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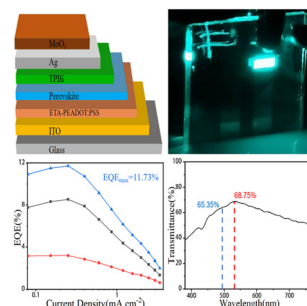


COMMUNICATION

7162

Efficient transparent blue-emitted perovskite light-emitting diodes based on multilayer transparent top electrodes

Zhenghao He, Zhiqiang Bao, Xiaoyang Guo,* Ying Lv, Tienan Wang, Yuejia Ma and Xingyuan Liu*

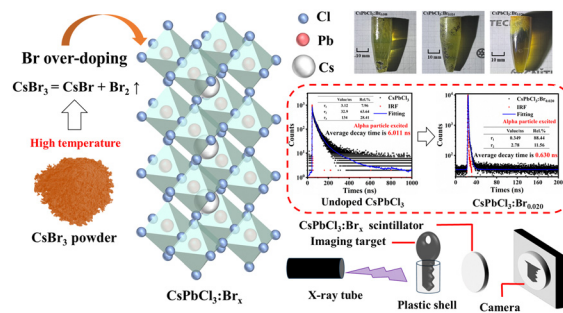


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7169

Ultrafast scintillation at room temperature achieved in CsPbCl₃-based single crystals through Br over-doping

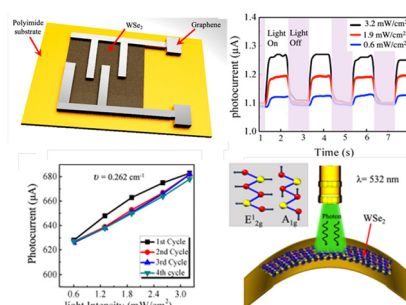
Yulin Zhang, Meng Shen, Bingliang Cheng, Wenjuan Ma, Xiaole Huang, Lei Zhang, Zhifang Chai and Wenwen Lin*



7176

Emission spectra and strain-dependent properties of flexible inkjet printed WSe₂-graphene heterostructure photodetectors

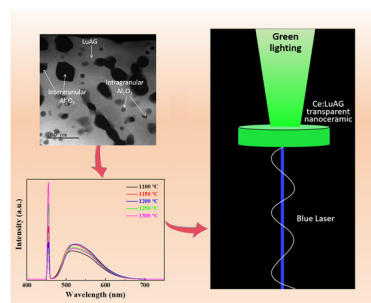
Ridwan F. Hossain, Avra S. Bandyopadhyay, Nirmal Adhikari, Sujan Aryal and Anupama B. Kaul*



7188

Green-emissive Ce³⁺:Lu₃Al₅O₁₂-Al₂O₃ nanoceramics elaborated *via* glass crystallization for high-power laser lighting applications

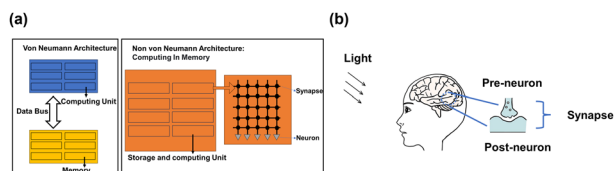
Jie Fu, Shaowei Feng, Cécile Genevois, Emmanuel Véron, Yafeng Yang, Hui Wang, Zhibiao Ma, Linghan Bai, Wenlong Xu, Ruyu Fan, Chengzhi Wang, Mathieu Allix* and Jianqiang Li*



7197

MXene-based optoelectronic synaptic transistors utilize attentional mechanisms to achieve hierarchical responses

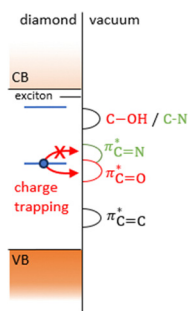
Ningpu Qin, Zexuan Ren, YuYang Fan, Congyao Qin, Changfei Liu, Wenhong Peng, Bingle Huang,* Huipeng Chen* and Tailiang Guo



7206

Enhanced quantum properties of shallow diamond atomic defects through nitrogen surface termination

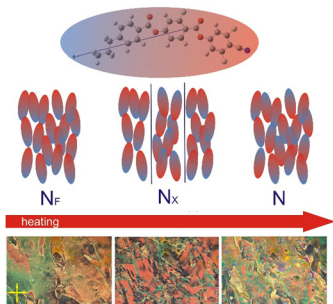
Rotem Malkinson, Mohan Kumar Kuntumalla, Arsène Chemin, Tristan Petit, Alon Hoffman and Nir Bar-Gill*



7214

Polar nematic phases with enantiotropic ferro- and antiferroelectric behaviour

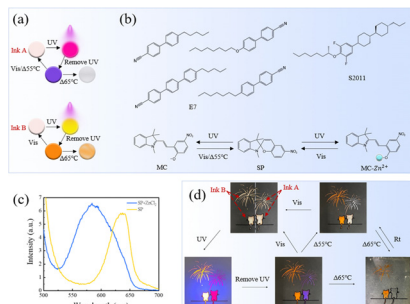
Mateusz Mrukiewicz, Michał Czerwiński,* Natalia Podoliak, Dalibor Repčák, Paweł Perkowski, Richard J. Mandle and Dorota Węglowska



7225

Cholesteric liquid crystal doped with spiropyran and zinc ions for multi-state anti-counterfeiting

Qingxiu Wang, Xiandi Zhang, Dong Zhou, Yuzhou Chen, Chaofeng Qu, Chunlian Lu* and Yongjun Liu*

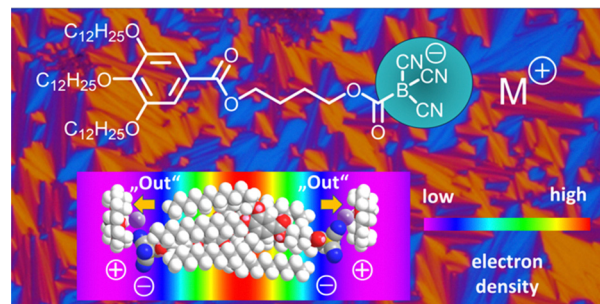


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7233

New ionic mesogens with high ionic conductivity based on a cyanoborate building block and lipophilic or hydrophilic counter ions

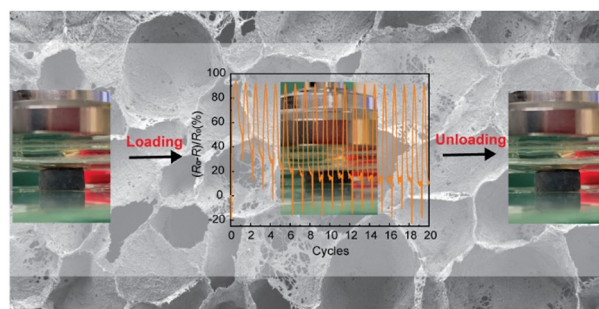
Matthias Lehmann,* Pascal Weinberger, Maik Finze, Guinevere A. Giffin, Mario Weller, Stephanie Bachmann and Ann-Christin Pöppler



7240

Lightweight, flexible, and conductive PEDOT:PSS coated polyimide nanofibrous aerogels for piezoresistive pressure sensor application

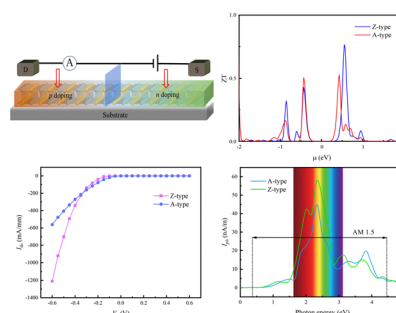
Khanh-Van Thi Khuat, Hoan Ngoc Doan,* Phu Phong Vo, De Nguyen, Kenji Kinashi,* Wataru Sakai and Naoto Tsutsumi



7252

Promising transport properties of multifunctional monolayer GeSe nanodevices

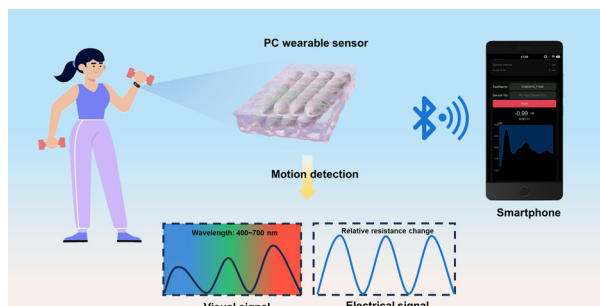
Xianghe Liu and Yuliang Mao*



7260

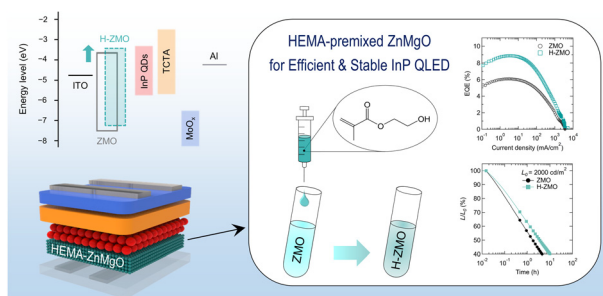
Biomimetic photonic crystal double-network hydrogel for visual and electrical dual signal bluetooth-enabled wearable sensor

Aojue Ke, Chunhao Li, Boheng Dong and Xinya Zhang*



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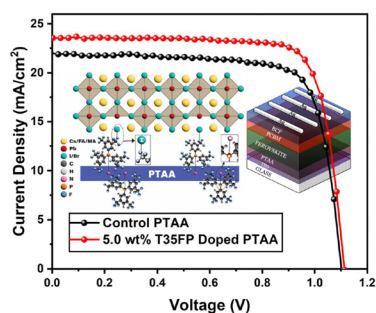
7270



Efficient and stable InP quantum-dot light-emitting diodes formed by premixing 2-hydroxyethyl methacrylate into ZnMgO

Yeseul Park, Minhyung Lee, Hansol Seo, Doyoon Shin, Donghyo Hahm, Wan Ki Bae, Jaehoon Kim* and Jeonghun Kwak*

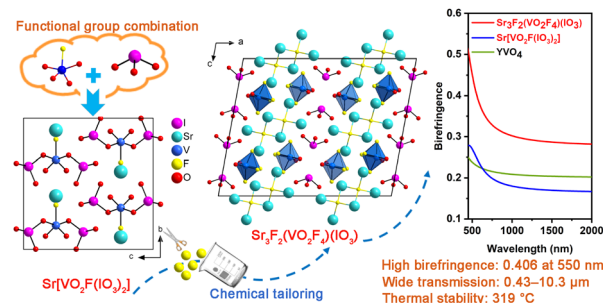
7278



Improved current density of inverted perovskite solar cells via hole transport layer doping

Santhosh Murugan, Xuewen Liu and Eun-Cheol Lee*

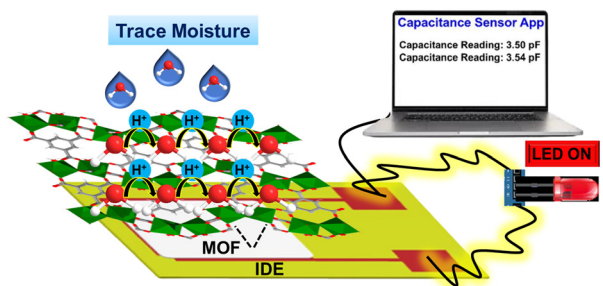
7286



Explorations of highly birefringent materials in the vanadium oxyfluoride–iodate system by fluoride ion modulation

Yu Huang, Xue-Ying Zhang, San-Gen Zhao, Jiang-Gao Mao and Bing-Ping Yang*

7295



A low-cost, swift response, highly sensitive MOF-based dual sensing device enables detection of ultralow humidity levels and solvent polarity changes

T. Leelasree, P. N. Sidhartha, Manav Tathacharya, Karumbaiah N. Chappanda and Himanshu Aggarwal*

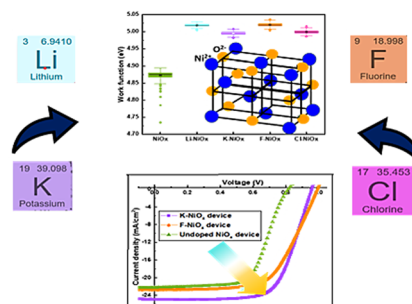


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Halogen doping of p-type inorganic hole transport layer: electronic nature-based dopant engineering for modulating hole selectivity in inverted planar perovskite solar cells

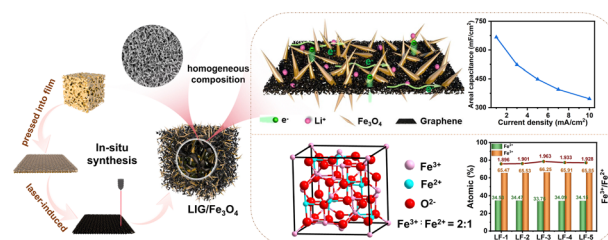
Vidya Sudhakaran Menon, Saraswathi Ganesan, Rohith Kumar Raman, Ananthan Alagumalai and Ananthanarayanan Krishnamoorthy*



7325

Valence state regulation of iron oxide composited with graphene towards negative electrodes in asymmetric supercapacitors

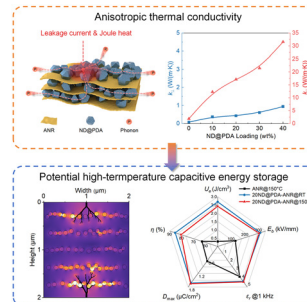
Zhihao Song, Nian Li,* Jun Kang, Liqing Chen, Yanping Song, Xinling Yu, Hu Ge, Zhao Li, Na Hong, Shudong Zhang* and Zhenyang Wang*



7338

Tailoring anisotropic thermal conductivity of 2D aramid nanoribbon-based dielectrics with potential high-temperature capacitive energy storage

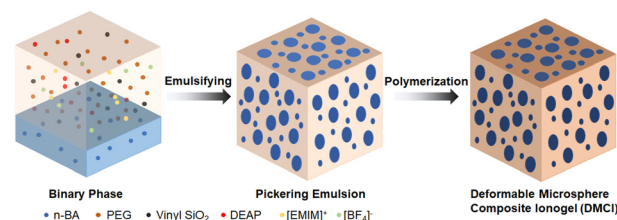
Xiang Yu, Rui Yang, Guangyi Shen, Kaixuan Sun, Fangcheng Lv and Sidi Fan*



7351

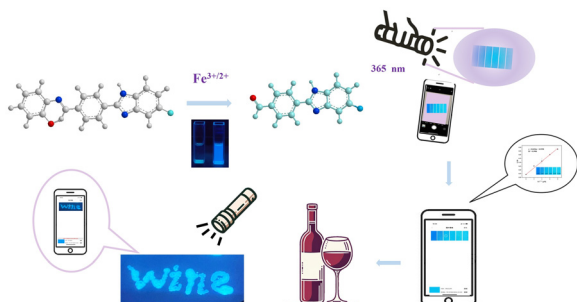
Facile fabrication of highly-stretchable, low-hysteresis and notch-insensitive ionogels for strain sensors

Yufei Wang, Xiaohui Yu,* Qiaozhi Hou and Xiaoshan Fan*



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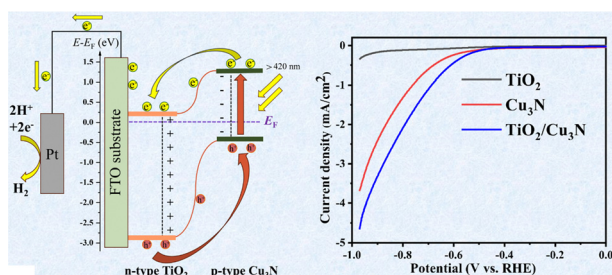
7359



A benzimidazole-based 'turn-on' fluorescent probe for highly sensitive detection of $\text{Fe}^{3+/2+}$: synthesis, performance, DFT calculations and applications

Ning Duan, Leyuan Ding, Shaoxiang Yang,* Hongyu Tian and Baoguo Sun

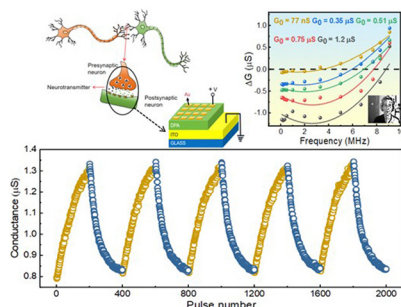
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Construction of nanorod-shaped $\text{TiO}_2/\text{Cu}_3\text{N}$ p-n heterojunction for efficient visible-light hydrogen evolution

Zhengwang Cheng, Neng Gan, Gang Yuan, Aobo Wang, Jiyan Liu, Hui Lv, Changcun Han, Mei Wang, Mengdai Luoshan, Xinguo Ma and Wei Zou*

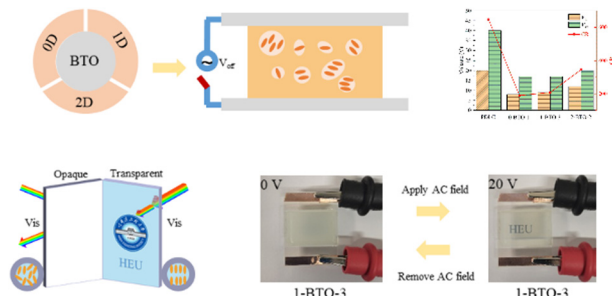
7377



An artificial synaptic device based on 1,2-diphenylacetylene with femtojoule energy consumption for neuromorphic computing

Mengyuan Duan, Jiesong Liu, Zhengjie Li, Xiaoyong Jia, Guanghong Yang,* Weifeng Zhang* and Caihong Jia*

7386



The effect of high dielectric BaTiO_3 nanoparticle dimensions on the dielectric properties and electro-optical performance of polymer dispersed liquid crystal films

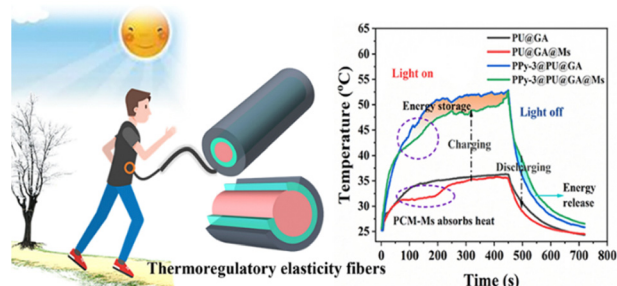
Wei Wu, Xiaohui Sun, Dong Wang, Haining Qian, Bo Wang, Xiangwei Wang, Xianhui Rong,* Xuyang Zhang* and Guohua Wu*



7398

Thermoregulatory elasticity braided fibers designed with core–sheath structure for wearable personal thermal management

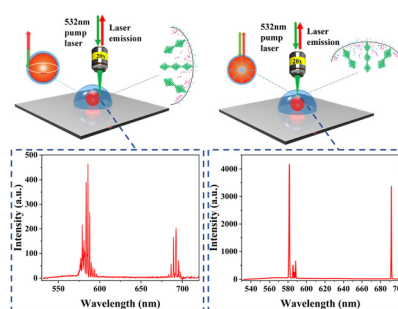
Chengcheng Wang, Jingwen Wang, Liping Zhang* and Shaohai Fu



7407

Laser mode control based on chiral liquid crystal microcavities

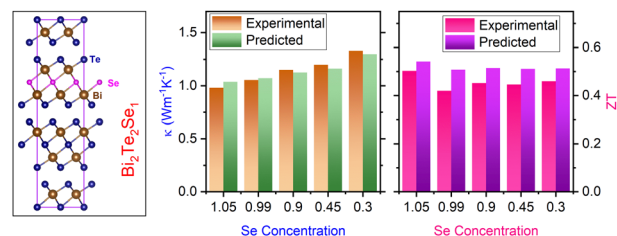
Zhonghao Liu, Xiaojuan Zhang, Guangyin Qu, Siqi Li, Yan Kuai, Jiangang Gao, Yu Liu, Zhigang Cao, Benli Yu and Zhijia Hu*



7415

Machine-learning guided prediction of thermoelectric properties of topological insulator $\text{Bi}_2\text{Te}_{3-x}\text{Se}_x$

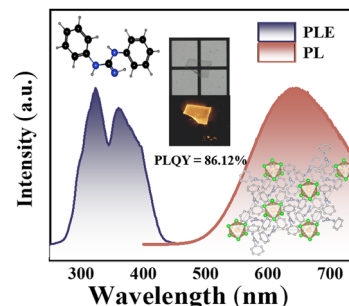
Vipin K. E. and Prahallad Padhan*



7426

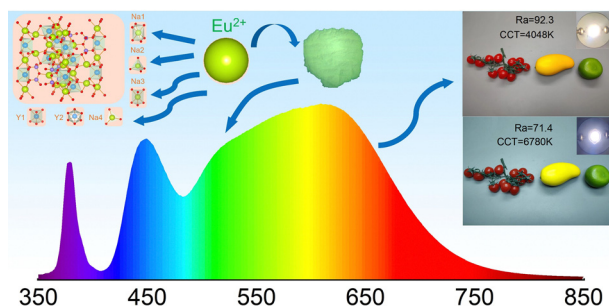
Designing guanidine-based lead-free hybrid indium perovskites with highly efficient intrinsic broadband emissions

Chunqing Hou, Xiaoting Liu, Zisheng Wang, Fan Yu, Bowen Jin, Yang Yang, Yilong Song and Qingfeng Dong*



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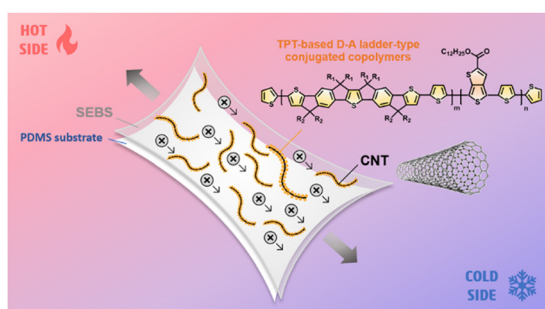
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Preparation of a novel violet-excitable $\text{Na}_3\text{YSi}_2\text{O}_7:\text{Eu}^{2+}$ green phosphor via salt-flux assistance and its luminescence properties

Jinqing Gao, Langping Dong,* Yandan Lin, Pengcheng Zhou, Xianchao Ma, Jingshan Hou* and Yongzheng Fang*

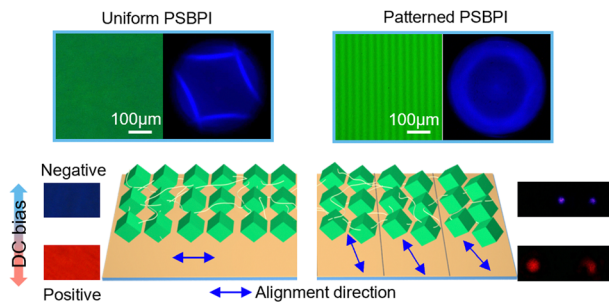
7446



High-performance ladder-type conjugated polymer/carbon nanotube nanocomposites blended with elastomers for stretchable thermoelectric thin films

Qing-Bao Zheng, Chi-Chun Tseng, Meng-Hao Lin, Jhih-Min Lin, Shih-Huang Tung, Yen-Ju Cheng* and Cheng-Liang Liu*

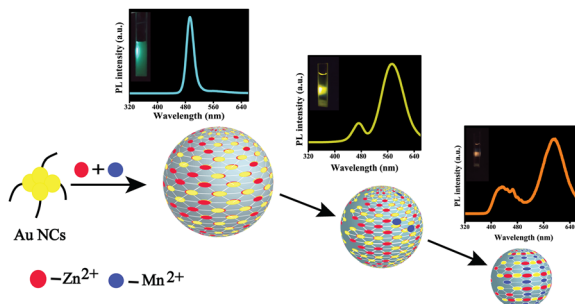
7456



Three-dimensionally programmable soft crystals toward geometric phase photonics

Fengyin He, Yuxian Zhang,* Xuan Liu, Cong-long Yuan, Honglong Hu, Xiao-Qian Wang, Duanbin Luo, Dong Shen and Zhi-Gang Zheng*

7463



Influence of dimensionality on optical properties of doped assembly of gold nanoclusters

Santanu Dolai, Srestha Basu* and Anumita Paul*



7472

Imidazole-assisted film-based fluorescent sensor for the ultrasensitive detection of hydrazine

Mohammad Masood Zafar, Subash Ch. Sahoo, Vakayil K. Praveen, Nidhi Tyagi* and Rakesh K. Mishra*

