

Journal of Materials Chemistry C

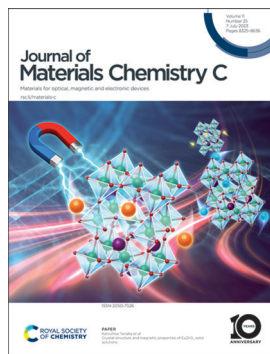
Materials for optical, magnetic and electronic devices

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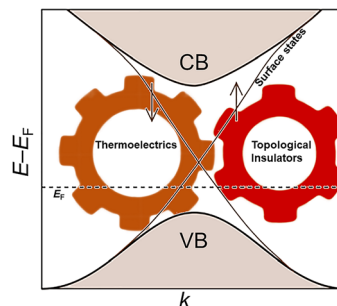
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REVIEWS

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Exploiting the fraternal twin nature of thermoelectrics and topological insulators in Zintl phases as a tool for engineering new efficient thermoelectric generators

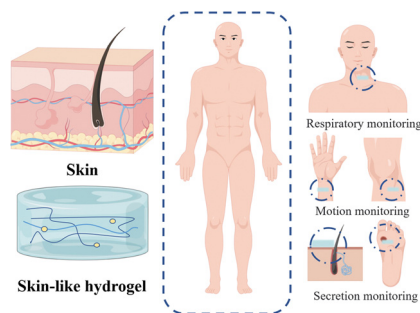
Michael O. Ogunbunmi and Svilen Bobev*



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Skin-like hydrogels: design strategy and mechanism, properties, and sensing applications

Lisha Pu, Hui Wang, Yinan Zhao, Zhiang Yuan, Yunqi Zhang, Junjie Ding, Keyu Qu, Wenzhi Sun, Zhongxin Xue, Wenlong Xu* and Xiyan Sun*



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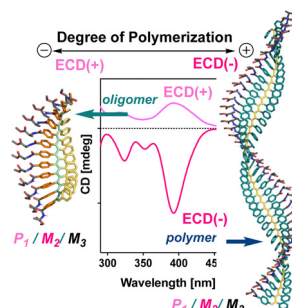


COMMUNICATION

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The role of the degree of polymerization in the chiroptical properties of dynamic asymmetric poly(diphenylacetylene)s

Juan José Tarrío, Berta Fernández, Emilio Quiñoá and Félix Freire*

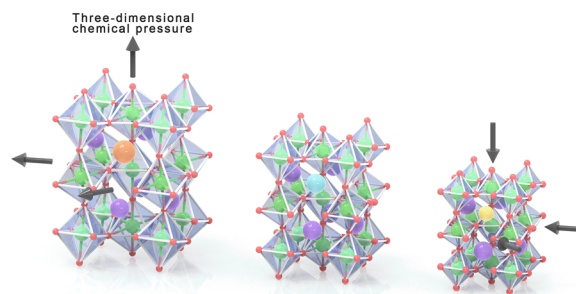


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Crystal structure and magnetic properties of EuZrO_3 solid solutions

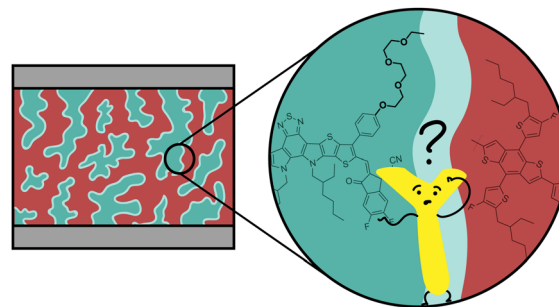
Sihui Li,* Shinya Konishi, Takuya Kito, Koji Fujita and Katsuhisa Tanaka*



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The challenge with high permittivity acceptors in organic solar cells: a case study with Y-series derivatives

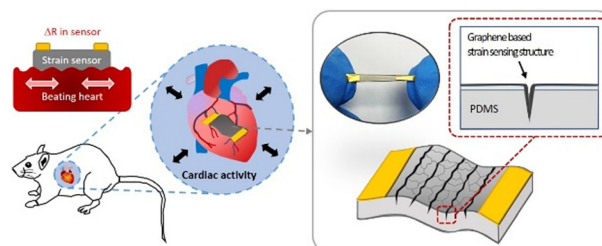
Peter Fürk, Suman Mallick, Thomas Rath,* Matiss Reinfelds, Mingjian Wu, Erdmann Spiecker, Nikola Simic, Georg Haberehner, Gerald Kothleitner, Barbara Ressel, Sarah Holler, Jana B. Schaubeder, Philipp Materna, Heinz Amenitsch and Gregor Trimmel*



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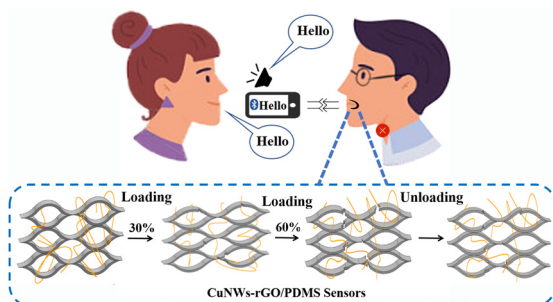
Biocompatible cracked reduced graphene oxide strain sensors: enhancing implantable strain sensing performance and durability

Hyun Joo Lee, Bokyeong Ryu, Dong Keon Lee, Hyung Ju Park, Chul Huh, Dong Ick Son, Dong Han Ha, C-Yoon Kim,* Yongseok Jun* and Yong Ju Yun*



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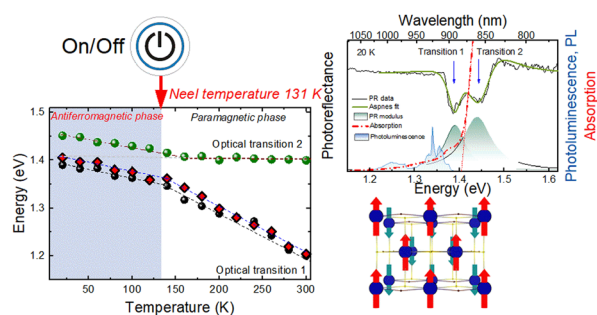
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A highly stretchable and sensitive strain sensor for lip-reading extraction and speech recognition

Lin Cheng, Diqing Ruan, Yongwei He, Jiayao Yang, Wei Qian, Longwei Zhu, Pindie Zhu, Huaping Wu* and Aiping Liu*

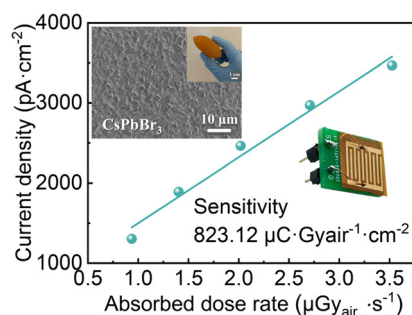
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Optical markers of magnetic phase transition in CrSBr

W. M. Linhart,* M. Rybak, M. Birowska, P. Scharoch, K. Mosina, V. Mazanek, D. Kaczorowski, Z. Sofer and R. Kudrawiec

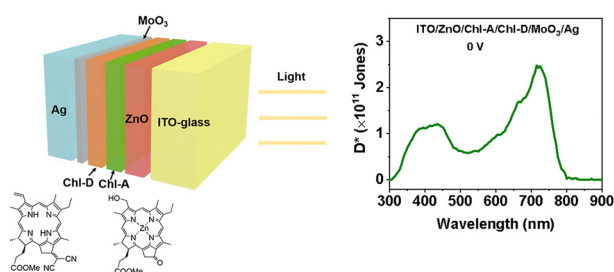
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Electrospray prepared flexible CsPbBr₃ perovskite film for efficient X-ray detection

Sixin Chen, Weiwei Liu,* Meng Xu, Pan Shi and Menghua Zhu*

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Bilayer chlorophyll-based bio-photodetector based on Z-type charge transfer process

Yuting Sun, Ziyang Liu, Yuanlin Li, Tianfu Xiang, Aijun Li, Yuhong He, Haotong Wei, Shin-ichi Sasaki, Hitoshi Tamiaki and Xiao-Feng Wang*

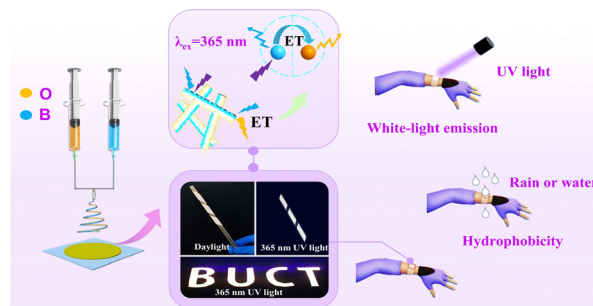


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Flexible Janus-structured porous fluorescent nanofibers with white-light emission

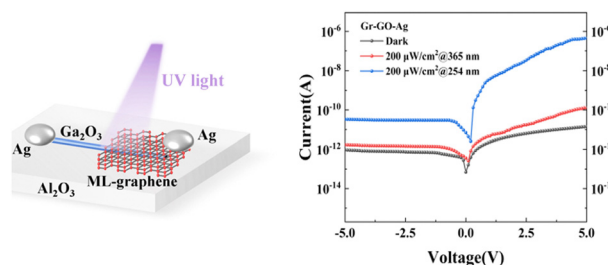
Minghui Zhang, Shikun Zhao, Zhen Qin, Yuhuan Lv, Han Zhu, Biao Zhao* and Kai Pan*



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An enhanced ultrasensitive solar-blind UV photodetector based on an asymmetric Schottky junction designed with graphene/ β -Ga₂O₃/Ag

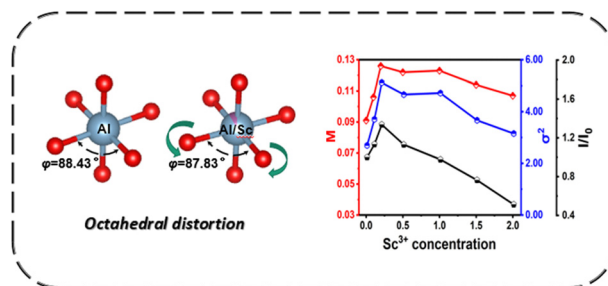
Song Qi, Jiahang Liu, Jianying Yue, Xueqiang Ji, Jiaying Shen, Yongtao Yang, Jinjin Wang, Shan Li,* Zhenping Wu* and Weihua Tang*



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Inducing octahedral distortion to enhance NIR emission in Cr-doped garnet Ca₃(Al, Sc)₂Ge₃O₁₂

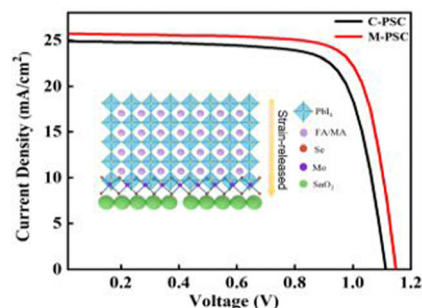
Chuxin Cai, Shengqiang Liu, Fangyi Zhao, Hao Cai, Zhen Song* and Quanlin Liu*



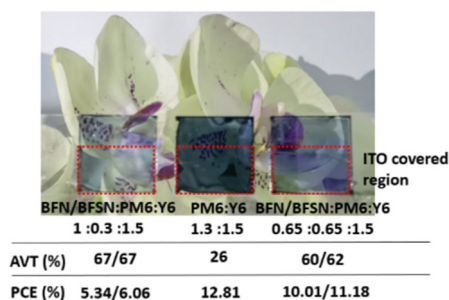
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Pure 2H phase MoSe₂ nanosheets promote the formation of a porous PbI₂ film and modulate residual stress for highly efficient and stable perovskite solar cells

Huimin Yang, Yang Hao,* Jingkun Ren, Yukun Wu, Qinqun Sun, Chenxi Zhang, Yanxia Cui and Yuying Hao*



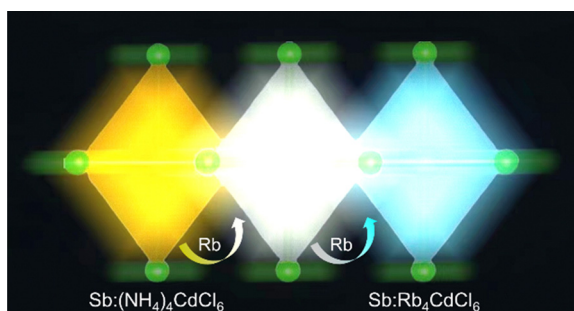
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Semi-transparent organic solar cells based on large bandgap star-shaped small molecules as mixed donors with PM6

Minming Yan, Peter J. Skabara* and Hong Meng*

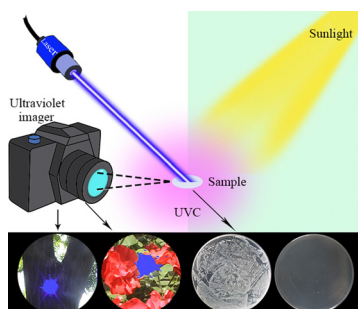
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Highly efficient warm white light emission in Sb^{3+} -doped $(\text{NH}_4)_4\text{CdCl}_6$ metal halides through A-site Rb-alloying regulation

Yilin Gao, Qilin Wei, Tong Chang, Miao Ren, Yunfeng Lou, Zhengjie Tian, Yue Fan, Jiandong Yao, Bingsuo Zou and Ruosheng Zeng*

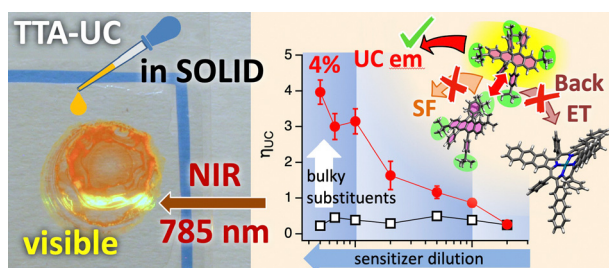
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Multi-response upconverted ultraviolet-C photons for tagging and sterilization

Chunzheng Wang, Leipeng Li,* Pinshu Lv, Lingzhu Zi, Shiji Feng, Furong Yang, Jianrong Qiu and Yanmin Yang*

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Enhancing NIR-to-visible photon upconversion in cast solid by introducing bulky substituents in rubrene and by suppressing back energy transfer

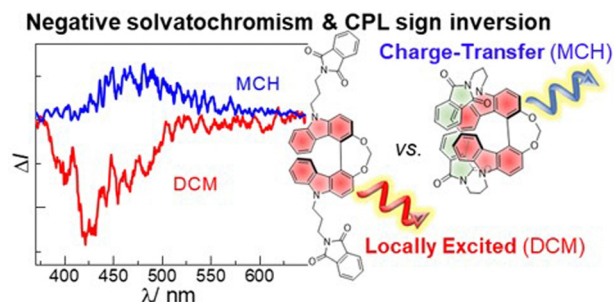
Akane Sawa, Shota Shimada, Neeti Tripathi, Claire Heck, Hiroaki Tachibana, Emiko Koyama, Toshiko Mizokuro, Yasukazu Hirao, Takashi Kubo, Naoto Tamai, Daiki Kuzuhara, Hiroko Yamada and Kenji Kamada*



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Negative solvatochromism and sign inversion of circularly polarized luminescence in chiral exciplexes as a function of solvent polarity

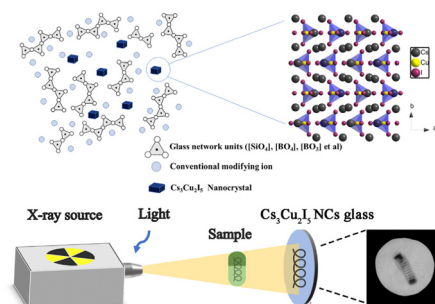
Patthira Sumsalee, Pierpaolo Morgante, Gregory Pieters, Jeanne Crassous, Jochen Autschbach* and Ludovic Favereau*



8524

In situ precipitation of $\text{Cs}_3\text{Cu}_2\text{I}_5$ nanocrystals in inorganic glass with long-term water stability for X-ray imaging

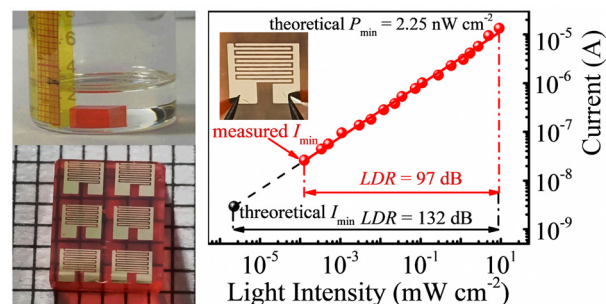
Luoja Huang, Hangtao Ye, Weidong Xiang,* Hongbin Fan* and Xiaojuan Liang*



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Nucleation-controlled growth of high-quality CsPbBr_3 single crystals for ultrasensitive weak-light photodetectors

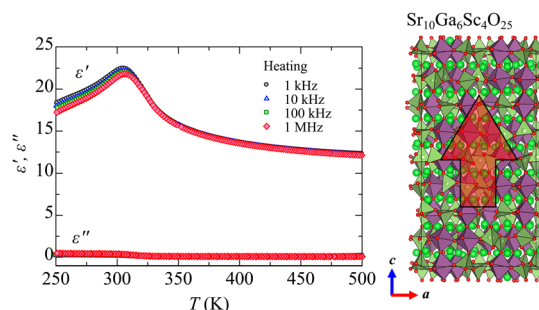
Xiao Zhao, Shimao Wang,* Fuwei Zhuge, Nengwei Zhu, Yanan Song, Mengyu Fu, Zanhong Deng, Xiaodong Fang* and Gang Meng*



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Ferroelectricity in oxygen-deficient perovskite-type oxide $\text{Sr}_{10}\text{Ga}_6\text{Sc}_4\text{O}_{25}$

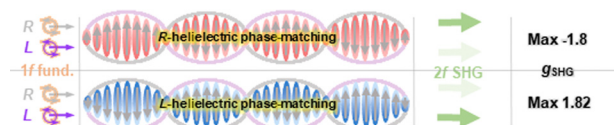
Akitoshi Nakano,* Ichiro Terasaki and Hiroki Taniguchi



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High-*g*-factor phase-matched circular dichroism of second harmonic generation in chiral polar liquids

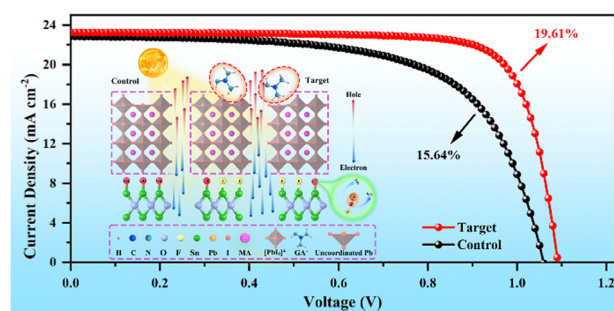
Xiuhu Zhao, Jinxing Li, Mingjun Huang and Satoshi Aya*



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Regulating charge carrier extraction and transport with dual-interface modification for efficient perovskite solar cells

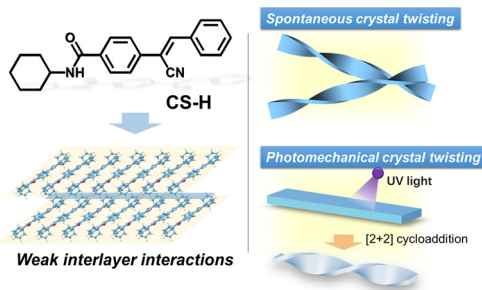
Weitao Ye, Zhentao Du,* Deliu Ou, Jielei Tu, Ming-Hui Shang, Jiahui Zhou, Lin Wang, Weiyou Yang and Zuobao Yang*



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Spontaneous and photomechanical twisting of a cyanostilbene-based molecular crystal

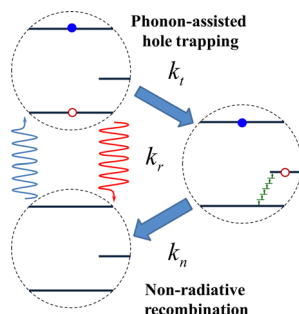
Pengyu Li, Jun Guan,* Min Peng, Junhong Wu and Meizhen Yin*



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A quantitative model of multi-scale single quantum dot blinking

Eduard A. Podshivaylov, Maria A. Kniazeva, Alexander O. Tarasevich, Ivan Yu. Eremchev, Andrei V. Naumov and Pavel A. Frantsuzov*

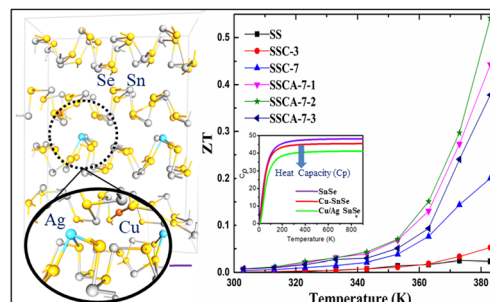


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Effects of codoping on tin selenide nanomaterials to enhance the thermoelectric performance above the ambient temperature range

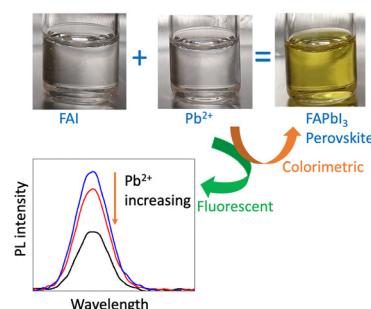
Pinaki Mandal, Soumyajit Maitra, Uday Kumar Ghorui, Prasenjit Chakraborty, Bibhotosh Adhikary and Dipali Banerjee*



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Formamidinium iodide for instantaneous and fluorescent detection of Pb^{2+} in water

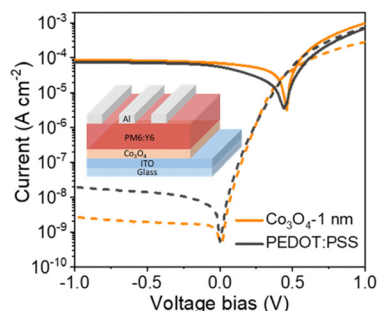
Md Ashiqur Rahman Laskar, Md Tawabur Rahman, Khan Mamun Reza, Abdullah Al Maruf, Nabin Ghimire, Brian Logue and Quinn Qiao*



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Efficient hole extraction and dark current suppression in organic photodetectors enabled by atomic-layer-deposition of ultrathin Co_3O_4 interlayers

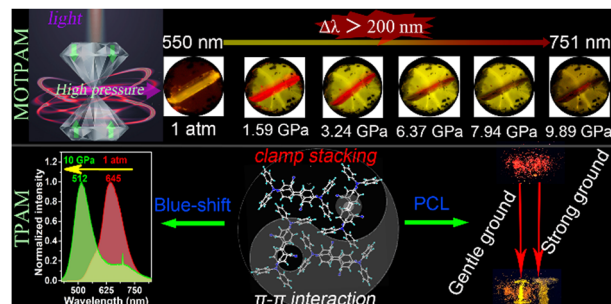
Ke Lu, Yuanhong Gao,* Zhenhui Wang, Xinwei Wang and Hong Meng*



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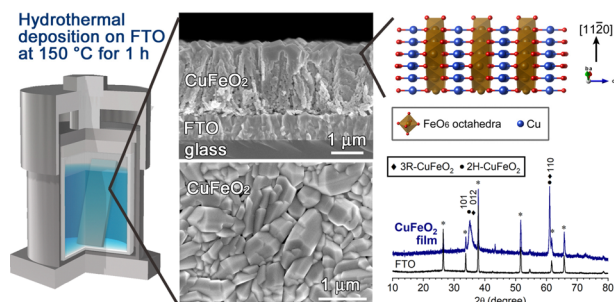
Tunable near-infrared piezochromic luminescence by effective substituent modification of D–A structures

Jianxun Liu, Guoshuai Du, Ning Liang, Li Yang, Yansong Feng,* Yabin Chen* and Chang-Jiang Yao*



PAPERS

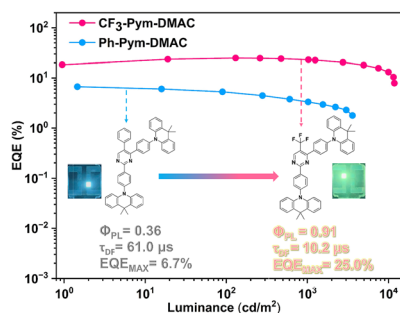
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One-pot hydrothermal synthesis of orientated delafossite CuFeO_2 films from a mildly acidic solution on substrates

Tsutomu Shinagawa,* Wataru Tachibori, Tomoya Nishii and Atsushi Ohtaka

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Boosting emission efficiency and suppressing device-efficiency roll-off for TADF emitters by modulating molecular conformation and intra–intermolecular interactions

Dan Lei, Jin-Hui Song, Ze-Ling Wu, Jia-Xuan Hu, Ya-Shu Wang, Dong-Hai Zhang, Lingyi Meng, Xu-Lin Chen* and Can-Zhong Lu*

CORRECTION

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Correction: In(III)-dictated formation of double $\text{Cs}_2\text{Ag}_x\text{Na}_{1-x}\text{Fe}_y\text{In}_{1-y}\text{Cl}_6$ perovskites

Oleksandr Stroyuk,* Oleksandra Raievska, Anastasia Barabash, Jens Hauch and Christoph J. Brabec

