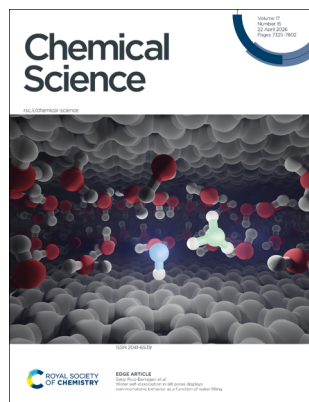
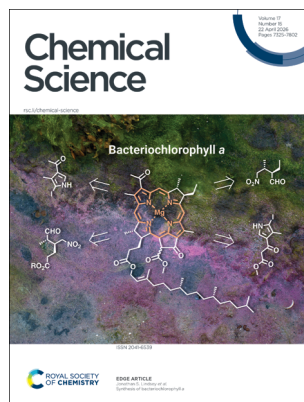


IN THIS ISSUE

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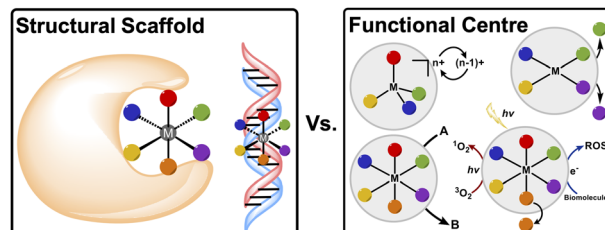
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PERSPECTIVE

7340

Metal complexes in medicine: structural scaffolds vs. functional centres

Nicolás Montesdeoca and Johannes Karges*



REVIEWS

7357

Challenges and advances of sulfide solid electrolytes for high-energy-density sodium metal batteries

Kaizhi Chen, Haohua Jiang, Hongyu Li, Xiang-Long Huang, Kunjie Zhu, Long Yao, Weihong Lai and Yun-Xiao Wang*



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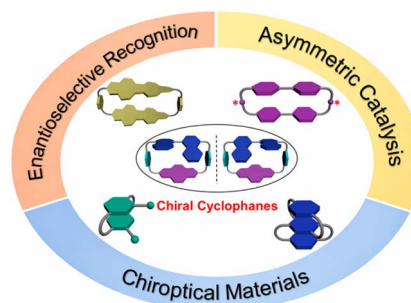
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REVIEWS

7376

Delicate molecular design, self-assembly and functional applications of chiral cyclophanes

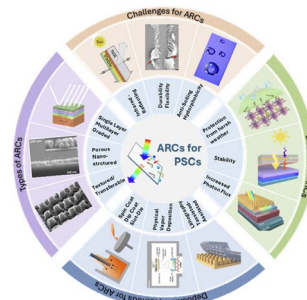
Yiming Zhang, Hongzhe Jia, Lijin Xu,* Minghua Liu and Guanghui Ouyang*



7404

From light loss to light harvesting: anti-reflective coatings bridging optics, materials, and performance in perovskite solar cells

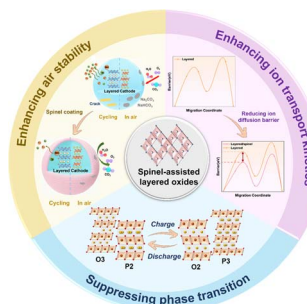
Sonia Rani, Silvia Cavalli and Giulia Grancini*



7424

Spinel integrated layered oxide cathodes for sodium-ion batteries: suppressing phase transitions, enhancing air stability, and accelerating Na⁺ transport

Rui Li, Yan-Jiang Li,* Neng-Hua Xu, Bing-Bing Chen, Hai-Yan Hu, Yan-Fang Zhu* and Yao Xiao*

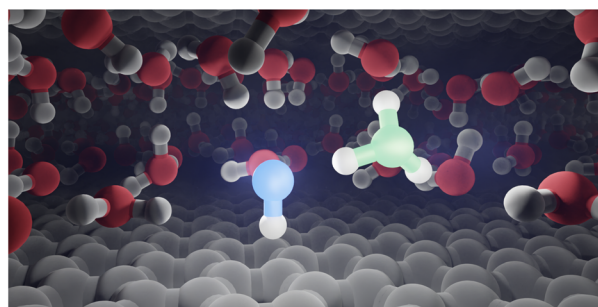


EDGE ARTICLES

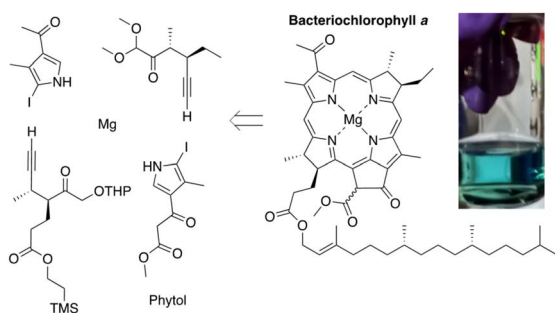
7447

Water self-dissociation in slit pores displays non-monotonic behavior as a function of water filling

Sergi Ruiz-Barragan,* Daniel Muñoz-Santiburcio, Saskia Körning and Dominik Marx



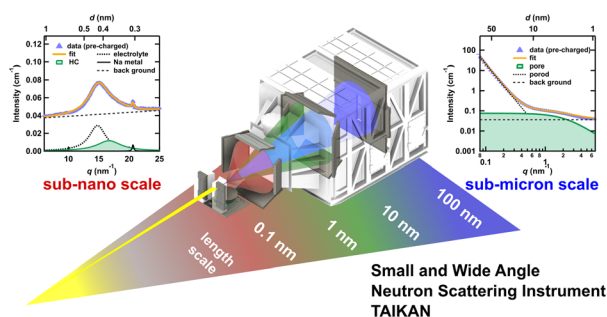
7454



Synthesis of bacteriochlorophyll a

Duy T. M. Chung, Khiem Chau Nguyen, Yizhou Liu and Jonathan S. Lindsey*

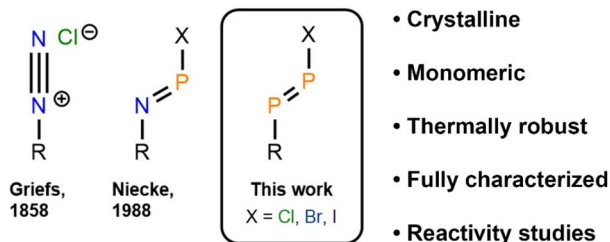
7466



Multiscale insights into sodium storage in hard carbon from *operando* small- and wide-angle neutron scattering measurements

Yoshihiko Umemoto,* Kazuki Ohishi,* Daisuke Igarashi, Ryoichi Tatara, Che-an Lin, Kosuke Nakamoto, Yukihiro Kawamura, Kosuke Hiroi, Shin-ichi Takata, Yusuke Nambu, Yoshitaka Tateyama and Shinichi Komaba

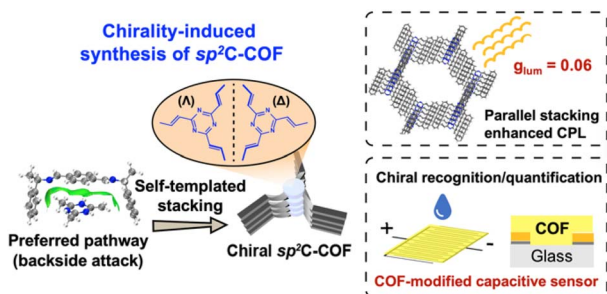
7475



Isolation of arylhalodiphosphenes: periodic trends in R–P=P–X bonding (X = Cl, Br, I)

John S. Wenger,* Nina Gaschik, William J. Rowe, Agamemnon E. Crumpton, Bono van IJzendoorn and Meera Mehta*

7486



Chirality-induced stereoselective synthesis of chiral sp^2 -carbon-conjugated covalent organic frameworks

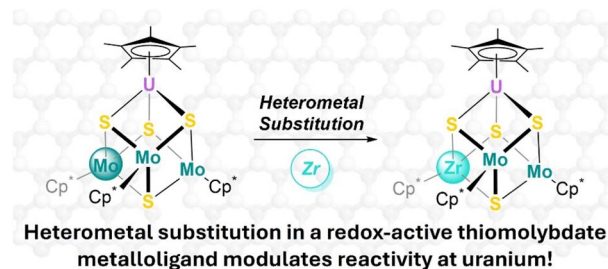
Weijun Weng, Zihan Zhu, Xiaoyan Xu and Jia Guo*



7496

Tuning reactivity at uranium through heterometal substitution in a redox-active thiomolybdate metalloligand

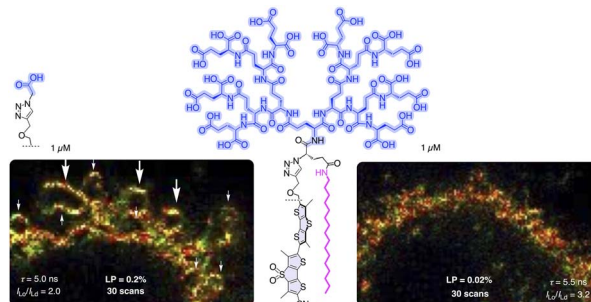
Leyla R. Valerio, Claire M. Dopp,
William W. Brennessel and Ellen M. Matson*



7509

Flipper dendrimers

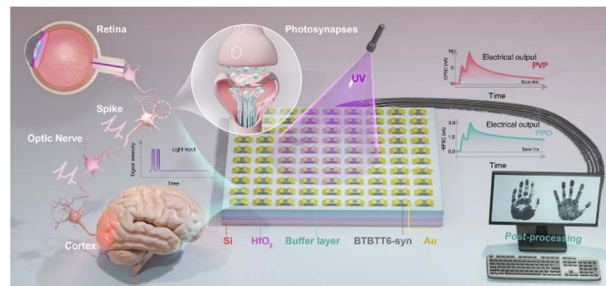
Nerea Gonzalez-Sanchis, Felix Bayard,
Juan Manuel Garcia-Arcos, Tithi Mandal, Aurelien Roux,
Naomi Sakai and Stefan Matile*



7516

Organic neuromorphic vision devices with multilevel memory for palmprint identification

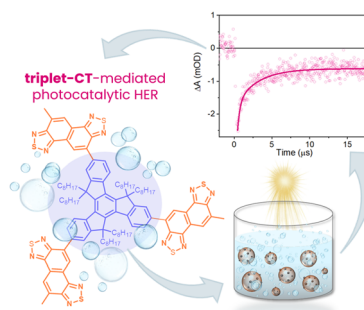
Chenxi Liu, Yongfeng Gu, Yongjie Ren, Mingyi Ding,*
Tao Deng,* Harald Fuchs, Deyang Ji* and Wenping Hu



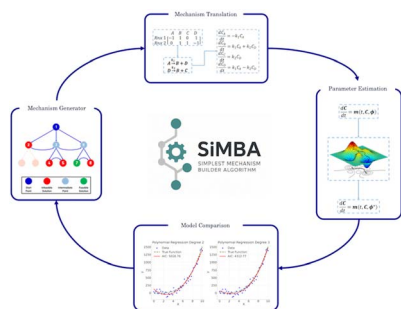
7525

Triplet states enable efficient photocatalytic hydrogen evolution in star-shaped truxene-based nanoparticles

Andjela Brnovic, Gaurav Kumar, Martin Axelsson, Bin Cai,
Mariia V. Pavliuk, Lars Kloo, Leif Hammarström and
Haining Tian*



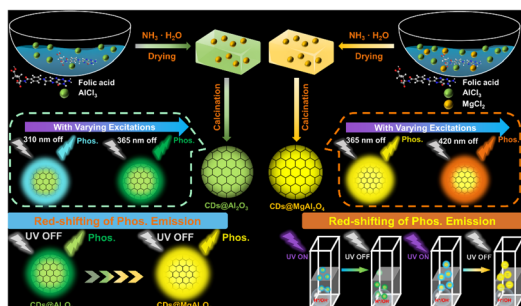
7533



Simplest mechanism builder algorithm (simba): an automated microkinetic model discovery tool

M. Á. de Carvalho Servia, K. K. (M.) Hii, K. Hellgardt, D. Zhang and E. A. del Rio Chanona*

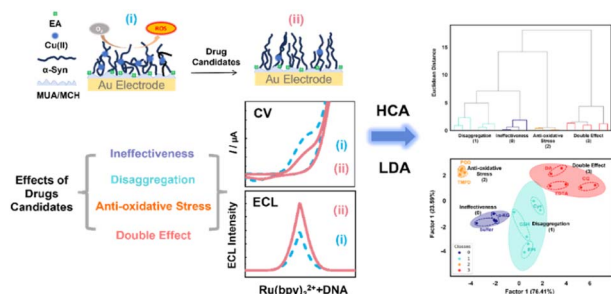
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Regulating red-shifted phosphorescence of carbon dots *via* introducing magnesium chloride

Yibin Long, Haoda Zhang, Yongjin Chen* and Xiaoming Yang*

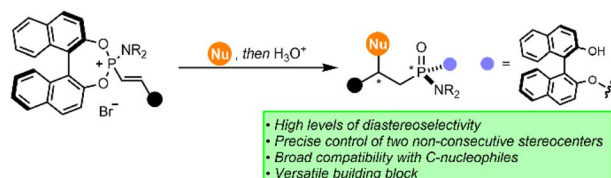
7560



Machine learning-assisted screening of small-molecule drugs for suppressing protein aggregation and ROS generation based on ECL and CV dual-mode signals amplified by DNA

Jiaqi Shi, Wenxiu Zhu, Jingyu Yan, Cong Xiao, Huiqin Yao, Lingchen Meng, Hongyun Liu* and Lanqun Mao*

7575



Stereoselective additions to alkenylphosphonium salts for the synthesis of P-stereogenic compounds

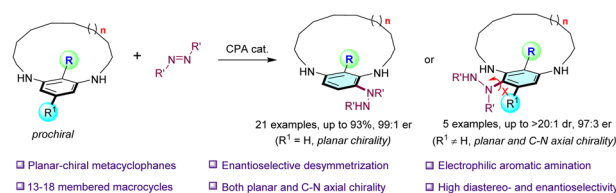
Xiao-Bing Chen, Damián Padín* and Ben L. Feringa*



7582

Asymmetric synthesis of planar-chiral metacyclophanes *via* aromatic amination enabled enantioselective desymmetrization

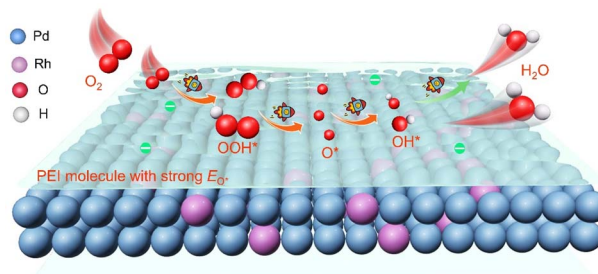
Changyu Zhou, Jinmiao Zhou, Lele Zhang, Wansen Xie, Huanhao Gu, Hua Liu and Xiaoyu Yang*



7590

Breaking the scaling relationship for oxygen reduction *via* amino-molecule-interface-mediated metallene electrocatalysts

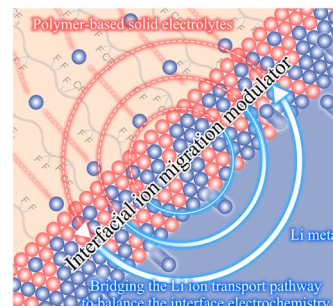
Shuya Xu, Yunyi Zhang, Yukun Peng, Jiawei Ke, Xueheng Liu, Chenglin Yan, Lifang Zhang,* Tongfei Li* and Tao Qian



7599

Compatible bridged interphase with enhanced Li ion migration for durable quasi-solid-state lithium metal batteries

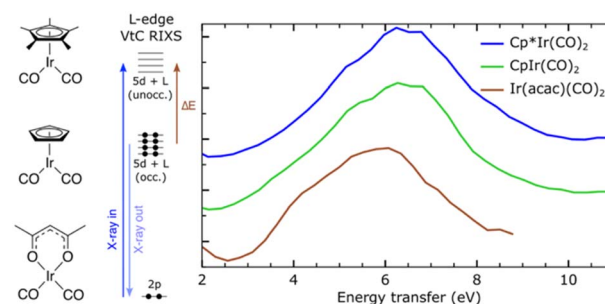
Peng Chen, Hui Wang, Tianyu Wei, Shengliang Zhang, Bing Ding, Hui Dou* and Xiaogang Zhang*



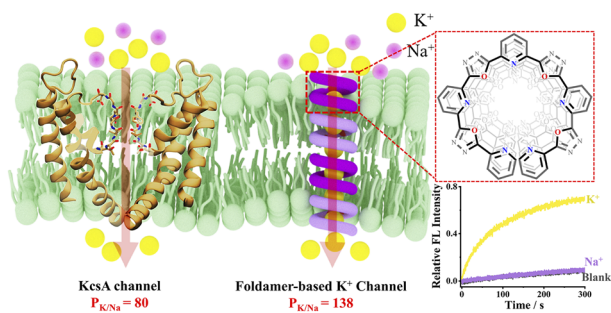
7609

Metal–ligand covalency of C–H activating iridium complexes from L-edge valence-to-core resonant inelastic X-ray scattering

Raphael M. Jay,* Ambar Banerjee,* Marco Reinhard, Huan Zhao, Nils Huse, Kelly J. Gaffney, Thomas Kroll, Dimosthenis Sokaras and Philippe Wernet*



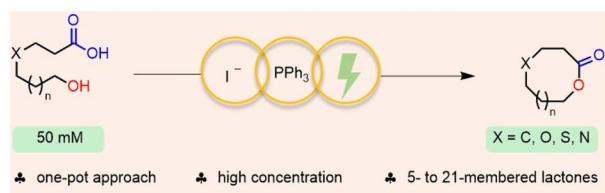
7620



Foldamer-based K^+ channels with ion selectivity surpassing the KcsA channel

Ze Lin, Zhaocheng Xu, Jun Tian, Chenyang Zhang, Chuqiao Sheng and Zeyuan Dong*

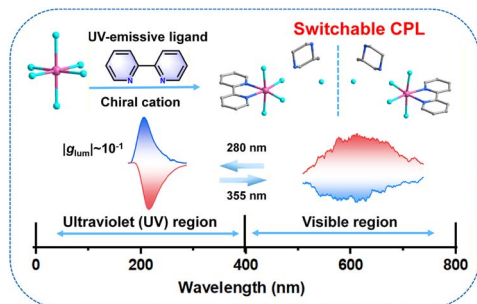
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Electrochemical control enables high-concentration, one-pot macrolactonization

Siying Mao, Dengchao Wei, Kun Xu* and Chengchu Zeng

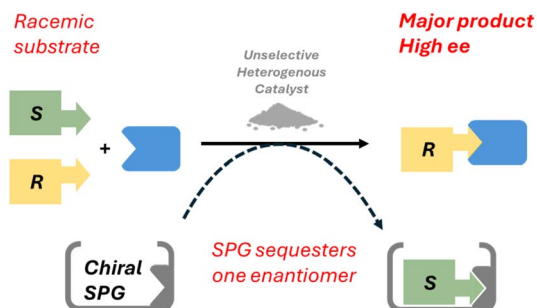
7636



Achieving switchable UV/Vis circularly polarized luminescence by varying excitation wavelength in chiral indium halides

Xin-Ping Guo, Hao-Wei Lin, Abdusalam Ablez, Sheng-Mao Zhang, Yu-Wei Ren, Guo-Yang Chen, Wei-Yu Zhang, Ke-Zhao Du,* Ze-Ping Wang* and Xiao-Ying Huang*

7643



Supramolecular protecting groups can impart prosthetic stereoselectivity to catalytic systems employing unmodified achiral heterogenous catalysts

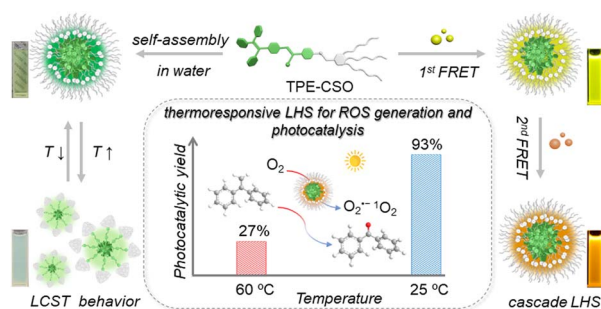
B. Ivonne Vergara-Arenas, J. Antonio Morales-Serna and Andrew J. Surman*



7649

Thermoresponsive artificial light-harvesting system with temperature-gated cascade energy transfer and photocatalysis

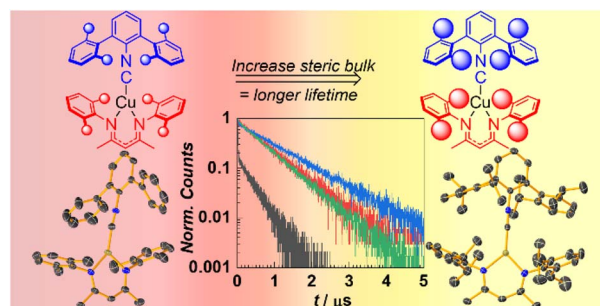
Zhiying Wu, Menglian Hu, Guangping Sun and Tangxin Xiao*



7659

Steric augmentation of three-coordinate Cu(I) β -diketiminato isocyanide chromophores to achieve microsecond excited-state lifetime

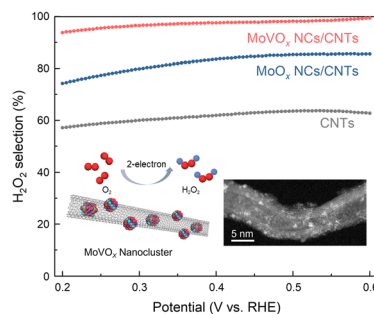
Ashish Kumar, Dooyoung Kim, Sean P. Dunphy, Erin N. Lewis, Joshua S. Figueroa and Thomas S. Teets*



7667

Tuning the electronic structure of molybdenum oxide nanoclusters with vanadium doping for electrochemical H_2O_2 production

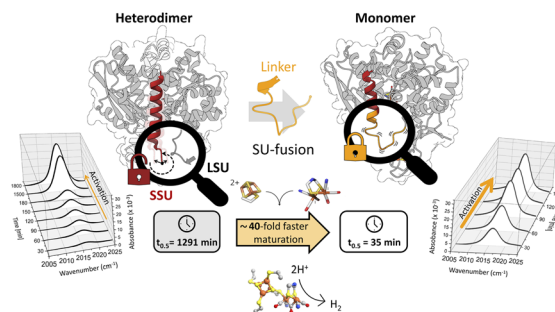
Luyao Zhang, Yingbo Li, Shuhao Zhang, Jianghua Wu, Weiyang Xue, Kun Wang, Haojie Liu, Boyuan Yu, Xin Zhao, Jiangfeng Ni* and Feng Yang*



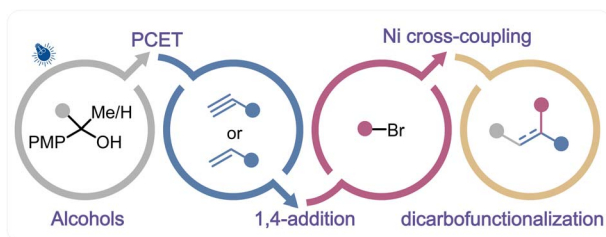
7678

Subunit fusion unlocks rapid *in vitro* maturation for slowly activating heterodimeric [FeFe]-hydrogenases

Jan Jaenecke, Konstantin Bikbaev, Miriam Malagnini, Julia Bronold, Shanika Yadav, Ulf-Peter Apfel, Christophe Léger, James A. Birrell, Ingrid Span, Nicolas Plumeré* and Martin Winkler*



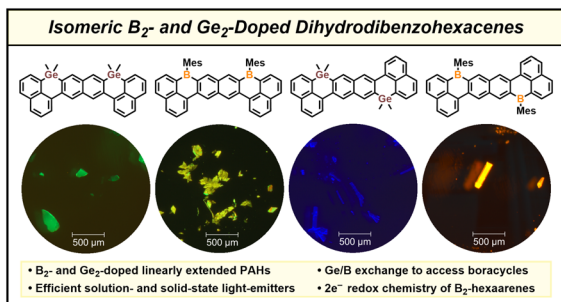
7690



Photocatalytic multicomponent alkene dicarbofunctionalization *via* PCET/nickel dual catalysis

Yeersen Patehebieke, Victoria Jansson, Jakob Öberg and Carl-Johan Wallentin*

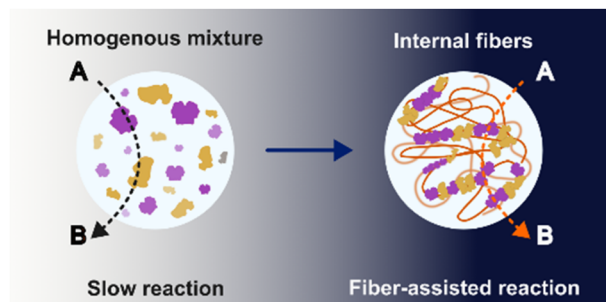
7699



Diboron- and digermanium-doped dihydrodibenzohexacenes: Ge–B exchange to access boron-doped extended acenes

Heechan Kim, Laura F. Peña, Adrian Espineira-Gutierrez, Carlos Romero-Nieto* and Robert J. Gilliard, Jr*

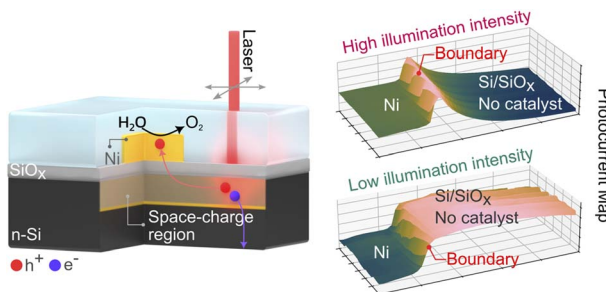
7707



Peptide-based artificial cytoskeleton enhances colocalized cascade reactions in cell-like microreactors

Thao P. Doan-Nguyen, Shoupeng Cao, Tsvetomir Ivanov, Katharina Landfester* and Lucas Caire da Silva*

7717



Imaging hole transport at catalyst-coated MIS photoanodes for water splitting under high-intensity illumination

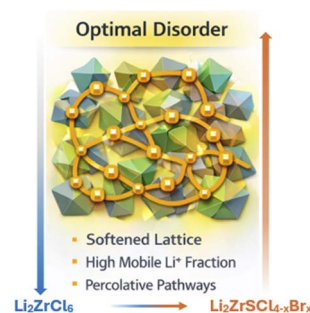
Kanokwan Klahan, Bertrand Goudeau, Patrick Garrigue, Véronique Lapeyre, Lionel Santinacci, Mana Toma, Pichaya Pattanasattayavong* and Gabriel Loget*



7729

Polarizability-enhanced ionic transport in rare-earth-free halide–sulfide electrolytes: $\text{Li}_2\text{ZrSCl}_{4-x}\text{Br}_x$

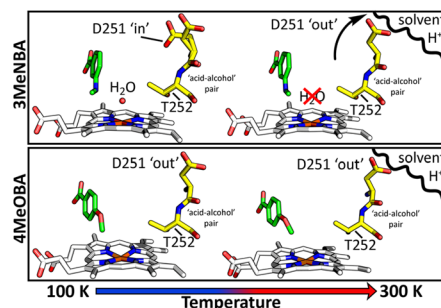
Thilina N. D. D. Gamaralalage, Pawan K. Ojha, Bright O. Ogbolu, Md Mahinur Islam, Tehreem Toheed, Sean C. Wilkerson and Yan-Yan Hu*



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Structural basis for substrate-dependent allostery in oxygen activation by a cytochrome P450 enzyme revealed by analysis at different temperatures

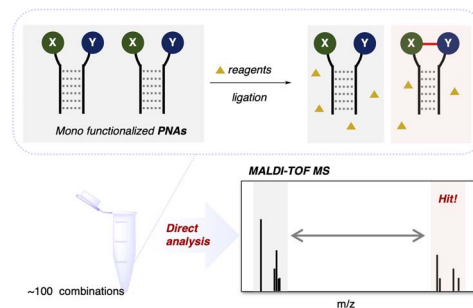
Matthew N. Podgorski, Daniel P. McDougal, Eleanor C. Campbell, John B. Bruning and Stephen G. Bell*



7756

One-pot multi-substrate screening of ligation reactions using PNA tags

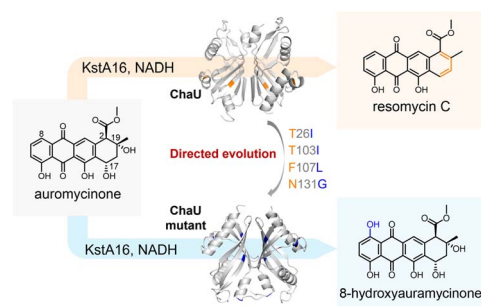
Aki Kohyama,* Sofia Barluenga and Nicolas Winssinger*



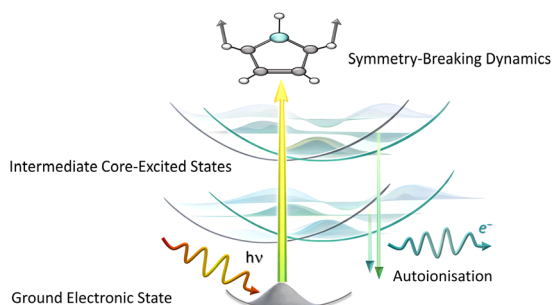
7766

Molecular basis for the biosynthetic divergence of anthracyclines kosinostatin and chartreusin

Ling Li Fang, Chen Hao Jia, Xuan Zhou, Jun Ying Ma, Huan Zi Guo, Xiuxiu Ma, Wei Bai, Lang Xiang, Jiapeng Zhu,* Ren Xiang Tan* and Yi Shuang Wang*



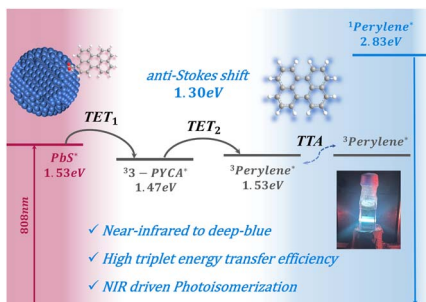
7773



Ultrafast dynamics in core-excited states probed by resonant Auger spectroscopy: pyrrole

D. M. P. Holland, H. G. McGhee, M. Lamanec, D. Nachtigallová, A. Milosavljević, J. D. Bozek, E. Muchová* and R. A. Ingles*

7787

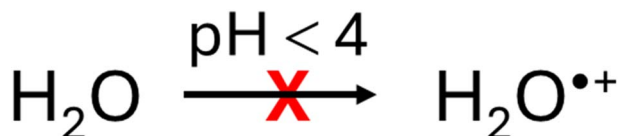


Near-infrared-to-deep-blue photon upconversion engineered from PbS quantum dots and perylene derivatives

Hongyu Li, Qingxin Luan, Shuai Zhang, Lin Xi, Yanan Feng and Lili Hou*

COMMENT

7794



Comment on "Radical-mediated proton transfer enables hydroxyl radical formation in charge-delocalized water" by R. Zhao, Q. Zhang, N. Yang, L. Li, Z. Li and C. Cui, *Chem. Sci.*, 2025, 16, 11954

Willem H. Koppenol*

CORRECTIONS

7797

Correction: Discovery of fully synthetic FKBP12-mTOR molecular glues

Robin C. E. Deutscher, Christian Meyners, Maximilian L. Repity, Wisely Oki Sugiarto, Jürgen M. Kolos, Edvaldo V. S. Maciel, Tim Heymann, Thomas M. Geiger, Stefan Knapp, Frederik Lermyte and Felix Hausch*



7799

Correction: Regulating red-shifted phosphorescence of carbon dots *via* introducing magnesium chloride

Yibin Long, Haoda Zhang, Yongjin Chen* and Xiaoming Yang*

