

Journal of Materials Chemistry C

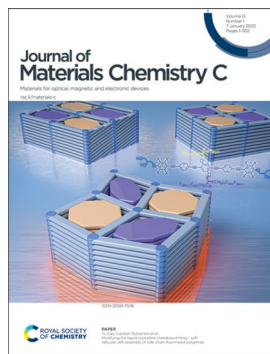
Materials for optical, magnetic and electronic devices

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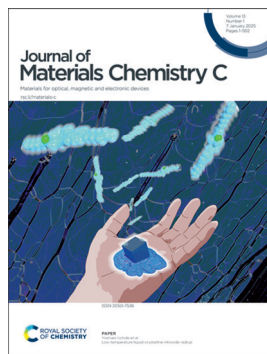
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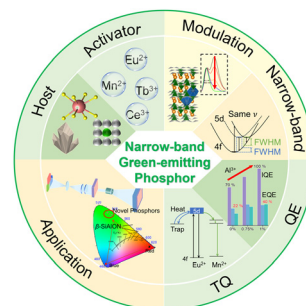
See Yoshiaki Uchida *et al.*, pp. 54–60.
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REVIEW

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High-performance, narrow-band green-emitting phosphors for white LEDs: recent advances and perspectives

Yujia Wan, Dongjie Liu, Wei Yang, Yingsheng Wang, Min Zhang, Hongzhou Lian,* Peipei Dang,* Guogang Li* and Jun Lin*

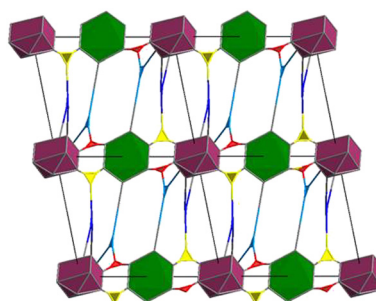


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Accessing mixed cluster rare-earth MOFs with reduced connectivity *via* linker expansion and desymmetrization: co-assembly of 6-c and 10-c hexanuclear clusters in RE-stc-MOF-1

Edward Loukopoulos, Constantinos Tsangarakis, Konstantinos G. Froudas, Maria Vassaki, Giasemi K. Angeli and Pantelis N. Trikalitis*



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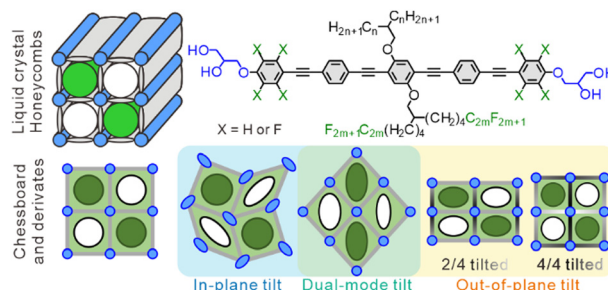
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Modifying the liquid crystalline chessboard tiling – soft reticular self-assembly of side-chain fluorinated polyphiles

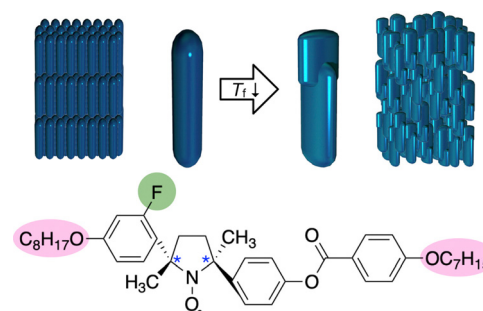
Christian Anders, Virginia-Marie Fischer, Tianyi Tan, Mohamed Alaasar, Rebecca Waldecker, Yubin Ke, Yu Cao,* Feng Liu and Carsten Tschierske*



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Low-temperature liquid-crystalline nitroxide radical

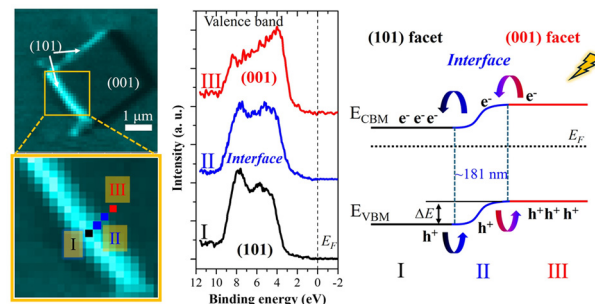
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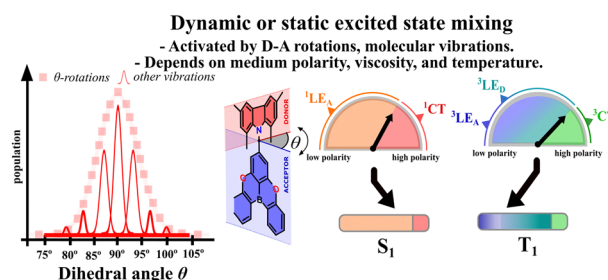
Wenxiong Zhang,* Mustafa Al Samarai, Haochong Zhao, Daobin Liu, Hisao Kiuchi, Ralph Ugalino, Sen Li, Fangyi Yao, Qi Feng and Yoshihisa Harada*



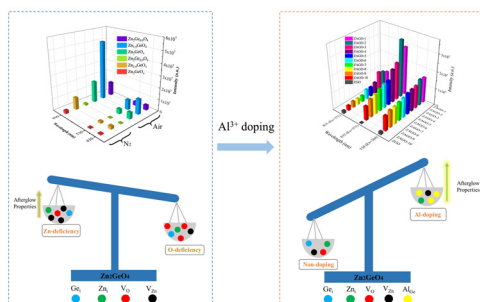
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Experimental evidence of the excited-state mixing in the blue emitter for organic light-emitting diodes

Vladyslav Ievtukhov, Michał Mońka, Olga Ciupak, Irena Bylińska, Piotr Bojarski, Karol Krzysiński and Illia E. Serdiuk*



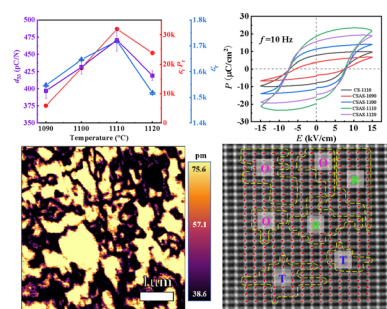
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Ternary afterglow and dynamic anti-counterfeiting applications of self-activated zinc germanate

Tianyu Hu, Jie Yu, Qiqi Zeng, Cong Zhang, Yuanjie Teng, Kang Shao and Zaifa Pan*

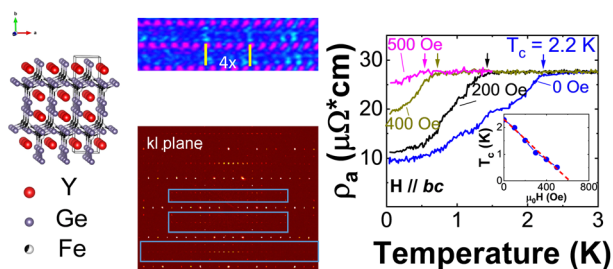
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Enhanced electrical properties of lead-free sodium potassium niobate piezoelectric ceramics prepared via cold sintering assisted sintering

Yao Huang, Xinyue Song, Renbing Sun, Hai Jiang, Peng Du and Laihui Luo*

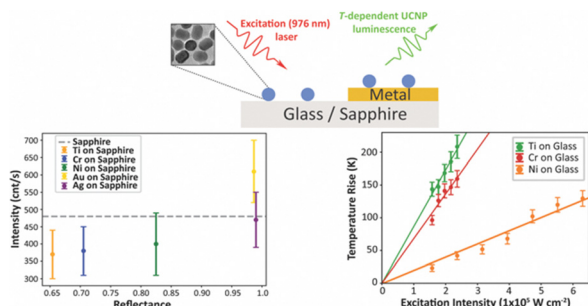
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Metal surface effects on single upconverting nanoparticle luminescence and thermometry signals

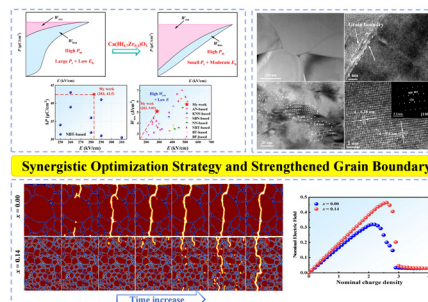
Ziyang Ye, Laura Signor, Molly Cohan and Andrea D. Pickel*



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Achieved excellent energy storage performance under moderate electric field in BaTiO₃-modified Bi_{0.5}Na_{0.5}TiO₃-based lead-free ceramics *via* multiple synergistic design

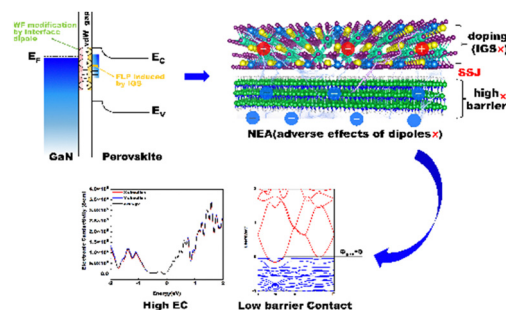
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Weak Fermi level pinning and low barrier interfacial contact: 2D lead-free perovskites on multilayer GaN

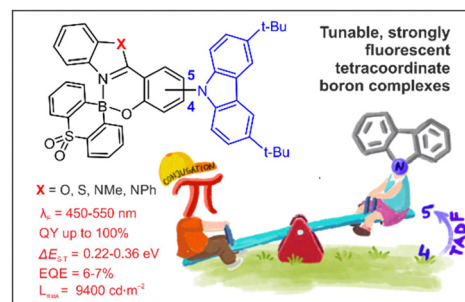
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Strongly fluorescent spiro-type tetracoordinate complexes of dibenzo[*b,e*][1,4]thiaborinine dioxide with functionalized 2-(benzo[*d*]heterazol-2-yl)phenolate ligands displaying TADF

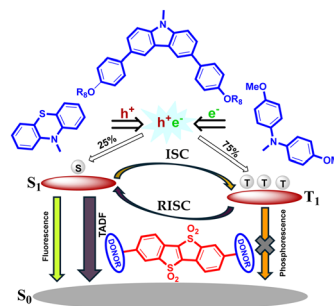
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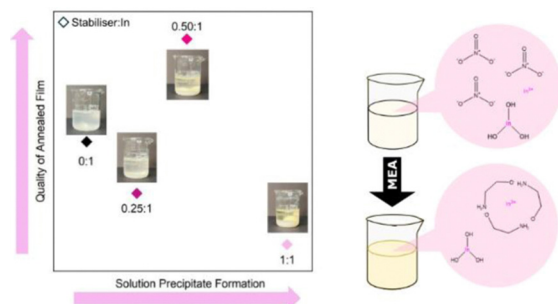
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New [1]benzothieno[3,2-*b*]benzothiophene-tetraoxide-based TADF emitters with a D–A–D structure for OLED applications

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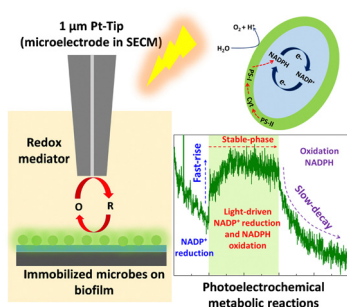
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The influence of stabiliser concentration on the formation of In_2O_3 thin films

Aysha A. Riaz, Curran Kalha, Maria Basso, Máté Füredi and Anna Regoutz*

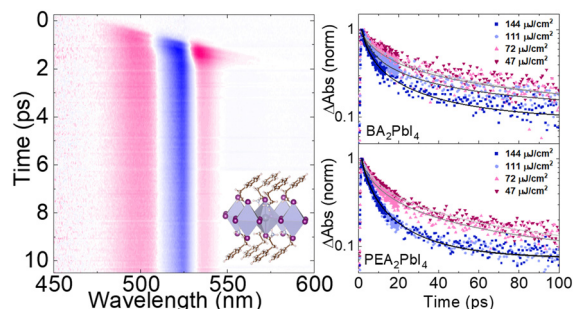
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Single microbe photoelectrochemical device using scanning electrochemical microscopy

Arun Kumar Samuel, Shweta Shinde, Alagammai Palaniappan, Prerna Bhalla and Aravind Kumar Chandiran*

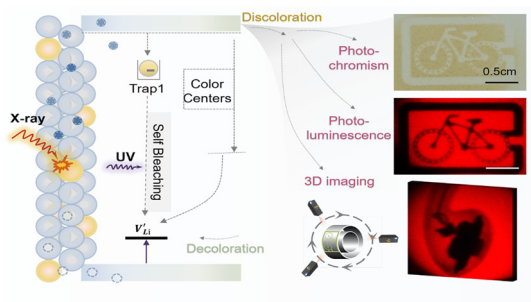
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Yueteng Zhang, Xue Bai, Heping Zhao, Jianbei Qiu, Zhiguo Song, Jiayan Liao* and Zhengwen Yang*

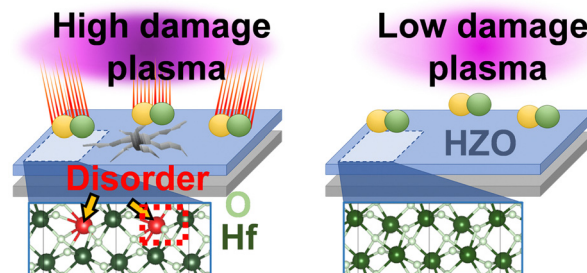


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Damage mitigation as a strategy to achieve high ferroelectricity and reliability in hafnia for random-access-memory

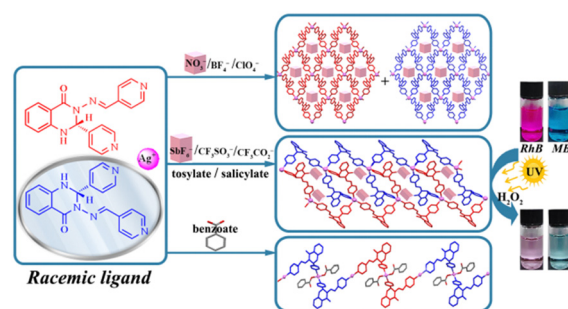
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Anion-induced chiral assembly: construction of Ag(I) coordination polymers for photocatalytic degradation of organic dyes

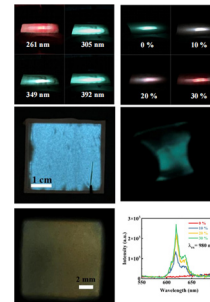
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Multimode stimulated luminescence of LiNbO₃:Pr³⁺/ZnS:Cu/PDMS flexible films

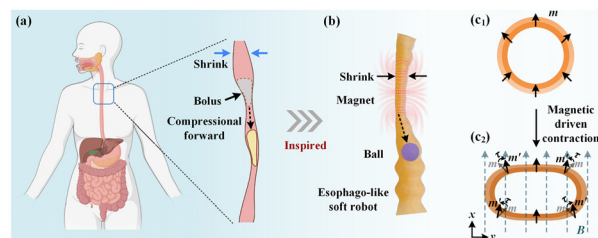
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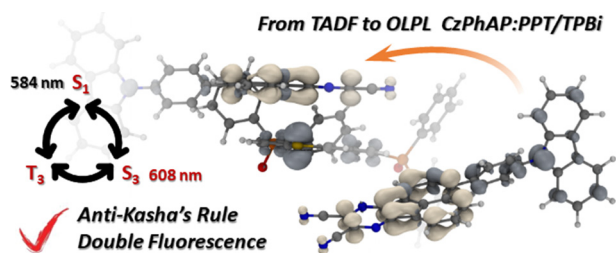
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An esophagus-inspired magnetic-driven soft robot for directional transport of objects

Shanfei Zhang, Qi Wang, Zhuofan Li, Yizhuo Xu and Bin Su*



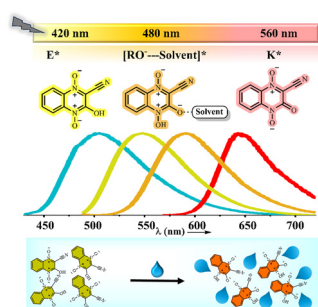
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Marcus inverted region in organic long-persistent luminescence host–guest systems designed from thermally activated delayed fluorescence molecules: a mechanistic study

Yajie Meng, Xi Chen, Yingqi Li, Yunlong Shang, Yulin Guo, Yong Wu,* Haiyan Wei* and Jiawei Xu*

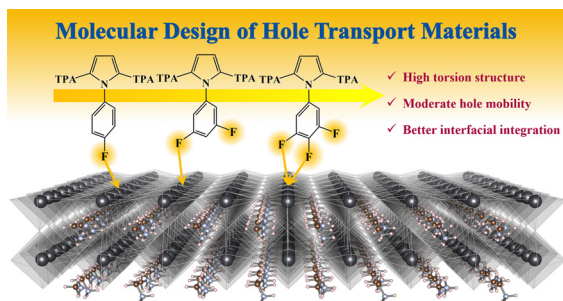
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Revisiting the excited state proton transfer dynamics in *N*-oxide-based fluorophores: a keto–enol/enolate interplay to detect trace water in organic solvents

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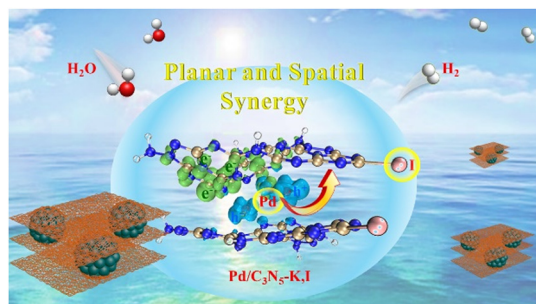
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Theoretical study on the optoelectronic properties of fluorinated phenylpyrrole-based hole transport materials for perovskite solar cells

Wenhui You, Jie Yang* and Quansong Li*

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Fabrication of a high-efficiency hydrogen generation Pd/C₃N₅-K,I photocatalyst through synergistic effects of planar and spatial carrier separation

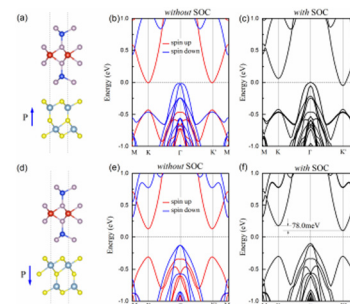
Yanan Gao, Jingjing Wang, Jingxuan Yang, Yajie Wang, Wenjuan Tian* and Bin Liu*



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Nonvolatile electrical control of the electronic and valleytronic properties by ferroelectricity in the $\text{VSi}_2\text{P}_4/\text{Al}_2\text{S}_3$ van der Waals heterostructure

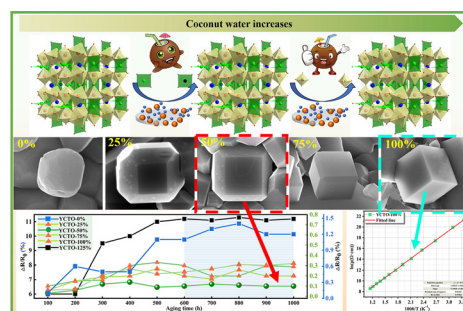
Shoubao Zhang, Na Jiao, Hongyan Lu, Mengmeng Zheng, Ping Zhang and Meiyan Ni*



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Crystal facet tailoring: a promising pathway toward high-performance $\text{Y}_{2/3}\text{Cu}_3\text{Ti}_4\text{O}_{12}$ thermosensitive ceramics

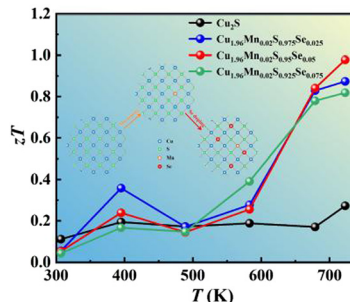
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Mn-doping method boosts Se doping concentration in Cu_2S towards high thermoelectric performance

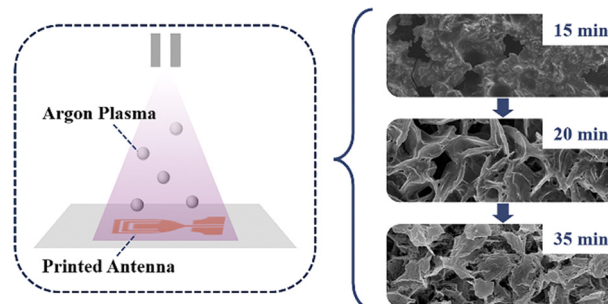
Chen Gong, Zhiwei Zeng, Xiaoling Sun, Chengran Luo and Hongyi Chen*



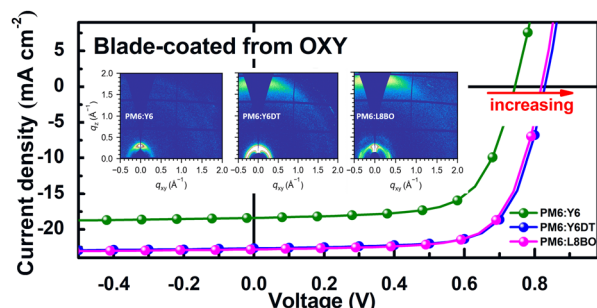
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Plasma-activated copper-alkanolamine precursor paste for printed flexible antenna: formulation, mechanism, and performance evaluation

Wendong Yang,* Zihao Guo, Michael Hengge and Emil J. W. List-Kratochvil*



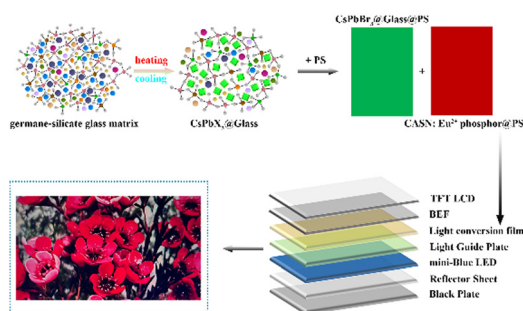
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Improving voltage and quantum efficiency in blade-coated ITO-free organic solar cells processed with a non-halogenated solvent

Cuifen Zhang, Zheng Li, Yi Lin, Zhibo Wang, Huawei Hu, Ming Wang,* Zheng Tang* and Zaifei Ma*

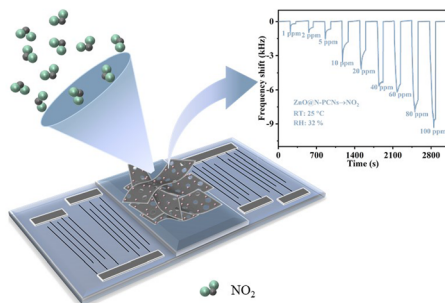
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High stability modified $\text{CsPb}(\text{ClBr})_3@\text{glass}@\text{PS}$ for wide color gamut mini-LED backlight displays

Enrou Mei, Jiapeng Yang, Yanling Lin, Zhaoping Chen,* Xiaojuan Liang* and Weidong Xiang*

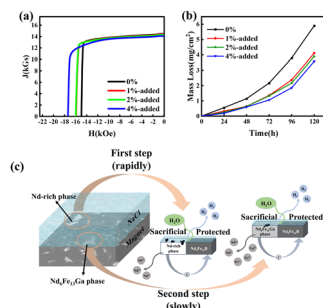
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Enhancing the NO_2 detection ability of surface acoustic wave sensors with ZnO-decorated N-doped porous carbon nanosheets

Xue Li, Yuan Feng, Haifeng Lv, Junjie Shi, Yuanjun Guo,* Sean Li* and Xiaotao Zu*

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Concurrent improvements in coercivity and corrosion resistance for $\text{Nd}_6\text{Fe}_{13}\text{Ga}$ -reconstructed Nd-Fe-B sintered magnets

Rui Shen, Shuainan Xu, Congyi Wang, Enxiang Yang, Xiaolian Liu,* Song Fu, Weiyang Jin, Yu Pan, Lizhong Zhao, Pengfei Guan and Xuefeng Zhang*

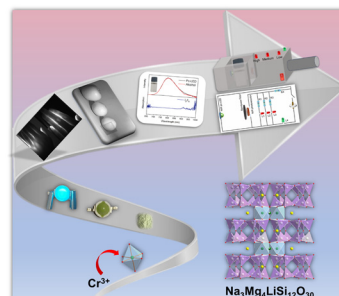


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A novel broadband near-infrared phosphor $\text{Na}_3\text{Mg}_4\text{LiSi}_{12}\text{O}_{30}:\text{Cr}^{3+}$: moderate synthesis and application

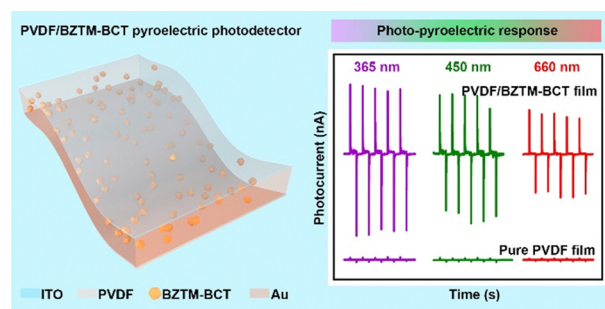
Zhenwei Jia, Xiaohui Zhao, Jingyi Gao, Tongqing Sun,*
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Boosting the light-driven pyroelectric response of poly(vinylidene difluoride) by constructing Mn-doped BZT-BCT/PVDF composites

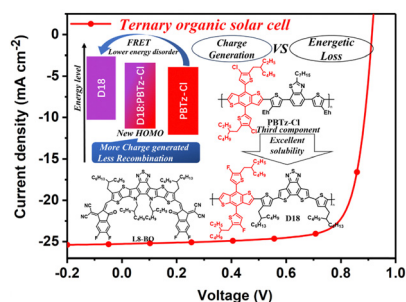
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Molecular interaction regulation by adding a third component with high miscibility suppresses the energetic disorder and reduces energy loss for efficient ternary solar cells

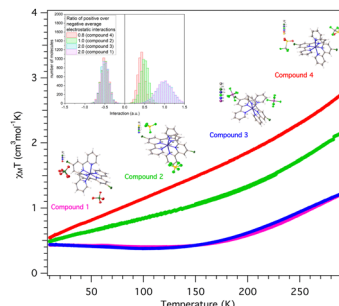
Ruiying Lin, Shichu Peng, Zhenyu Luo, Jiaxin Wu,
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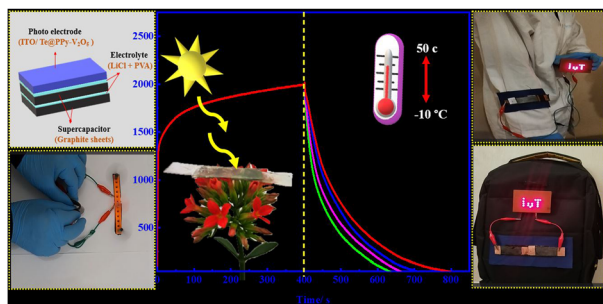
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Variation in the zero-point energy difference via electrostatic interactions in Co(II)-Cltpy-based spin-crossover molecular materials

Mousumi Dutta, Ajana Dutta, Prabir Ghosh,*
Shubhankar Maiti, Laurentiu Stoleriu,
Cristian Enachescu and Pradip Chakraborty*



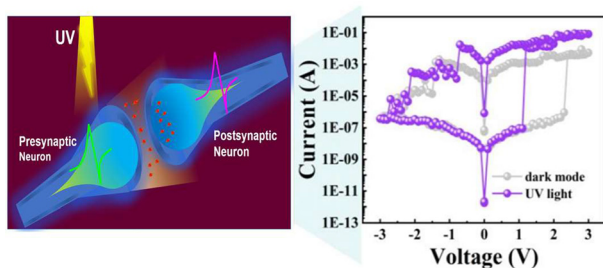
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Lightweight flexible self-powered photo-supercapacitors with good stability through photoelectrochemical deposition of tellurium on PPy- V_2O_5 films as a new visible light active dual photoelectrode

Mohamad Mohsen Momeni,^{*}
Hossein Mohammadzadeh Aydisheh,
Byeong-Kyu Lee^{*} and Ali Naderi

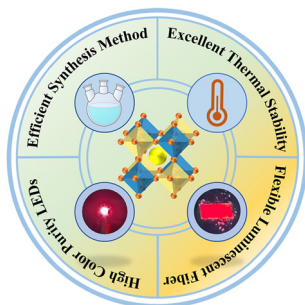
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Optoelectronic stimuli-driven switchable memristors with multilevel resistance states for neuromorphic vision sensors

Pravinraj Selvaraj, Meng-Lin Chen, Sreeshyam Adat and Yu-Wu Wang^{*}

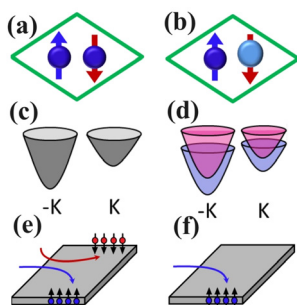
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High stability of robust anti-thermal-quenching lead-free double perovskite crystals for optoelectronic devices and high-performance fibers

Xiaoman Zhang, Yehua Zheng, Kun Nie,^{*}
Xiaodong Zhang, Xiuqiang Duan, Ziyao Hu, Ming Yang,
Lefu Mei, Luoxin Wang, Hua Wang, Mingquan Li and Xiaoxue Ma^{*}

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The isovalent alloying assisted anomalous valley Hall effect in a hexagonal antiferromagnetic monolayer

Liguo Zhang, San-Dong Guo,^{*} Xiao-Shu Guo and Gangqiang Zhu

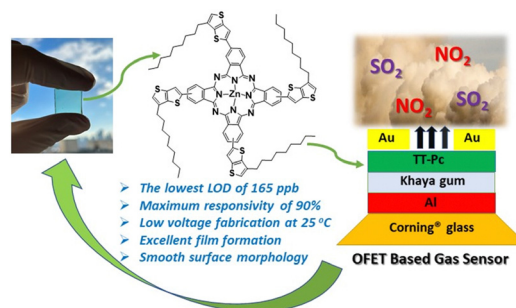


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Highly sensitive OFET based room temperature operated gas sensors using a thieno[3,2-*b*]thiophene extended phthalocyanine semiconductor

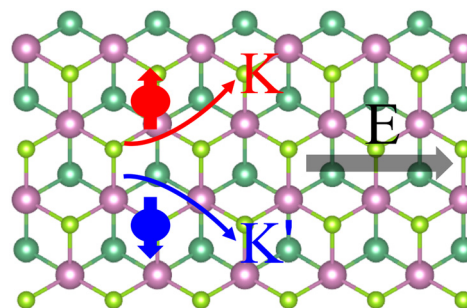
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Strain and *U* driven phase transitions in monolayer intrinsic ferrovalley NbIn₂As₂Se₂

Jiajun Zhu, Heyun Zhao and Wanbiao Hu*



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Study on the time-resolved detection performance of β-Ga₂O₃-based SBUV photodetectors: surface chemical analysis and the impacts of non-V_O factors

Zeming Li, Rensheng Shen, Wancheng Li, Teng Jiao, Yuchun Chang,* Hongwei Liang,* Xiaochuan Xia and Baolin Zhang*

