

Journal of Materials Chemistry C

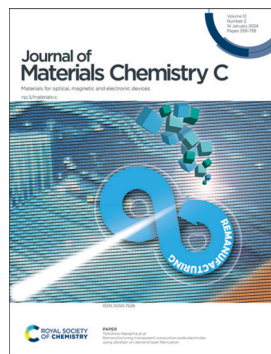
Materials for optical, magnetic and electronic devices

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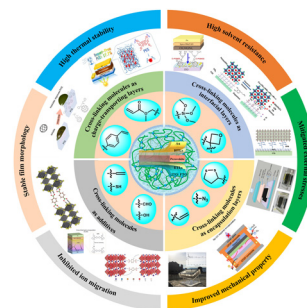
See Tomohiko Nakajima
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REVIEWS

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Cross-linking strategies for efficient and highly stable perovskite solar cells

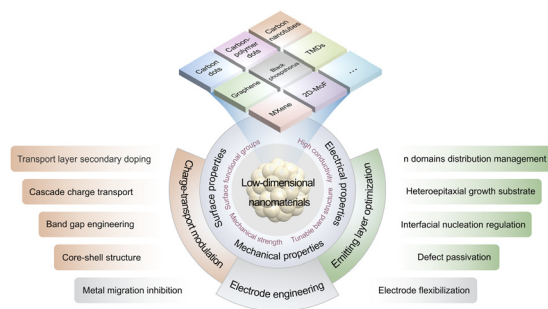
Xuran Wang, Ziwu Ding, Xiaozhen Huang, Xingyu Liu,
Yue Wang, Yang Wang* and Wei Huang*



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Low-dimensional nanomaterial-enabled efficient and stable perovskite light-emitting diodes: recent progress and challenges

Xiankan Zeng, Shiyu Yang, Lunyao Pan, Yongjian Chen,
Qungui Wang, Chenglong Li, Maolin Mu, Wen Li* and
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Fundamental questions
Elemental answers

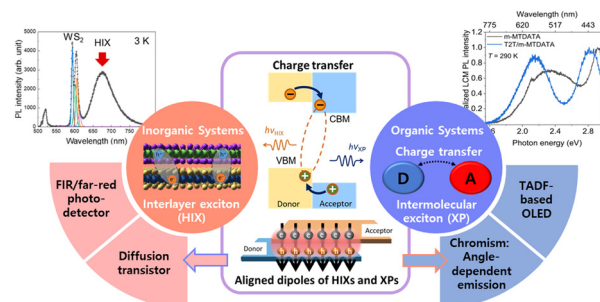


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Interlayer and intermolecular excitons in various donor–acceptor heterostructures: applications to excitonic devices

Taek Joon Kim, Sang-hun Lee, Dayeong Kwon and Jinsoo Joo*

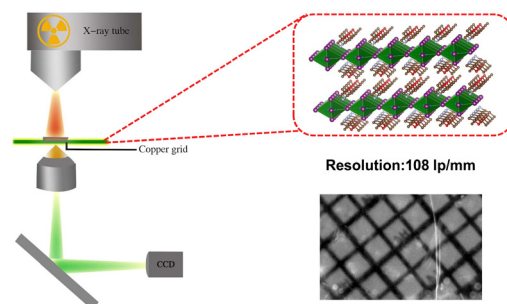


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High spatial resolution X-ray scintillators based on a 2D copper(I) iodide hybrid

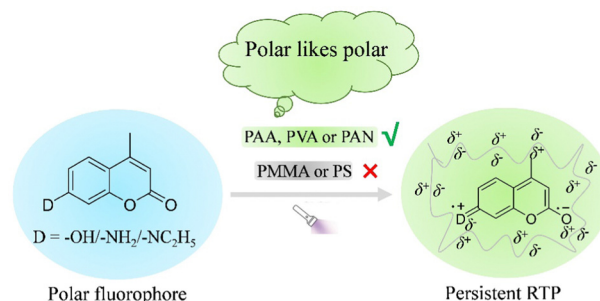
Han-Jiang Yang, Weijia Xiang, Xiangzhou Zhang, Jin-Yun Wang, Liang-Jin Xu* and Zhong-Ning Chen*



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Translating efficient fluorescence into persistent room-temperature phosphorescence by doping bipolar fluorophores into polar polymer matrix

Mengjiao Dong, Liyun Liao, Chensheng Li, Yingxiao Mu,* Yanping Huo, Zhong-Min Su and Fushun Liang*

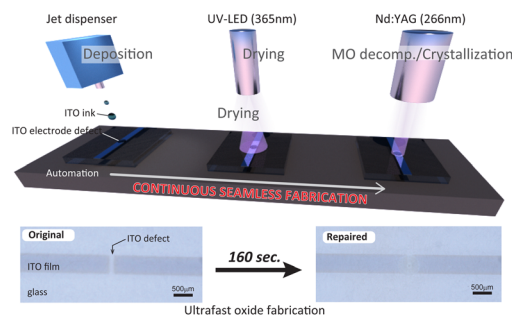


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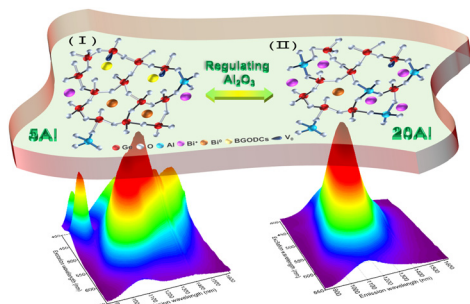
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Remanufacturing transparent conductive oxide electrodes using ultrafast on-demand laser fabrication

Tomohiko Nakajima,* Junichi Nomoto, Yuuki Kitanaka and Iwao Yamaguchi



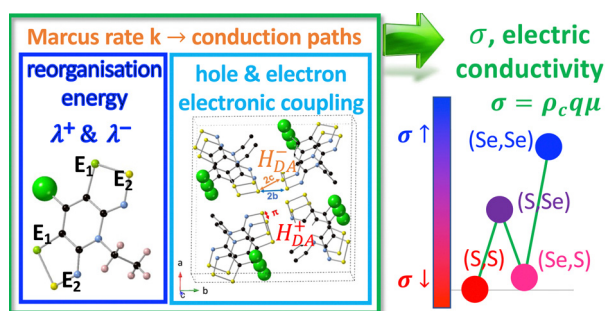
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Tunable ultra-broadband multi-band NIR emission in Bi-doped aluminogermanate glasses and fibers via controllable Al_2O_3 content for broadband amplifiers

Weiwei Chen, Xiongjian Huang, Quan Dong, Puxian Xiong, Dandan Yang, Jianrong Qiu, Zhongmin Yang and Guoping Dong*

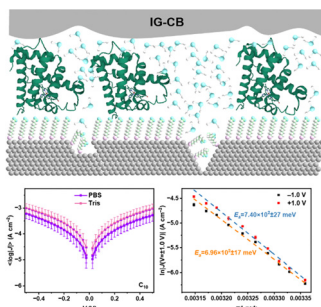
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C. Roncero-Barrero, M. A. Carvajal, J. Ribas-Ariño,* I. de P. R. Moreira and M. Deumal*

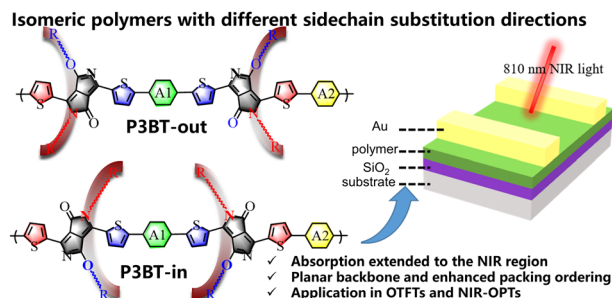
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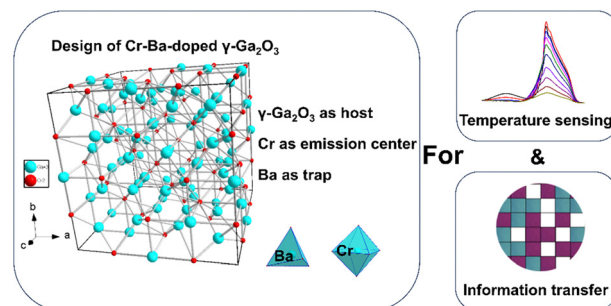
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Design of Cr–Ba-doped γ -Ga₂O₃ persistent luminescence nanoparticles for ratiometric temperature sensing and encryption information transfer

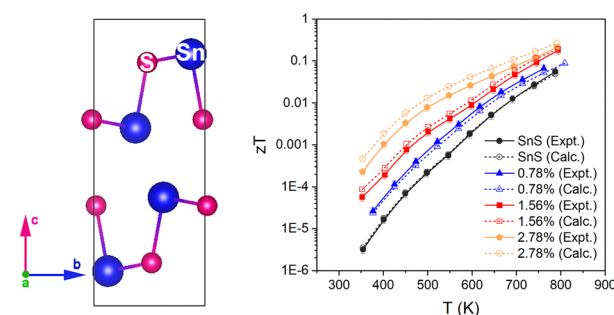
Tianqi Zhao, Renagul Abdurahman,* Qianting Yang, Ruxiangul Aiwalli and Xue-Bo Yin*



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A combined experimental and modelling approach for the evaluation of the thermoelectric properties of Ag-doped SnS

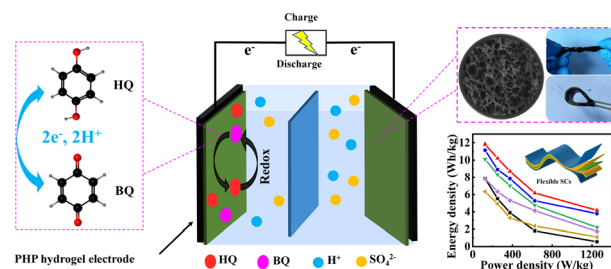
Yu Liu, Jonathan M. Skelton, Xiuqi Xia, Yibing Zhu, David J. Lewis* and Robert Freer*



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Organic redox additive incorporated PANI hydrogel electrodes for flexible high-energy-density supercapacitors

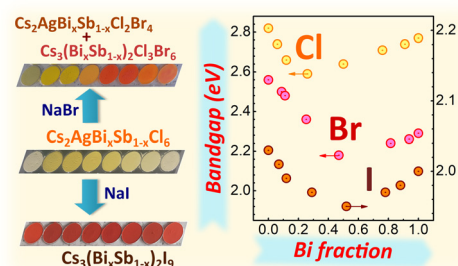
Liyang Dou, Shixiang Zhou, Jie Ma, Cheng Zhao, Peixin Cui, Shifang Ye, Peizhong Feng, Xiuquan Gu, Sheng Huang and Xueyu Tao*



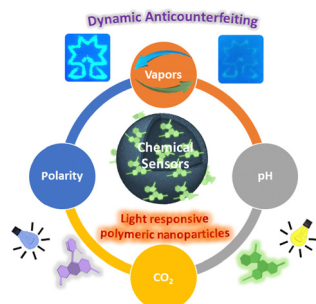
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Band-bowing effects in lead-free double Cs₂AgBi_xSb_{1-x}Cl₆ perovskites and their anion-exchanged derivatives

Oleksandr Stroyuk,* Oleksandra Raievska, Anastasia Barabash, Riley W. Hooper, Vladimir K. Michaelis, Jens Hauch and Christoph J. Brabec



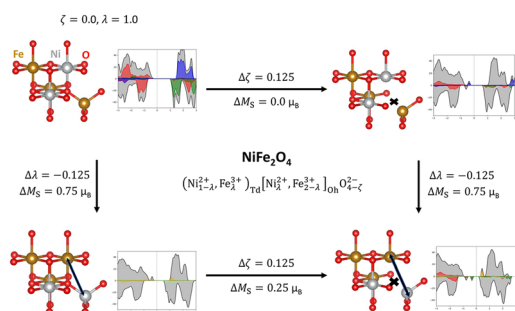
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Design of chemosensors and dynamic anticounterfeiting inks based on colloidal nanoprecipitated polymers

Milad Babazadeh-Mamaqani, Sana Alipour-Fakhri, Moein Mohammadi-Jorjafki, Hossein Roghani-Mamaqani,* Hanieh Mardani and Amin Babaie

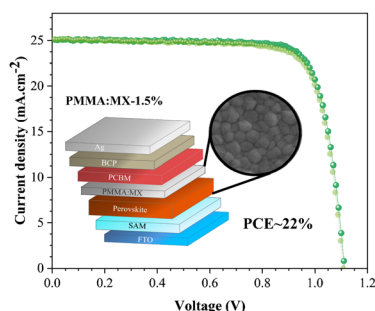
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Interplay between oxygen vacancies and cation ordering in the NiFe_2O_4 spinel ferrite

Rémi Arras,* Kedar Sharma and Lionel Calmels

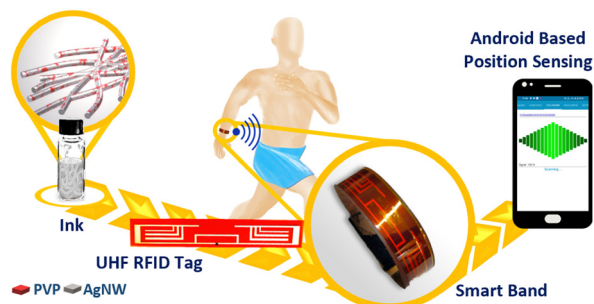
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Interface passivation with $\text{Ti}_3\text{C}_2\text{T}_x$ -MXene doped PMMA film for highly efficient and stable inverted perovskite solar cells

João Pedro F. Assunção, Hugo G. Lemos,* Jéssica H. H. Rossato, Gabriel L. Nogueira, João V. M. Lima, Silvia L. Fernandes, Rafael K. Nishihora, Ricardo V. Fernandes, Sidney A. Lourenço, Diego Bagnis, Sydney F. Santos and Carlos F. O. Graeff*

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Perforated PVP encapsulated AgNWs for high mass loading in silver nanowire inks for printed RFID integrated wearable smart bands

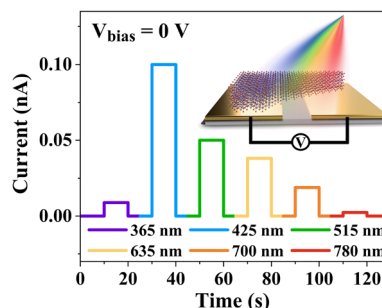
Adarsh Sivan Pillai, Sumith Sudhakar, Steffy Benny, Swaroop Sahoo, Achu Chandran and Surendran Kuzhichalil Peethambharan*



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A broadband self-powered photodetector based on NiPS₃

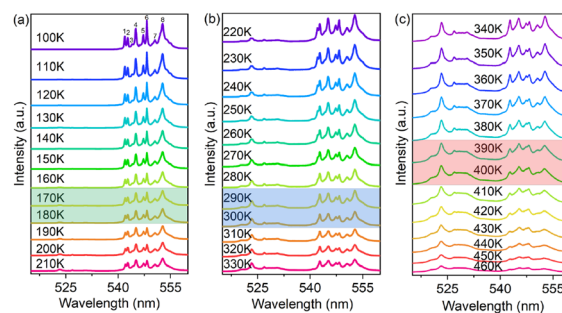
Linghao Zong, Jiaming Song,* Shuxian Wang, Wenhui Chen, Juanjuan Yang, Bingda Li, Peng Hu, Haibo Fan, Feng Teng and Xin Zhao



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Photoluminescence and structural phase transition relationship in Er-doped BaTiO₃ model ferroelectric system

Jingye Zou,* Shenglan Hao, Pascale Gemeiner, Nicolas Guiblin, Omar Ibder, Brahim Dkhil and Charles Paillard

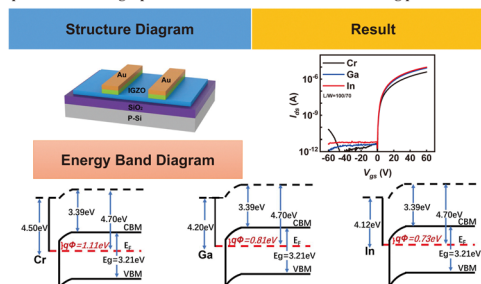


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High-performance sol-gel processed a-IGZO TFTs with low-melting point metal electrodes

Han He, Hao Huang,* Chuan Peng, Guanshun Liu, Jiajie Liu, Sili Duan, Bingsuo Zou* and Da Wan*

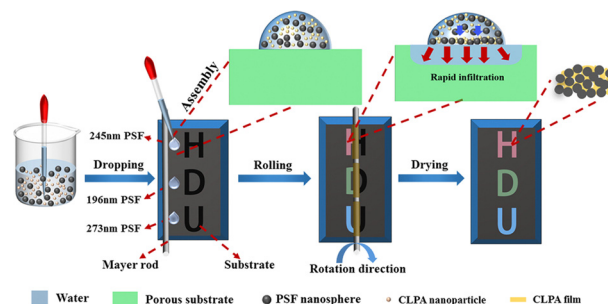
High-performance sol-gel processed a-IGZO TFTs with low-melting point metal Electrodes



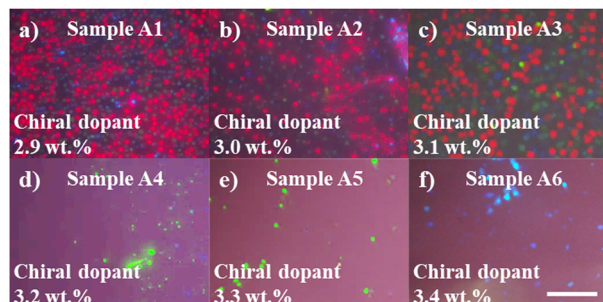
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Infiltration-assisted colloidal assembly of amorphous photonic crystal patterns with high color saturation and mechanical stability

Mengwei Xu, Ting Lü,* Dongming Qi, Ling Bai,* Ying Pan, Dong Zhang and Hongting Zhao



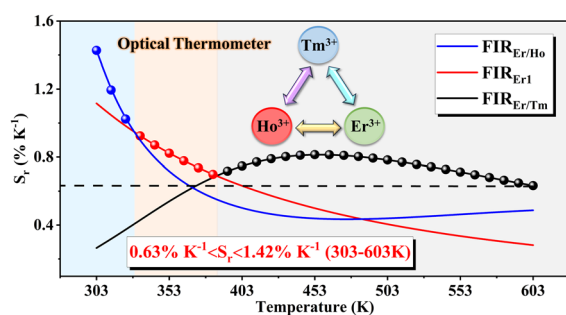
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Spontaneous formation of liquid-crystalline nuclei in blue-phase liquid crystals based on different chirality

Xiaowan Xu, Yanjun Liu and Dan Luo*

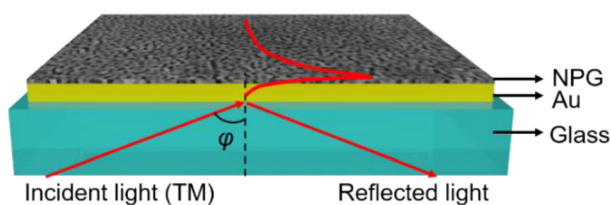
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Eulytite-type $\text{Ba}_3\text{Yb}(\text{PO}_4)_3\text{:Tm/Er/Ho}$ as a high sensitivity optical thermometer over a broad temperature range

Zonghao Lei, Houhe Dong, Lijie Sun, Bing Teng,* Yanfei Zou and Degao Zhong*

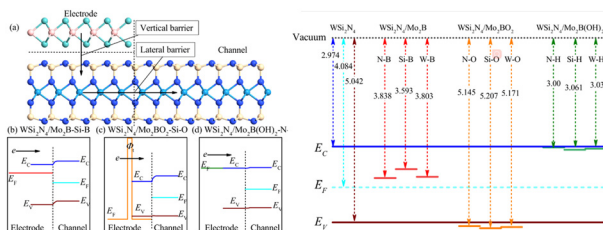
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Characterization of ultrathin nanoporous gold films for improving the performance of SPR biochemical sensors

Chenglong Zhang, Yicheng Chen, Hongyi Tang and Zhi-mei Qi*

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Designing CMOS compatible efficient ohmic contacts to WSi_2N_4 via surface-engineered Mo_2B monolayer electrodes

Liemao Cao, Xiaohui Deng,* Zhen-kun Tang, Rui Tan and Yee Sin Ang*

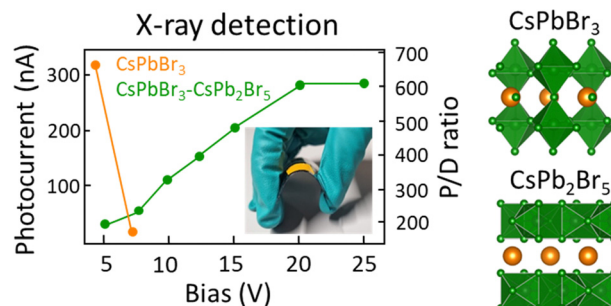


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Phase-engineering compact and flexible CsPbBr₃ microcrystal films for robust X-ray detection

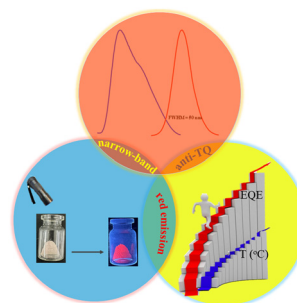
Lotte Clinckemalie, Bapi Pradhan,* Roel Vanden Brande, Heng Zhang, Jonathan Vandenwijngaerden, Rafikul Ali Saha, Giacomo Romolini, Li Sun, Dirk Vandenbroucke, Mischa Bonn, Hai I. Wang and Elke Debroye*



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Unusual red luminescence and super thermal stability of a new narrow-band emission phosphor for backlight display application

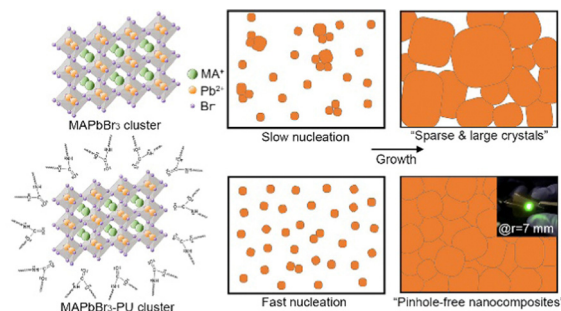
Qiu Zong, Dan Zhao,* Rui-Juan Zhang, Qing-Xia Yao,* Lei Jia and Meng-Han Yu



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Soft nanocomposites of lead bromide perovskite and polyurethane prepared via coordination chemistry for highly flexible, stable, and quaternary metal alloy-printed light emitting diodes

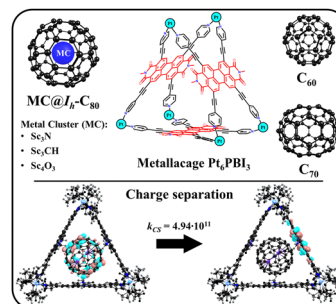
Ga Eun Kim, Hae-Jin Kim, Heesuk Jung and Minwoo Park*



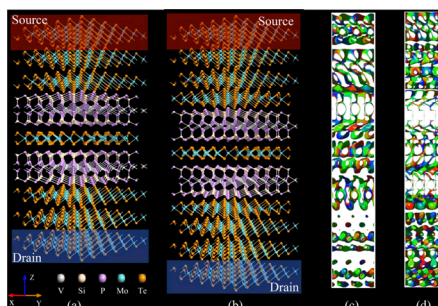
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Host-guest complexes of perylene bisimide-based metallacage and fullerenes for efficient photoinduced charge separation

O. A. Stasyuk, M. Solà* and A. J. Stasyuk*



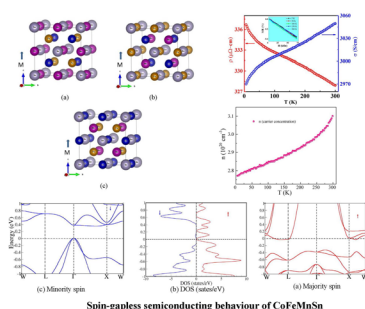
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Resonant tunneling induced large magnetoresistance in vertical van der Waals magnetic tunneling junctions based on type-II spin-gapless semiconductor VSi_2P_4

Jiangchao Han, Daming Zhou, Wei Yang, Chen Lv, Xinhe Wang, Guodong Wei, Weisheng Zhao, Xiaoyang Lin* and Shengbo Sang*

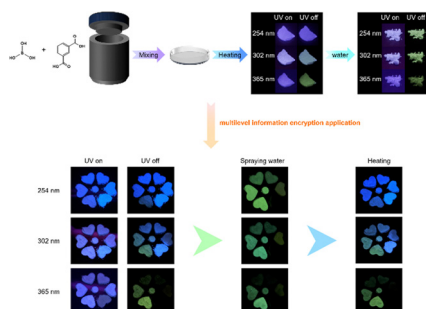
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Spin-gapless semiconducting characteristics and related band topology of quaternary Heusler alloy CoFeMnSn

Shuvankar Gupta, Jyotirmoy Sau, Manoranjan Kumar* and Chandan Mazumdar*

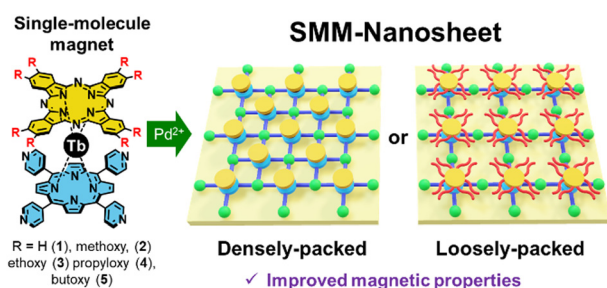
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Water stimulus-responsive room temperature afterglow materials with color tunability based on inorganic/organic H–G hybrid systems

Shanshan Hou, Jing Yang and Peng Li*

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Two-dimensional metal–organic nanosheets composed of single-molecule magnets: structural modulation and enhanced magnetism utilizing the steric hindrance effect

Ikumi Aratani, Yoji Horii,* Yoshinori Kotani, Hitoshi Osawa, Hajime Tanida, Toshiaki Ina, Takeshi Watanabe, Yohko F. Yano, Akane Mizoguchi, Daisuke Takajo and Takashi Kajiware

