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Inside cover

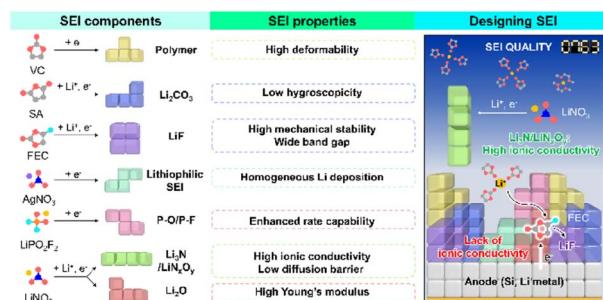
See Yujiro Hayashi et al., pp. 10081–10086. Image reproduced by permission of Miho Iwabuchi from *Chem. Sci.*, 2023, 14, 10081.

REVIEWS

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Liquid electrolyte chemistries for solid electrolyte interphase construction on silicon and lithium-metal anodes

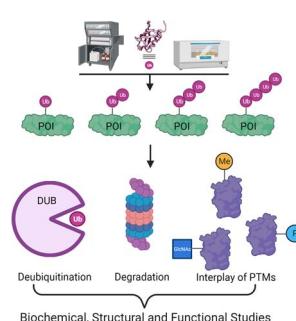
Sewon Park, Saehun Kim, Jeong-A. Lee, Makoto Ue and Nam-Soon Choi*



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Synthesis of ubiquitinated proteins for biochemical and functional analysis

Julia Kriegesmann and Ashraf Brik*



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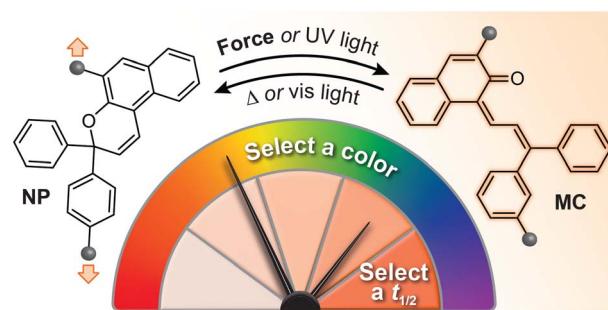


PERSPECTIVE

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Naphthopyran molecular switches and their emergent mechanochemical reactivity

Molly E. McFadden, Ross W. Barber, Anna C. Overholts and Maxwell J. Robb*

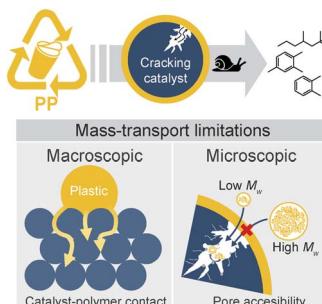


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Transport limitations in polyolefin cracking at the single catalyst particle level

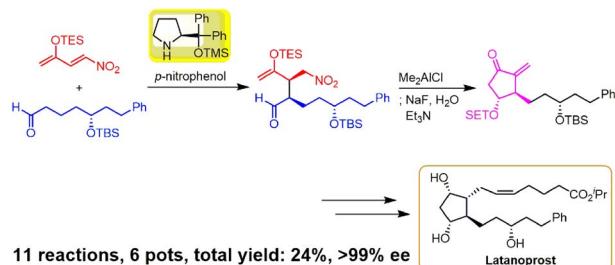
Sebastian Rejman, Ina Vollmer,* Maximilian J. Werny, Eelco T. C. Vogt, Florian Meirer and Bert M. Weckhuysen*



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Organocatalyst-mediated, pot-economical total synthesis of latanoprost

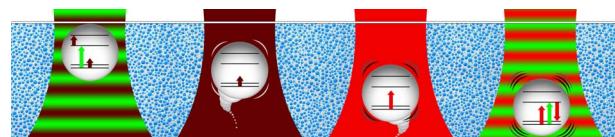
Genki Kawauchi, Yurina Suga, Shunsuke Toda and Yujiro Hayashi*



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Gaining control on optical force by the stimulated-emission resonance effect

Tetsuhiro Kudo,* Boris Louis, Hikaru Sotome, Jui-Kai Chen, Syoji Ito,* Hiroshi Miyasaka, Hiroshi Masuhara,* Johan Hofkens* and Roger Bresolí-Obach*

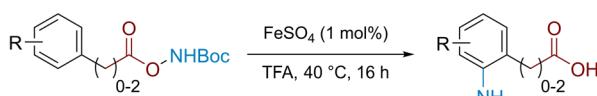


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**Mesomerism induced temperature-dependent multicomponent phosphorescence emissions in CIBDBT**Zexing Qu,* Yujie Guo, Jilong Zhang*
and Zhongjun Zhou*

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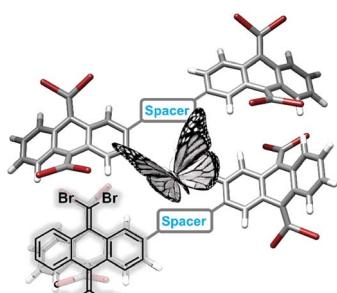


- Simple and practical conditions leading to unprotected anthranilic acids
 - Highly *ortho*-selective
- No precious metal catalysts or bespoke directing groups
 - Effective on various chain lengths
 - Detailed mechanistic studies performed

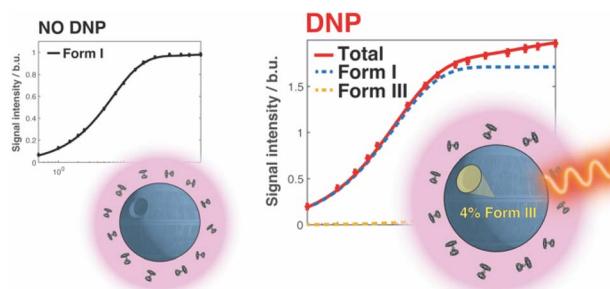
***Ortho*-Selective amination of arene carboxylic acids via rearrangement of acyl O-hydroxylamines**

James E. Gillespie, Nelson Y. S. Lam and Robert J. Phipps*

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**Dimeric tetrabromo-p-quinodimethanes: synthesis and structural/electronic properties**Diego J. Vicent, Manuel Pérez-Escribano,
Abel Cárdenas-Valdivia, Ana Barragán, Joaquín Calbo,
José I. Urgel, David Écija,* José Santos,* Juan Casado,*
Enrique Ortí* and Nazario Martín*

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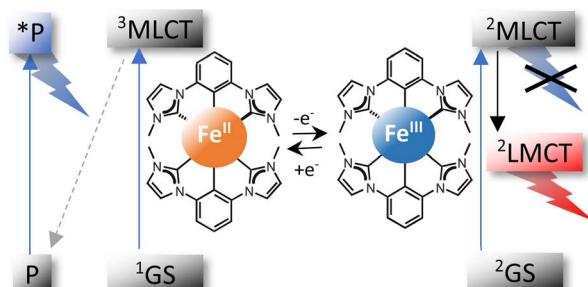
**Exploiting solid-state dynamic nuclear polarization NMR spectroscopy to establish the spatial distribution of polymorphic phases in a solid material**Samuel F. Cousin, Colan E. Hughes, Fabio Ziarelli,
Stéphane Viel, Giulia Mollica,* Kenneth D. M. Harris,*
Arthur C. Pinon* and Pierre Thureau*

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Ferrous and ferric complexes with cyclometalating N-heterocyclic carbene ligands: a case of dual emission revisited

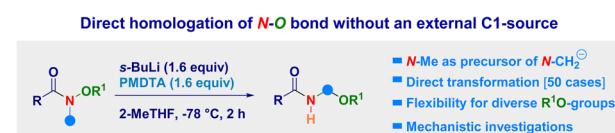
Catherine Ellen Johnson, Jesper Schwarz, Mawuli Deegbey, Om Prakash, Kumkum Sharma, Ping Huang, Tore Ericsson, Lennart Häggström, Jesper Bendix, Arvind Kumar Gupta, Elena Jakubikova,* Kenneth Wärnmark* and Reiner Lomoth*



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Base-mediated homologative rearrangement of nitrogen–oxygen bonds of *N*-methyl-*N*-oxyamides

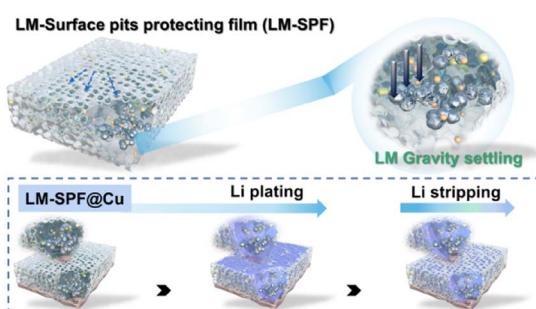
Monika Malik, Raffaele Senatore, Thierry Langer, Wolfgang Holzer and Vittorio Pace*



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A liquid metal-fluoropolymer artificial protective film enables robust lithium metal batteries at sub-zero temperatures

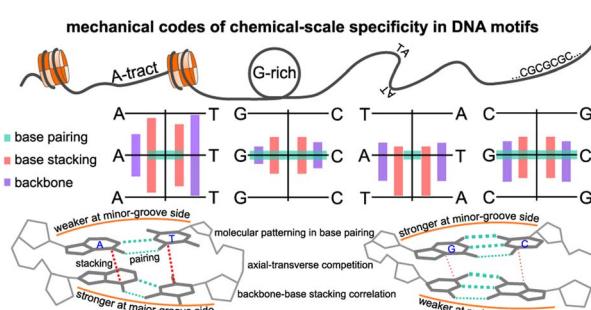
Hongbao Li, Rong Hua, Yang Xu, Da Ke, Chenyu Yang, Quanwei Ma, Longhai Zhang, Tengfei Zhou* and Chaofeng Zhang*



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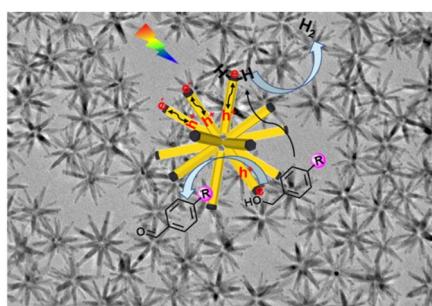
Mechanical codes of chemical-scale specificity in DNA motifs

Yi-Tsao Chen, Haw Yang and Jhih-Wei Chu*



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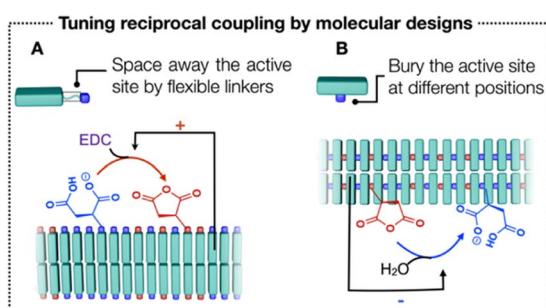
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Versatile synthesis of nano-icosapods via cation exchange for effective photocatalytic conversion of biomass-relevant alcohols

Dan Xu, Li Zhai, Zhangyan Mu, Chen-Lei Tao, Feiyue Ge, Han Zhang, Mengning Ding, Fang Cheng* and Xue-Jun Wu*

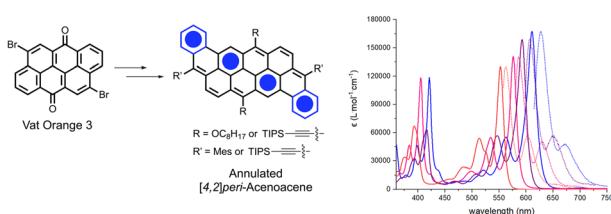
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Design rules for reciprocal coupling in chemically fueled assembly

Xiaoyao Chen, Brigitte A. K. Kriebisch, Alexander M. Bergmann and Job Boekhoven*

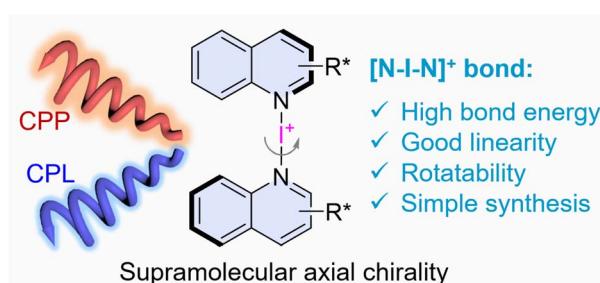
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Dibenzannulated *peri*-acenoacenes from anthanthrene derivatives

Frédéric Lirette, Ali Darvish, Zheng Zhou, Zheng Wei, Lukas Renn, Marina A. Petrukhina, R. Thomas Weitz and Jean-François Morin*

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Supramolecular axial chirality in [N–I–N]⁺-type halogen bonded dimers

Shuguo An, Aiyou Hao and Pengyao Xing*

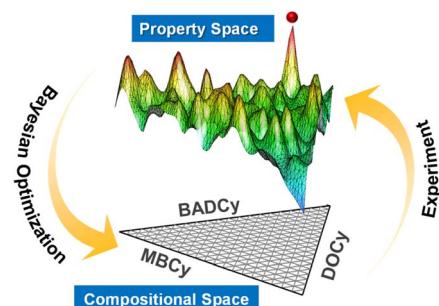


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Efficient exploration of compositional space for high-performance copolymers *via* Bayesian optimization

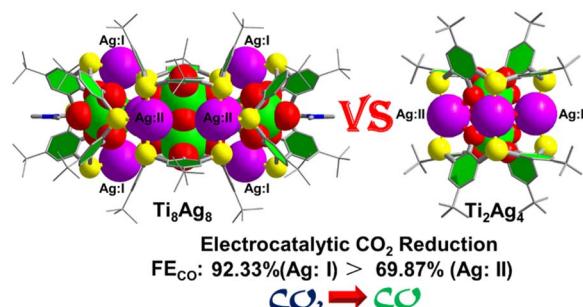
Xinyao Xu, Wenlin Zhao, Liquan Wang,* Jiaping Lin* and Lei Du



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Stepwise assembly of thiocalix[4]arene-protected Ag/Ti bimetallic nanoclusters: accurate identification of catalytic Ag sites in CO₂ electroreduction

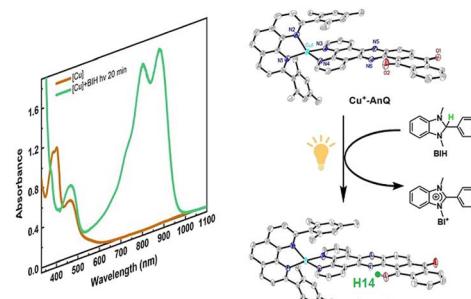
Yi-Qi Tian, Wen-Lei Mu, Lin-Lin Wu,* Xiao-Yi Yi, Jun Yan* and Chao Liu*



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Photochemical charge accumulation in a heteroleptic copper(I)-anthraquinone molecular dyad *via* proton-coupled electron transfer

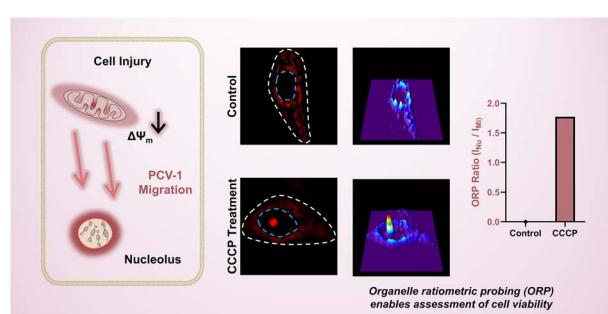
Zhu-Lin Xie, Nikita Gupta, Jens Niklas, Oleg G. Poluektov, Vincent M. Lynch, Ksenija D. Glusac and Karen L. Mulfort*



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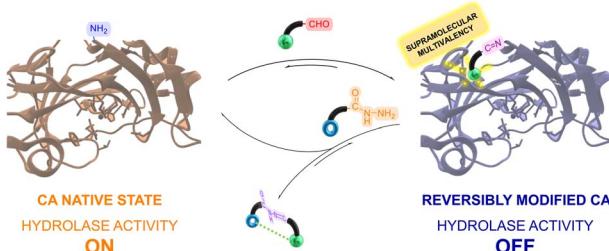
Quantifying cell viability through organelle ratiometric probing

Rui Chen, Kangqiang Qiu, Guanqun Han, Bidyut Kumar Kundu, Guodong Ding, Yujie Sun* and Jiajie Diao*



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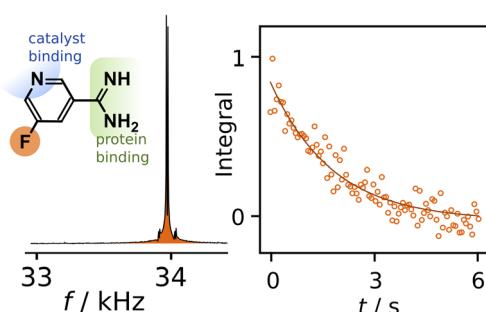
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Supramolecular multivalence effects enhance imine formation in aqueous medium allowing for dynamic modification of enzymatic activity

Ferran Esteve,* Fidan Rahmatova and Jean-Marie Lehn*

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Biomolecular interactions studied by low-field NMR using SABRE hyperpolarization

Pierce Pham and Christian Hilty*

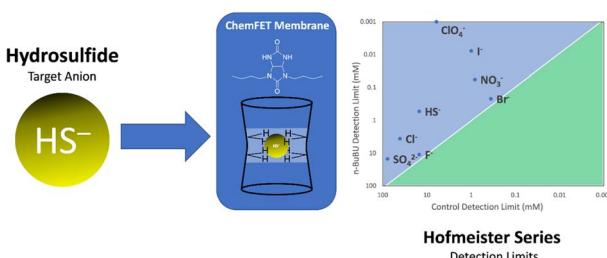
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Lewis acid-driven self-assembly of diiridium macrocyclic catalysts imparts substrate selectivity and glutathione tolerance

Hieu D. Nguyen, Rahul D. Jana, Dylan T. Campbell, Thi V. Tran and Loi H. Do*

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Benchmarking the placement of hydrosulfide in the Hofmeister series using a bambus[6]uril-based ChemFET sensor

Grace M. Kuhl, Douglas H. Banning, Hazel A. Fargher, Willow A. Davis, Madeline M. Howell, Lev N. Zakharov, Michael D. Pluth* and Darren W. Johnson*

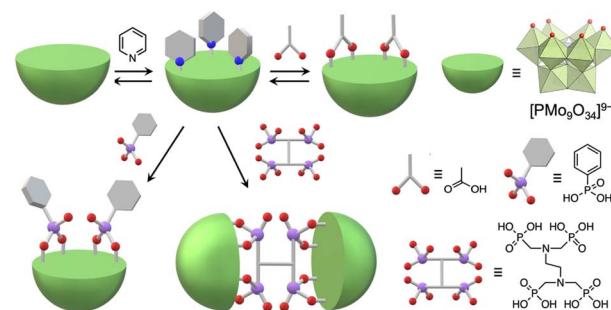


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Molecular hybrids of trivacant lacunary polyoxomolybdate and multidentate organic ligands

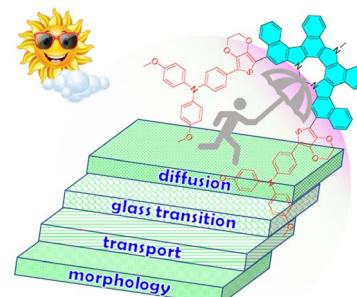
Atsuhiro Jimbo, Chifeng Li, Kentaro Yonesato, Tomoki Ushiyama, Kazuya Yamaguchi and Kosuke Suzuki*



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Molecular engineering of nitrogen-rich helicene based organic semiconductors for stable perovskite solar cells

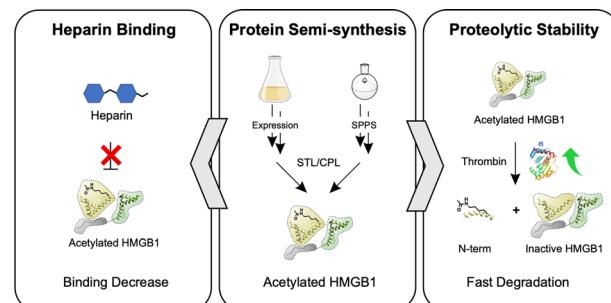
Yuefang Wei, Yaohang Cai, Lifei He, Yuyan Zhang, Yi Yuan,* Jing Zhang and Peng Wang*



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Revealing the extracellular function of HMGB1 N-terminal region acetylation assisted by a protein semi-synthesis approach

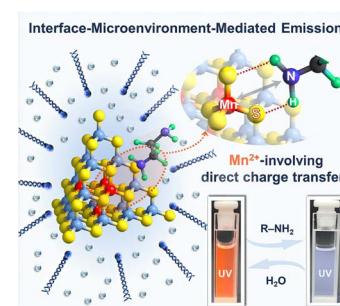
Tongyao Wei, Jiamei Liu, Can Li, Yi Tan, Ruohan Wei, Jinzheng Wang, Hongxiang Wu, Qingrong Li, Heng Liu, Yubo Tang and Xuechen Li*



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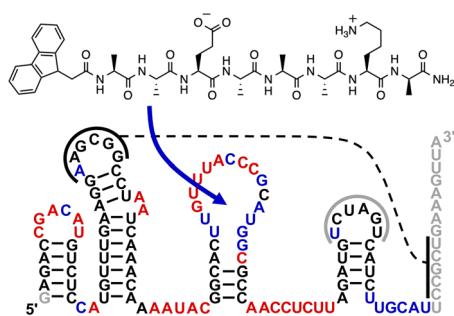
The interface microenvironment mediates the emission of a semiconductor nanocluster via surface-dopant-involving direct charge transfer

Zhiqiang Wang, Hao Ma, Jiaxu Zhang, Yingjia Lan, Jia-Xing Liu, Shang-Fu Yuan, Xiao-Ping Zhou, Xiaohong Li, Chaochao Qin, Dong-Sheng Li and Tao Wu*



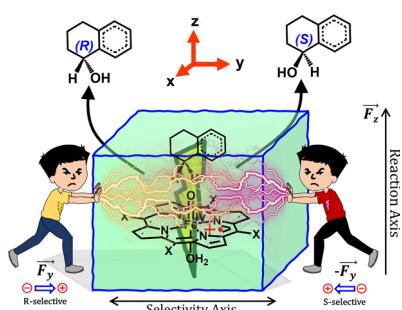
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**Peptide conjugates with polyaromatic hydrocarbons can benefit the activity of catalytic RNAs**

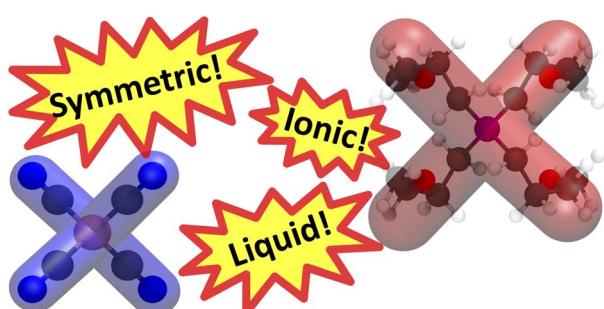
Kevin J. Sweeney, Tommy Le, Micaella Z. Jorge, Joan G. Schellinger, Luke J. Leman and Ulrich F. Müller*

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**A porphyrin-based molecular cage guided by designed local-electric field is highly selective and efficient**

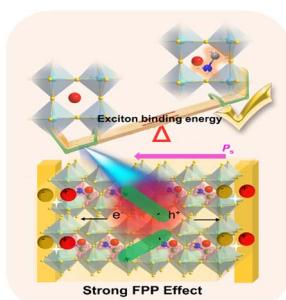
Shakir Ali Siddiqui, Sason Shaik,* Surajit Kalita and Kshatresh Dutta Dubey*

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**Room temperature ionic liquids with two symmetric ions**

Daniel Rauber,* Frederik Philippi,* Daniel Schroeder, Bernd Morgenstern, Andrew J. P. White, Marlon Jochum, Tom Welton and Christopher W. M. Kay*

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**Mixing cage cations in 2D metal-halide ferroelectrics enhances the ferro-pyro-phototronic effect for self-driven photopyroelectric detection**

Yu Ma, Wenjing Li, Yi Liu, Wuqian Guo, Haojie Xu, Shiguo Han, Liwei Tang, Qingshun Fan, Junhua Luo and Zhihua Sun*

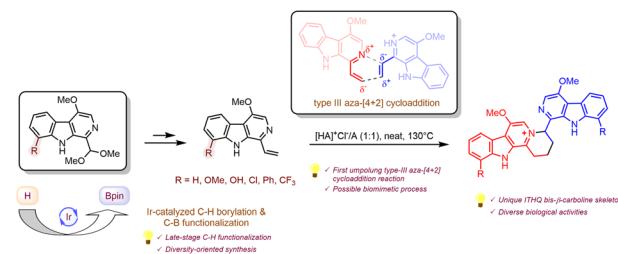


EDGE ARTICLES

10353

Divergent total syntheses of ITHQ-type bis- β -carboline alkaloids by regio-selective formal aza-[4 + 2] cycloaddition and late-stage C–H functionalization

Qixuan Wang, Fusheng Guo, Jin Wang and Xiaoguang Lei*



CORRECTIONS

10360

Further correction: Expanding medicinal chemistry into 3D space: metallocraftments as 3D scaffolds for fragment-based drug discovery

Christine N. Morrison, Kathleen E. Prosser, Ryjul W. Stokes, Anna Cordes, Nils Metzler-Nolte and Seth M. Cohen*

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Correction: Self-quenched ferrocenyl diketopyrrolopyrrole organic nanoparticles with amplifying photothermal effect for cancer therapy

Pingping Liang, Qianyun Tang, Yu Cai, Gongyuan Liu, Weili Si, Jinjun Shao, Wei Huang*, Qi Zhang* and Xiaochen Dong*