

Journal of Materials Chemistry C

Materials for optical, magnetic and electronic devices

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Cover

See Yuichi Hirai, Rémi Métivier, Clémence Allain et al., pp. 1952–1957.
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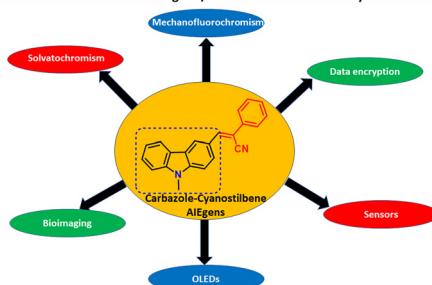
REVIEW

1923

Symphony of light: AIE and MFC in carbazole-based cyanostilbenes

A. Afrin and P. Chinna Ayya Swamy*

"Molecular Brilliance: Unveiling AIE/MFC in Carbazole-Based Cyanostilbenes"

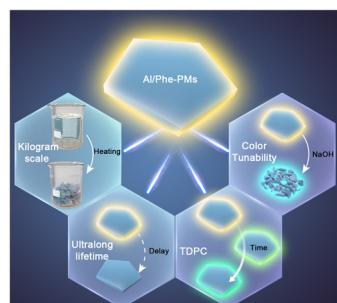


COMMUNICATION

1945

Achieving time-dependent and color-tunable ultralong room temperature phosphorescence through sodiation reconfiguration for dynamic 5D information encryption

Li Ya Liang, Ya Ting Gao, Shuai Chang, Jian Lv, Bin Bin Chen* and Da Wei Li*



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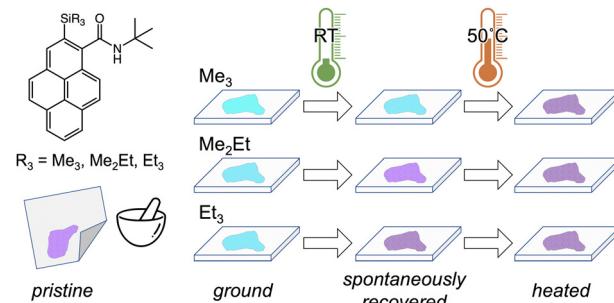


PAPERS

1952

Mechanofluorochromism and self-recovery of alkylsilylpyrene-1-carboxamides

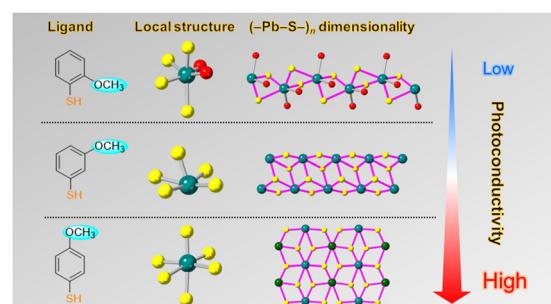
Yuichi Hirai,* Anna Wrona-Piotrowicz,
Janusz Zakrzewski, Magdalena Ciechańska,
Takahito Ohmura, Takashi Takeda, Takayuki Nakanishi,
Rémi Métivier* and Clémence Allain*



1958

Impact of substituent position on crystal structure and photoconductivity in 1D and 2D lead(II) benzenethiolate coordination polymers

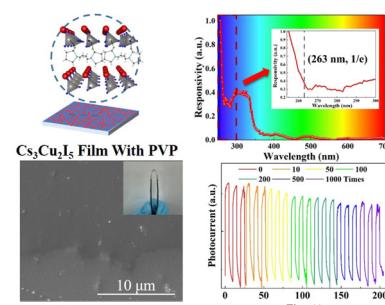
Ryohei Akiyoshi,* Akinori Saeki, Kazuyoshi Ogasawara
and Daisuke Tanaka*



1965

Polymer-assisted crystal growth regulation and defect passivation for high-performance flexible solar-blind photodetectors based on copper-based halides

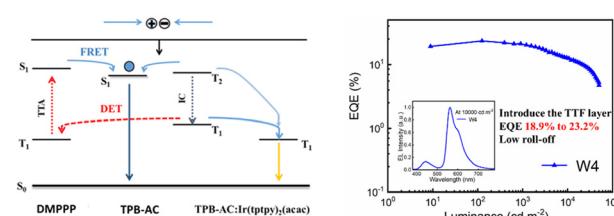
Chengjun Liu, Yuyi Zhang, Lixi Wang, Jianhua Chang,
Qing Li, Xiaobing Zhang, Byung Seong Bae,
Omolola Esther Fayemi, Xiaobao Xu, Jiangyong Pan,*
Jing Chen* and Wei Lei*



1972

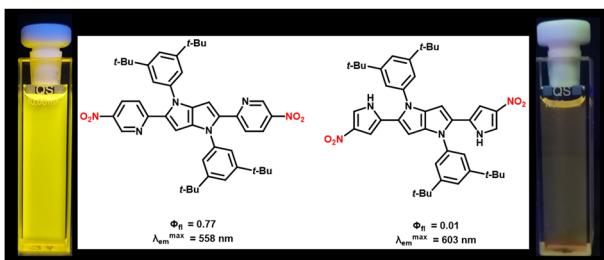
High-efficiency and low-efficiency roll-off fluorescence/phosphorescence hybrid white organic light-emitting diodes based on AlEgens with hot exciton property by strategically managing triplet excitons

Guangjian Gao, Pengbo Han, Xianfeng Qiao,
Yanfeng Dai, Qian Sun, Dezhi Yang, Anjun Qin,*
Ben Zhong Tang and Dongge Ma*



PAPERS

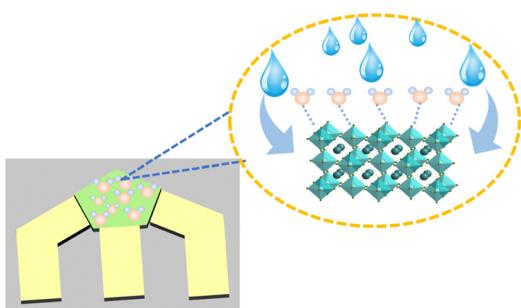
1980



The interplay of intersystem crossing and internal conversion in quadrupolar tetraarylpyrrolo-[3,2-b]pyrroles

Krzysztof Górski, Damian Kusy, Shuhei Ozaki, Marzena Banasiewicz, Rashid Valiev, Smruti Ranjan Sahoo, Kenji Kamada,* Glib Baryshnikov* and Daniel T. Gryko*

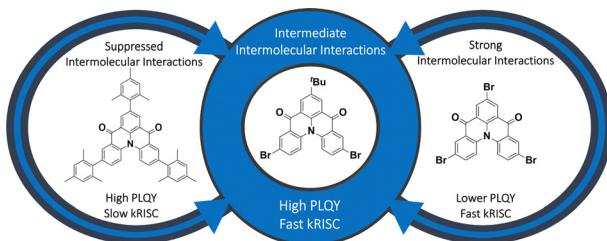
1988



Effects of halogen elements on a humidity sensor based on a thin film bulk acoustic wave resonator incorporated with $\text{Cs}_3\text{Bi}_2\text{X}_9$ ($\text{X} = \text{Cl}, \text{Br}, \text{I}$) perovskites

Lishuai Zhao, Peidong Ouyang, Xinyan Yi and Guoqiang Li*

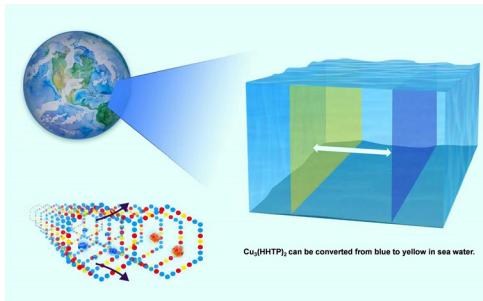
1996



Peripheral halogen atoms in multi-resonant thermally activated delayed fluorescence emitters: the role of heavy atoms in intermolecular interactions and spin orbit coupling

Hector Miranda-Salinas, Jingxiang Wang, Andrew Danos, Tomas Matulaitis, Kleitos Stavrou,* Andrew P. Monkman* and Eli Zysman-Colman*

2007



Electrochromic electrically conductive $\text{Cu}_3(\text{HHTP})_2$ films with adaptation to diverse and low-concentration water

Yongsheng Liu, Xiaoyu Zhang, Ran Li, Ziqiu Lu, Xilu Wu, Chengyi Hou, Qinghong Zhang, Yaogang Li, Kerui Li* and Hongzhi Wang*

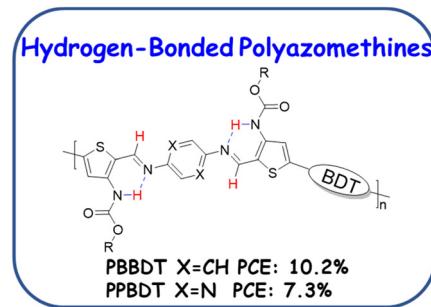


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2016

Hydrogen-bonded polyazomethines for efficient organic solar cells

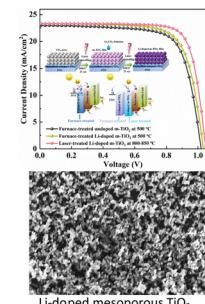
Bo Zhang, Yuanyuan Wang, Kaiwen Lin, Yinhua Zhou* and Qing Zhang*



2025

Laser processing of Li-doped mesoporous TiO₂ for ambient-processed mesoscopic perovskite solar cells

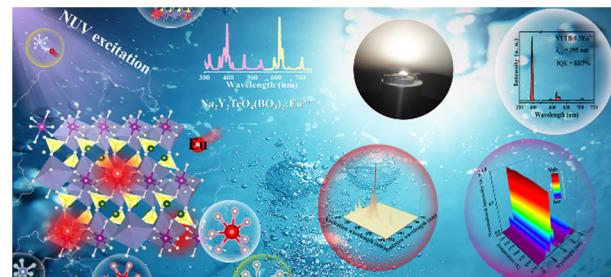
Hongbo Mo, Qian Chen,* Dong Wang, Wei Guo, Dongxu Cheng, Yang Sha, Muhamad Z. Mokhtar, Zhenyu Jia, Janet Jacobs, Andrew G. Thomas, Lin Li, Zhu Liu* and Richard J. Curry*



2037

Layered structure-induced quenching delay toward highly efficient and thermally stable red emission in Eu³⁺-activated borotellurate phosphors

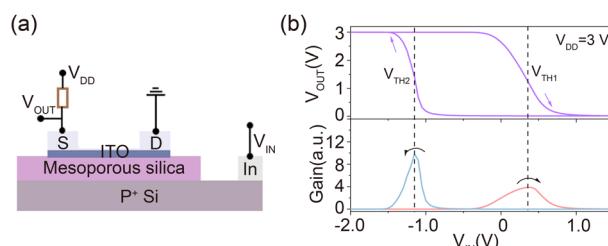
Yuefei Xiang, Hongzhi Zhang,* JunPeng Li, Hong Li, Tongsheng Yang, Canyuan Liao, Heyun Zhao and Jing Zhu*



2048

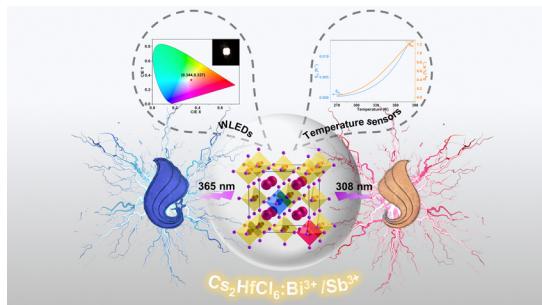
A reverse Schmitt trigger with an adjustable hysteresis window implemented by mesoporous silica electrolyte-gated transistors

Linzi Liang, Kekang Liu, Zhiyuan Luo, Zhengdong Jiang, Qichang Hu and Yanghui Liu*



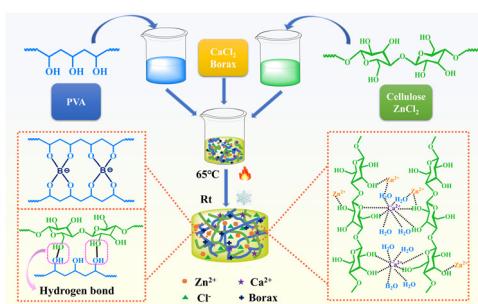
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2053

 **$\text{Bi}^{3+}/\text{Sb}^{3+}$ co-doped Cs_2HfCl_6 vacancy-ordered double perovskites for multifunctional optoelectronic applications**

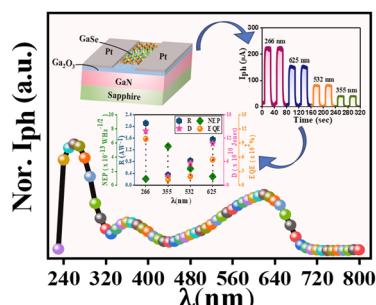
Zixuan Huang, Jinju Zheng,* Hui Fu, Jialiang Jiang, Zilong Li, Chunhong Gu, Zhentao Du, Yang Yang, Weiyou Yang and Jialong Zhao*

2063

**Preparation of PVA/cellulose composite hydrogel electrolytes based on zinc chloride-dissolved cellulose for flexible solid-state capacitors**

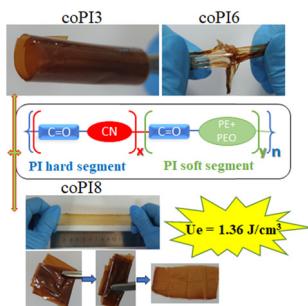
Ru Zhang, Chengfeng Wu,* Xuyan Liao, Axi Luo, Yidan Jing,* Ningya Yu, Shengpei Su, Xiaomin Zhang,* Jin Zhu and Guobo Deng

2073

**A nanoflower-like GaSe/β-Ga₂O₃ based heterostructure for highly efficient self-powered broadband photodetectors**

Urvashi Varshney, Anuj Sharma, Aditya Yadav, Preeti Goswami and Govind Gupta*

2084

**Tailoring the properties of semi-aromatic copolyimides through structural manipulation towards energy-storage applications**

Irina Butnaru,* Adriana-Petronela Chiriac, Mihai Asandulescu, Codrin Tugui, Iuliana Stoica and Mariana-Dana Damaceanu

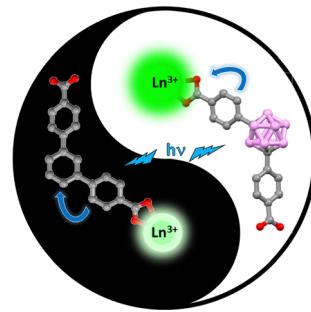


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Rationalizing the carborane *versus* phenyl-driven luminescence in related dicarboxylic ligands and their antenna effect for their Eu³⁺ and Tb³⁺ metal–organic frameworks: a combined experimental and computational study

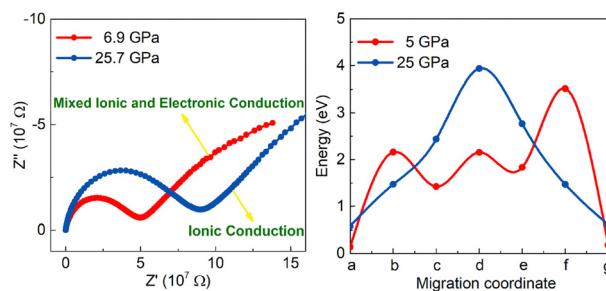
Zhen Li, Claudio Roscini, Rosario Núñez, Francesc Teixidor, Clara Viñas, Eliseo Ruiz* and José Giner Planas*



2110

Pressure effects on the ionic transport properties of LiNH₂

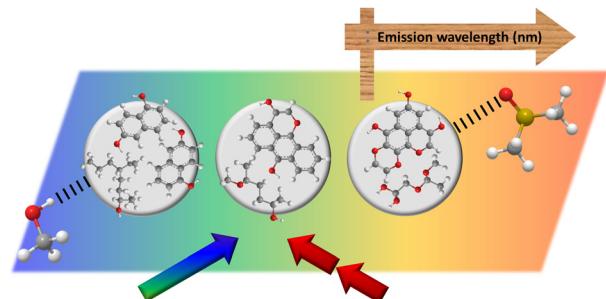
Jia Wang, Hao Liu, Li Wang, Min Cao, Xin Zhang, Chunxiao Gao and Yonghao Han*



2117

Revealing two chemical strategies to tune bright one- and two-photon excited fluorescence of carbon nanodots

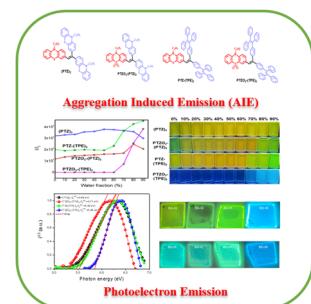
Sebastian G. Mucha, Lucyna Firlej, Filip Formalik, Jean-Louis Bantignies, Eric Anglaret, Marek Samoć and Katarzyna Matczyszyn*



2134

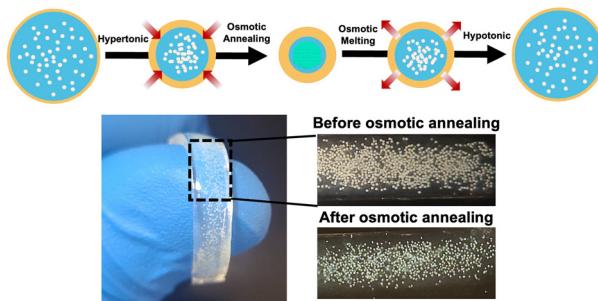
Phenothiazine and phenothiazine sulfone derivatives: AIE, HTMs for doping free fluorescent and multiple-resonance TADF OLEDs

Ramakant Gavale, Melika Ghasemi, Faizal Khan, Dmytro Volyniuk, Juozas Vidas Grazulevicius and Rajneesh Misra*



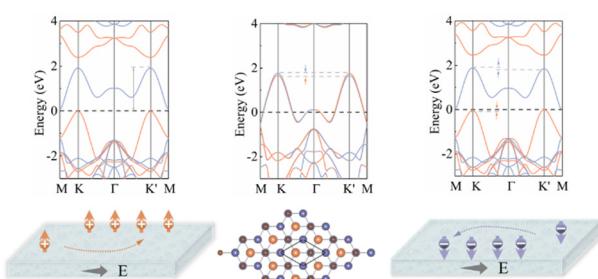
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2148

**Adaptive coloration enabled by the reversible osmotic annealing of chromatophore-like microcapsules**

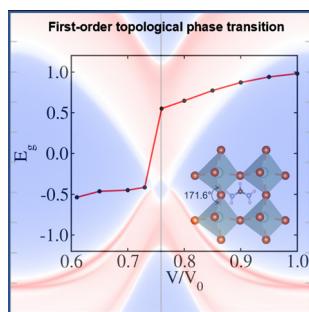
Jae-Hyun Kim, Ji-Young Lee, Jaekyoung Kim, Zhe Gong, Daniel J. Wilson, Leila F. Deravi* and Daeyeon Lee*

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**Controllable dual-polarization valley physics in the strain-engineered 2D monolayer of VC_2N_4**

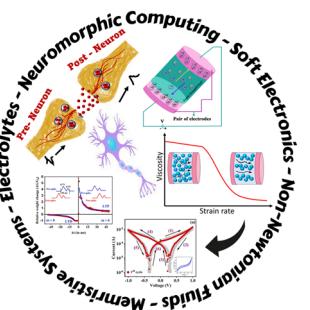
Chengan Lei, Shiyu Cao, Zelong Gong, Xinru Li, Yandong Ma, Jian Gao, Jianqiang Bi, Rajeev Ahuja and Zhao Qian*

2165

**Strain-driven topological quantum phase transition in (pseudo)cubic (mixed)-Cs/MA/FA halide perovskites**

Ankita Phutela,* Sajjan Sheoran, Deepika Gill and Saswata Bhattacharya*

2173

**Unlocking the resistive switching in Acacia Senegal-based electrolyte for neuromorphic computation**

Aziz Lokhandwala, Parth Thakkar, Jeny Gosai, Suvik Oza and Ankur Solanki*

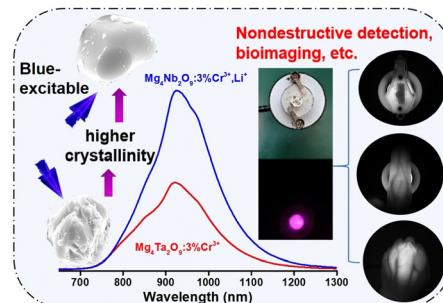


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Broadband short-wave infrared $\text{Mg}_4\text{Nb}_2\text{O}_9:\text{Cr}^{3+},\text{Li}^+$ phosphor for nondestructive safety detection and biomedical imaging

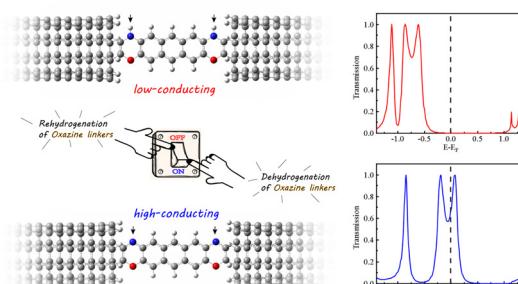
Qingyang Ding, Jincheng Wu, Dechao Yu,* Xinxin Han, Yunzhou Zhou, Tiantian Shen, Yunfeng Ma,* Songlin Zhuang and Dawei Zhang



2194

Oxazine: an anchoring group serving as functional kernels to construct single-molecule switches

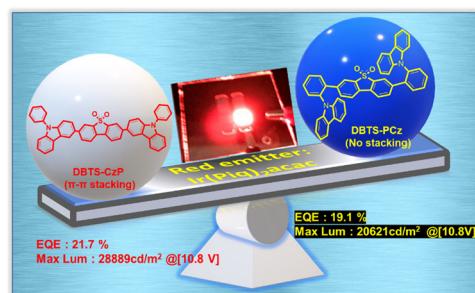
Shi Li, Yuxuan Jiang, Yudi Wang, Dongying Lin, Haoyang Pan, Yongfeng Wang, Stefano Sanvito and Shimin Hou*



2203

Perceiving the influence of phenyl-carbazole isomers on sulfone/thioxanthone-based D-A-D hosts: realizing efficient red-phosphorescent OLEDs

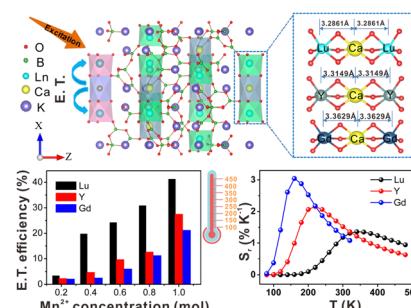
Premkumar Gnanasekaran, Yi-Ting Chen, Yun-Tzu Tseng, Kuan-Yu Su, Yu-Ting Lin, Tsz Chung Yiu, Chih-Hao Chang* and Yuan Jay Chang*



2216

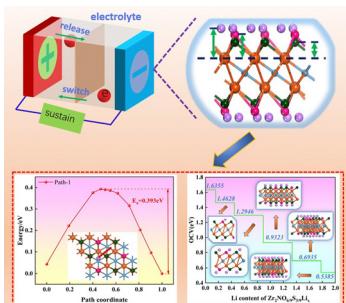
Realizing a broad-scope and high-sensitivity optical thermometer based on dual-emission centers with structure confinement effect-related energy transfer

Shixiang Huang, Liuhan Yi, Feng Zhang,* Xiansheng Liu, Chao Li, Mengzhu Long and Yuhua Wang



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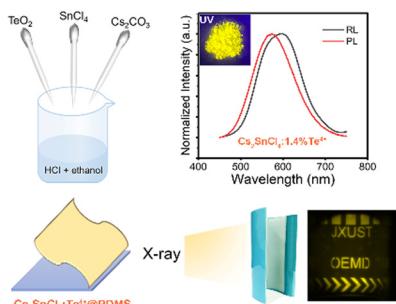
2227



First-principles study of the effect of O and S functional groups on the lithium storage properties of Zr₂N materials

Xuefeng Lu, Jupeng Qi, Junqiang Ren, Junchen Li,
Hongtao Xue, Fuling Tang and Xin Guo*

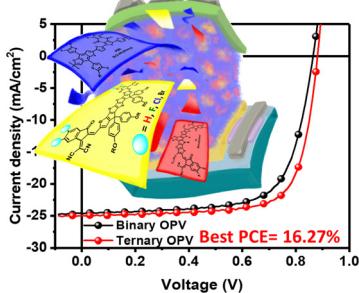
2241



Te⁴⁺-doped Cs₂SnCl₆ scintillator for flexible and efficient X-ray imaging screens

Mengyao Wang, Xiaofei Qing, Tianyun Du, Chuanli Wu
and Xiuxun Han*

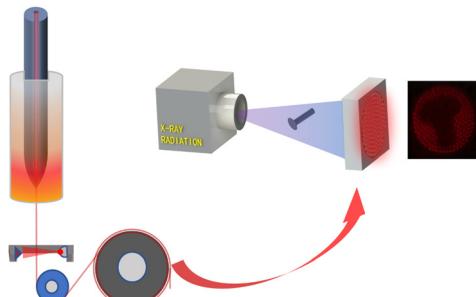
2247



Dicyclopentadithienothiophene-based non-fullerene acceptors for ternary blend organic photovoltaics

Shakil N. Afraj, Bing-Huang Jiang, Yu-Wei Su,
Chien-Hung Yang, Hui-Shan Shih, Arulmozhi Velusamy,
Jen-Shyang Ni, Yamuna Ezhumalai, Ting-Yu Su,
Cheng-Liang Liu, Shuhelin Yau, Chih-Ping Chen* and
Ming-Chou Chen*

2258



Plastic scintillation fiber with europium complexes for low-dose X-ray detection and long-distance imaging

Gang Ren, Zhouyuanhang Wang, Yan Kuai,
Zhigang Cao, Feng Xu, Yu Liu, Kang Xie, Siqi Li,*
Benli Yu and Zhijia Hu*