

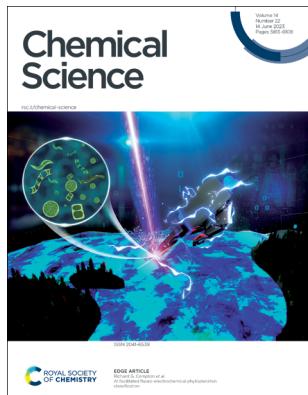
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IN THIS ISSUE

ISSN 2041-6539 CODEN CSHCBM 14(22) 5813–6108 (2023)



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See Manickam Bakthadoss and
Tadiparthi Thirupathi Reddy,
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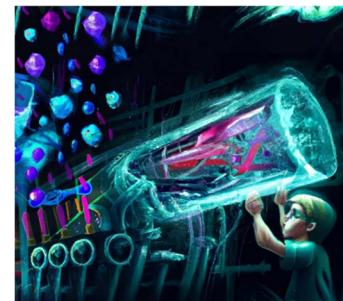
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COMMENTARY

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A focus on how latent "codons" are unravelled in synthetic copolymers

Christopher Barner-Kowollik* and Bryan T. Tuten*

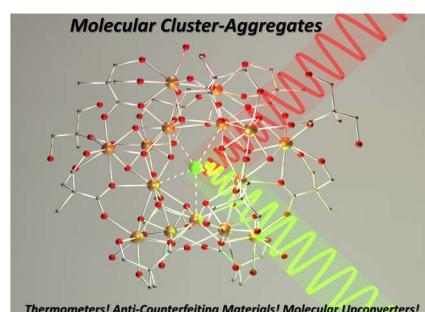


PERSPECTIVE

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Lanthanide molecular cluster-aggregates as the next generation of optical materials

Diogo Alves Gálico, Claudia Manuela Santos Calado
and Muralee Murugesu*



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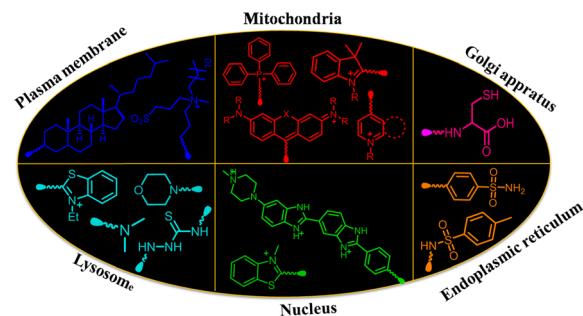
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REVIEW

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Organelle-targeting ratiometric fluorescent probes: design principles, detection mechanisms, bio-applications, and challenges

Manoj Kumar Goshisht, Neetu Tripathi,*
Goutam Kumar Patra and Manohar Chaskar



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AI facilitated fluoro-electrochemical phytoplankton classification

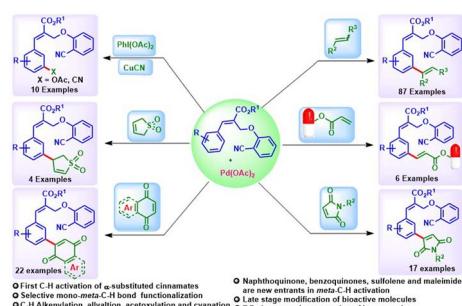
Haotian Chen, Samuel Barton, Minjun Yang,
Rosalind E. M. Rickaby, Heather A. Bouman and
Richard G. Compton*



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Distal meta-C–H functionalization of α -substituted cinnamates

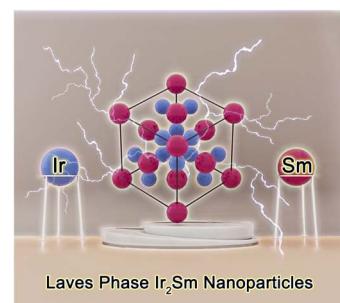
Manickam Bakthadoss* and Tadiparthi Thirupathi Reddy



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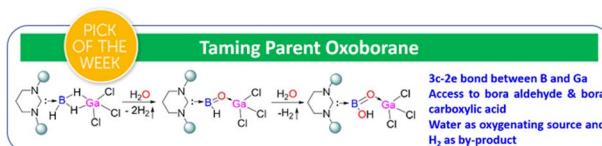
Laves phase Ir_2Sm intermetallic nanoparticles as a highly active electrocatalyst for acidic oxygen evolution reaction

Shuai Zhang, Leilei Yin, Qingqing Li, Siyuan Wang,
Weihua Wang and Yaping Du*



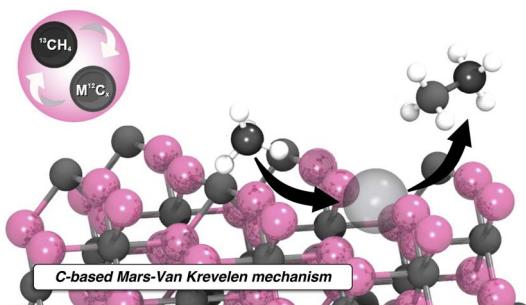
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**Taming the parent oxborane**

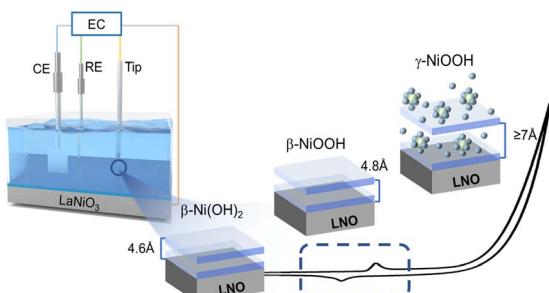
Gargi Kundu, P. R. Amrutha, K. Vipin Raj, Srinu Tothadi, Kumar Vanka and Sakyu S. Sen*

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**Role and dynamics of transition metal carbides in methane coupling**

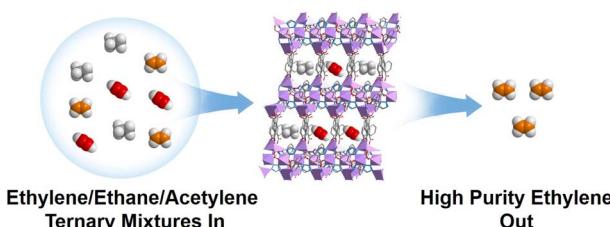
Seraphine B. X. Y. Zhang, Quentin Pessemesse, Lukas Lätsch, Konstantin M. Engel, Wendelin J. Stark, Alexander P. van Bavel, Andrew D. Horton, Pierre-Adrien Payard* and Christophe Copéret*

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**Direct observation of the dynamic reconstructed active phase of perovskite LaNiO₃ for the oxygen-evolution reaction**

Yan Sun, Cheng-Rong Wu, Tian-Yi Ding, Jian Gu, Jia-Wei Yan,* Jun Cheng* and Kelvin H. L. Zhang*

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**Pillar-layer Zn-triazolate-dicarboxylate frameworks with a customized pore structure for efficient ethylene purification from ethylene/ethane/acetylene ternary mixtures**

Jiaqi Liu, Hao Wang* and Jing Li*

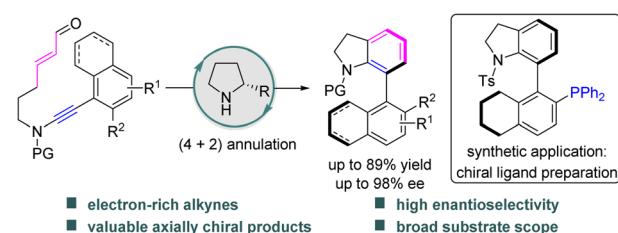


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Organocatalytic intramolecular (4 + 2) annulation of enals with ynamides: atroposelective synthesis of axially chiral 7-aryl indolines

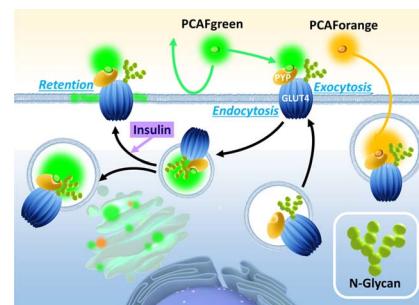
Zhi-Xin Zhang, Li-Gao Liu, Yi-Xi Liu, Jian Lin, Xin Lu,* Long-Wu Ye and Bo Zhou*



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Visualization of multiple localizations of GLUT4 by fluorescent probes of PYP-tag with designed unnatural warhead

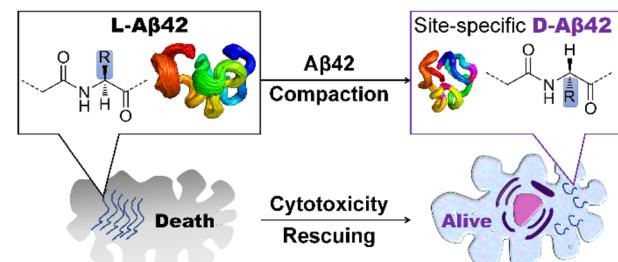
Miyako Nishiura, Yuichiro Hori,* Maho Umeno and Kazuya Kikuchi*



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Site-specific chirality-conferred structural compaction differentially mediates the cytotoxicity of A β 42

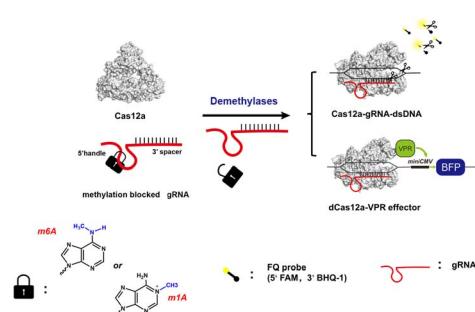
Gongyu Li,* Chae Kyung Jeon, Min Ma, Yifei Jia, Zhen Zheng, Daniel G. Delafield, Gaoyuan Lu, Elena V. Romanova, Jonathan V. Sweedler, Brandon T. Ruotolo* and Lingjun Li*



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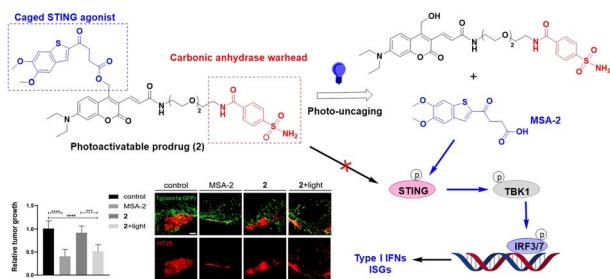
Regulation of the CRISPR-Cas12a system by methylation and demethylation of guide RNA

Zhian Hu, Ao Sun, Jinlei Yang, Gul Naz, Gongwei Sun, Zhengping Li, Jun-Jie Gogo Liu,* Sichun Zhang* and Xinrong Zhang*



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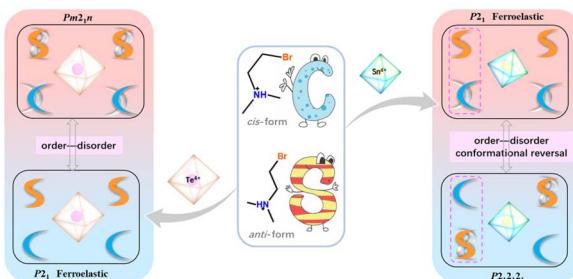
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Photochemically controlled activation of STING by CAIX-targeting photocaged agonists to suppress tumor cell growth

Chunyong Ding,* Mengyan Du, Zhi Xiong, Xue Wang, Hongji Li, Ende He, Han Li, Yijing Dang, Qing Lu, Shicong Li, Ruoxuan Xiao, Zhai Xu, Lili Jing,* Liufu Deng, Xiyuan Wang, Meiyu Geng, Zuoquan Xie* and Ao Zhang*

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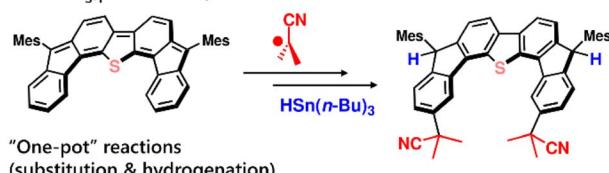
An anomalous ferroelastic phase transition arising from an unusual *cis*-/anti-conformational reversal of polar organic cations

Bing-Qing Zhao, Xiao-Xian Chen, Hui Ye, Ya-Ping Gong, Jun Wang, Le Ye and Wei-Xiong Zhang*

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Site-selective radical reactions of open-shell singlet diradicaloids

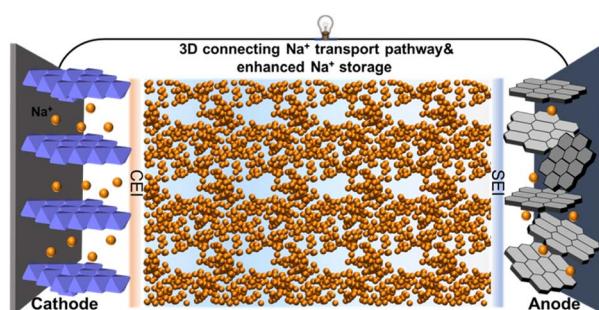
Difluoreno[4,3-*b*:3',4'-*d*]thiophene
 $\Delta E_{S-T} = -4.3$ kcal/mol



Site-selective radical reactions of kinetically stable open-shell singlet diradicaloid difluorenoheteroles with tributyltin hydride and azo-based radical initiators

Naoki Tabata, Takumi Uchino, Chitoshi Kitamura, Kazunari Yoshizawa, Yoshihito Shiota* and Shin-ichiro Kato*

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Three-dimensional heterogeneity in liquid electrolyte structures promotes Na ion transport and storage performance in Na-ion batteries

Mengying Ma, Binbin Chen and Huilin Pan*

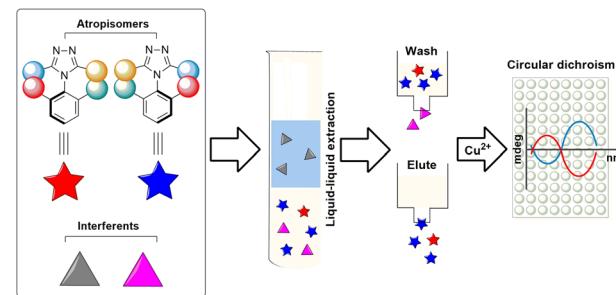


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High-throughput determination of enantiopurity in atroposelective synthesis of aryl triazoles

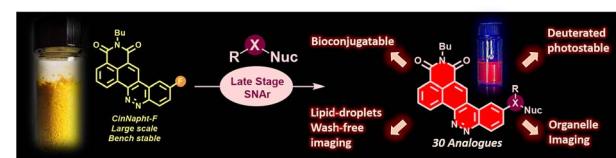
Jongdoo Lim, Melody Guo, Sooyun Choi, Scott J. Miller* and Eric V. Anslyn*



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Unprecedented perspectives on the application of CinNaphl fluorophores provided by a "late-stage" functionalization strategy

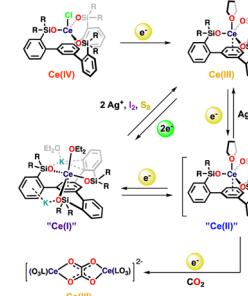
Eléonore Tacke, Minh-Duc Hoang, Kevin Tatoueix, Benoît Keromnes, Elsa Van Eslande, Philippe Durand, Gregory Pieters and Arnaud Chevalier*



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Isolation and redox reactivity of cerium complexes in four redox states

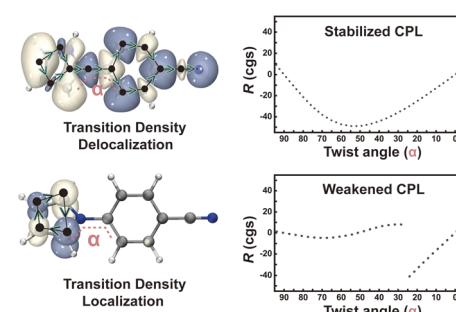
Fang-Che Hsueh, Thayalan Rajeshkumar, Laurent Maron,* Rosario Scopelliti, Andrzej Sienkiewicz and Marinella Mazzanti*



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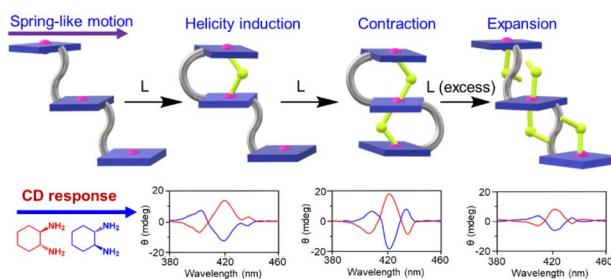
Pivotal role of transition density in circularly polarized luminescence

Zhanxiang Chen, Manli Huang, Cheng Zhong,* Shaolong Gong, Veaceslav Coropceanu,* Jean-Luc Brédas* and Chuluo Yang*



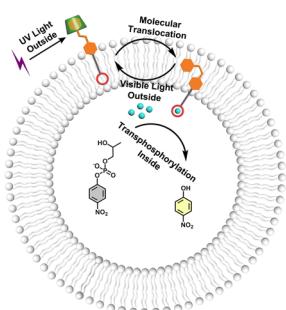
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Modulation of supramolecular chirality by stepwise axial coordination in a nano-size trizinc(II)porphyrin trimer

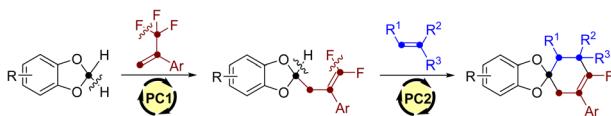
Avinash Dhamija, Dolly Chandel and Sankar Prasad Rath*

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Light-controlled artificial transmembrane signal transduction for 'ON/OFF'-switchable transphosphorylation of an RNA model substrate

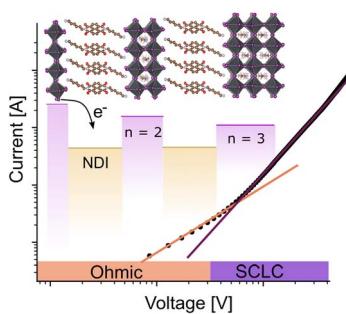
Jinxing Hou, Jiale Guo, Tengfei Yan, Shengda Liu, Mingsong Zang, Liang Wang, Jiayun Xu, Quan Luo, Tingting Wang* and Junqiu Liu*

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Photoredox radical/polar crossover enables C–H gem-difunctionalization of 1,3-benzodioxoles for the synthesis of monofluorocyclohexenes

Jiabao Tian and Lei Zhou*

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Photogenerated charge transfer in Dion–Jacobson type layered perovskite based on naphthalene diimide

Simon Nussbaum, Etienne Socie, George C. Fish, Nicolas J. Diercks, Hannes Hempel, Dennis Friedrich, Jacques-E. Moser, Jun-Ho Yum* and Kevin Sivula*

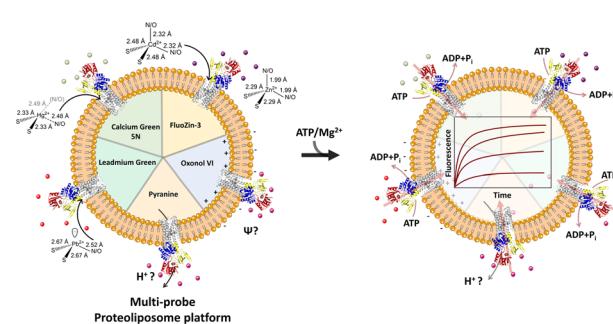


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Plastic recognition and electrogenic uniport translocation of 1st-, 2nd-, and 3rd-row transition and post-transition metals by primary-active transmembrane P_{1B-2}-type ATPase pumps

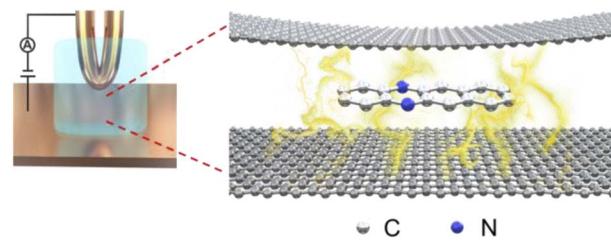
Sameera S. Abeyrathna, Nisansala S. Abeyrathna, Priyanka Basak, Gordon W. Irvine, Limei Zhang and Gabriele Meloni*



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Atomically well-defined nitrogen doping for cross-plane transport through graphene heterojunctions

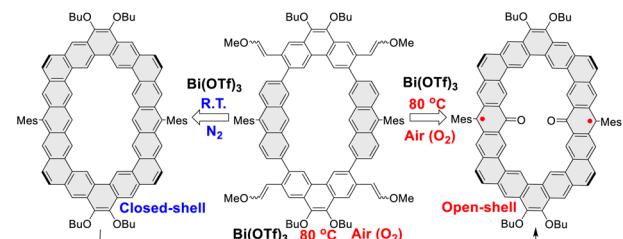
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From closed-shell edge-extended kekulenes to open-shell carbonylated cycloarene diradicaloid

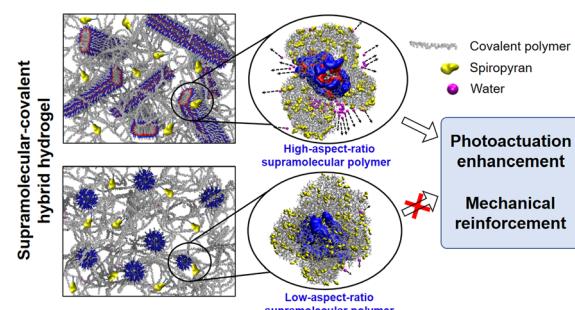
Dongdong Chang, Jiangyu Zhu, Yutao Sun, Kai Chi, Yanjun Qiao, Teng Wang, Yan Zhao, Yunqi Liu and Xuefeng Lu*



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Role of supramolecular polymers in photo-actuation of spiropyran hydrogels

Chuang Li, Qinsi Xiong, Tristan D. Clemons, Hiroaki Sai, Yang Yang, M. Hussain Sangji, Aysenur Iscen, Liam C. Palmer, George C. Schatz* and Samuel I. Stupp*



CORRECTION

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Correction: Molybdenum chloride double perovskites: dimensionality control of optical and magnetic properties

Devesh Chandra Binwal, Prashurya Pritam Mudoi, Debendra Prasad Panda and Pratap Vishnoi*

