

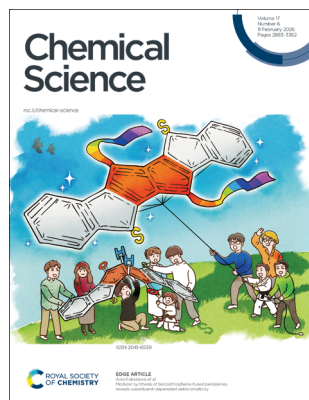
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IN THIS ISSUE

ISSN 2041-6539 CODEN CSHCBM 17(6) 2883–3362 (2026)



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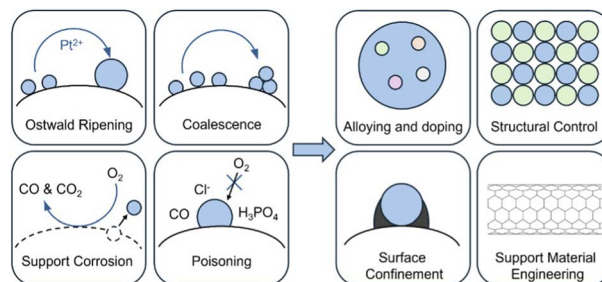
Inside cover
See Benjamin Dietzek-Ivanšić, Birgit Esser *et al.*, pp. 3012–3022. Image reproduced by permission of Evgenia Ryndin from *Chem. Sci.*, 2026, **17**, 3012. Cover design by Evgenia Ryndin.

PERSPECTIVE

2897

Emerging strategies for durable Pt catalysts in PEMFCs

Yuliang Chen, Linghang Meng, Haobo Sun, Honghong Lin and Shouheng Sun*

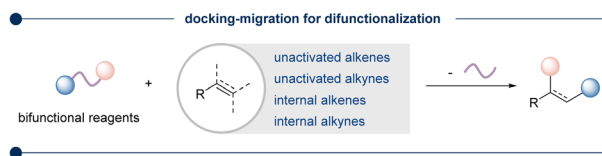


REVIEWS

2913

Radical docking–migration: a powerful strategy for difunctionalization of alkenes and alkynes

Zhu Cao, Fushan Chen and Chen Zhu*



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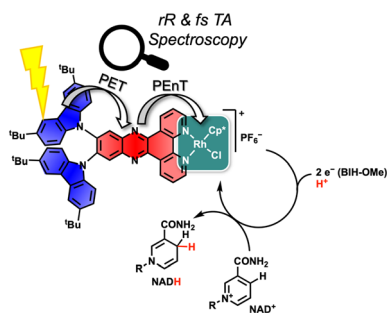
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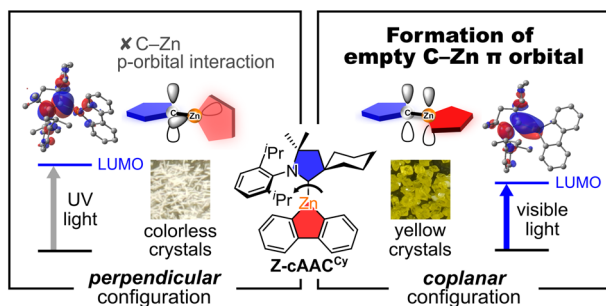
3012



A donor–acceptor photosensitizer-catalyst dyad for light-driven nicotinamide hydrogenation

Alexander Tombrink, Mohini Semwal, Tamar Maisuradze, Alexander K. Mengele, Daniel Straub, Alexander J. C. Kuehne, Sven Rau, Stephan Kupfer, Benjamin Dietzek-Ivanšić* and Birgit Esser*

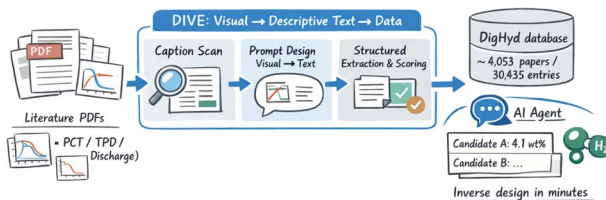
3023



Zincafluorene complex with an empty C–Zn π orbital that captures visible light

Hidemitsu Iwamoto, Yusuke Sunada and Yoshimasa Wada*

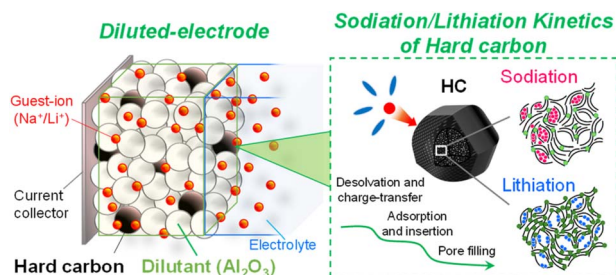
3031



“DIVE” into hydrogen storage materials discovery with AI agents

Di Zhang,* Xue Jia, Hung Ba Tran, Seong Hoon Jang, Linda Zhang, Ryuhei Sato, Yusuke Hashimoto, Toyoto Sato, Kiyoe Konno, Shin-ichi Orimo* and Hao Li*

3043



Revealing the kinetic limits of sodiation and lithiation at hard carbon using the diluted electrode method

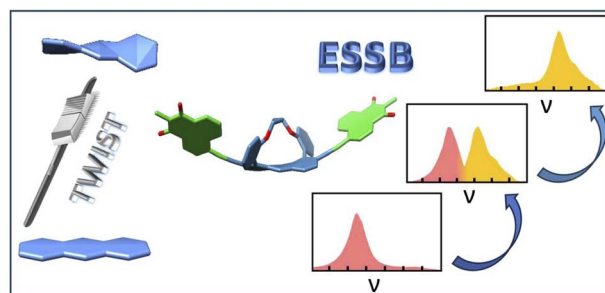
Yuki Fujii, Zachary T. Gossage, Ryoichi Tataru and Shinichi Komaba*



3056

Exciton trapping with a twist

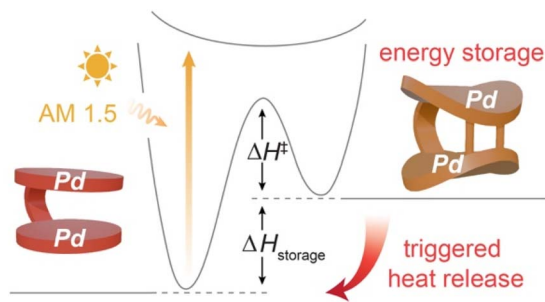
Chinju Govind, Israa Shioukhi, Yinon Deree, Jhon Sebastian Oviedo Ortiz, Jeanne Crassous, Ori Gidron* and Eric Vauthey*



3066

Visible photon energy storage by [2+2] cycloaddition of Pd-oxazolones

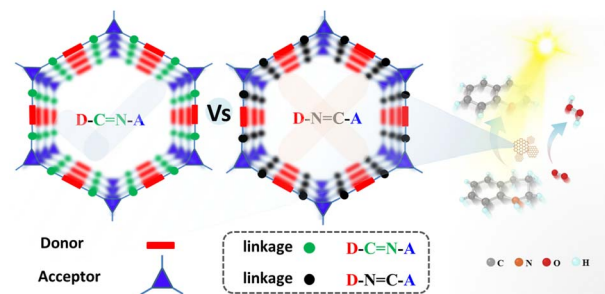
Qianfeng Qiu, Junichi Usuba, Wai Lean Koay, Vincent J. O. Conrad, Nathan M.-W. Wu, Shao-Liang Zheng, Vinh Xuan Truong and Grace G. D. Han*



3075

Directing robust built-in electric fields via imine linkage orientation in COFs for efficient dehydrogenative organic transformation coupled with H₂O₂ photosynthesis

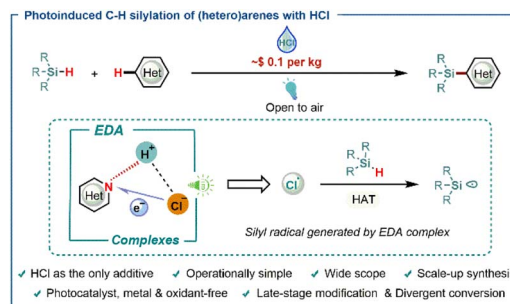
Chang He, Weixu Liu, Enwei Zhu,* Yongfa Zhu* and Chen Chen*



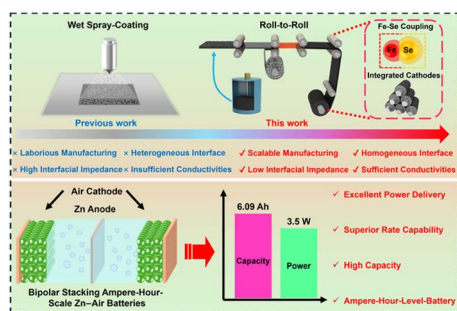
3084

HCl-mediated silylation of C–H bonds in (hetero)arenes with trialkylsilanes

You Su, Meiqi Zhu, João C. A. Oliveira, Xiangnan Zhang, Zheng-Jun Wang, Lutz Ackermann* and Dingyi Wang*



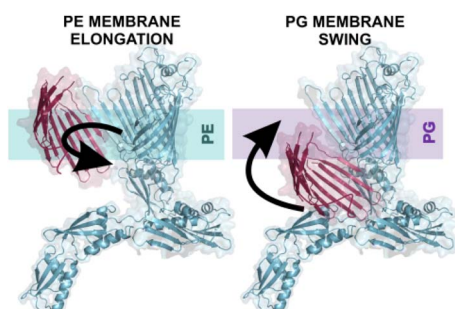
3092



Roll-to-roll fabrication of integrated cathodes enabled by asymmetric dual-atom catalysts for bipolar stacking ampere-hour-scale Zn-air batteries

Yuanhao Wei, Yuanjie Ma, Jingjing Huang, Chenbao Lu, Longbin Li, Xuejiao J. Gao,* Dirk Lützenkirchen-Hecht, Xiaodong Zhuang, Kai Yuan* and Yiwang Chen*

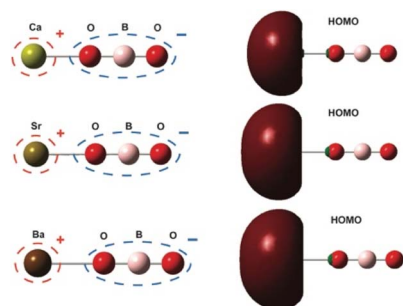
3103



Lipid-regulated assembly mechanisms and functional energetics of the essential bacterial chaperone Bama

Anjana George, Anusree Mulanthala Raj, Akanksha Gajanan Patil, Varsha Kumari and Radhakrishnan Mahalakshmi*

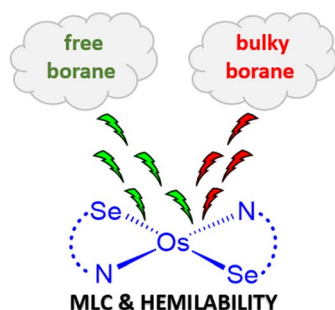
3122



High resolution photoelectron imaging of cryogenically cooled alkaline-earth metal complexes with the BO_2 superhalogen, MBO_2^- ($\text{M} = \text{Ca}, \text{Sr}, \text{Ba}$)

Han-Wen Gao, Jie Hui, Xin-Yu Zhang and Lai-Sheng Wang*

3129



Cooperative borane activation by tuning hemilability of different $\text{Os}-\kappa^2\text{-N,Se}$ -chelated complexes

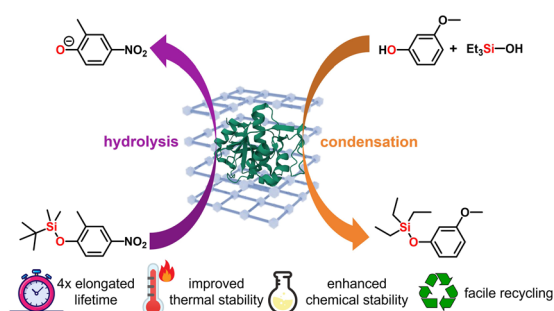
Faneesha Assanar, Sourav Gayen, Deepak Kumar Patel, Thalappil Pradeep* and Sundargopal Ghosh*



3141

Enhanced stability and reusability of recombinant silicatein upon biomimetic metal–organic framework crystallization

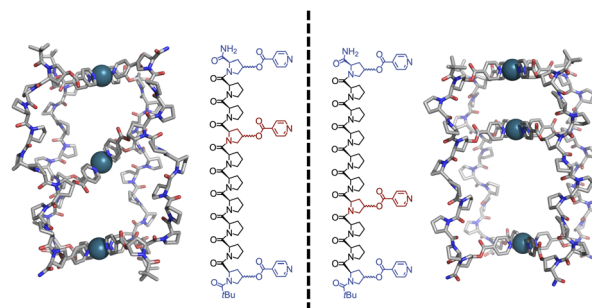
Tongtong Zhang, Xiangyu Wang, Jack D. Wright, George F. S. Whitehead, Jeremiah P. Tidey, Lu Shin Wong* and Imogen A. Riddell*



3148

Peptide ligand isomerism drives divergent stability and guest binding in Pd₃L₄ metal-peptidic cages

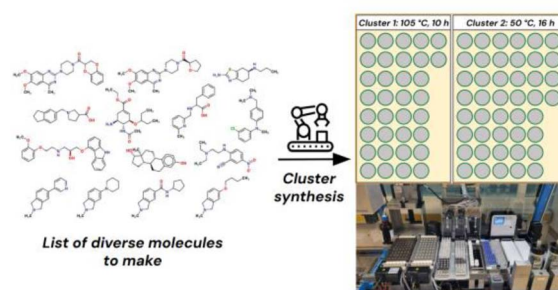
Ben E. Barber, Ellen M. G. Jamieson, Leah E. M. White and Charlie T. McTernan*



3157

Thinking outside the library: cluster synthesis of diverse molecules on a single robotic platform

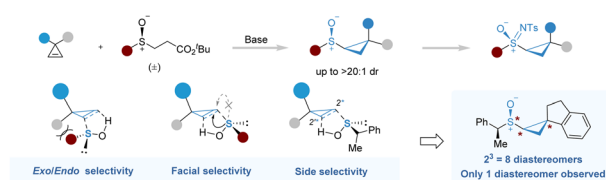
Franck Le Vaillant,* Luidgi Gromat, Clémentine Pescheteau, Nicolas Ducrot, Aurélien Demilly, Jean-Christophe Meillon, Nicolas Do Huu and Quentin Perron



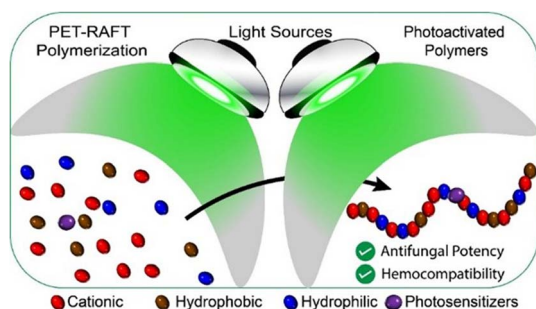
3171

Diastereoselective synthesis of cyclopropyl sulfoxides via hydrosulfenation

Liyan Yuwen, Jiazhong Tang, Yayu Qi, Tianyi Zou, Shaotong Zhang, Ya-Qian Zhang and Qing-Wei Zhang*



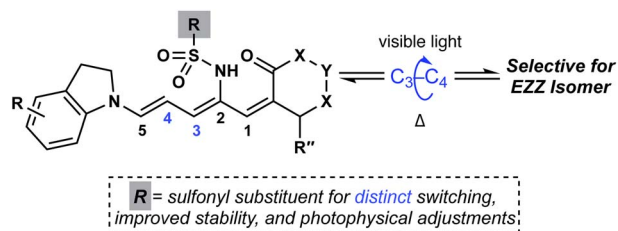
3178



Photoactivated antifungal polymers prepared by PET-RAFT polymerization

Hatu Gmedhin, Md Aquib, Nathaniel Corrigan, Megan D. Lenardon* and Cyrille Boyer*

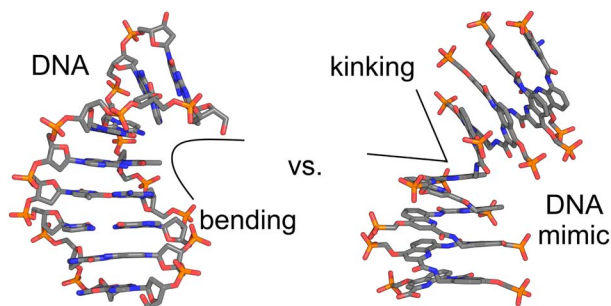
3189



Sulfonyl-tuned amino DASAs for targeted photophysical and photoswitching control

Alexander Karr, Hye Joon Lee, A. Talim G. K, Chloe A. Ramsperger, Cesar A. Reyes, Kelly Biv and Elias Picazo*

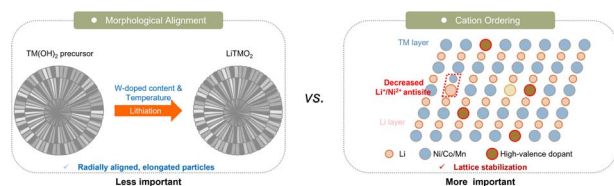
3198



Structural dynamics of DNA mimic foldamers

Manuel Loos, Lion Thurecht, Jiaojiao Wu, Valentina Corvaglia, Zhiwei Liu, Vojislava Pophrstic, Martin Zacharias* and Ivan Huc*

3212



Revisiting high-valence dopant mechanisms in Ni-rich cathodes: cation ordering dominates over morphological alignment for enhanced stability

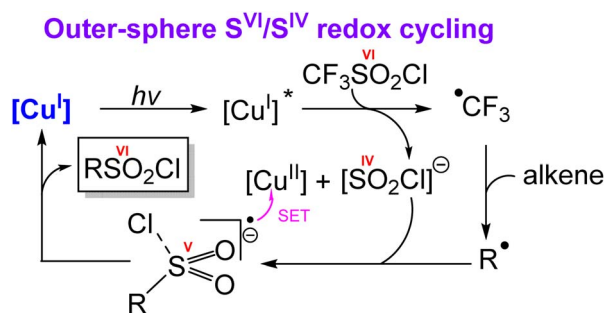
Shuo Wang, Siqi Chen, Xiaohong Liu,* Guilin Feng, Bin Zhang, Wangyan Xing, Yao Xiao,* Hao Liu* and Wei Xiang*



3224

Uncovering outer-sphere mechanisms governing chemoselectivity in copper-photocatalyzed ATRA reactions of $\text{CF}_3\text{SO}_2\text{Cl}$ with alkenes

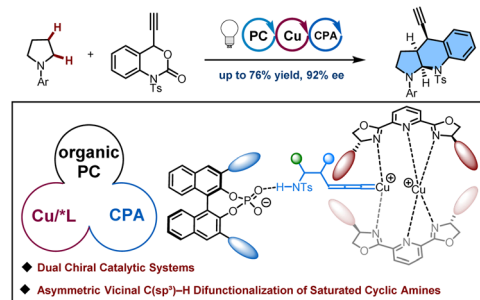
Farshad Shiri, Morteza Jamshidi, Saba Hadidi,*
Robert Stranger and Alireza Ariafard*



3240

Asymmetric vicinal $\text{C}(\text{sp}^3)\text{-H}$ difunctionalization of saturated cyclic amines *via* synergistic photoredox, copper and chiral phosphoric acid catalysis

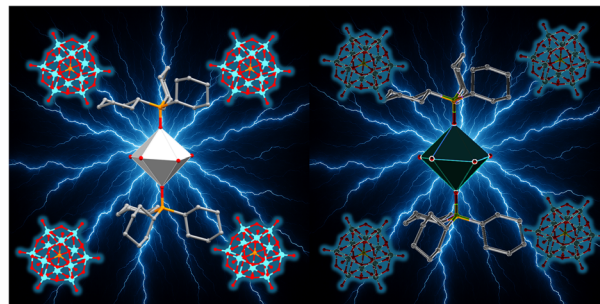
Teng-Fei Xiao, Ke-Rui Jian, Yu-Cheng Gu, Guo-Qiang Xu*
and Peng-Fei Xu*



3248

Highly reducible polyoxometalate– $\text{Dy}(\text{III})$ SMM hybrid materials with exceptional charge stability

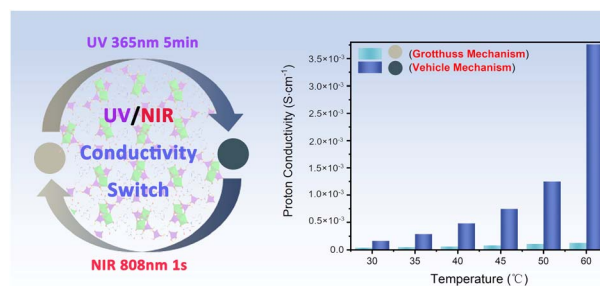
Ethan Lowe, Mathieu Rouzières, Sarah K. Dugmore,
Christopher Kelly, Claire Wilson, Angelos B. Canaj,
Rodolphe Clérac* and Mark Murrie*



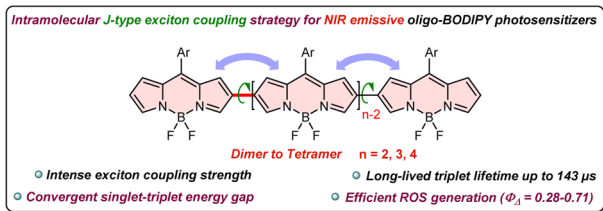
3259

Switchable proton conduction driven by UV/NIR-induced electron transfer in an inorganic–organic hybrid gallium phosphate–oxalate open-framework

Shuai Huang, Zhihui Yi, Zhuopeng Wang, Tan Su,
Junbiao Wu,* Zhiqiang Liang and Jiyang Li*



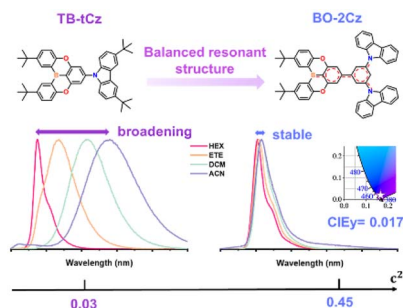
3267



Intramolecular exciton coupling modulates the convergent singlet-triplet energy gap toward NIR-emissive heavy-atom-free Oligo-BODIPY photosensitizers

Chunyan Pan, Jinsong Shao, Zhengxin Kang,* Fan Lv, Xiankang Zhang, Jiangan Gao, Xinsheng Xu, Yaxiong Wei,* Erhong Hao* and Lijuan Jiao*

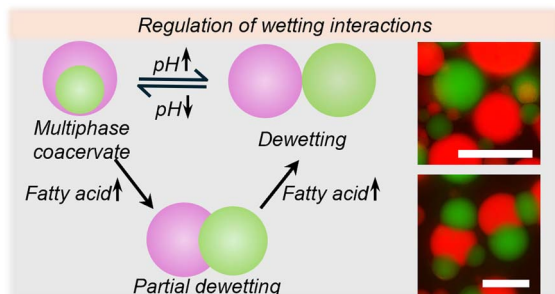
3278



Modulating resonance structures toward highly efficient violet-blue organic light-emitting diodes with narrow emission

Xinyu Wang, Hanlin Gan, Mingliang Xie, Wenle Tan, Pengfei Niu, Mingke Li, Xinru Liao, Bohan Wang, Lei Ying, Yue Yu* and Yuguang Ma

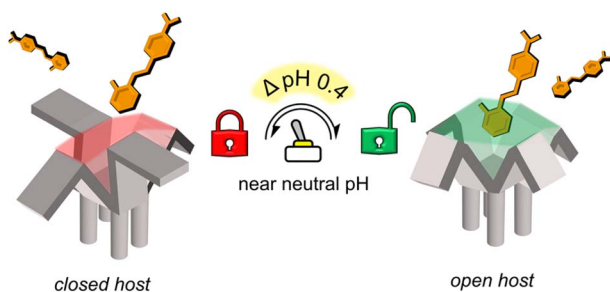
3285



pH-responsive regulation of multiphase coacervate wetting via phase selective enrichment of fatty acids

Preeti Sharma, Pankaj Singh Patwal and B. V. V. S. Pavan Kumar*

3293



N-Arylsulfonamidocalix[4]arenes with narrow pH-responsive binding near neutral pH

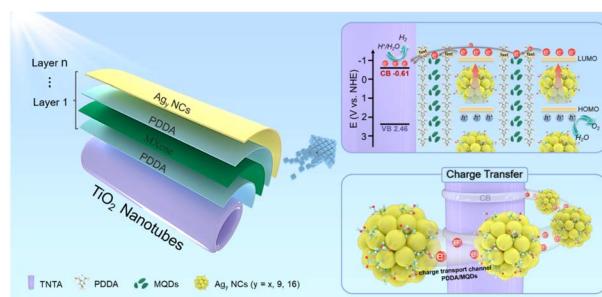
Carlos Alarcon-Miranda, Isis A. Middleton, Olivia Rusli, Nicolas Caceres-Herrera, Mohan Bhadbhade, Nicole J. Rijs, Pall Thordarson,* Marcelo J. Kogan* and Claudio Saitz*



3300

Optimization of electron transfer pathways in atomically precise metal nanoclusters: catalyzing a leap in solar water oxidation

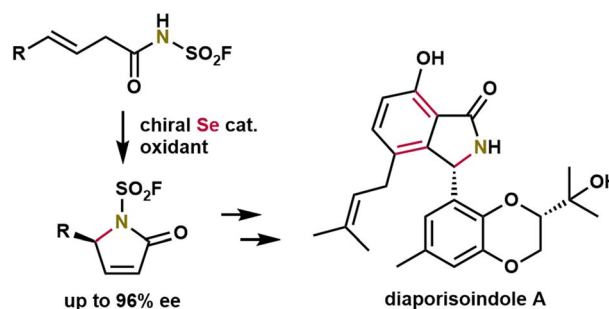
Peng Su, Jia-Liang Liu and Fang-Xing Xiao*



3313

Se-catalyzed enantioselective lactamization enabled by a *N*-fluorosulfonyl group: total synthesis of diaporisoindole A

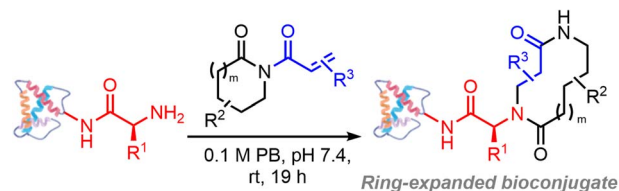
Daiki Yamamoto, Shun Yamasaki and Takuya Hashimoto*



3320

N-terminal protein-macrocycles enabled by conjugate addition/ring expansion cascade reactions

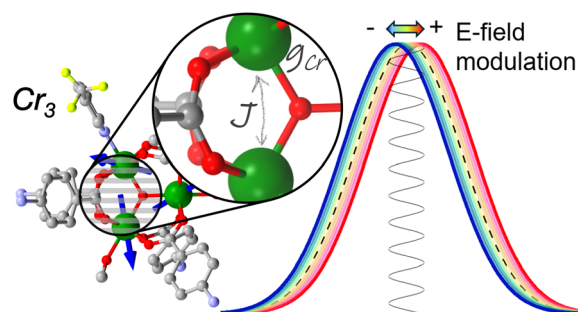
Owen R. Hughes, Afzaal Tufail, Esme Hutton, Joe Nabarro, Rachel Howarth, Nicholas D. Yates, Adrian C. Whitwood, Craig N. Robson, Nathalie Signoret, Martin A. Fascione,* Christopher D. Spicer* and William P. Unsworth*



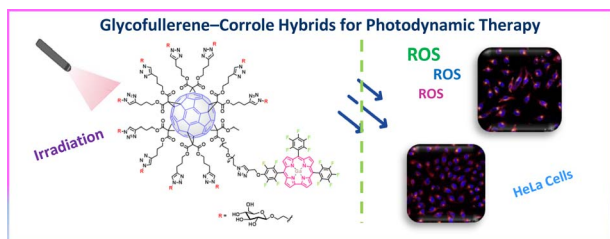
3329

Sensitive detection of spin-electric coupling in a Cr₃ antiferromagnetic triangle

Leonardo Tacconi, Shubham Bisht, Alberto Cini, Mauro Perfetti, Tomas Orlando, Maria Fittipaldi,* Michael Shatruk* and Roberta Sessoli*



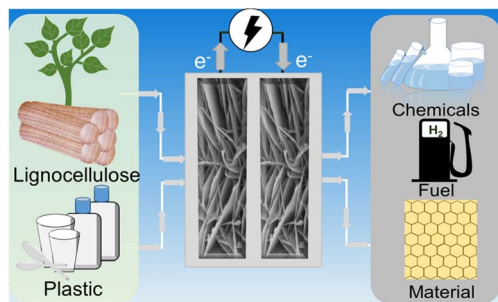
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Glycofullerene–corrole hybrids: a new class of multifunctional nanomaterials with potential in targeted photodynamic therapy

Jennifer Patino-Alonso, Carla I. M. Santos,^{*} Adriana F. Cruz, Sandra Pinto, Justo Cabrera-González, M. Amparo F. Faustino, M. Graça P. M. S. Neves, Ermelinda M. S. Maçôas,^{*} Nazario Martin^{*} and Beatriz M. Illescas^{*}

3351



Selective electrochemical oxidation of biomass and waste plastic at higher current densities for simultaneous hydrogen generation through hybrid water electrolysis

Snehanjali Behera, Akanksha Negi, Gayatri Joshi, Chetansinh Chauhan, Dipak Suresh Kanthali, Saumyakanti Khatua^{*} and Biswajit Mondal^{*}

CORRECTION

3360

Correction: Large-area thin-film synthesis of photoactive Cu_3PS_4 thiophosphate semiconductor with 0–14 pH stability range

Lena A. Mittmann,^{*} Javier Sanz Rodrigo, Eugène Bertin, Giulia Dalmonte, Jean-Claude Grivel, Ivano E. Castelli and Andrea Crovetto^{*}

