

IN THIS ISSUE

ISSN 2041-6539 CODEN CSHCBM 14(37) 9983–10366 (2023)



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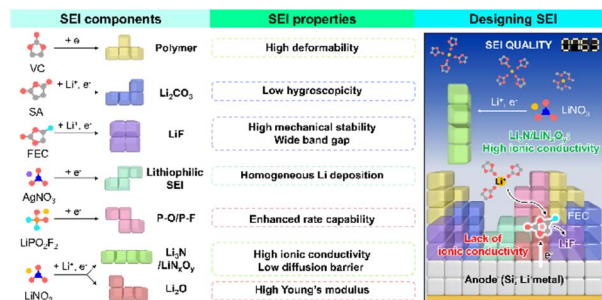
Inside cover
See Yujiro Hayashi *et al.*, pp. 10081–10086. Image reproduced by permission of Miho Iwabuchi from *Chem. Sci.*, 2023, **14**, 10081.

REVIEWS

9996

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

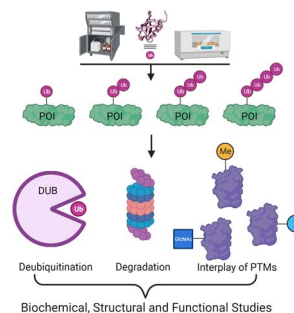
Sewon Park, Saehun Kim, Jeong-A. Lee, Makoto Ue and Nam-Soon Choi*



10025

Synthesis of ubiquitinated proteins for biochemical and functional analysis

Julia Kriegesmann and Ashraf Brik*



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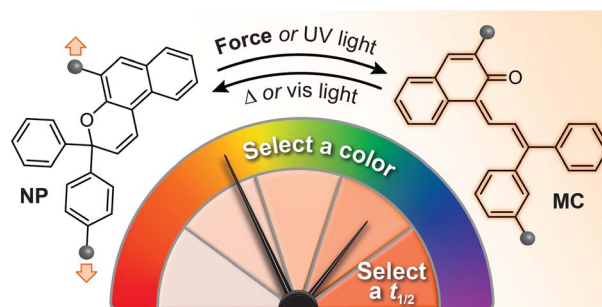


PERSPECTIVE

10041

Naphthopyran molecular switches and their emergent mechanochemical reactivity

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

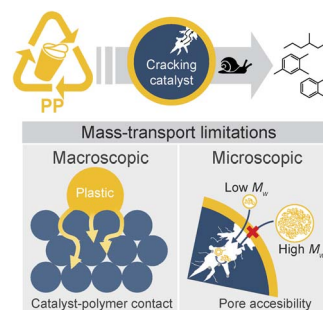


EDGE ARTICLES

10068

Transport limitations in polyolefin cracking at the single catalyst particle level

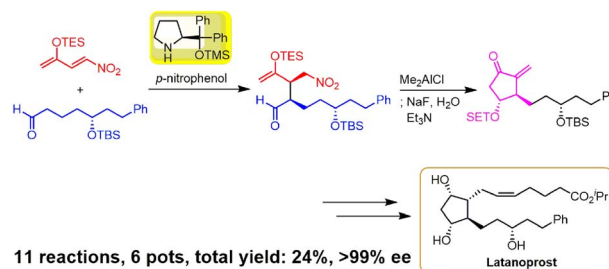
Sebastian Rejman, Ina Vollmer,* Maximilian J. Werny, Eelco T. C. Vogt, Florian Meirer and Bert M. Weckhuysen*



10081

Organocatalyst-mediated, pot-economical total synthesis of latanoprost

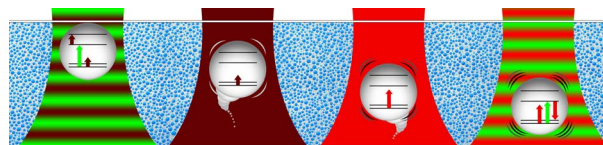
Genki Kawauchi, Yurina Suga, Shunsuke Toda and Yujiro Hayashi*



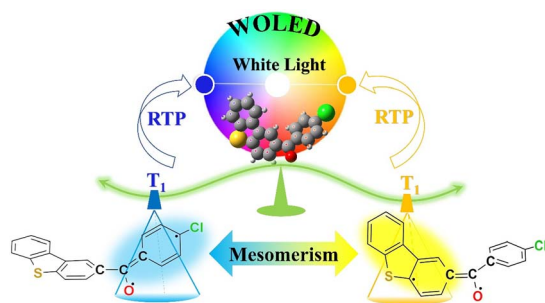
10087

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*



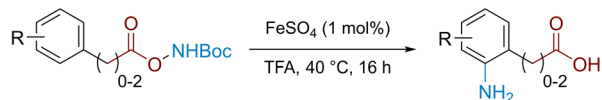
10096



Mesomerism induced temperature-dependent multicomponent phosphorescence emissions in CIBDBT

Zexing Qu,^{*} Yujie Guo, Jilong Zhang^{*} and Zhongjun Zhou^{*}

10103

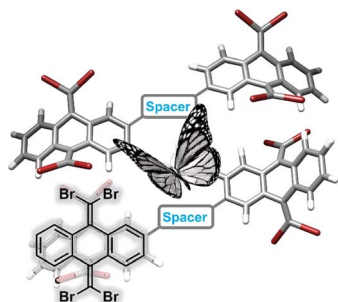


- Simple and practical conditions leading to unprotected anthranilic acids
 - Highly *ortho*-selective
- No precious metal catalysts or bespoke directing groups
 - Effective on various chain lengths
 - Detailed mechanistic studies performed

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

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

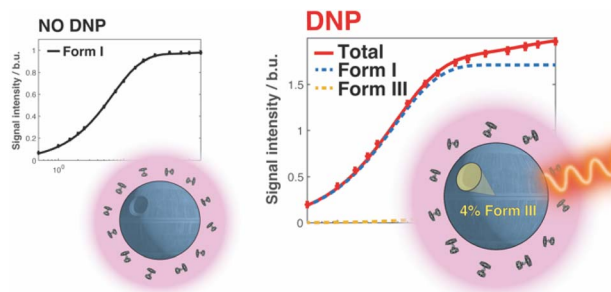
10112



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 Orti^{*} and Nazario Martín^{*}

10121



Exploiting solid-state dynamic nuclear polarization NMR spectroscopy to establish the spatial distribution of polymorphic phases in a solid material

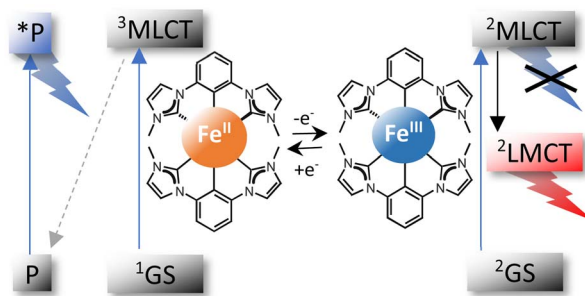
Samuel F. Cousin, Colan E. Hughes, Fabio Ziarelli, Stéphane Viel, Giulia Mollica,^{*} Kenneth D. M. Harris,^{*} Arthur C. Pinon^{*} and Pierre Thureau^{*}



10129

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*

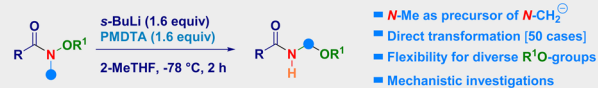


10140

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

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

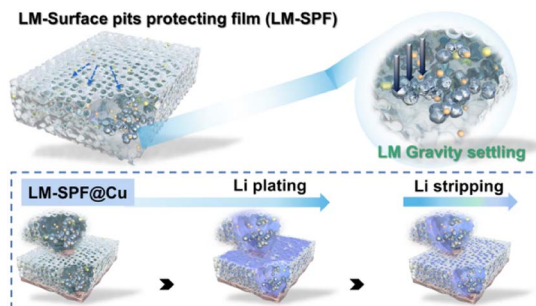
Direct homologation of N–O bond without an external C1-source



10147

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

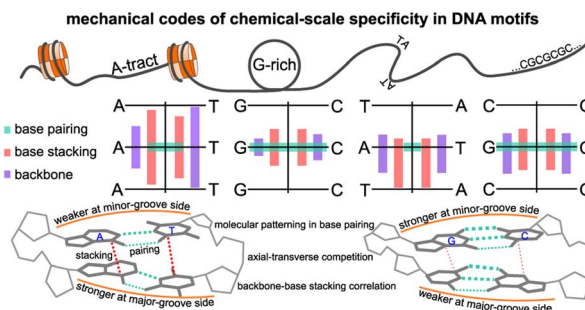
Hongbao Li, Rong Hua, Yang Xu, Da Ke, Chenyu Yang, Quanwei Ma, Longhai Zhang, Tengfei Zhou* and Chaofeng Zhang*



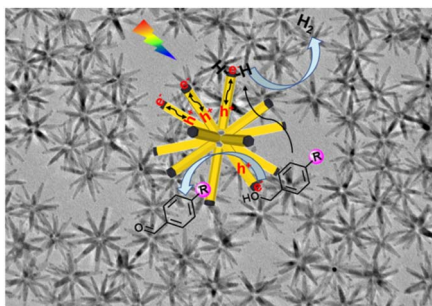
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Mechanical codes of chemical-scale specificity in DNA motifs

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



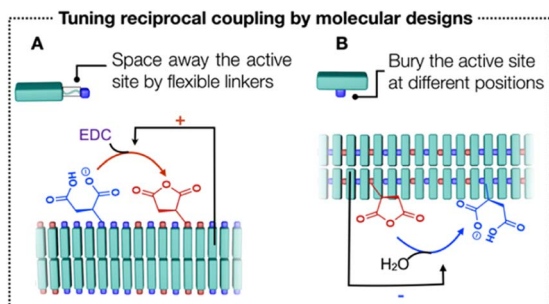
10167



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*

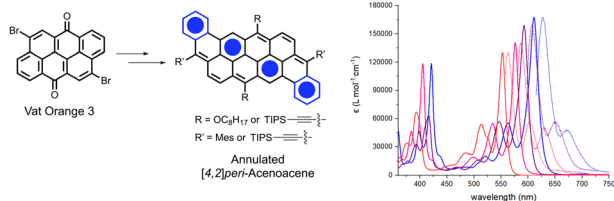
10176



Design rules for reciprocal coupling in chemically fueled assembly

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

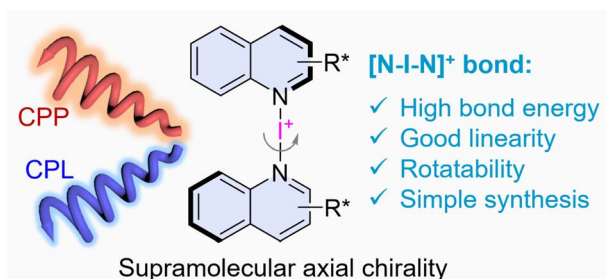
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Dibenzannulated *peri*-acenoacenes from anthanthrene derivatives

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

10194



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

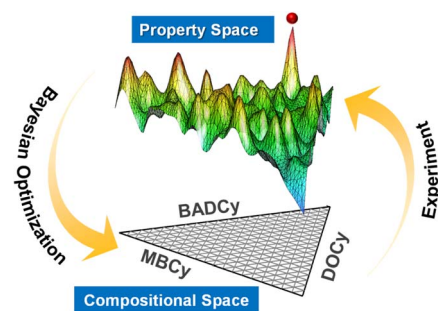
Shuguo An, Aiyu Hao and Pengyao Xing*



10203

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

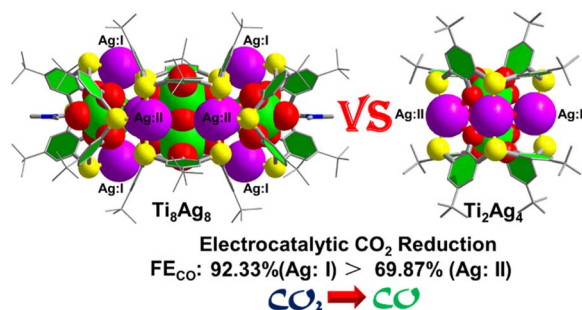
Xinyao Xu, Wenlin Zhao, Liquan Wang,* Jiaping Lin* and Lei Du



10212

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

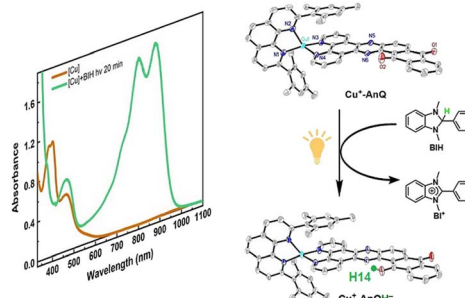
Yi-Qi Tian, Wen-Lei Mu, Lin-Lin Wu,* Xiao-Yi Yi, Jun Yan* and Chao Liu*



10219

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

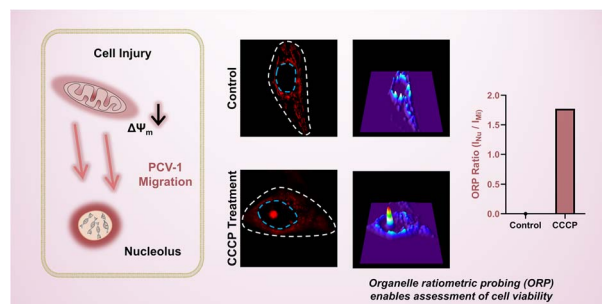
Zhu-Lin Xie, Nikita Gupta, Jens Niklas, Oleg G. Poluektov, Vincent M. Lynch, Ksenija D. Glusac and Karen L. Mulfort*



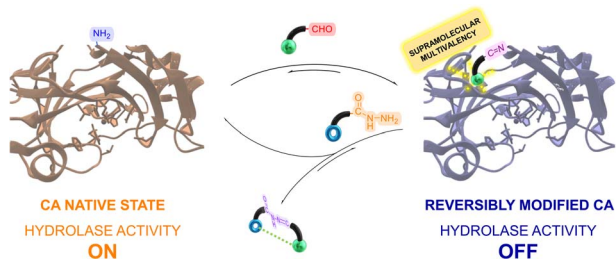
10236

Quantifying cell viability through organelle ratiometric probing

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



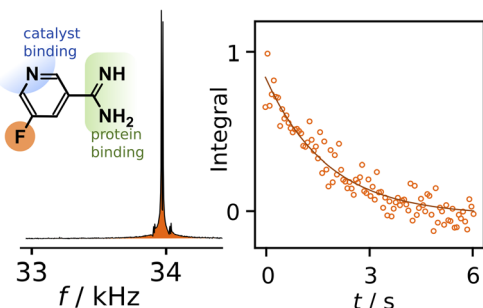
10249



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

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

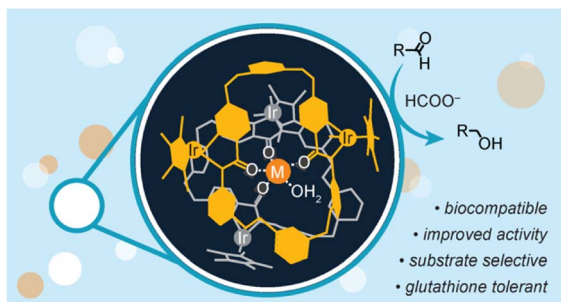
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Biomolecular interactions studied by low-field NMR using SABRE hyperpolarization

Pierce Pham and Christian Hilty*

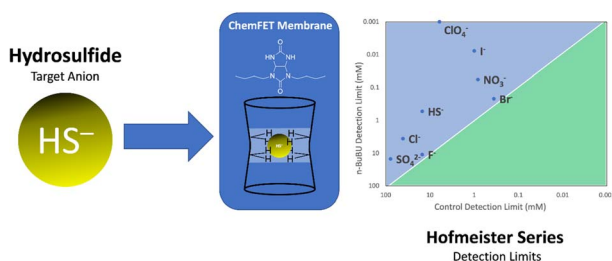
10264



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*

10273



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

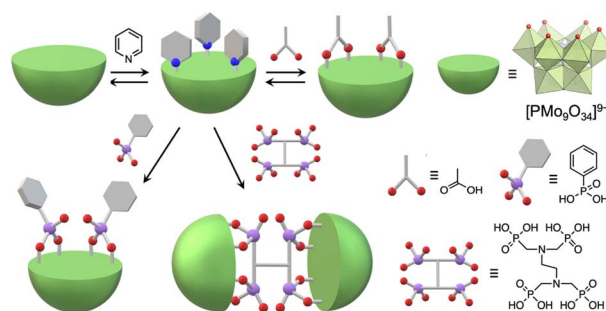
Grace M. Kuhl, Douglas H. Banning, Hazel A. Fargher, Willow A. Davis, Madeline M. Howell, Lev N. Zakharov, Michael D. Pluth* and Darren W. Johnson*



10280

Molecular hybrids of trivacant lacunary polyoxomolybdate and multidentate organic ligands

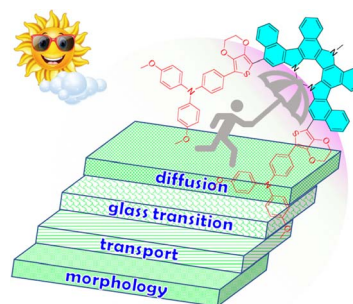
Atsuhiko Jimbo, Chifeng Li, Kentaro Yonesato, Tomoki Ushiyama, Kazuya Yamaguchi and Kosuke Suzuki*



10285

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

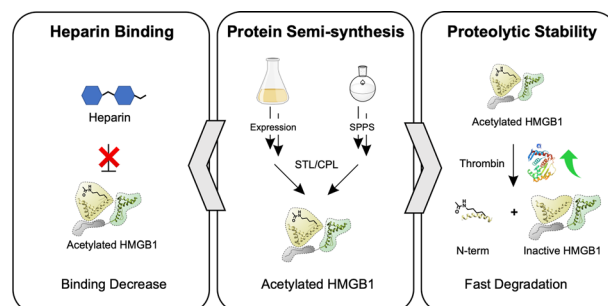
Yuefang Wei, Yaohang Cai, Lifei He, Yuyan Zhang, Yi Yuan,* Jing Zhang and Peng Wang*



10297

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

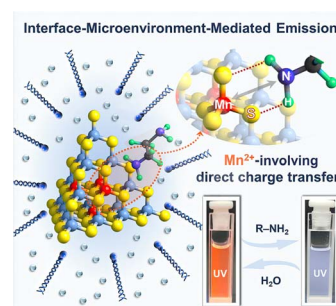
Tongyao Wei, Jiamei Liu, Can Li, Yi Tan, Ruohan Wei, Jinzheng Wang, Hongxiang Wu, Qingrong Li, Heng Liu, Yubo Tang and Xuechen Li*



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

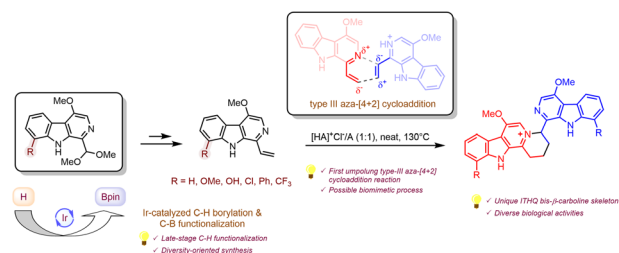
Zhiqiang Wang, Hao Ma, Jiayu Zhang, Yingjia Lan, Jia-Xing Liu, Shang-Fu Yuan, Xiao-Ping Zhou, Xiaohong Li, Chaochao Qin, Dong-Sheng Li and Tao Wu*



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: metallofragments 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*

10363

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*

