

Journal of Materials Chemistry C

Materials for optical, magnetic and electronic devices

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ISSN 2050-7526 CODEN JMCCCC 13(20) 9899-10438 (2025)



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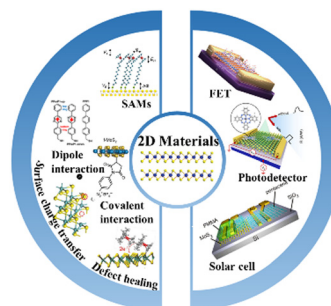
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Molecular engineering of polarity control in two-dimensional materials for optoelectronic applications

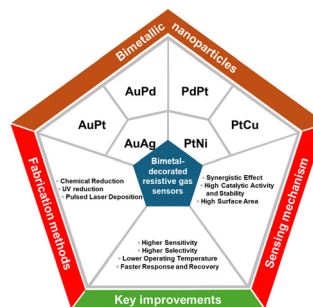
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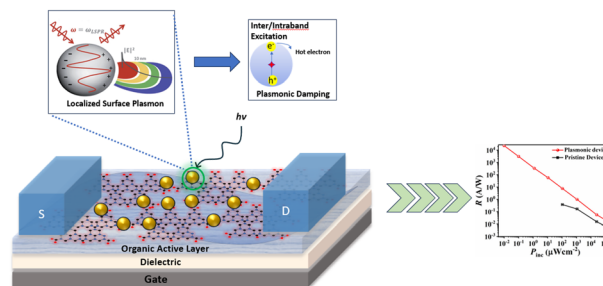
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Plasmon-enhanced organic field effect transistors

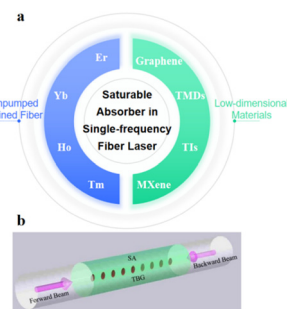
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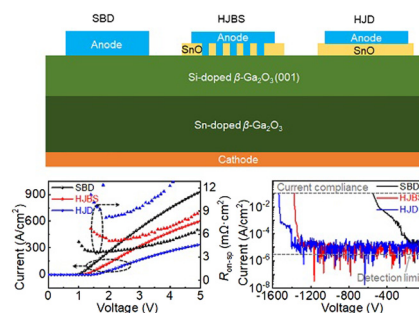


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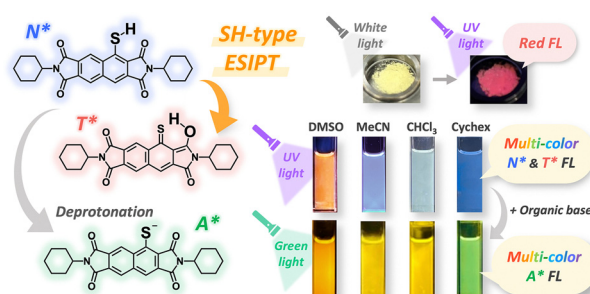
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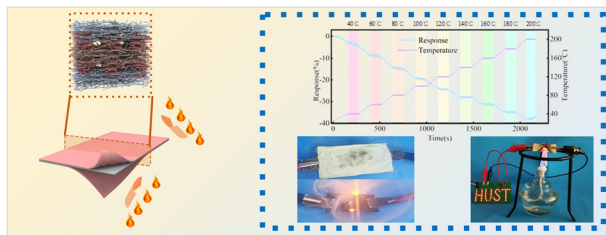
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Yuka Ando, Marina Doi, Haonan Liu and Shinji Ando*



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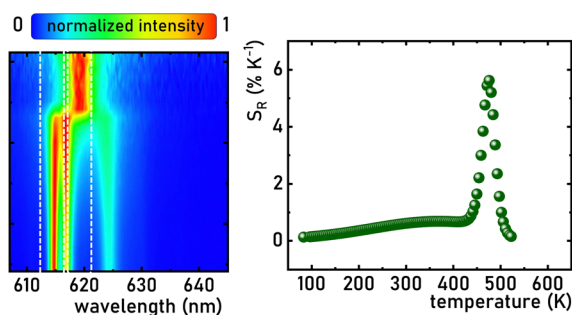
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LEGO[®]-inspired assembly strategy for fabricating BN-CNT-BN multilayer Kevlar-based composites as high-performance temperature sensors and fire alarms

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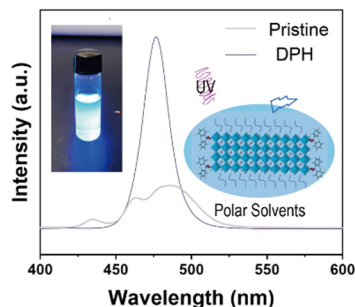
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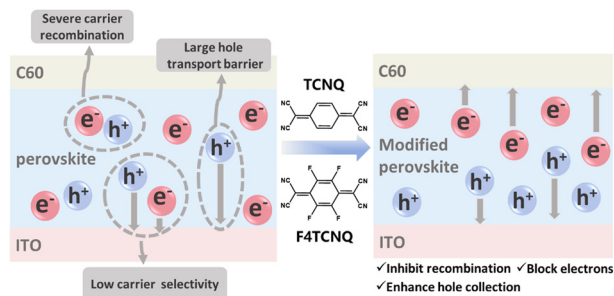
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Yuanyuan Li, Xiao Wang, Jidong Deng, Qingming Huang, Kun Wei, Yinhu Gao, Yuliang Che, Xiaofeng Li, Ye Yang, Xiaoli Zhang,* Jinbao Zhang and Li Yang*

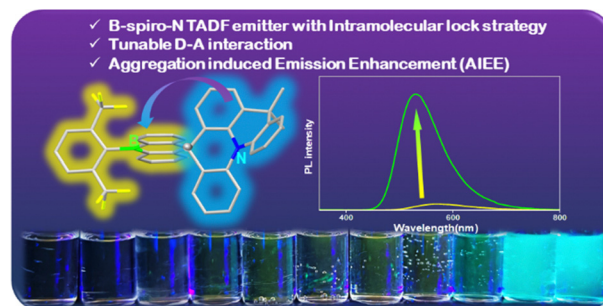


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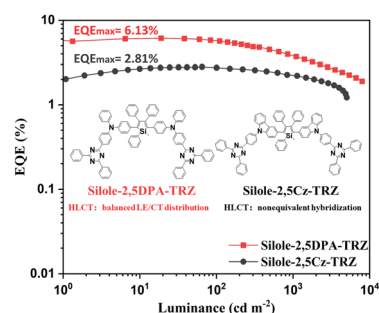
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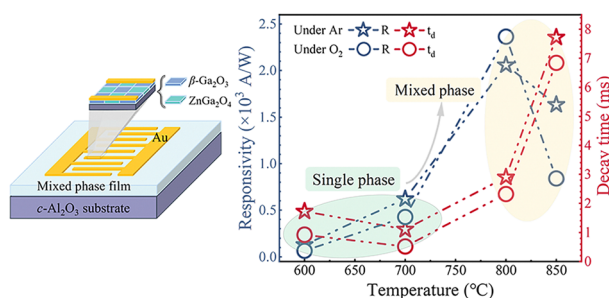
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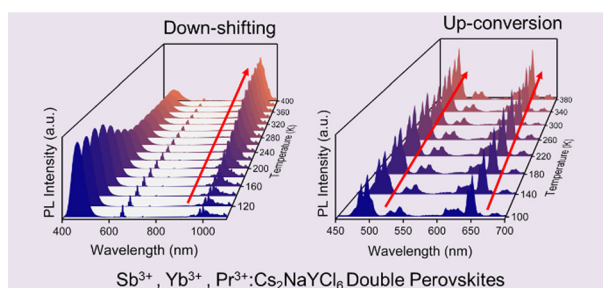
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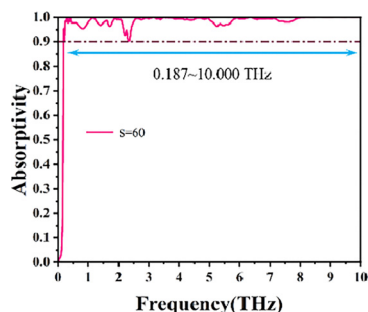
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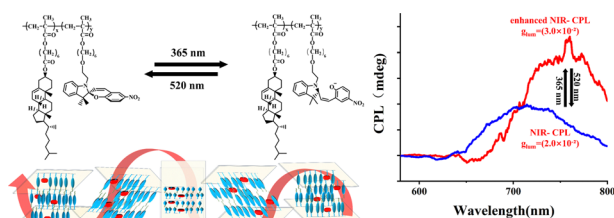
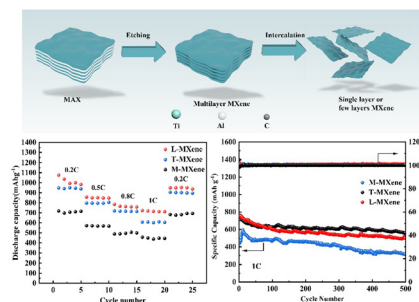


Photo-responsive near-infrared circularly polarized luminescent liquid crystal copolymers

Yongjie Hu, Mengdie Zhou, Xincan Wang, Qin Gui, Yongjie Yuan* and Hailiang Zhang*

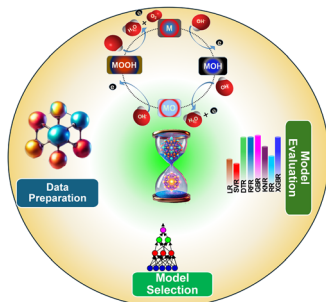
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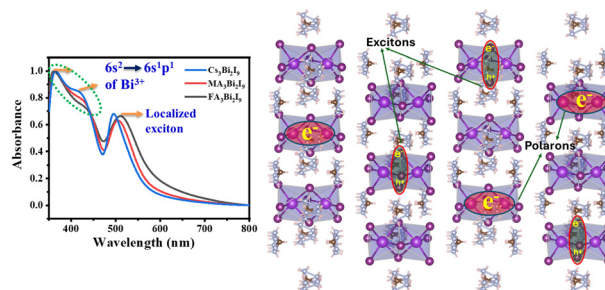
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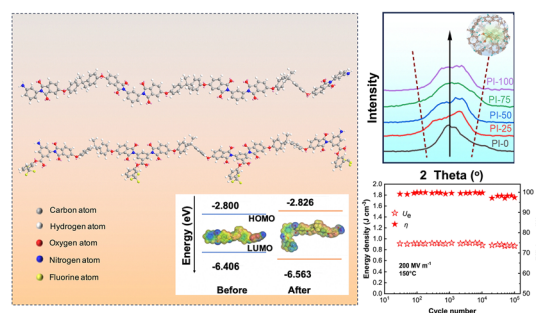
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High-temperature energy storage capability of flexible polyimide with a fluorinated pendant group

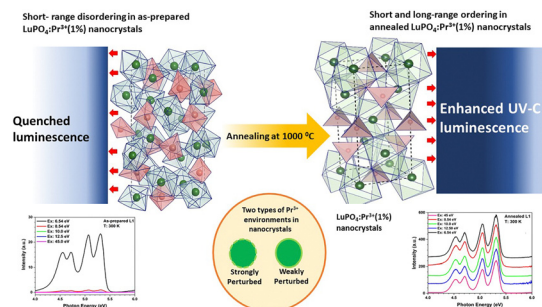
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Impact of crystallinity and local disorder on the luminescence properties of solvothermally synthesized LuPO₄:Pr³⁺ nanocrystals

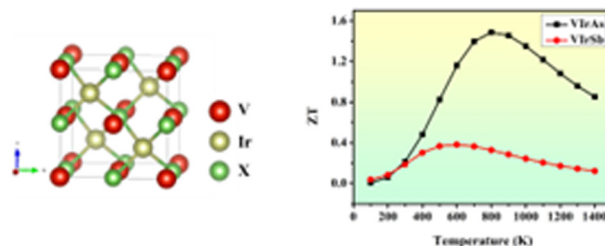
Sanu Bifal Maji,* Alexander Vanetsev, Vitali Nagirnyi, Kirill Chernenko, Eduard Feldbach, Jekaterina Kozlova, Hugo Mändar, Ivo Romet, Mihkel Rähn and Marco Kirm



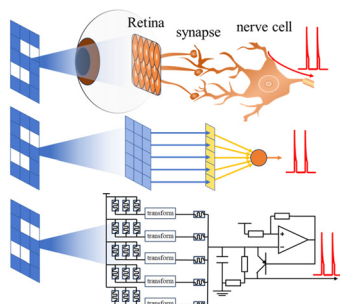
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Prodigious half Heusler alloys VIrX (X = As and Sb) for waste heat recovery systems and spintronics applications – unravelled by DFT

Hannah Jeniffer I. and Punithavelan N.*



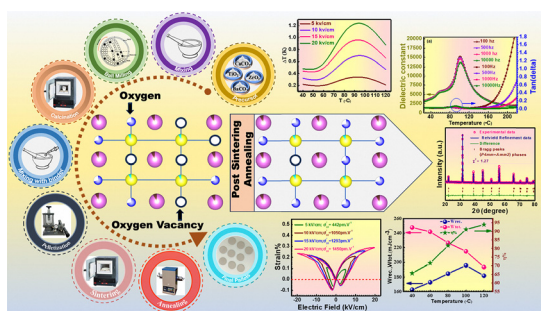
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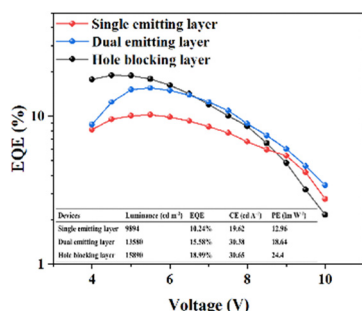
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Impact of oxygen vacancy reduction on the dielectric, energy storage, and electrocaloric properties of annealed BCZT ceramic

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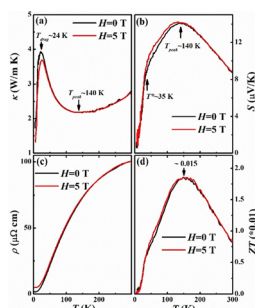
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Enhancing the efficiency of blue organic light-emitting diodes by using a dual emitting layer structure

Bin Cheng, Gang Liu, Qing Sun, Shaocong Duan, Jinxiang Ling, Bo Shen, Die Hu, Bonan Kang* and S. Ravi P. Silva

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Large magnetoresistance and thermoelectric properties of a quasi-skutterudite Ca₃Pt₄Sn₁₃ single crystal

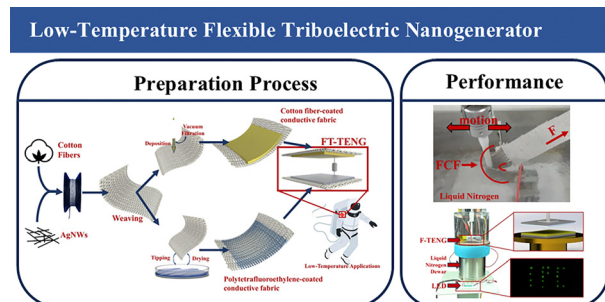
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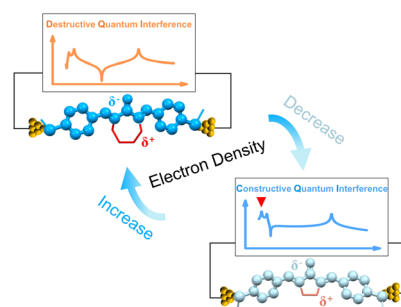
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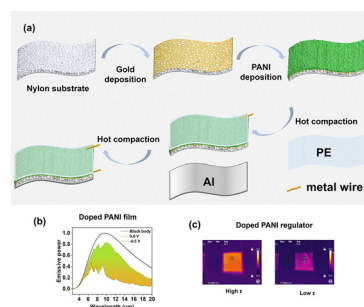
Jiao-Yang Liu, Hui-Xin Li, Yun-Long Ge, Kai Qu, Fei Chen, Zhong-Ning Chen, Zong-Liang Li* and Qian-Chong Zhang*



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Improved infrared emissivity modulation of polyaniline based on various metal compound doping strategies

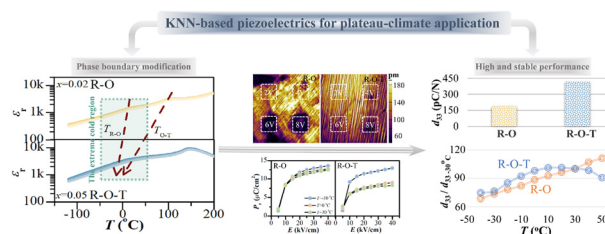
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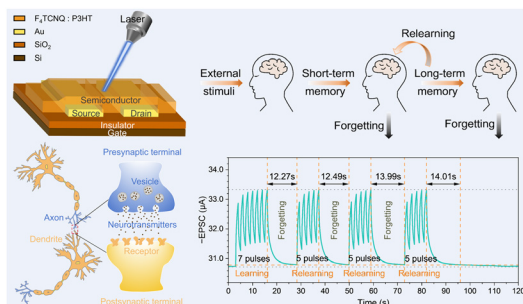
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High piezoelectric performance in KNN-based ceramics with multiphase coexistence for plateau climate applications

Hong Tao,* Chen Liao, Zixin Liu, Bo Wu, Chunlin Zhao, Wenjuan Wu, Lin Zhao and Jian Ma



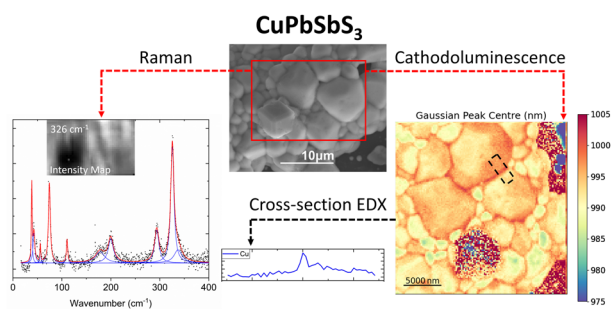
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Extending the light response range of organic photoelectric synaptic transistors by p-doping

Jie Huang, Shunhong Dong and Qingdong Zheng*

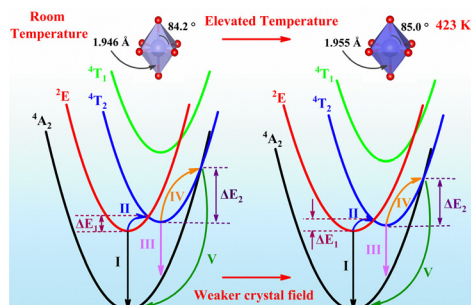
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Correlative spectroscopy mapping of the prospective photovoltaic material bournonite using Raman and cathodoluminescence

O. M. Rigby,* C. Hill, G. Kusch, M. Guennou, M. Szablewski, R. A. Oliver, L. Wirtz, P. Dale and B. G. Mendis*

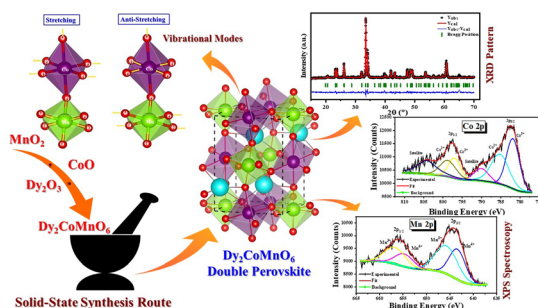
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Efficiency optimization of $\text{BaY}_2\text{Al}_{2-y}\text{Sc}_y\text{Ga}_2\text{SiO}_{12}:x\text{Cr}^{3+}$ garnet phosphors with sustained anti-thermal quenching behavior

Haiyan Shi, Yan Yuan, Desheng Yin, Xiaohong Zhang, Pengbo Lyu,* Changfu Xu* and Lizhong Sun*

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Experimental and DFT analysis of antisite disorder and Griffiths phase in $\text{Dy}_2\text{CoMnO}_6$: structural, electronic, and magnetic insights

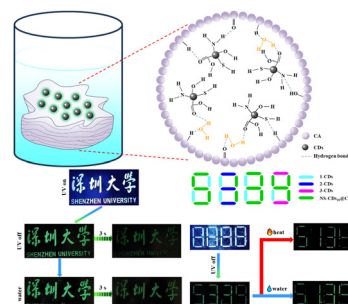
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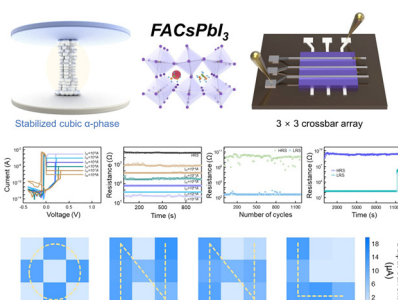
Shuai Ye, Shujian Ji, Minghao Kang, Liwei Liu, Junle Qu, Jiaqing Guo* and Jun Song*



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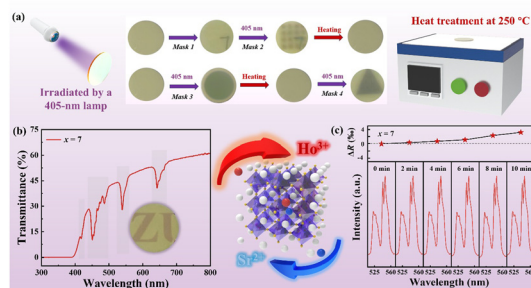
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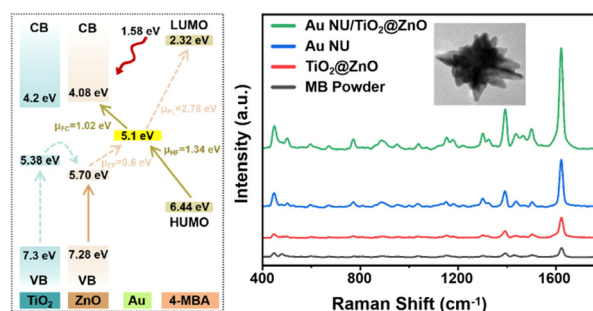
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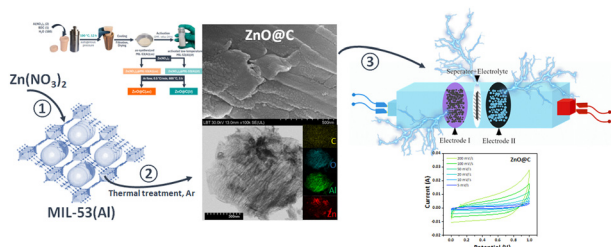
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A novel metal–semiconductor SERS self-cleaning system with synergistic effects for highly sensitive detection of pollutants

Junnan Wang, Zeyu Wang,* Jindou Shi, Chen Zhang, Qin Yao, Yun Zhou, Zheyuan Da, Arshad Saleem Bhatti and Minqiang Wang*



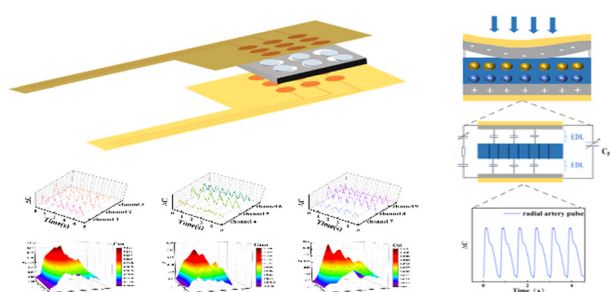
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Zinc oxide-decorated MIL-53(Al)-derived porous carbon for supercapacitor devices

Arpad Mihai Rostas, Ahmet Gungor, Angela M. Kasza, Feray Bakan Misirlioglu, Alexandru Turza, Lucian Barbu-Tudoran, Emre Erdem* and Maria Mihet*

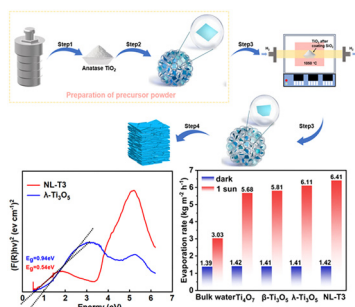
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A flexible pressure sensor array based on an ionic gel for pulse detection

Tong Song, Jie Liang, Xiling Shi* and Zhidong Zhang*

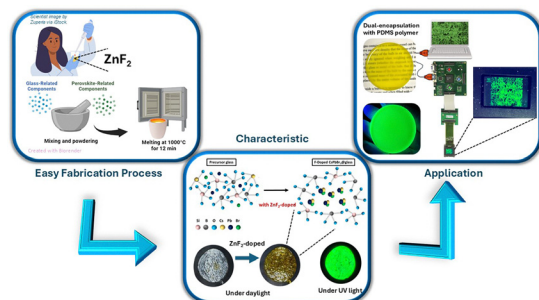
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Efficient solar steam generation enabled by nanolamellar λ - Ti_3O_5 based on designing the bandgap through morphology modulation

Tingting Yuan, Yudong Wang, Na Jin and Jinwen Ye*

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ZnF_2 modulation of a CsPbBr_3 @glass composite: a heat treatment-free approach to reach stable and bright green emission for backlight display devices

Sadaf Samiei, Gholamreza Nabiyouni,* Ehsan Soheyli* and Jean-Michel Nunzi

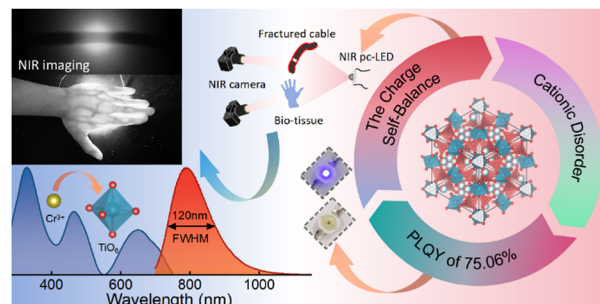


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Efficient near-infrared luminescence in a $\text{Na}_2\text{CaTi}_2\text{Ge}_3\text{O}_{12}:\text{Cr}^{3+}$ garnet for light-emitting-diode applications

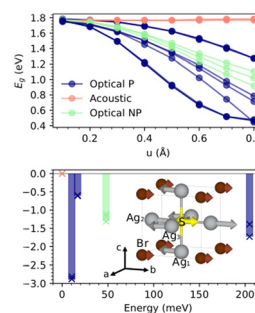
Yi Xu, Xuewan Lin and Jiyong Zhong*



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Giant thermally induced band-gap renormalization in anharmonic silver chalcogenide antiperovskites

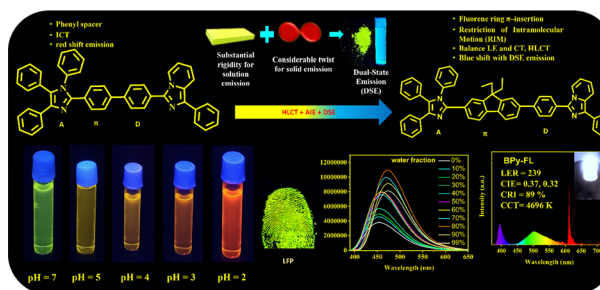
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Imidazo[1,5-a]pyridine–benzimidazole conjugated (donor– π –acceptor) greenish-yellow fluorophores and their applications in white light-emitting diodes, acidochromism and anticounterfeiting

Bhabana Priyadarshini Debata, Sabita Patel* and Sivakumar Vaidyanathan*



CORRECTION

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Correction: Bimetal-decorated resistive gas sensors: a review

Ka Yoon Shin, Yujin Kim, Ali Mirzaei*, Hyoun Woo Kim* and Sang Sub Kim*

