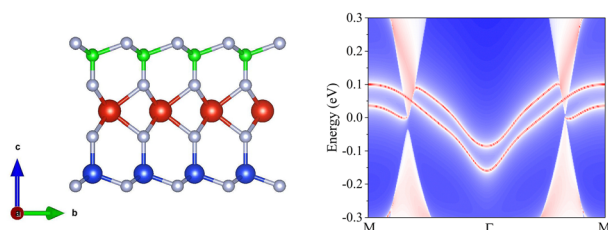
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Transparent organic photovoltaics with a tungsten oxide buffer layer fabricated by nanosecond laser processing for color-neutral performance

I-Sheng Hsu, Chih-Chien Lee,* Abdul Khalik Akbar, Kasimayan Uma and Shun-Wei Liu*

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Strain-engineering induced topological phase transitions and multiple valley states in Janus monolayer VCSiN₄

Kang Jia, Xiao-Jing Dong, Sheng-Shi Li, Wei-Xiao Ji and Chang-Wen Zhang*



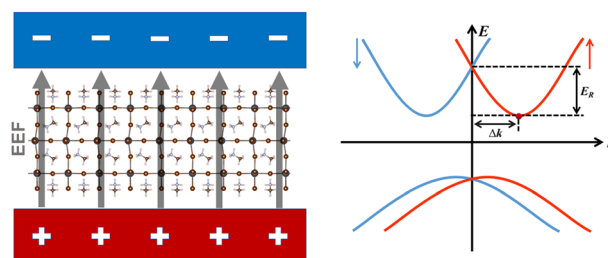
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The impact of an external electric field on the Rashba effect in two-dimensional hybrid perovskites

Beichen Liu, Huaxiong Gao, Chaoying Meng and Honggang Ye*

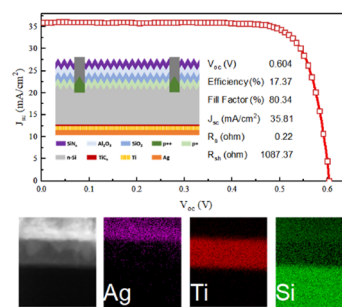
The impacts of external electric fields on the Rashba effect in 2D HOIPs



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Temperature and environmentally stable titanium carbide as an electron-selective heterocontact for crystalline silicon solar cells

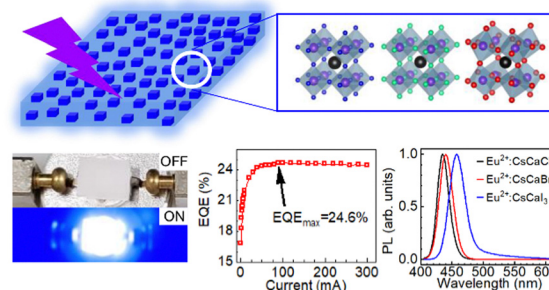
Yang Ding, Zhiping Huang, Deyuan Wei,* Jingwei Chen, Biao Sun, Chong Di, Jianming Wang, Kangping Zhang, Ying Xu* and Guangsheng Fu*



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$\text{Eu}^{2+}:\text{CsCaX}_3$ ($\text{X} = \text{Cl}, \text{Br}, \text{I}$) perovskite nanocrystals in glasses for blue light-emitting applications

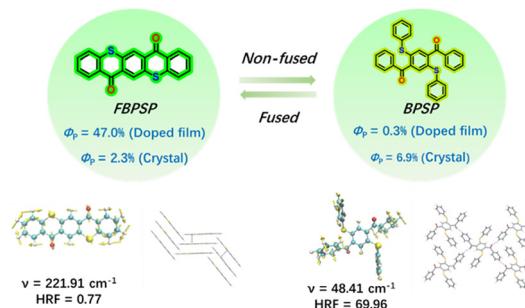
Yudong Zhang, Zhao Deng, Kai Li, Ying Ye and Chao Liu*



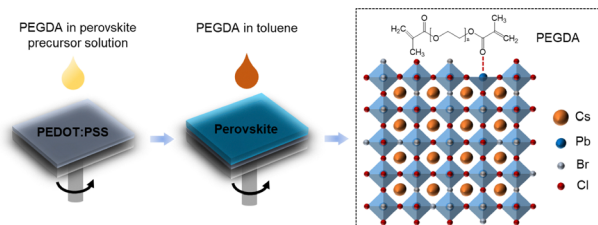
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Suppression of nonradiative transitions of triplet excitons via a fused/non-fused strategy for realizing efficient room-temperature phosphorescence

Haiyang Shu, YuLu Liu, Liang Chen, Zhiqiang Cheng, Xin Wang, Xiaofu Wu, Hui Tong* and Lixiang Wang*



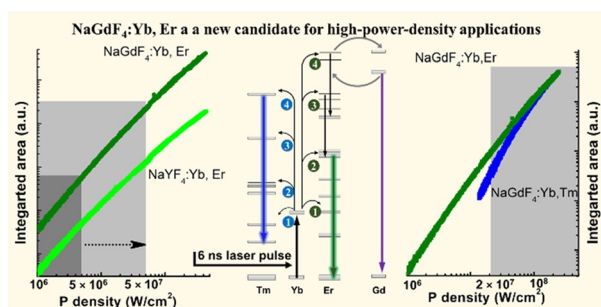
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Enhanced efficiency and stability of blue perovskite light-emitting diodes through dual defect passivation

Xiaoying Bi, Xiao Yang, Shuang Xu, Yunfang Tong, Xiaopeng Liang, Yang Nan, Lin Zhu, Nana Wang* and Jianpu Wang*

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Gd–Er interaction promotes NaGdF₄:Yb, Er as a new candidate for high-power density applications

Daniel Avram,* Andrei A. Patrascu, Marian Cosmin Istrate and Carmen Tiseanu*

