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IN THIS ISSUE

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Cover

See Elsa Reichmanis *et al.*, pp. 1979–1998.

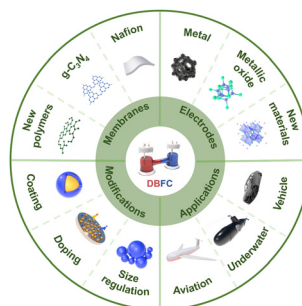
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HIGHLIGHT

1965

Research progress on direct borohydride fuel cells

Liu Liu, Junming Zhang, Ying Zhao,* Milin Zhang, Linzhi Wu, Piaoping Yang* and Zhiliang Liu*

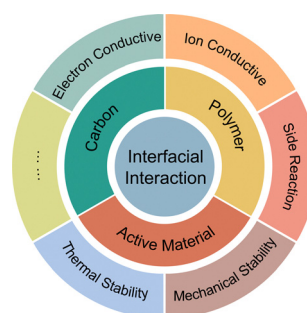


FEATURE ARTICLES

1979

Enhancing composite electrode performance: insights into interfacial interactions

Haoze Ren, Esther S. Takeuchi, Amy C. Marschilok, Kenneth J. Takeuchi and Elsa Reichmanis*



RSC Applied Interfaces

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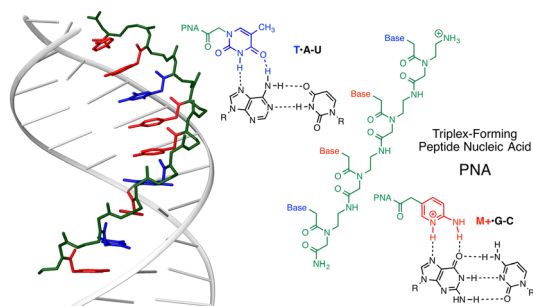
Fundamental questions
Elemental answers

FEATURE ARTICLES

1999

Triplex-forming peptide nucleic acids as emerging ligands to modulate structure and function of complex RNAs

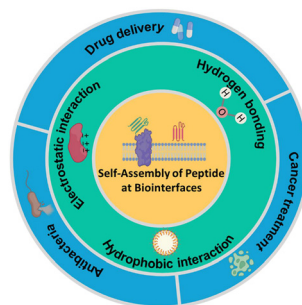
Martins Katkevics, James A. MacKay and Eriks Rozners*



2009

Self-assembly of peptide nanomaterials at biointerfaces: molecular design and biomedical applications

Xin-Yuan Guo, Li Yi, Jia Yang, Hong-Wei An,* Zi-Xin Yang* and Hao Wang*

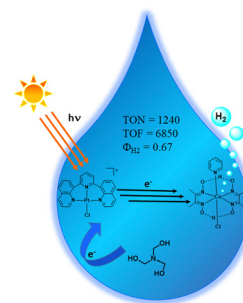


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2022

Pt(II)-bis(quinoliny) complexes for photocatalytic hydrogen production

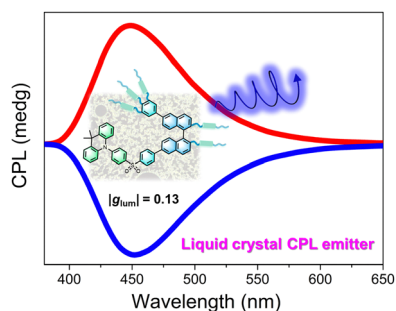
Rahat Gupta, Olivier Schott, Arindam Saha, Shriya, Garry S. Hanan and Amlan K. Pal*



2026

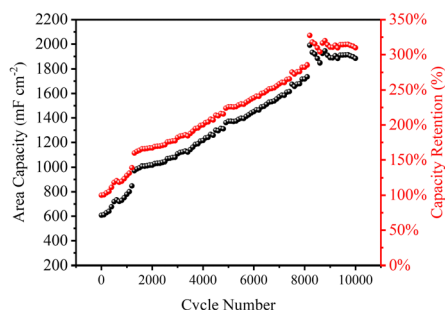
Liquid-crystalline circularly polarised fluorescent emitters with a high luminescence dissymmetry factor

Xiaoyi Lai, Qihang Zhong, Chen Xiao, Stephen J. Cowling, Pengfei Duan,* Duncan W. Bruce,* Weiguo Zhu and Yafei Wang*



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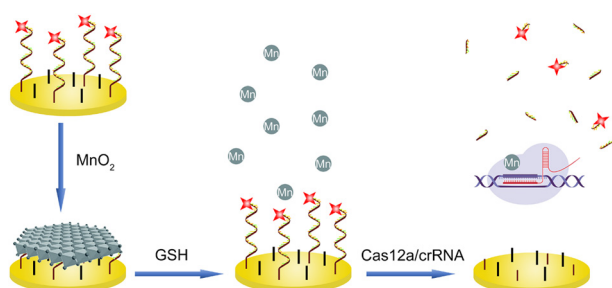
2030



Capacitance-soaring phenomenon induced by CuO electrode reconstruction with metastable $\text{Cu}(\text{OH})_2$ nanowires

Jie Bai, Zhenhuai Yang* and Qiang Wang*

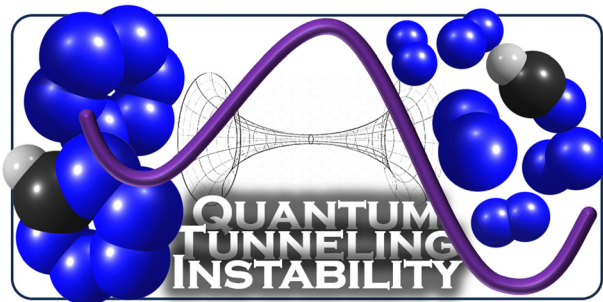
2034



Electrochemical detection of glutathione based on accelerated CRISPR/Cas12a *trans*-cleavage with MnO_2 nanosheets

Renpeng Xia, Nan Ouyang, Tingting Wang, Yuan Zhuang* and Peng Miao*

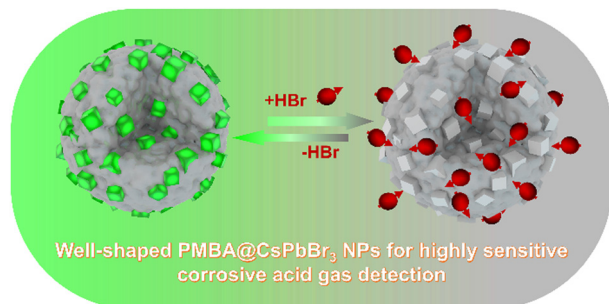
2038



Quantum tunneling instability of the mythical hexazine and pentazine

Itzhak Sedgi and Sebastian Kozuch*

2042



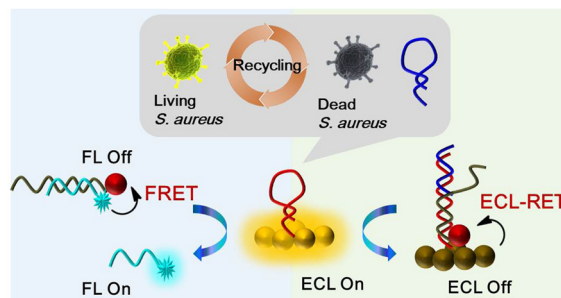
Controllable fabrication of well-shaped PMBA@CsPbBr₃ nanoparticles for highly sensitive detection of HCl and HBr

Ying Zhou, Zaozhen He, Chunyu Zhao, Chengyu Shi and Aizhao Pan*



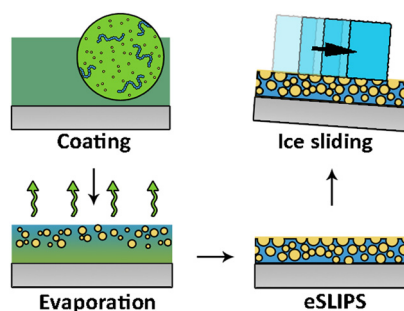
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2046

Two-step resonance-energy-transfer-based ratiometric biosensor for sensing and annihilation of *Staphylococcus aureus*Qiumei Feng, Tao Wu, Huan Wang, Meisheng Wu,*
Baoting Dou and Po Wang*

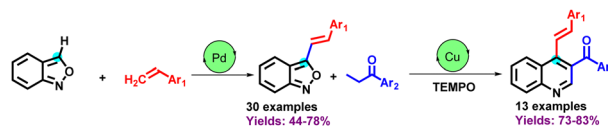
2050

Room-temperature endogenous lubricant-infused slippery surfaces by evaporation induced phase separation

Hao-Cheng Yang,* Hai-Yuan Yuan, Zhen-Wei Wu and
Zhi-Kang Xu*

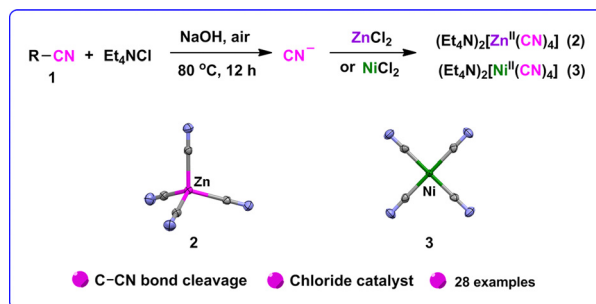
2054

Synthesis of 4-styrylquinolines via direct oxidative C3-alkenylation of anthranils under Pd(II) catalysis

Annapurna Awasthi, Khushboo Tiwari, Pushpendra Yadav,
Suman Bhowmick and Dharmendra Kumar Tiwari*

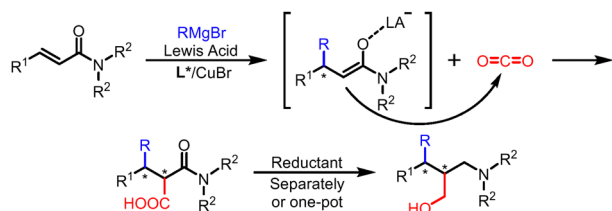
2058

Direct transformation of nitriles to cyanide using chloride anion as catalyst

Xiaofeng Zhang, Yinghua Li, Weibin Fan and
Deguang Huang*

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2062

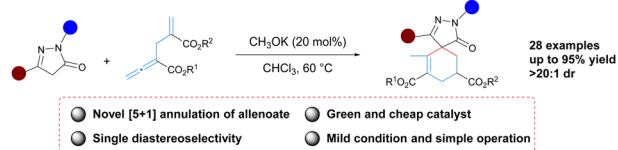


Readily available α,β -unsaturated amides and Grignard reagents as raw materials
Transformation of CO₂ into useful chiral organic molecules
Chiral γ -amino alcohols with two continuous stereocenters can be obtained

Green transformation of CO₂ into γ -amino alcohols with continuous stereocenters

Qiuxin Zhang, Heng Zhang, Senbai Geng, Xian Zhao, Shucheng Liu,* Kun Hong,* Jianming Pan* and Xingchen Yan*

2066

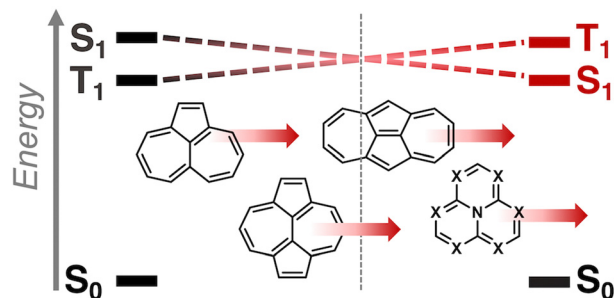


- Novel [5+1] annulation of allenates
- Green and cheap catalyst
- Single diastereoselectivity
- Mild condition and simple operation

A highly diastereoselective (5+1) annulation of allenates and pyrazolones catalyzed by CH₃OK

Jingxiong Lai and You Huang*

2070

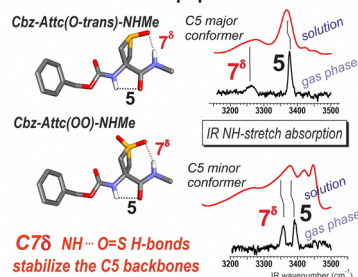


Enhanced inverted singlet-triplet gaps in azaphenalenenes and non-alternant hydrocarbons

Marc H. Garner,* J. Terence Blaskovits and Clémence Corminboeuf*

2074

C5 conformation of peptide models



Effects of sulfoxide and sulfone sidechain-backbone hydrogen bonding on local conformations in peptide models

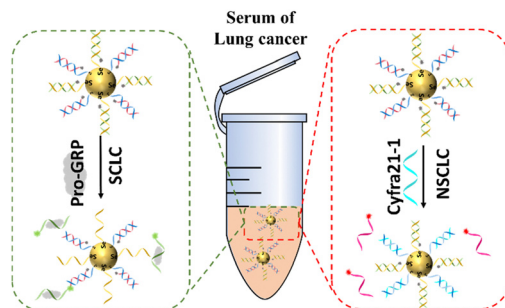
Dayi Liu, Sylvie Robin, Eric Gloaguen, Valérie Brenner, Michel Mons* and David J. Aitken*



2078

Dual-targets fluorescent nanoprobe for precise subtyping of lung cancer

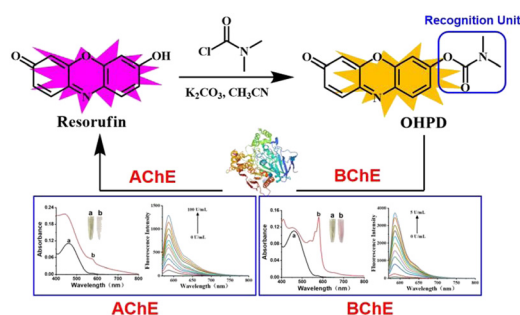
Zixuan Chang, Ming Jia, Gao Liu, Houbang Yang, Yinian Wang, Mingyi Ouyang, Xiaonan Gao* and Bo Tang*



2082

Detection of acetylcholinesterase and butyrylcholinesterase *in vitro* and *in vivo* using a new fluorescent probe

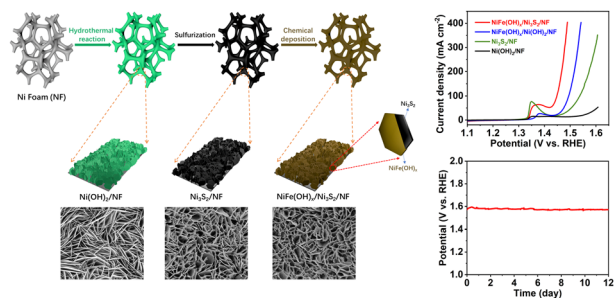
Xiaojie Tang, Yuan Zhang, Qiuyue Wang, Zhao Li* and Chengxiao Zhang



2086

In situ assembly of Ni₃S₂ nanosheets encapsulated with NiFe(oxy)hydroxides for efficient water oxidation

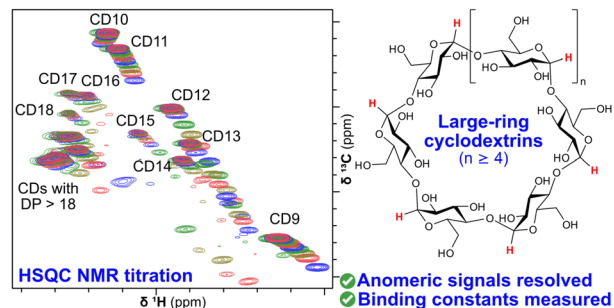
Yu Wei, Zhao Liu, Zhenze Han, Taolue Liu, Xin Ding* and Yan Gao*



2090

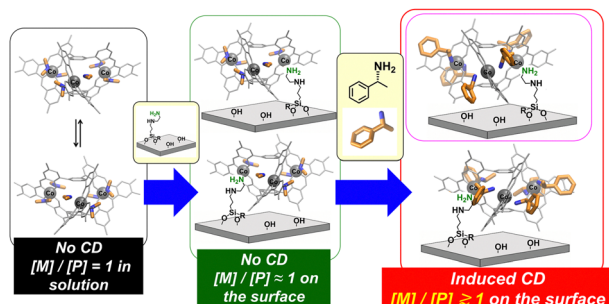
Quantitative determination of the binding capabilities of individual large-ring cyclodextrins in complex mixtures

Dennis Larsen, Andreas Erichsen, Giorgia Masciotta, Sebastian Meier and Sophie R. Beeren*



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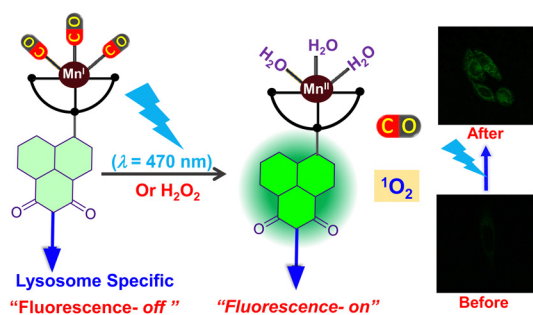
2094



Induced chirality at the surface: fixation of a dynamic *M/P* invertible helical Co₃ complex on SiO₂

Satoshi Muratsugu,* Kana Sawaguchi, Takafumi Shiraogawa, Shunsuke Chiba, Yoko Sakata, Sora Shirai, Hiroshi Baba, Masahiro Ehara,* Shigehisa Akine* and Mizuki Tada*

2098



Lysosome targeted visible light-induced photo-CORM for simultaneous CO-release and singlet oxygen generation

Upendar Reddy Gandra,* Batakrishna Jana, Patrick Hammer, M. Infas H. Mohideen, Ute Neugebauer and Alexander Schiller*

