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IN THIS ISSUE

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Cover

See Koki Ikemoto, Hiroyuki Isobe *et al.*, pp. 3045–3050. Image reproduced by permission of Koki Ikemoto, Misato Akiyoshi and Hiroyuki Isobe from *Chem. Sci.*, 2025, **16**, 3045.



Inside cover

See Heidy M. Quitián-Lara, Felipe Fantuzzi, Albeiro Restrepo *et al.*, pp. 3051–3065. Image reproduced by permission of Felipe Fantuzzi from *Chem. Sci.*, 2025, **16**, 3051.

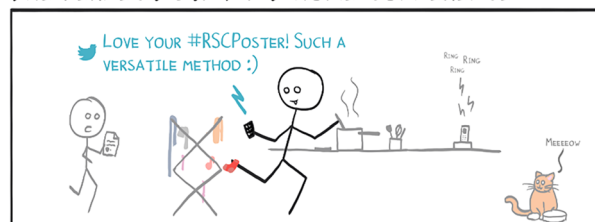
EDITORIAL

2950

Celebrating 10 years of #RSCPoster

Natalie Cotterell, Patrick A. J. M. de Jongh, Timothy Noël, Tanja Junkers, C. Malla Reddy, Athina Anastasaki and Edward Randviir

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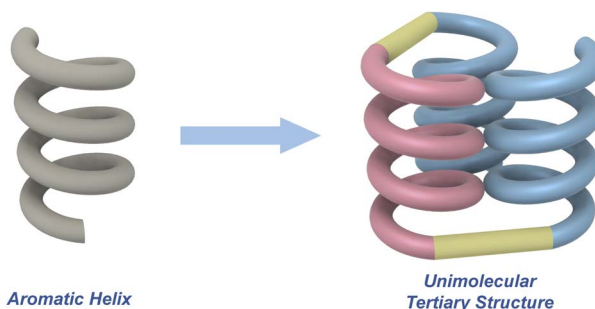


COMMENTARY

2958

A focus on a complex abiotic tertiary structure

Yulong Zhong and Bing Gong*



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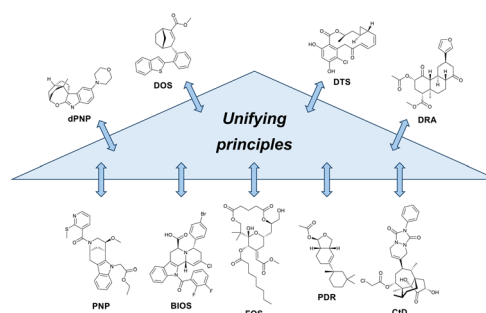
**Fundamental questions
Elemental answers**

PERSPECTIVE

2961

Unifying principles for the design and evaluation of natural product-inspired compound collections

Frederik Simonsen Bro and Luca Laraia*

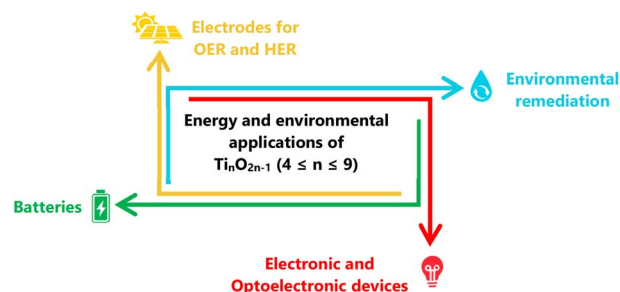


REVIEWS

2980

Recent advances in synthesis and application of Magnéli phase titanium oxides for energy storage and environmental remediation

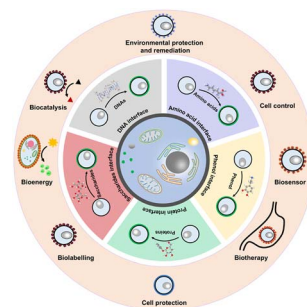
S. Amanda Ekanayake, Haoxin Mai, Dehong Chen and Rachel A. Caruso*



3019

Natural biomolecules for cell-interface engineering

Tong-Kai Zhang, Zi-Qian Yi, Yao-Qi Huang,* Wei Geng* and Xiao-Yu Yang*

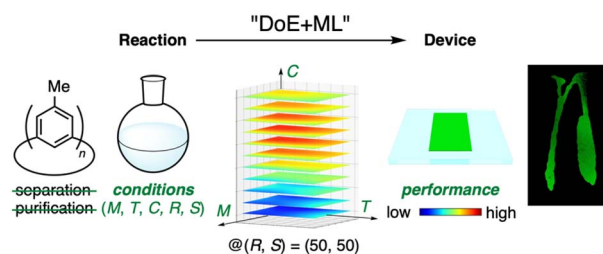


EDGE ARTICLES

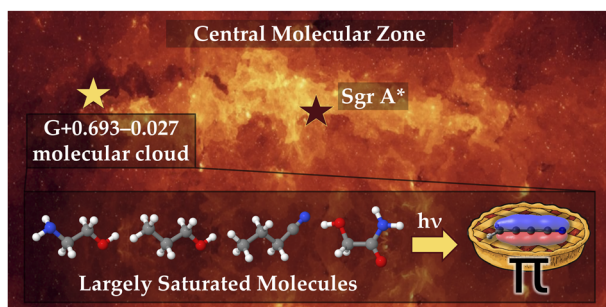
3045

Optimising reaction conditions in flasks for performances in organic light-emitting devices

Koki Ikemoto,* Misato Akiyoshi, Ayano Kobayashi, Hiroshi Kita, Hideo Taka and Hiroyuki Isobe*



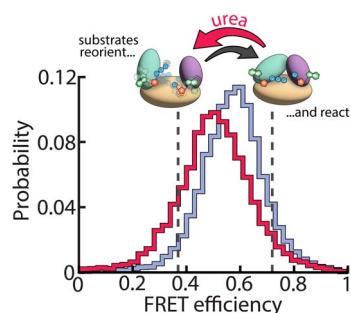
3051



More π , please: What drives the formation of unsaturated molecules in the interstellar medium?

Jhoan Londoño-Restrepo, Santiago Gómez, Heidy M. Quitián-Lara,* Felipe Fantuzzi* and Albeiro Restrepo*

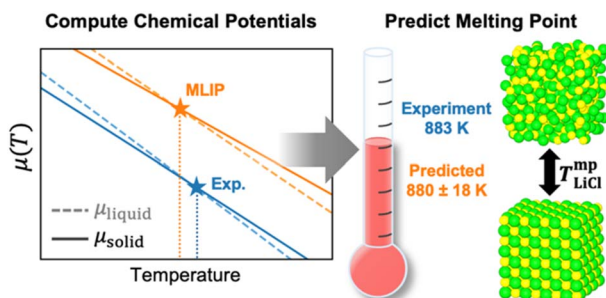
3066



Interplay between conformational dynamics and substrate binding regulates enzymatic activity: a single-molecule FRET study

David Scheerer,* Dorit Levy, Remi Casier, Inbal Riven, Hisham Mazal and Gilad Haran*

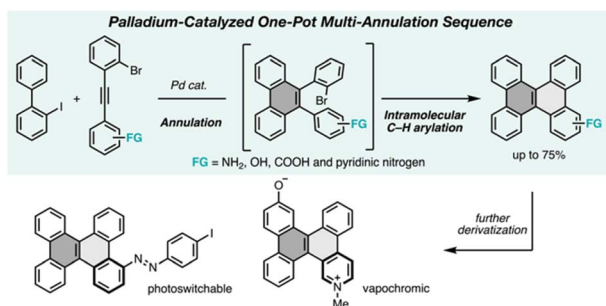
3078



Computing chemical potentials with machine-learning-accelerated simulations to accurately predict thermodynamic properties of molten salts

Luke D. Gibson,* Rajni Chahal and Vyacheslav S. Bryantsev*

3092



Rapid access to functionalized nanographenes through a palladium-catalyzed multi-annulation sequence

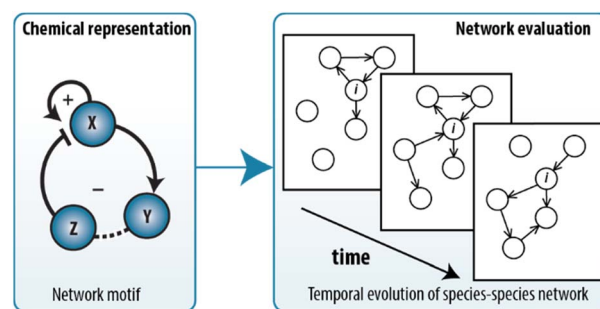
Takehisa Maekawa* and Kenichiro Itami*



3099

Identify structures underlying out-of-equilibrium reaction networks with random graph analysis

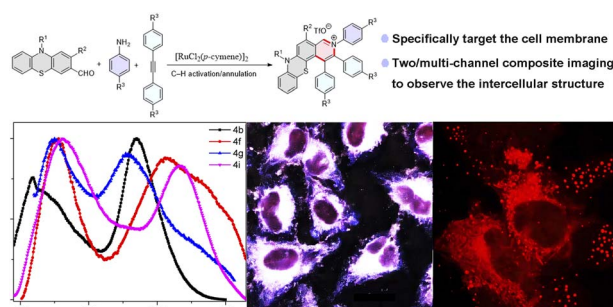
Éverton F. da Cunha, Yanna J. Kraakman, Dmitrii V. Kriukov, Thomas van Poppel, Clara Stegehuis* and Albert S. Y. Wong*



3107

Ruthenium-catalyzed C–H bond activation and annulation of phenothiazine-3-carbaldehydes: facile access to dual-emission materials

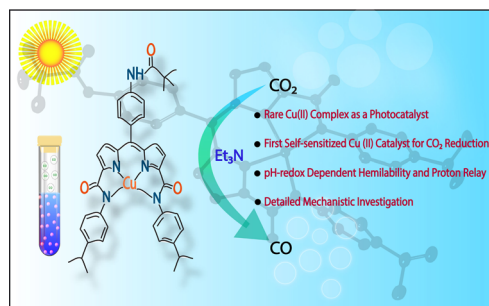
Junxiang Liu, Kangmin Wang, Liqiu Wan, Xianhui Yang and Bijin Li*



3114

Self-sensitized Cu(II)-complex catalyzed solar driven CO₂ reduction

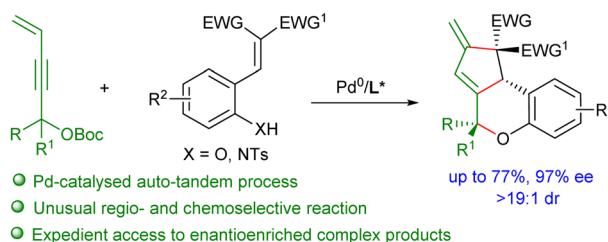
Soumadip Das, Aritra Roy, Navonil Chakrabarti, Narottam Mukhopadhyay, Aniruddha Sarkar and Sayam Sen Gupta*



3124

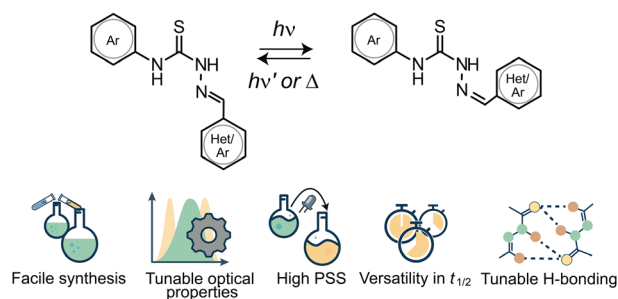
Palladium-catalysed asymmetric cascade transformations of 4-alken-2-ynyl carbonates to construct complex frameworks

Ze-Liang He, Li Li, Zhi-Chao Chen,* Wei Du and Ying-Chun Chen*



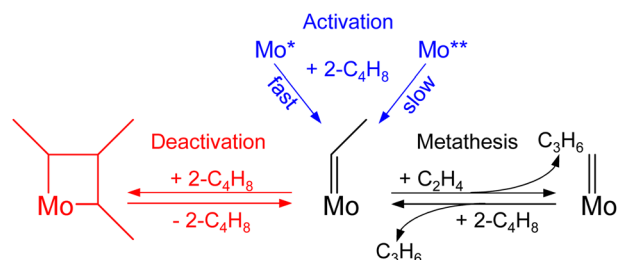
EDGE ARTICLES

3130

**Thiosemicarbazones as versatile photoswitches with light-controllable supramolecular activity**

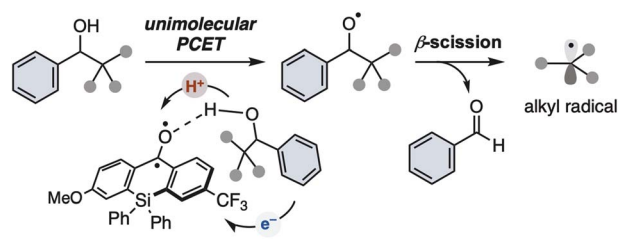
Bengi Sentürk, Burkhard Butschke and Fabian Eisenreich*

3141

**Time-resolved and theoretical analysis of Mo-carbene transformations in metathesis of ethylene with 2-butene**

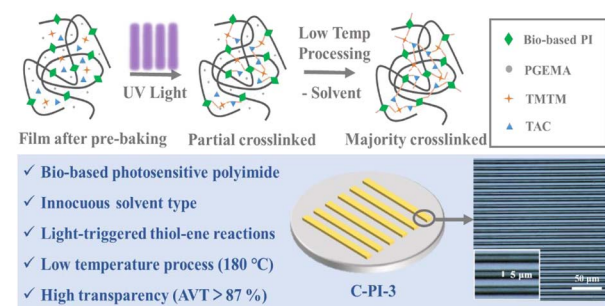
Tatiana Otroshchenko,* Aleksandr Fedorov, Qiyang Zhang, David Linke, Jarosław Handzlik, Mirjam Schröder, Björn Corzilius and Evgenii V. Kondratenko*

3150

**Organic photoredox-catalyzed unimolecular PCET of benzylic alcohols**

Tomotoki Matsuo, Masaki Sano, Yuto Sumida* and Hirohisa Ohmiya*

3157

**Innocuous solvent-based, low-temperature curable, and highly transparent photosensitive polyimides developed using soluble polyimides containing bio-based magnolol moieties**

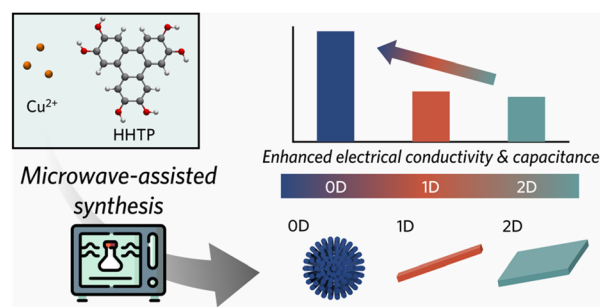
Huifa Meng, Kaijin Chen, Chuying Li, Longfei Zhang, Yanwei He, Zining Zhao, Peixin Wu, Hai Zhu, Zhenguo Chi, Jiarui Xu, Siwei Liu and Yi Zhang*



3168

From 0D to 2D: microwave-assisted synthesis of electrically conductive metal–organic frameworks with controlled morphologies

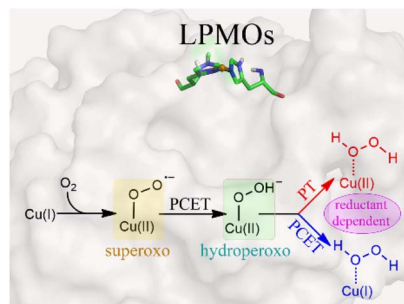
Xiaoyu Fang, Ji Yong Choi, Chenwei Lu, Elizabeth Reichert, Hoai T. B. Pham and Jihye Park*



3173

Theoretical study of the *in situ* formation of H_2O_2 by lytic polysaccharide monooxygenases: the reaction mechanism depends on the type of reductant

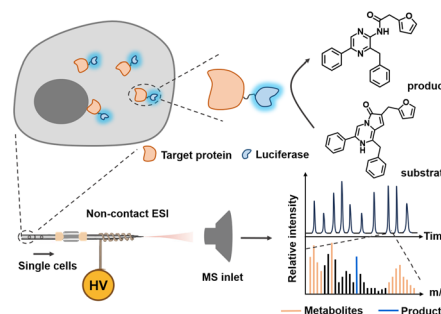
Zhanfeng Wang,* Xiaodi Fu, Wenwen Diao, Yao Wu,* Carme Rovira* and Binju Wang*



3187

Multi-dimensional bio mass cytometry: simultaneous analysis of cytoplasmic proteins and metabolites on single cells

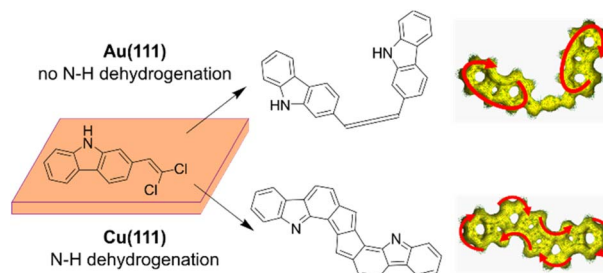
Shaojie Qin, Xinyi Zhang, Yi Zhang, Daiyu Miao, Wensheng Wei and Yu Bai*



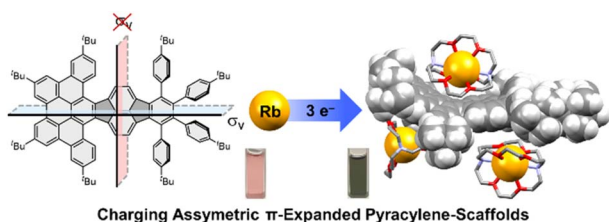
3198

Competing pathways to aromaticity governed by amine dehydrogenation and metal–organic complexation in on-surface synthesis

Andrés Lombana, Songpol Chaunchaiyakul, Olivier Chuzel,* Denis Hagebaum-Reignier, Jean-Luc Parrain,* Franck Bocquet, Laurent Nony, Christian Loppacher, Federica Bondino, Elena Magnano, Hiroshi Imada, Emiko Kazuma, Yousoo Kim, Luca Giovannelli* and Sylvain Clair*



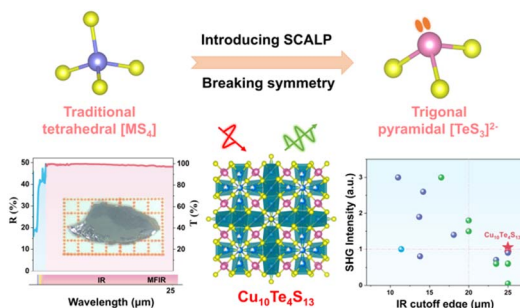
3211



Stepwise reduction of an asymmetric π -expanded pyracylene towards the crystalline radical trianion

Yikun Zhu, Jan Borstelmann, Christian Neiss, Zheng Wei, Andreas Göring, Milan Kivala* and Marina A. Petrukhina*

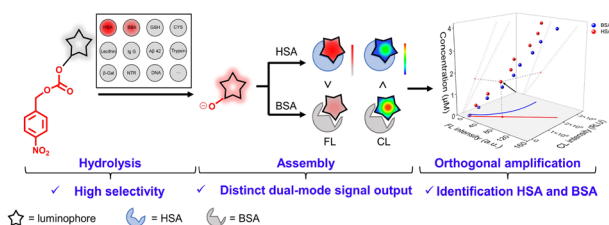
3218



Exploring new horizons in mid-to-far infrared nonlinear optical crystals: the significant potential of trigonal pyramidal $[TeS_3]^{2-}$ functional units

Bo Zhang, Sheng-Hua Zhou,* Bing-Xuan Li, Xin-Tao Wu, Hua Lin* and Qi-Long Zhu*

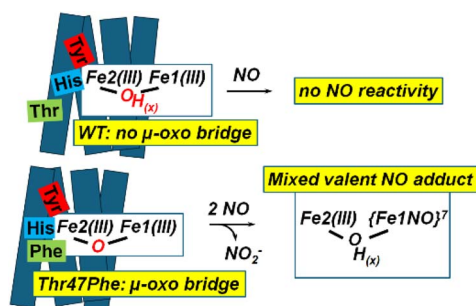
3228



A two-dimensional fluorescence and chemiluminescence orthogonal probe for discriminating and quantifying similar proteins

Juan Li, Xiuyan Zhao, Yutao Zhang,* Yao Lu, Haoyun Xue, Dan Li, Qiang Liu, Chenxu Yan, Weijie Chi, Xingqing Xiao,* Wei-Hong Zhu and Zhiqian Guo*

3238



A single outer-sphere amino-acid substitution turns on the NO reactivity of a hemerythrin-like protein

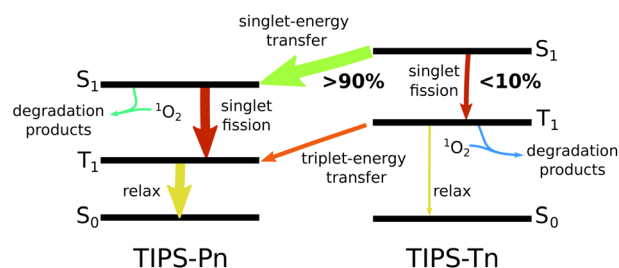
Therese Albert, Natasha Pence, Fangfang Zhong, Ekaterina V. Pletneva and Pierre Moënné-Loccoz*



3246

Photodegradation reveals that singlet energy transfer impedes energy-gradient-driven singlet fission in polyacene blends

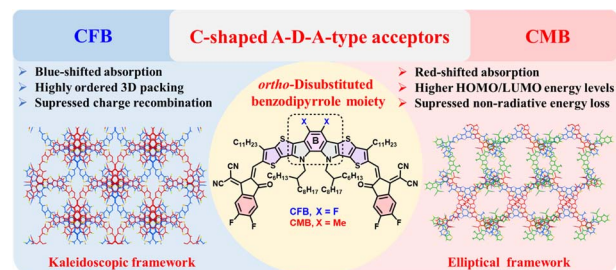
Alexandra N. Stuart,* Jessica M. de la Perrelle, David M. Huang* and Tak W. Kee*



3259

Fluorinated and methylated *ortho*-benzodipyrrole-based acceptors suppressing charge recombination and minimizing energy loss in organic photovoltaics

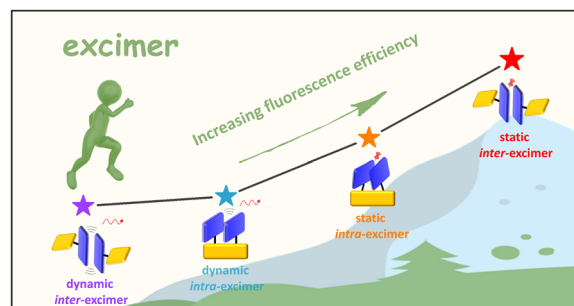
Yan-Bo Wang, Chia-Lin Tsai, Yung-Jing Xue, Bing-Huang Jiang, Han-Cheng Lu, Jun-Cheng Hong, Yu-Chi Huang, Kuo-Hsiu Huang, Su-Ying Chien, Chih-Ping Chen and Yen-Ju Cheng*



3275

A comparative investigation on excimer fluorescence toward its bright future

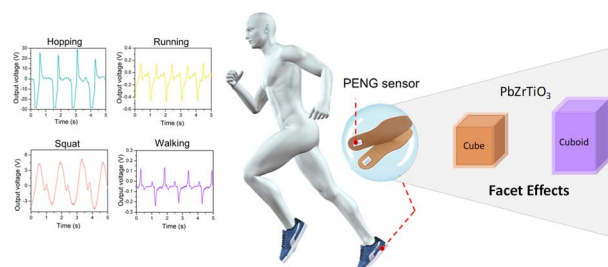
Shiyin Wang, Haichao Liu,* Shuaiqiang Zhao, Qiaolin Wu, Zhiqiang Yang, Daojie Yang, Yingbo Lv, Qing Su, Shi-Tong Zhang and Bing Yang*



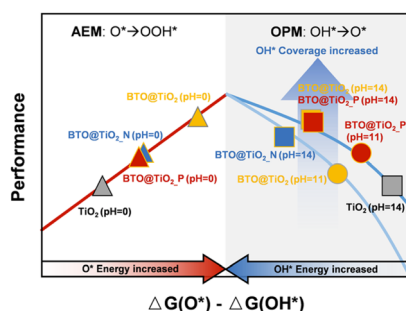
3285

Synthesis of shape-tunable $PbZrTiO_3$ nanocrystals with lattice variations for piezoelectric energy harvesting and human motion detection

Ya-Ju Chuang, Arnab Pal, Bo-Hao Chen, Satyaranjan Jena, Sreerag Suresh, Zong-Hong Lin* and Michael H. Huang*



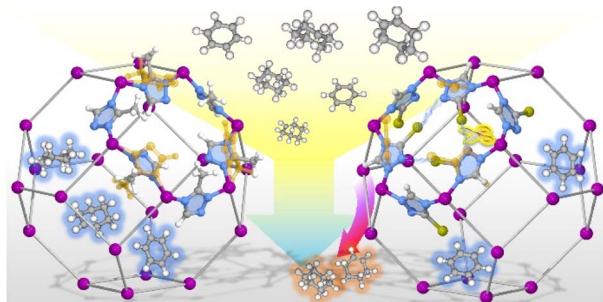
3296



Unravelling the pH-dependent mechanism of ferroelectric polarization on different dynamic pathways of photoelectrochemical water oxidation

Xing Ji, Zhouhao Zhu, Ming Zhou, Ying Zhang, Liyong Gan,^{*} Yunhuai Zhang^{*} and Peng Xiao^{*}

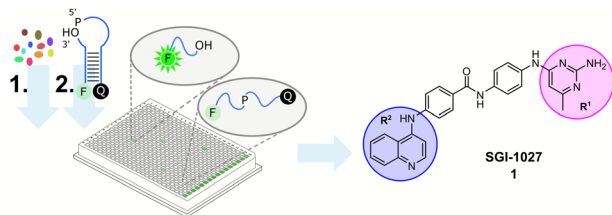
3307



Introducing halogen-bonded gates into zeolitic frameworks for efficient benzene/cyclohexene/cyclohexane separation

Zi-Jun Liang, Fang-Di Dong, Le Ye, Kai Zheng, Ding-Yi Hu, Xi Feng, Wen-Yu Su, Zhi-Shuo Wang, Mu-Yang Zhou, Zi-Luo Fang, Dong-Dong Zhou,^{*} Jie-Peng Zhang^{*} and Xiao-Ming Chen

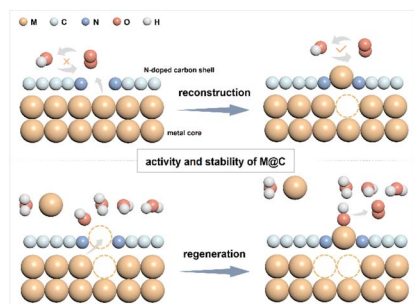
3313



Potent inhibitors of the human RNA ligase Rlig1 highlights its role in RNA integrity maintenance under oxidative cellular stress

Lisa A. Schlör, Maya Peußner, Silke Müller and Andreas Marx^{*}

3323



Activity and stability origin of core-shell catalysts: unignorable atomic diffusion behavior

Yuanyuan Xue, Letian Chen, Lijuan Zhang, Gengfeng Zheng,^{*} Xu Zhang^{*} and Zhen Zhou^{*}

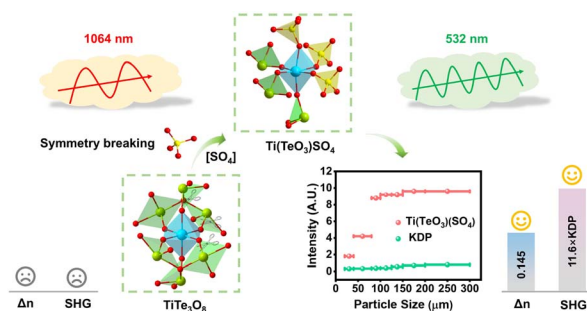


EDGE ARTICLES

3329

Different p-block elements induce $C_3[111]$ octahedral distortion in titanium to generate an intense nonlinear effect

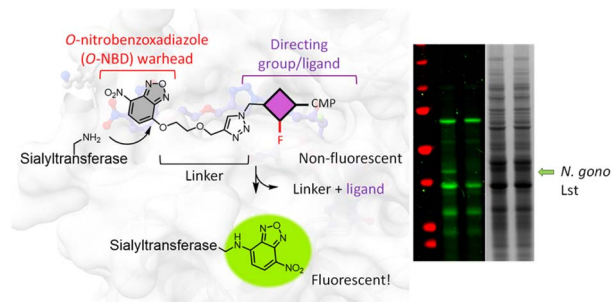
Zhenhua Li, Zhengli Liang, Jiahao Wan, Lehui Liu, Chunxiang Wu, Ping Wang, Xingxing Jiang,* Zheshuai Lin and Hongming Liu*



3336

Affinity-based covalent sialyltransferase probes enabled by ligand-directed chemistry

Jun Yang Ong, Erianna I. Alvarado-Melendez, Joshua C. L. Maliepaard, Karli R. Reiding and Tom Wennekes*



CORRECTION

3345

Correction: Peptide macrocyclisation via intramolecular interception of visible-light-mediated desulfurisation

Frances R. Smith, Declan Meehan, Rhys C. Griffiths, Harriet J. Knowles, Peiyu Zhang, Huw E. L. Williams, Andrew J. Wilson and Nicholas J. Mitchell*

