

Journal of Materials Chemistry C

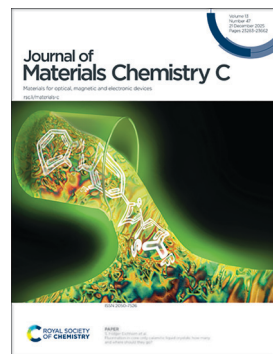
Materials for optical, magnetic and electronic devices

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See S. Holger Eichhorn *et al.*, pp. 23379–23391. Image reproduced by permission of Sophia Egidio from *J. Mater. Chem. C*, 2025, 13, 23379.



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See Paula Mayorga-Burrezo, Imma Ratera *et al.*, pp. 23392–23399. Image reproduced by permission of Paula Mayorga-Burrezo and Imma Ratera from *J. Mater. Chem. C*, 2025, 13, 23392.

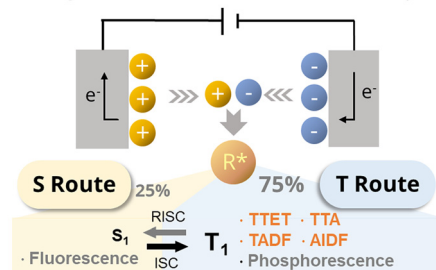
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Enhancing electrochemiluminescence through triplet state dynamics

Jiajia Gao, Badma Dylykov, Zelong Li, Sherwin Chong Li Tan, Yong Yu, Feng Liu, Veronica Gurung and Le Yang*

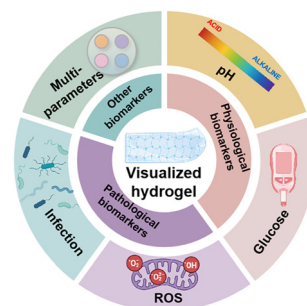
Electrogenerated chemiluminescence (ECL)



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In situ visual monitoring strategies for wound healing based on hydrogel materials

Yufei Zhao, Huangshui Ma, Shaojingya Gao, Jinming Li,* Qiang Sun* and Rui Zhang*



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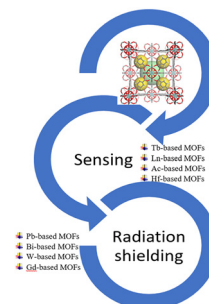


REVIEWS

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In situ degradation and radiation-responsive behavior of metal organic frameworks under high-energy irradiation: implications for sensing and shielding

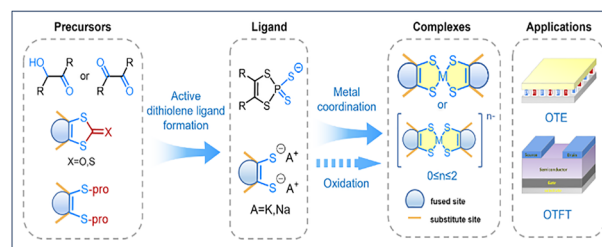
Godwin A. Udourioh, Samuel E. Egga and Moses M. Solomon*



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Metal bis(dithiolene) complexes with one dimensional structure: synthesis and application

Meiling Liu, Yunfeng Deng* and Yanhou Geng

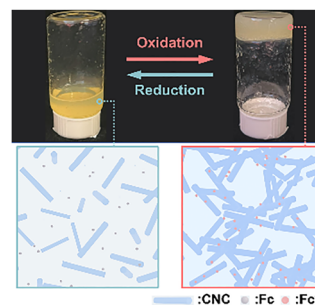


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Redox-switchable gelation of unmodified cellulose nanocrystals

Yota Neagari, Zongzhe Li and Mark J. MacLachlan*

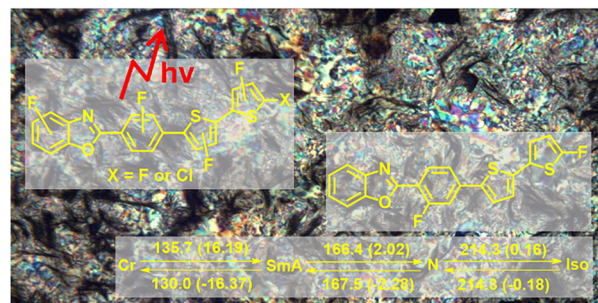


PAPERS

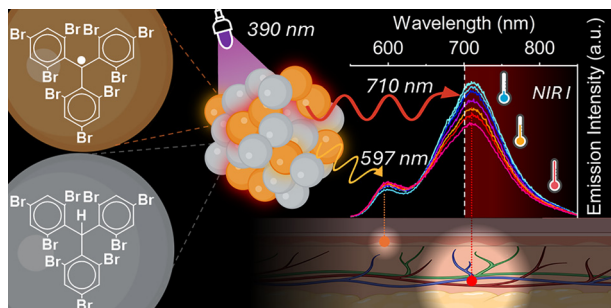
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Fluorination in core-only calamitic liquid crystals: how many and where should they go?

Jacob G. Rothera, Reem Bazzi, Lara K. Watanabe, Jeremy M. Rawson, A. Mohan Raj, William G. Skene and S. Holger Eichhorn*



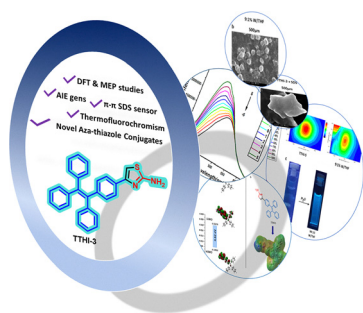
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Brominated trityl radical nanoparticles: metal-free ratiometric nanothermometer with near-infrared excimeric emission in water

Nerea Gonzalez-Pato, Giovanni Schievano, Pau Armada, Jesús Cerdá, Davide Blasi, Juan Aragón, Jaime Veciana, Paula Mayorga-Burrezo* and Imma Ratera*

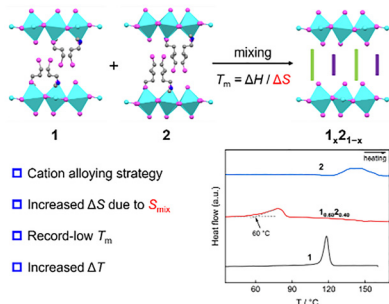
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π - π -Driven aggregation-induced emissive aza-thiazole: a selective fluorescent sensor for anionic surfactants

Rameshbabu Ajaydev, Murugesan Preethi and Sivakumar Shanmugam*

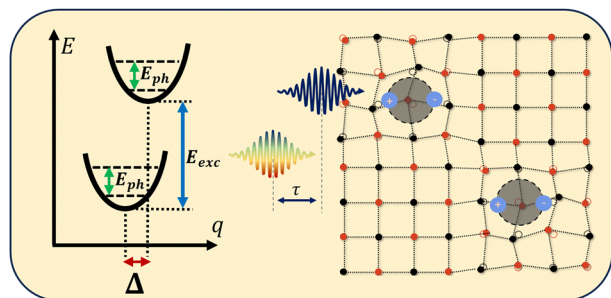
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Alloying strategy enables record-low melting temperature in 2D metal halide perovskites

Fei-Yang Li, Cheng-Dong Liu, Wei Wang, Chang-Chun Fan, Shu-Yin Jia, Rui Zuo, Chao-Yang Chai* and Wen Zhang*

23416



Structure–property relationships for exciton polarons in organic–inorganic hybrid materials

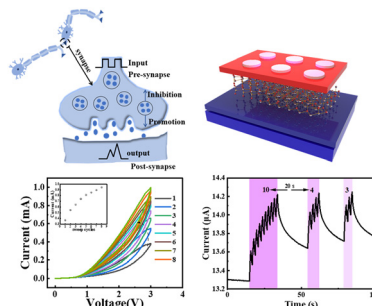
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Ultralow-energy consumption SnSe/ZnO heterojunction artificial optoelectronic synaptic devices towards ultraviolet optical communication applications

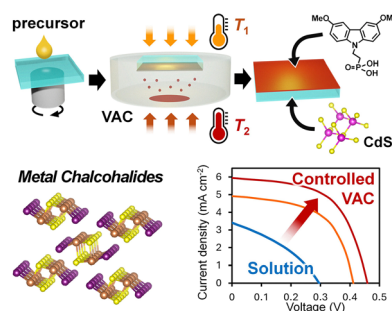
Shuangshuang Li, Yunjie Liu, Jiang Li, Fuhai Guo, Mingcong Zhang, Jianyu Jiang, AnKai Sun and Lanzhong Hao*



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A chemical vapor-assisted highly crystalized SbSI solar cell and a photodetector with bifacial passivation to mitigate the charge transport loss

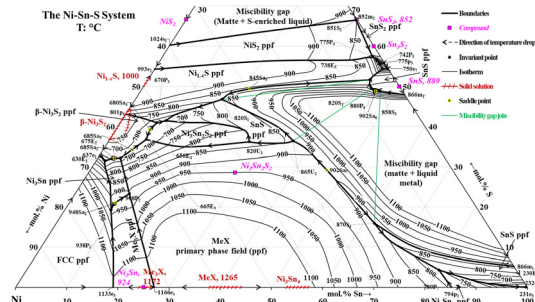
Shosuke Murayama, Ryosuke Nishikubo,* Tai Kobayashi and Akinori Saeki*



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The experimental phase equilibria studies of the Ni–Sn–S system

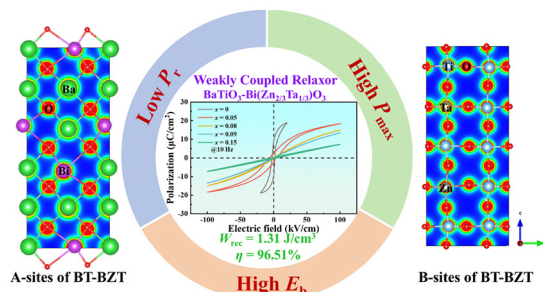
Modassir Akhtar,* Maksym Shevchenko, Georgii Khartcyzov, Svetlana Sineva, Roman Starykh and Evgueni Jak



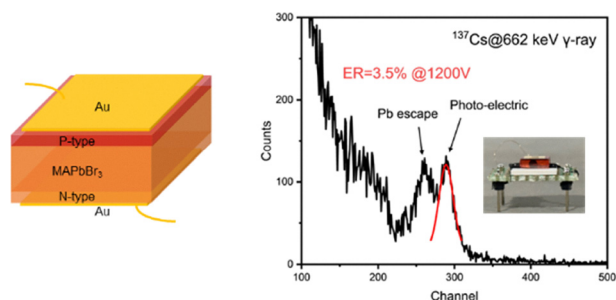
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Boosting low-field energy storage performance in a weakly coupled lead-free ergodic relaxor of BaTiO₃–Bi(Zn_{2/3}Ta_{1/3})O₃

Zenghui Liu,* Hangyu Zhou, Hao Li, Zhenjun Shao, Zifan Hou, Ruihua An, Yunjian Cao, Yiran Wang, Jiawei Yu, Xiang Lu, Lei Zhang, Yongping Pu, Jinyan Zhao, Gang Niu, Wei Ren and Zuo-Guang Ye



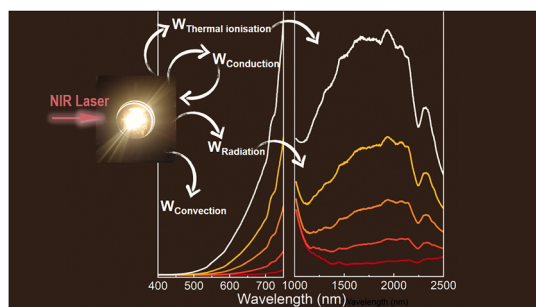
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Solution-processed epitaxial growth of PIN photodiodes made of MAPbBr₃ single crystals for high energy resolution gamma-ray spectroscopy

Ziyi Liu, Xin Wang* and Wei Lei*

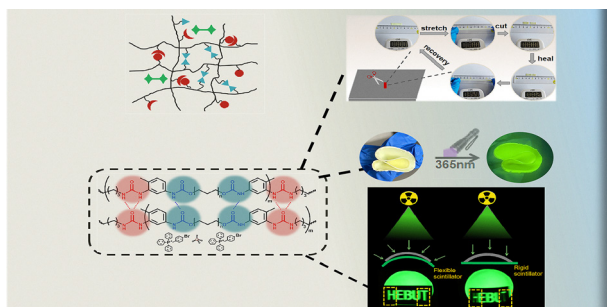
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Above and beyond the laser-induced anti-Stokes broadband white light emission in rare-earth-manganese perovskites

Talita J. S. Ramos,* Ágata Musialek, Robert Tomala and Wiesław Stręk

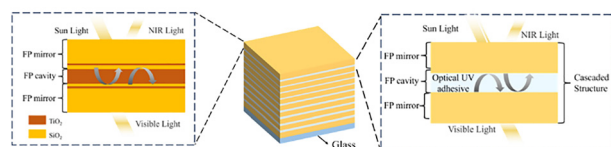
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Self-healing scintillator films consisting of hybrid manganese bromides for non-planar X-ray imaging

Ranran Li, Di Zhao and Yige Wang*

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Structural design and performance evaluation of a high-transparency thermal insulation film suitable for multiple scenarios

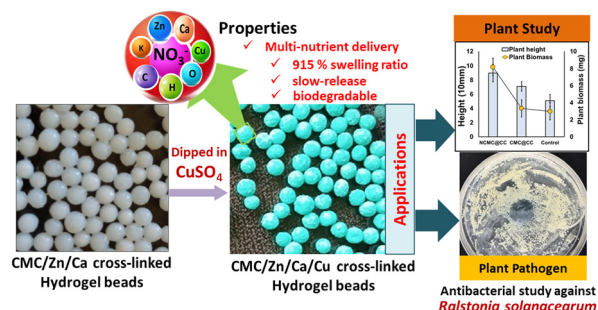
Zhe Zhang, Chao Zhang, Yuxiang Zhao, Hongyun Xing, Shihao Yang, Jianhua Ji, Wang Zhang* and Wanlin Wang*



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Biodegradable CMC/Zn/Ca/Cu cross-linked novel superabsorbent hydrogel bead for plant pathogen prevention and agricultural applications

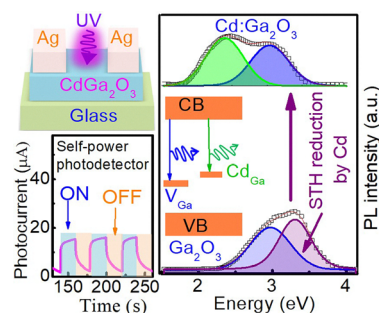
Madhusmita Baruah, Rimjim Gogoi, Tanmoy Karak, Sangita Bharali, Anurag Kashyap and Jiban Saikia*



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Cadmium defect-induced modulation of hole self-trapping in monoclinic gallium oxide for optoelectronic applications

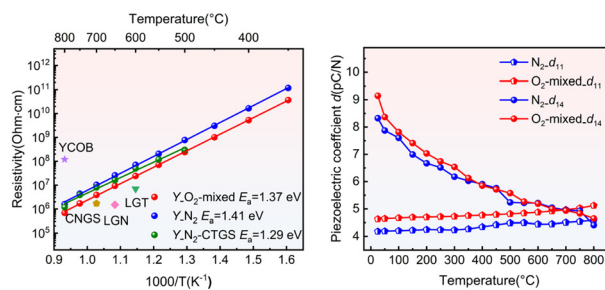
Tasfia Chowdhury, Rahima Khatun, Md. Rabiur Rahaman and M. Azizar Rahman*



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Electro-elastic features of $\text{Ca}_3\text{Ta}(\text{Ga}_{0.7}\text{Al}_{0.3})_3\text{Si}_2\text{O}_{14}$ single crystals grown in different atmospheres

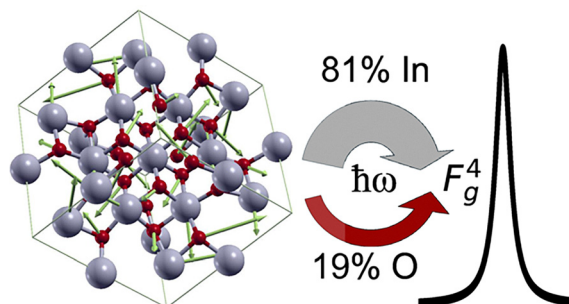
Dongyang Tian, Xiangkang Peng, Zijian Liu, Guoliang Wang, Yuzhen Li, Yanan Li and Fapeng Yu*



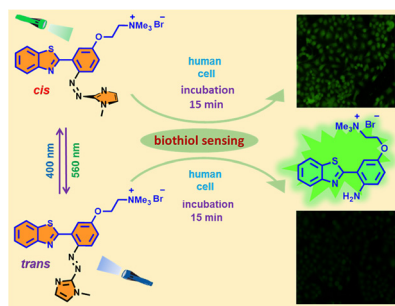
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Unravelling the oxygen influence in cubic bixbyite In_2O_3 on Raman active phonon modes by isotope studies

Johannes Feldl, Roland Gillen, Janina Maultzsch, Alexandra Papadogianni, Joe Kler, Zbigniew Galazka, Oliver Bierwagen* and Manfred Ramsteiner



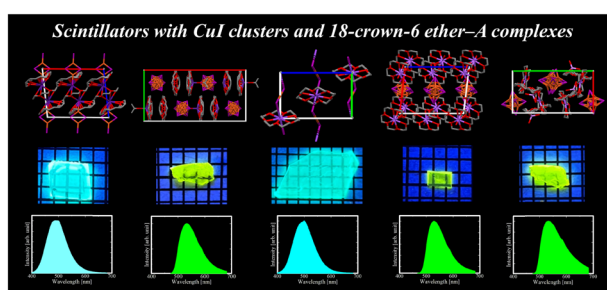
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An arylazoimidazole-based photoswitchable probe allowing visible-light-triggered rapid detection and imaging of live-cell biothiols *via* fluorophore release

Sk Majid Box, Santosh Kumar Jana, Satyajit Bera, Supriya Bhunia, Sukhendu Mandal and Subhas Samanta*

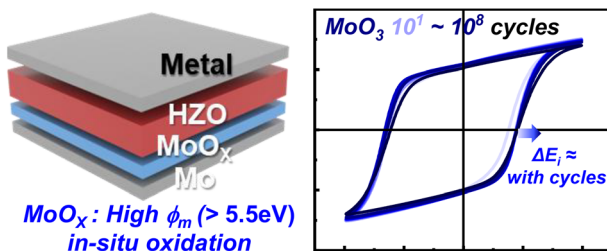
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Development of organometallic single-crystal scintillators with CuI clusters and 18-crown-6 ether-alkali metal complexes

Keishi Yamabayashi,* Kai Okazaki, Daisuke Nakauchi, Shohei Katao, Junko Kamikubo, Takumi Kato, Noriaki Kawaguchi and Takayuki Yanagida

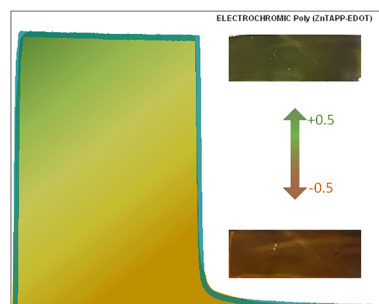
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Interface engineering of oxidized Mo electrodes for imprint stability and enhanced endurance in hafnia-based ferroelectric devices

Junghyeon Hwang, Chaeheon Kim, Geonhyeong Kang, Yongsu Kim, Jinho Ahn* and Sanghun Jeon*

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Ultrafast ambipolar switching in electrochromic copolymer thin films of zinc(II) tetrakis(4-aminophenyl)porphyrin – 3,4-ethylenedioxythiophene

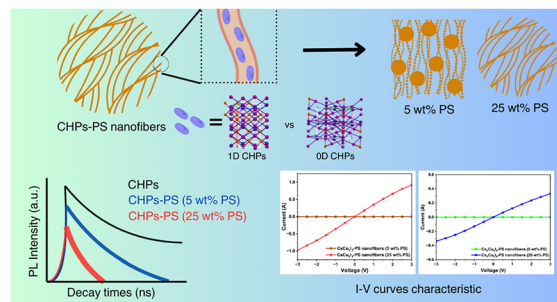
Sachin Kochrekar,* Subrahmanyam Sappati, Plawan Kumar Jha, Ermei Mäkilä, Ashwini Jadhav, Pia Damlin, Mikko Salomäki and Carita Kvarnström*



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Optical and electrical characteristics of lead-free Cu-based halide perovskites in electrospun polystyrene nanofibers

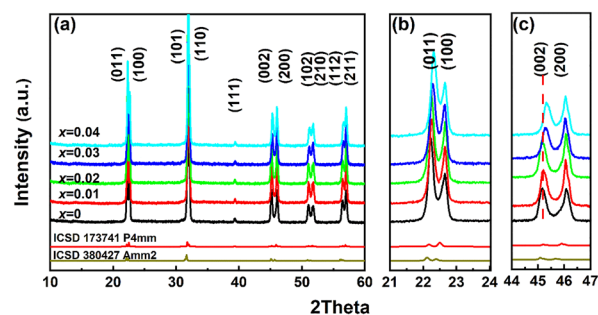
Vito Bintang Saputra, Tobias Haposan, Dominik Kowal, Pramudita Anindita Prakasa Tanaya, Wulan Chairunisa, Sri Hartati, Lei Zhang, Joko Suwardy, Nandang Mufti, Akmal Zulfi, Lina Jaya Diguna,* Ismudiati Puri Handayani, Muhammad Danang Birowosuto, Witri Wahyu Lestari* and Arramel Arramel*



23601

Promoting polar rotation *via* antimony doping to enhance the pyroelectric performance of lead-free potassium sodium niobate ceramics

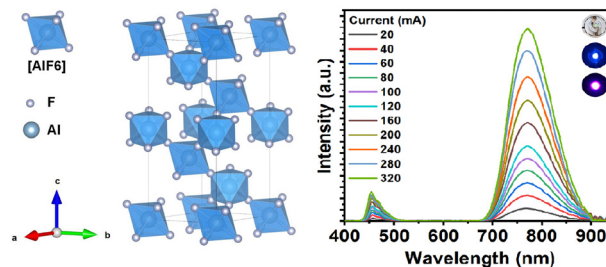
Cong Su, Hua Hao, Shangshu Li, Zhonghua Yao, Minghe Cao and Hanxing Liu*



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A novel $\text{AlF}_3:\text{Cr}^{3+}$ NIR phosphor with high thermal quenching stability for advanced pc-LEDs

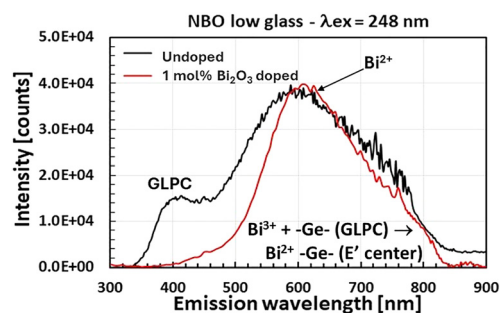
Wenqiang Li, Qihao Li, Yuehua Chen, Cailing Liu, Wenjing Zhong, Xiang Zhang, Yayun Zhou,* Tingting Deng,* Jiantao Lü and Ting Fan*



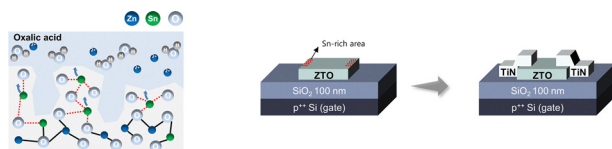
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Bismuth-doped soda aluminogermanate glass part I: examination of the role of Na/Al atomic ratio on the glass matrix and bismuth luminescence properties in the 300–900 nm spectral range

Leanne J. Henry,* Michael L. Klopfer, Joshua D. Reding and Kathleen A. Richardson



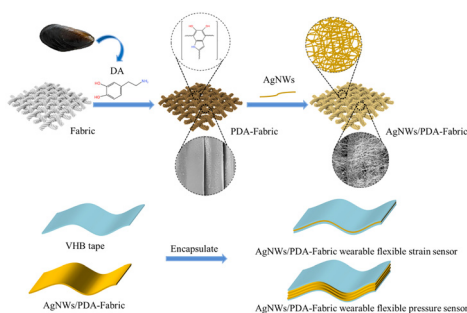
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Wet etching of atomic-layer-deposited amorphous zinc–tin–oxide thin film using oxalic acid

Seo Young Jang, Jaewon Ham, Yonghee Lee, Sukin Kang, Sahngik Aaron Mun, Jinheon Choi, Juneseong Choi, Seoryong Park, Hyungjeung Kim and Cheol Seong Hwang*

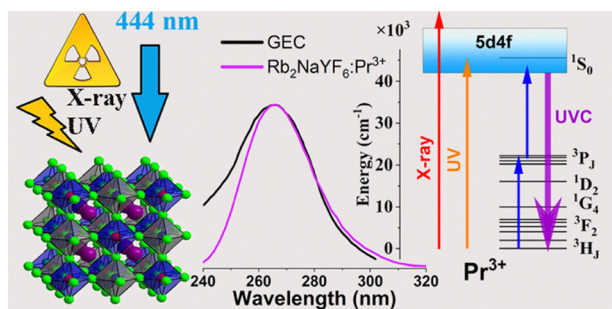
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A mussel-inspired AgNWs/PDA-fabric multifunctional wearable flexible strain/pressure sensor for human motion detection

Lu Zhang,* Yumin Tian, Lei Tian, JingQiu Sun and HaoYang Di

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Luminescence and upconversion properties of a novel ultraviolet-C emitting phosphor: $\text{Rb}_2\text{NaYF}_6:\text{Pr}^{3+}$

Nadiia Rebrova,* Alexander Grippa, Patrycja Zdeb-Stańczykowska, Aleksejs Zolotarjovs, Anatoli I. Popov and Przemysław J. Dereń

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Correction: Mechanofluorochromism and self-recovery of alkylsilylpyrene-1-carboxamides

Yuichi Hirai,* Anna Wrona-Piotrowicz, Janusz Zakrzewski, Magdalena Ciechańska, Takahito Ohmura, Takashi Takeda, Takayuki Nakanishi, Rémi Métivier* and Clémence Allain*

