

Journal of Materials Chemistry C

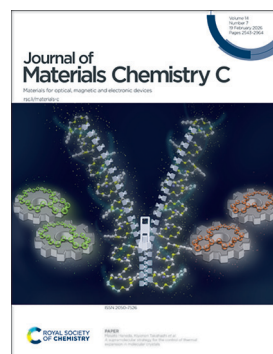
Materials for optical, magnetic and electronic devices

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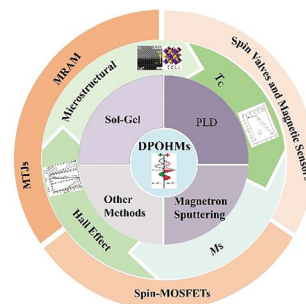
See Masato Haneda, Kiyonori Takahashi *et al.*, pp. 2609–2618. Image designed by Kazuya Kanamaru and reproduced by permission of Masato Haneda and Kazuya Kanamaru from *J. Mater. Chem. C*, 2026, **14**, 2609.

REVIEW

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Research progress in double perovskite oxide half-metals for magnetic storage technology

Qingkai Tang and Xinhua Zhu*

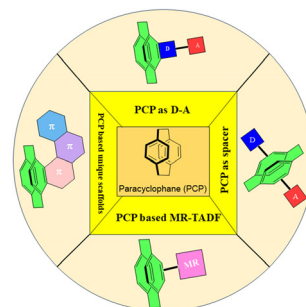


PERSPECTIVE

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Planar chiral paracyclophanes: emerging scaffolds for circularly polarized OLEDs

Pratham Bahirat, Marissa Carvalho, Sunil Madgaya, Hardik Janwadkar, Aniket Chaudhari* and Atul Chaskar*



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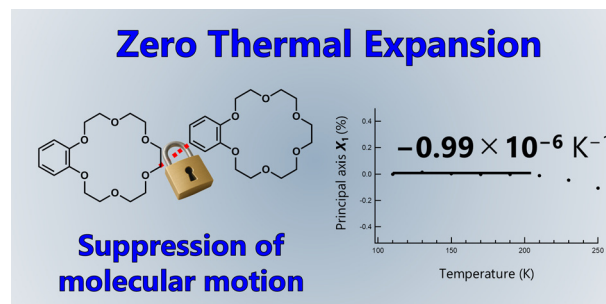
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2609

A supramolecular strategy for the control of thermal expansion in molecular crystals

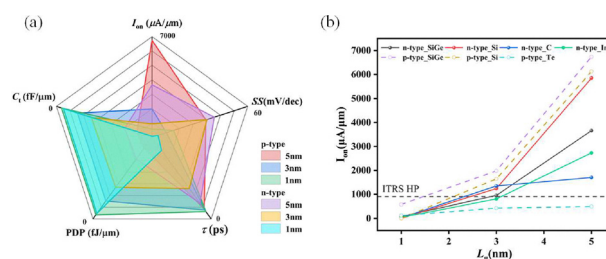
Masato Haneda, Kiyonori Takahashi,*
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Chen Xue, Shin-ichiro Noro, Seiji Tsuzuki,
Sadafumi Nishihara and Takayoshi Nakamura*



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Ultrathin sub-5 nm gate-all-around SiGe nanowire transistors with near-ideal subthreshold swing

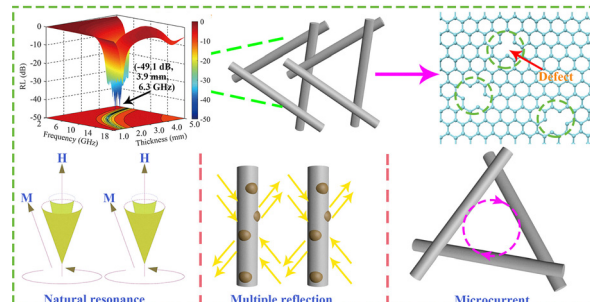
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Iron–cobalt/carbon nanocomposites with adjustable impedance matching and a wide effective absorption bandwidth as outstanding microwave absorbers

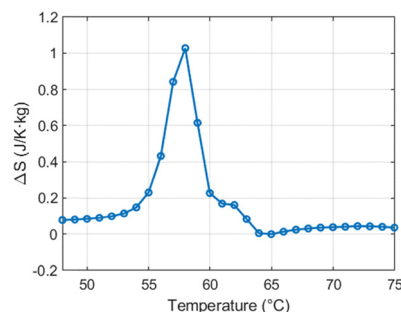
Xiaolei Zheng* and Xiaoqiang Li*



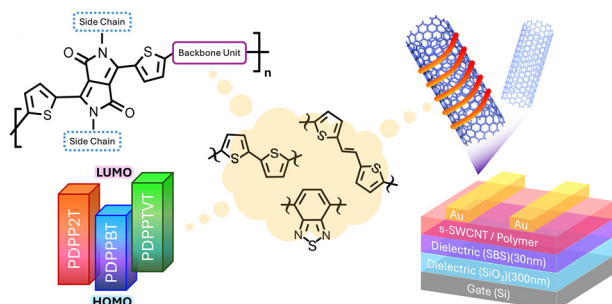
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Influence of particle orientation, concentration and matrix stiffness on the elastocaloric performance of spin crossover composite materials

Nagham Mawassy, Adelais Trapali, Vincent Collière,
Lionel Salmon, Gábor Molnár* and
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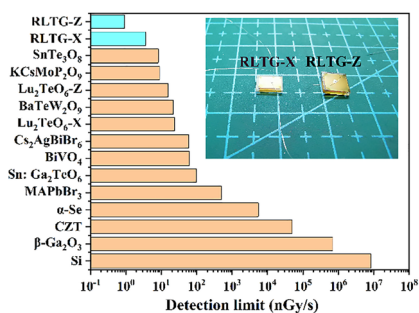
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Fine-tuning the backbone coplanarity and energy level of diketopyrrolopyrrole-based conjugated polymers for single-walled carbon nanotube sorting and field-effect transistor applications

Chun-Yen Wu, Guo-Hao Jiang, Yu-Che Kan, Yu-Chun Huang, Chi-Cheng Chiu, Chien-Chung Shih and Yan-Cheng Lin*

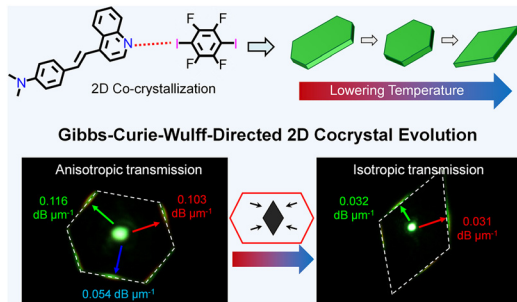
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Tianyu Wang, Chuan Tang, Feifei Guo, Yini An, Qian Wu,* Haotian Tian, Hui Sun, Tixian Zeng, Chenghua Sun, Zeliang Gao* and Mingjun Xia*

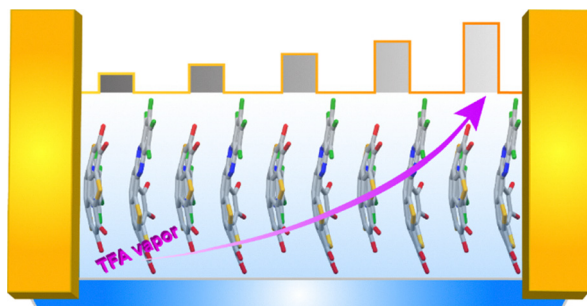
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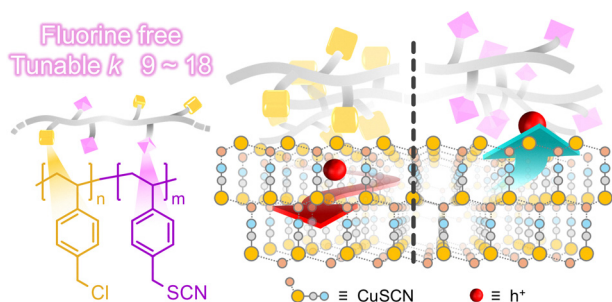


Ultrasensitive ppb-level detection of trifluoroacetic acid vapor using bucky-bowl-based organic field-effect transistors

Yecheng Li, Haomin Zhang, Xinqiang Hua, Zitong Liu, Hao-Li Zhang and Xiangfeng Shao*



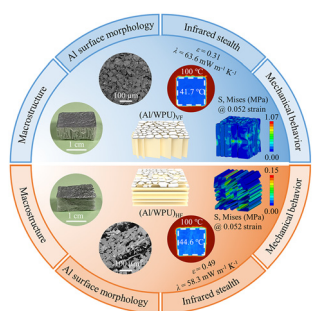
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Achieving high field-effect mobility in CuSCN thin-film transistors with thiocyanate-functionalized polymers as fluorine-free dielectrics

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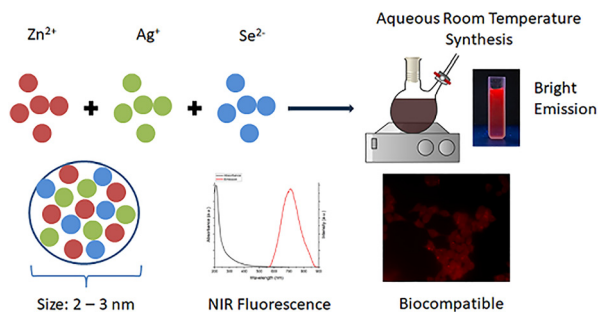
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Aluminum/waterborne polyurethane composite aerogels with combined low infrared emissivity and thermal conductivity

Bingcheng Li, Fei Fang,* Ke Zhang and Xudong Huang*

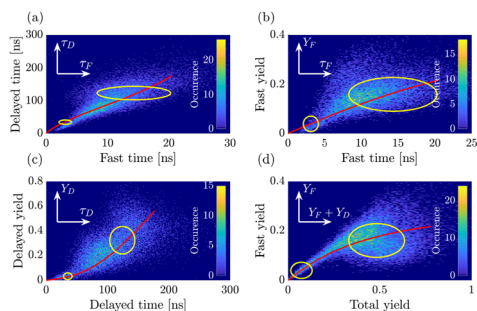
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Room-temperature aqueous ZnAgSe alloyed quantum dots: Zn-assisted defect passivation for bright NIR emission and biointerface-ready colloids

Özge İbış, Hadi Jahangiri, Toghrul Almammadov and Caner Ünlü*

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Model of luminescence and delayed luminescence correlated blinking in single CsPbBr₃ nanocrystals

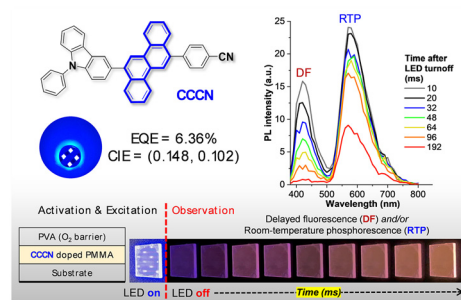
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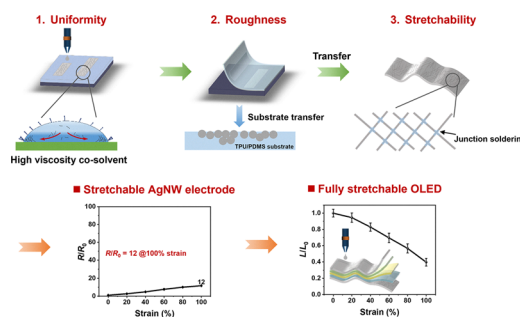
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Inkjet printing of silver nanowire electrodes for fully stretchable organic light-emitting diodes

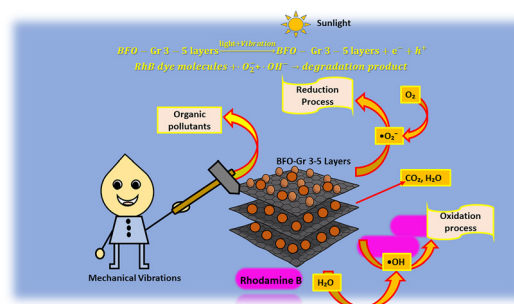
Dong Lv, Qiang Zhang, Xinhong Yu* and Yanchun Han*



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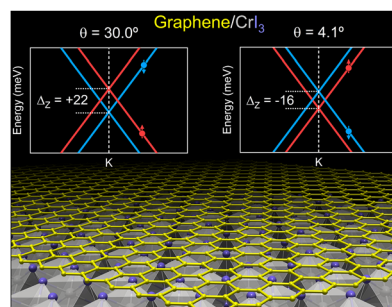
Anjali Varshney, Sunil Chauhan* and Subhash Sharma*



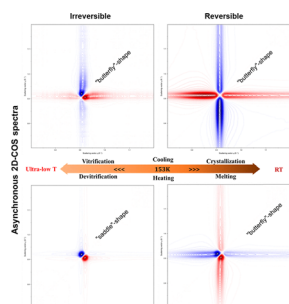
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Twist-angle programmable magnetism in graphene/CrI3 bilayers

Florentino López-Urías and Francisco Sánchez-Ochoa*



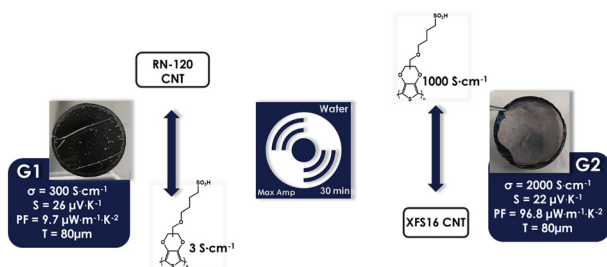
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Mapping the structural evolution in supercooled polysiloxane liquids: a combined temperature-resolved WAXD and 2D-COS study

Xiang Shi* and Chao Fu*

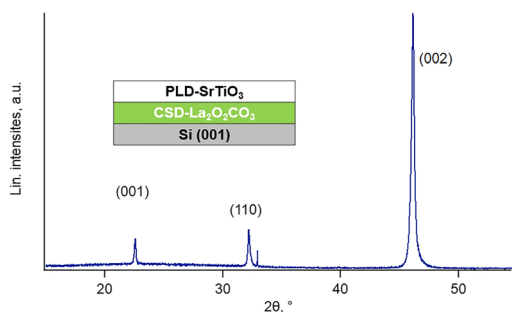
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Organic thermoelectric films: achieving high conductivity and power factor through sulfonated-poly(3,4-ethylenedioxythiophene) and single-walled carbon nanotube composites

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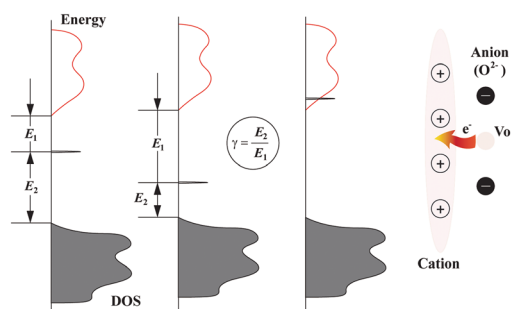
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Preferentially oriented SrTiO₃ thin films grown on lanthanide-assisted Si(001) via pulsed laser deposition

Hannes Rijckaert,* Giovanna Latronico, Davy Deduytsche, Eduardo Solano, Petriina Paturi and Paolo Mele

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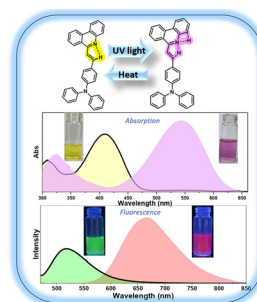
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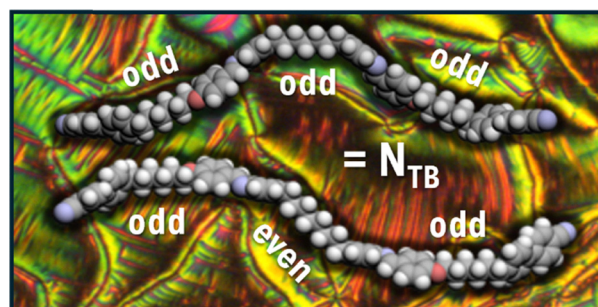
Atul B. Nipate, Vinutha K. Venkatareddy and M. Rajeswara Rao*



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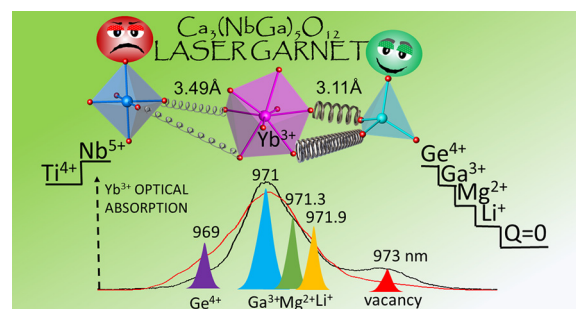
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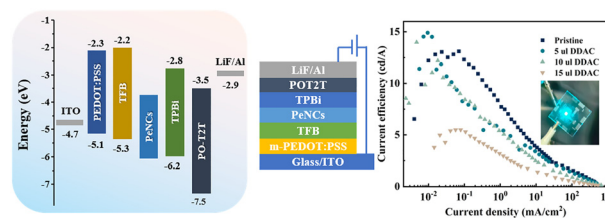
Maria Dolores Serrano, Concepción Cascales, Carlos Zaldo,* Nicolas Trcera, João Elias F. S. Rodrigues, Giulio Gorni, Mamoru Kitaura and Hirokazu Masai



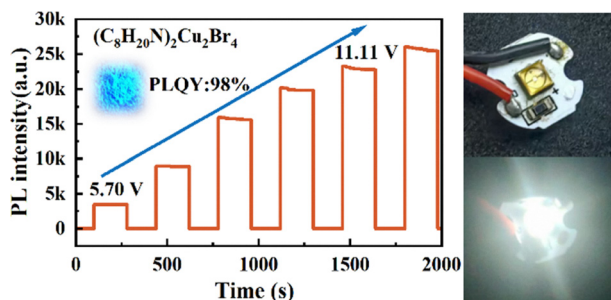
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Neodymium chloride doping and homogeneous passivation in CsPbBr₃ nanocrystals for efficient blue light-emitting diodes

Chenrun Liu, Ziqi Wu, Peisheng Nong, Qiuting Cai, Xingliang Dai, Bobo Li,* Haiping He,* Wang Zhang* and Mingxia Qiu*



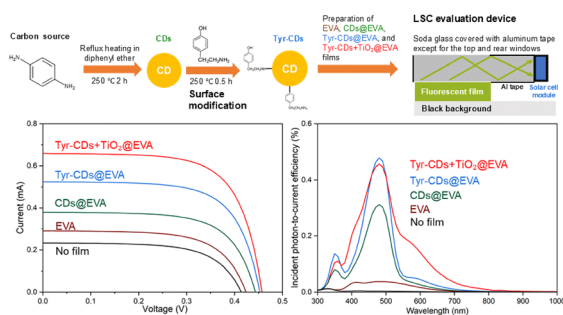
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Efficient and stable deep-blue emission from lead-free $(\text{TEA})_2\text{Cu}_2\text{Br}_4$ for white LEDs

Bing Wang,* Yonglin Wang, Ming Cui, Ting Yu, Zurong Du, Wanfu Wang and Pengbo Lyu

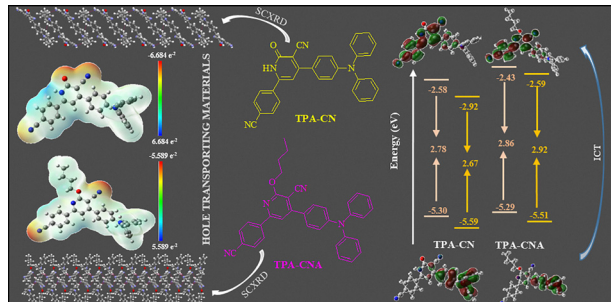
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Performance enhancement of carbon dot-based luminescent solar concentrators *via* surface modification and TiO₂-enhanced scattering

Yunxiang Liu, Yoshiki Iso* and Tetsuhiko Isobe*

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Exploring π -conjugated triphenylamine–cyano derivatives as cost-effective hole-transporting materials in perovskite solar cell

M. Swathi, Rachel Chetri, Vyngintas Jankauskas, Gediminas Kreiza, Kasparas Rakstys, Vytautas Getautis and T. N. Ahipa*

