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Cover
See Dirk Volkmer, Gregor Kieslich *et al.*, pp. 4954–4960.
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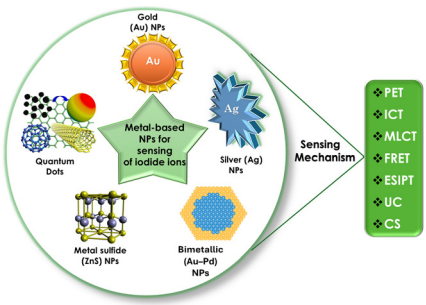
REVIEW

4919

Nanomaterial-based probes for iodide sensing: synthesis strategies, applications, challenges, and solutions

Muhammad Mansha, Noreen Abbas, Faizah Altaf, Safyan Akram Khan, Ibrahim Khan and Shahid Ali*

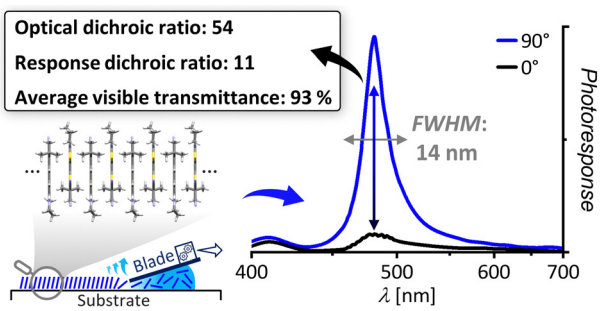


COMMUNICATION

4948

Polarized, color-selective and semi-transparent organic photodiode of aligned merocyanine H-aggregates

Tim Schembri, Leonhard Kolb, Matthias Stolte and Frank Würthner*



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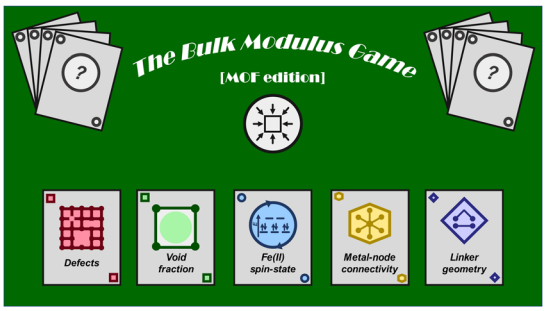
4954

Spin-state dependent pressure responsiveness of Fe(II)-based triazolate metal–organic frameworks

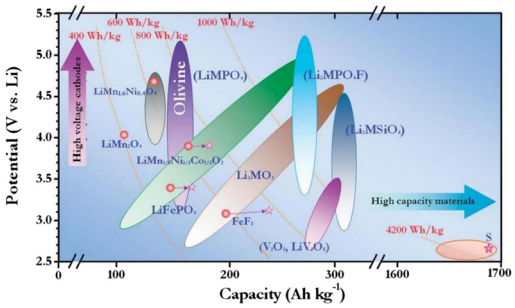
Silva M. Kronawitter, Richard Röß-Ohlenroth, Sebastian A. Hallweger, Marcel Hirrle, Hans-Albrecht Krug von Nidda, Tobias Luxenhofer, Emily Myatt, Jem Pitcairn, Matthew J. Cliffe, Dominik Daisenberger, Jakub Wojciechowski, Dirk Volkmer* and Gregor Kieslich*



4961

A critical revelation of lithium ferromanganese phosphate (LMFP) performance in a Mn-rich cathode for Li-ion batteries using Fe equivalents to occupy a Mn site

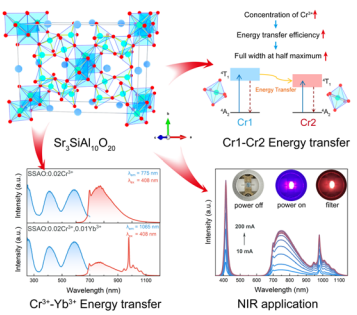
Ruifen Yang, Longjiao Chang,* Shaohua Luo,* Xiaolong Bi, Wei Yang, Kedi Cai, Anlu Wei and Zenglei Hou



4977

A NIR phosphor with ultra-broadband emission enabled by dual energy transfer within two Cr^{3+} emitters and $Cr^{3+} \rightarrow Yb^{3+}$

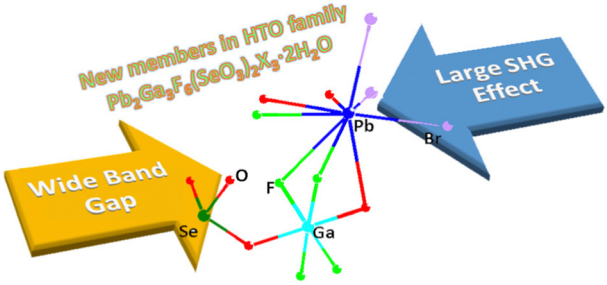
Shuai Wei, Zeyu Lyu,* Dashuai Sun, Sida Shen, Xiaowei Zhang, Zheng Lu, Pengcheng Luo, Hanyu Hu and Hongpeng You*



4986

$Pb_2Ga_3F_6(SeO_3)_2X_3{\cdot}2H_2O$ (X = Cl, Br): two new HTO-type members exhibiting large NLO effects mediated by ionic mixing and substitution strategies

Lili Liu,* Junbo Wang, Bingchen Xiao, Xunchi Li, Yaoqing Chu, Tongqing Sun* and P. Shiv Halasyamani



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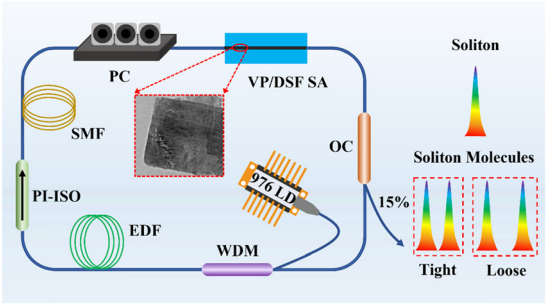
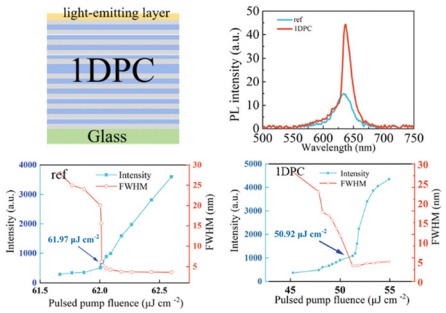
4995



Violet phosphorene as a saturable absorber for controllable soliton molecule generation in a mode-locked fiber laser

Han Pan,* Xiaoyang Ma, Hongwei Chu, Zhongben Pan, Jinying Zhang, Ying Li, Shengzhi Zhao and Dechun Li*

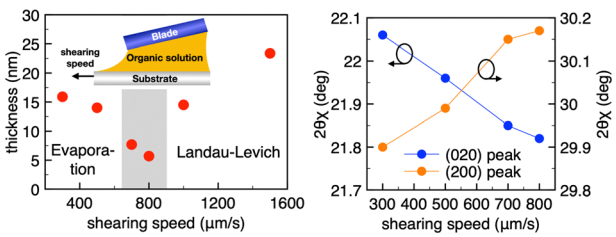
5004



Modulated spontaneous and stimulated emission in luminescent films using one-dimensional photonic crystal filters

Xu Guo, Deyue Zou, Xiaoyang Guo,* Ying Lv, Tienan Wang, Yunjun Wang and Xingyuan Liu*

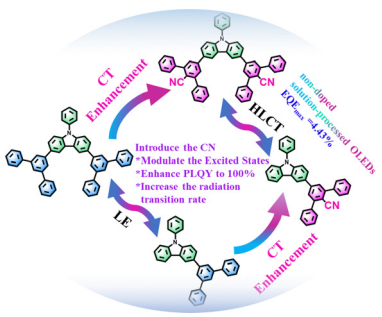
5012



Lattice strain-induced high-performance low-operating-voltage organic field-effect transistors by solution-sheared organic single crystal

Bowen Geng, Feng Zhang, Congcong Huang, Lihua He, Chengtai Li, Shuming Duan,* Xiaochen Ren* and Wenping Hu*

5019



Rational design of hybridized local and charge transfer emitters towards deep blue emission by incorporating extra cyano-based acceptor moieties

Xinjian Wang, Guimin Zhao, Tao Gao, Guanghao Zhang, Haowen Chen, Tao Zhou, Zhengmao Zhang, Wenwen Tian, Wei Jiang* and Yueming Sun

PAPERS

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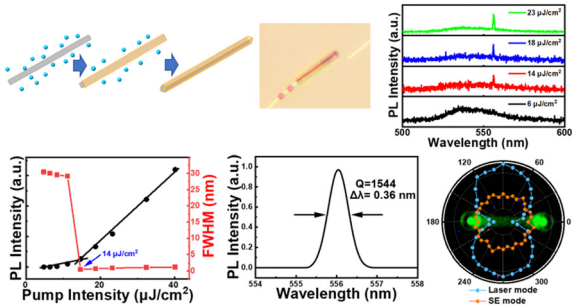
Lasing in perovskite crystallites grown *via* silver-nanowire-induced nucleation

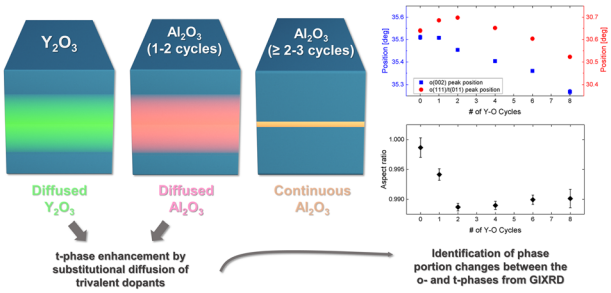
Bin Liu, Junhan Guo, Yang Tang, Liang Qin,* Zhidong Lou, Yufeng Hu, Feng Teng and Yanbing Hou*



5035

Understanding phase evolution of ferroelectric $Hf_{0.5}Zr_{0.5}O_2$ thin films with Al_2O_3 and Y_2O_3 inserted layers

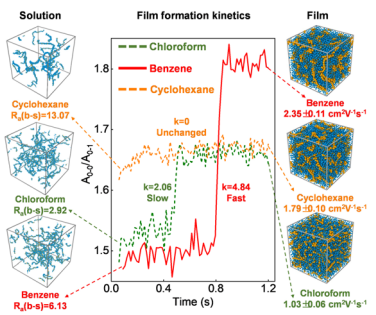
Jonghoon Shin, Haengha Seo, Kun Hee Ye, Yoon Ho Jang, Dae Seon Kwon, Junil Lim, Tae Kyun Kim, Heewon Paik, Haewon Song, Ha Ni Kim, Seungyong Byun, Seong Jae Shin, Kyung Do Kim, Yong Bin Lee, In Soo Lee, Jung-Hae Choi and Cheol Seong Hwang*



5047

Improving the hole mobility of conjugated semiconducting polymer films by fast backbone aggregation during the film formation process

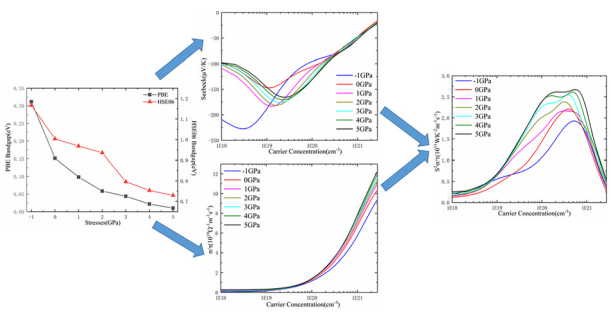
Tianya Jin, Jichen Li, Hongxiang Li,* Xinyu Liu, Junhang Li, Qiang Zhang, Xinhong Yu, Xiaozheng Duan* and Yanchun Han*



5062

Effects of stresses on the thermoelectric properties of In_4Se_3

Weiguo Xu, Quan Liu, Xin Zhou, Jianfeng Lin, Shiquan Lin, Mi Lu and Jianping Lin*



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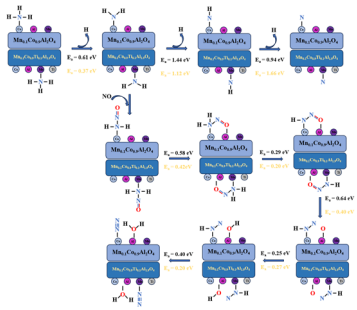

A DFT study of the mechanism of NH_3-SCR NOx reduction over Mn-doped and Mn–Ti co-doped $CoAl_2O_4$ catalysts

Xu Wang, Weiyao Wang, Wei Xiong, Xiaodi Jiang, Taoyuan Ouyang, Yaoning Bai, Xiaoming Cai, Jinming Cai and Honglin Tan*

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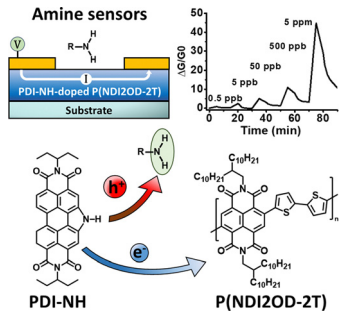

Organic heterojunction charge-transfer chemical sensors

Marc Courté,* Anderson Hoff, Gregory C. Welch and Loren G. Kaake*

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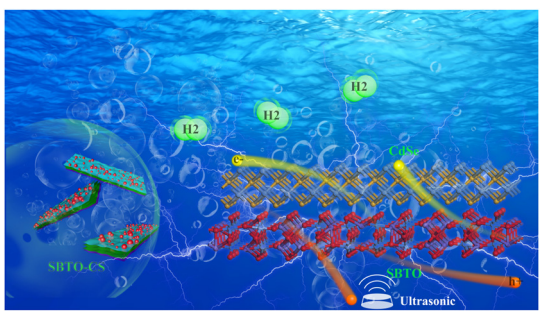

Green and efficient piezocatalytic hydrogen production achieved by modifying $SrBi_4Ti_4O_{15}$ with CdSe

Tiancheng Hou, Longbin Chen, Yaodong Yang,* Jialong Wang, Tianzi Yang and Wei-Feng Rao*

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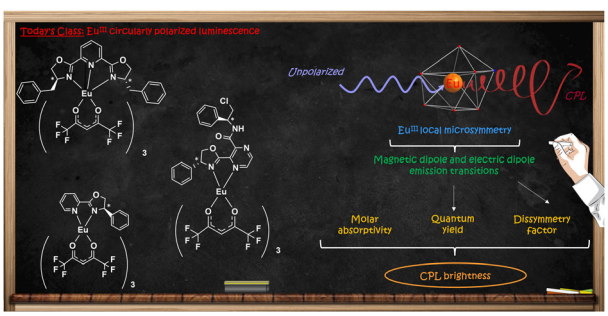

Towards opto-structural parameters to enhance the circularly polarized luminescence brightness of Eu^{III} β-diketone complexes with chiral auxiliary ligands

Isabela Moreira Soares Diogenis, Airton Germano Bispo-Jr, Rodrigo Vezula Pirovani, Leonardo Figueiredo Saraiva, Fabio Cesar Gozzo, Carlos Roque Duarte Correia, Italo Odone Mazali, Rene Alfonso Nome and Fernando Aparecido Sigoli*

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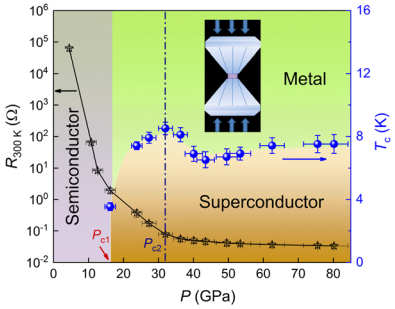
Pressure-induced superconductivity in van der Waals layered semiconductor $SnPSe_3$

Mengyao Qi,* Weifang Chen, Yanping Huang, Hao Song, Xindeng Lv, Ming Wu, Wendi Zhao, Lili Zhang and Tian Cui*



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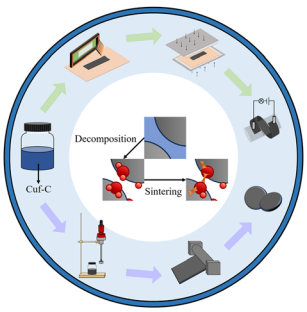
Self-reducing molecular ink for printed electronics and lithium-ion battery cathodes as conductive binder

Wenning Qi, Ruolin Han, Hui Quan, Ruilu Guo, Dali Gao,* Zheng Zhou, Guang-Xin Chen* and Qifang Li



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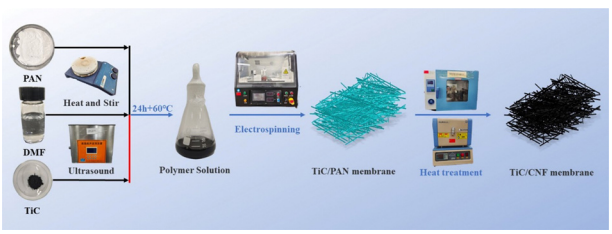
High-performance carbon nanofiber conductive films induced by titanium carbide

He-Dong Huang, Jun-Wei Fan, Hong-Yang Liu, Bing Su, Xin-Yi Ha, Ze-Yu Guo* and Yong-Fei Ren



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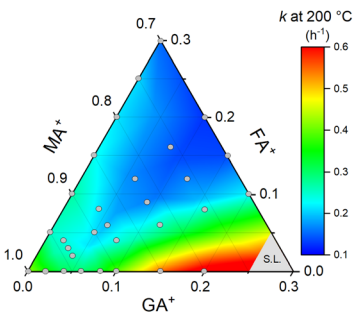
Thermal degradation in methylammonium–formamidinium–guanidinium lead iodide perovskites

F. B. Minussi,* R. M. Silva Jr, J. F. Carvalho and E. B. Araújo



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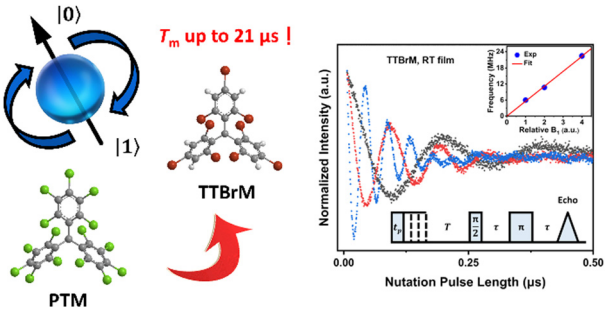

Potential molecular qubits with long coherence time constructed using bromo-substituted trityl radicals

Yu-Shuang Zhang, Yi-Fei Fan, Xing-Quan Tao, Geng-Yuan Li, Qing-Song Deng, Zheng Liu, Ye-Xin Wang,* Song Gao and Shang-Da Jiang*

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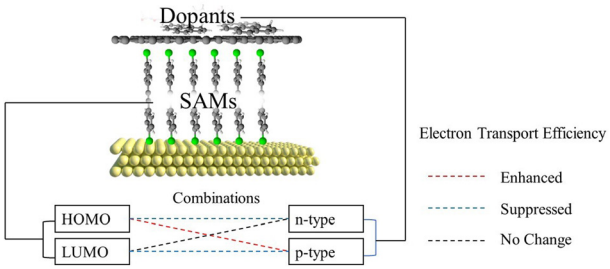

Tailoring quantum transport efficiency in molecular junctions *via* doping of graphene electrodes

Xintai Wang, Shanglong Ning, Liyuan Lin, Xiaoying Li* and Christopher J. B. Ford*

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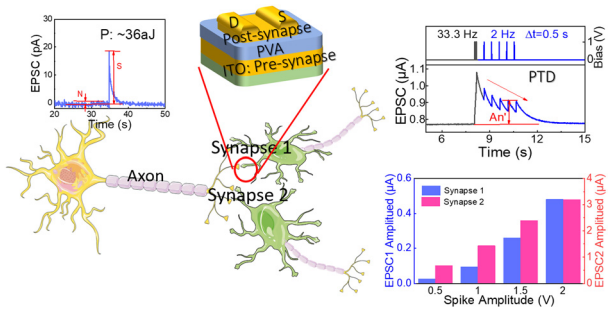

Polyvinyl alcohol electrolyte-gated oxide transistors with tetanization activities for neuromorphic computing

You Jie Huang, Jia Kang Di, Yan Li, Xin Huang, Wei Sheng Wang, Xin Li Chen, Hui Xiao and Li Qiang Zhu*

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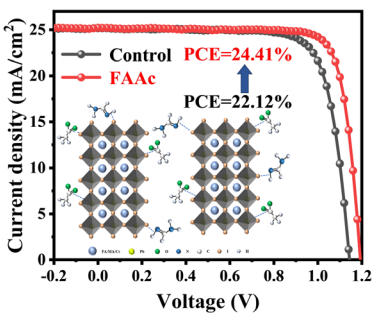

Ionic liquid-regulated PbI_2 layers and defect passivation for efficient perovskite solar cells

Yonggui Sun, Ruiyuan Hu,* Fei Wang, Taomiao Wang, Xiao Liang, Xianfang Zhou, Guo Yang, Yongjun Li, Fan Zhang, Quanyao Zhu, Xing'ao Li* and Hanlin Hu*

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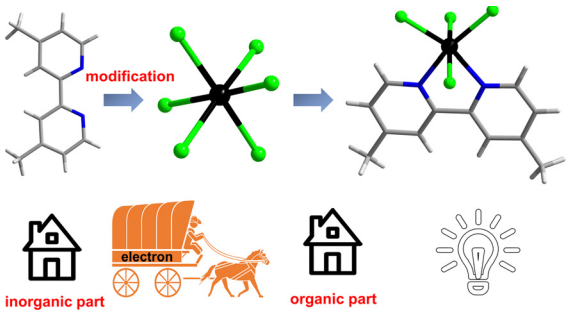
A ligand-incorporating strategy towards single-component white light in ionic zero-dimensional indium chlorides

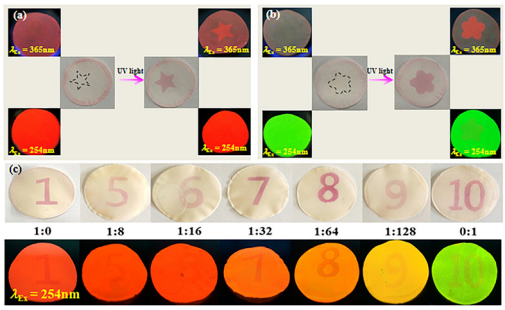
Hao-Wei Lin, Abdusalam Ablez, Zhong-Hua Deng, Zhi-Hua Chen, Ying-Chen Peng, Ze-Ping Wang,* Ke-Zhao Du* and Xiao-Ying Huang*



5191

Light-responsive smart nanopapers and ink: design for information storage and encryption

Zhao Zhang, Xiena Kang, Xinyu Zhao,* Xiaomin Dai, Xiaolin Su, Boying Yang, Yuxia Luo, Chuanyin Xiong, Hui Chang and Xinping Li*



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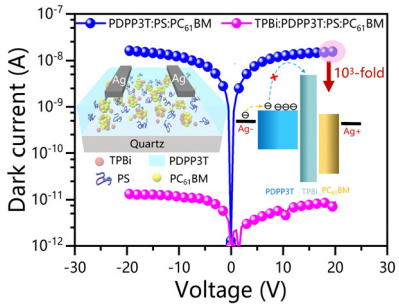
Controlling electron transfer in a lateral near-infrared polymer photodetector by adding higher-LUMO-level acceptors: a pathway to reduce dark current

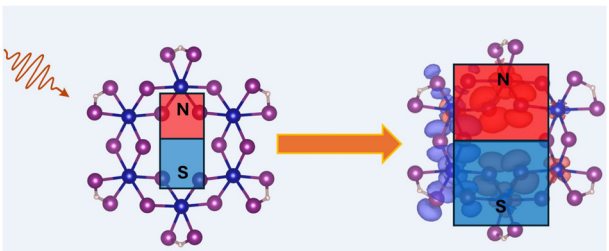
Tao Han,* Xiaoting Li, Junjie Zhang, Wenjun Tang, Sirong Jiang, Changle Pan, Yue Qian, Shufang Ding, Yaqi Chen and Chunzhi Jiang



5213

Magnetic properties of CrX_3 (X = Cl, Br, I) monolayers in excited states

Prakash Mishra and Tunna Baruah*



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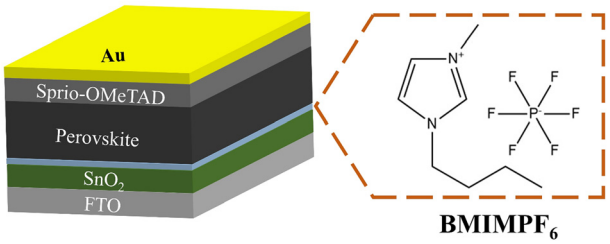
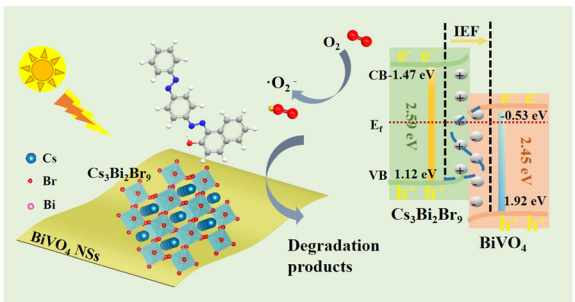


Buried interface modification by multifunctional ionic liquids for triple-cation perovskite solar cells made in a fully ambient air

Gangyi Zeng, Guangyao Liu, Tiantian Wang, Lingling Wen, Jiangning Li, Yan Meng, Ziqiu Ren and Xin Li*

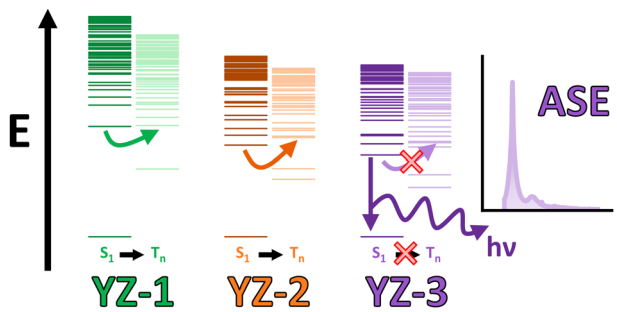
5230



***In situ* growth of $Cs_3Bi_2Br_9$ on ultrathin $BiVO_4$ nanosheets to fabricate heterojunction intimate interfaces for enhancing photocatalytic activity**

Yingdan Gao, Yurong Guo and Guangjiu Zhao*

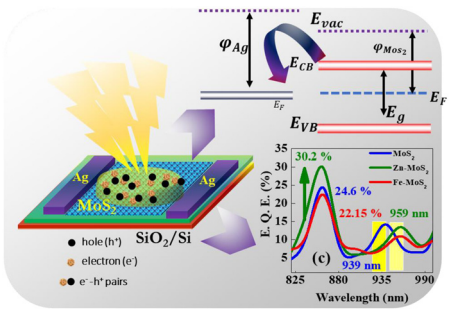
5239



Triplet formation inhibits amplified spontaneous emission in perylene-based polycyclic aromatic hydrocarbons

Sergio Moles Quintero, Jose C. Mira-Martínez, Ya Zou, Marcos Díaz-Fernández, Pedro G. Boj, Jishan Wu,* María A. Díaz-García,* Jose M. Marín-Beloqui* and Juan Casado*

5247



Modulating Fermi energy in few-layer MoS_2 *via* metal passivation with enhanced detectivity for near IR photodetector

R. Abinaya, E. Vinoth, S. Harish, S. Ponnusamy, J. Archana,* M. Shimomura and M. Navaneethan*