

ChemComm

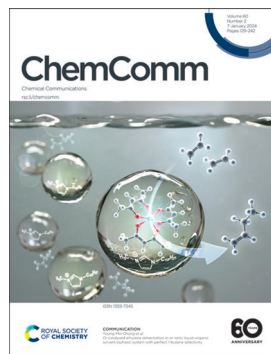
Chemical Communications

rsc.li/chemcomm

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 60(2) 129-242 (2024)



Cover

See Young-Min Chung *et al.*, pp. 168–171. Image reproduced by permission of Young-Min Chung from *Chem. Commun.*, 2024, 60, 168.



Inside cover

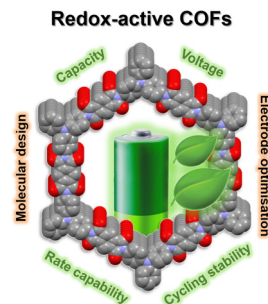
See Masafumi Ueda *et al.*, pp. 172–175. Image reproduced by permission of Masafumi Ueda from *Chem. Commun.*, 2024, 60, 172.

HIGHLIGHT

138

Organic electrodes based on redox-active covalent organic frameworks for lithium batteries

Raquel Dantas, Catarina Ribeiro and Manuel Souto*

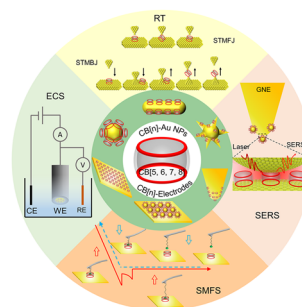


FEATURE ARTICLE

150

Emerging sensing platforms based on Cucurbit[n]uril functionalized gold nanoparticles and electrodes

Tao Ma, Shuai Chang, Jin He* and Feng Liang*



Fuelling your energy research



Energy & Environmental Science

Agenda-setting research in energy science and technology

Chair of the Editorial Board

Jenny Nelson, Imperial College London, UK

Impact factor 2021: 39.714, median time to first decision (peer reviewed articles only): 46 days*.

rsc.li/ees



EES Catalysis

Exceptional research on energy and environmental catalysis

Editor-in-Chief

Shizhang Qiao, University of Adelaide, Australia

Median time to first decision (peer reviewed articles only): 24 days*.

rsc.li/ees-catalysis



Sustainable Energy & Fuels

Driving the development of sustainable energy technologies through cutting edge research

Editor-in-Chief

Garry Rumbles, National Renewable Energy Laboratory and University of Colorado Boulder, USA

Impact factor 2021: 6.813, median time to first decision (peer reviewed articles only): 28 days*.

rsc.li/sustainable-energy



Energy Advances

Embracing research at the nexus of energy science and sustainability

Editor-in-Chief

Volker Presser, Leibniz Institute for New Materials, Germany

Median time to first decision (peer reviewed articles only): 32 days*.

rsc.li/energy-advances

Submit your work today

rsc.li/energy

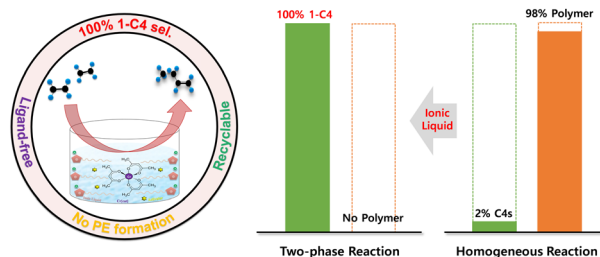
*Visit rsc.li/metrics-explainer for more information

Registered charity number: 207890

168

Cr-catalysed ethylene dimerization in an ionic liquid-organic solvent biphasic system with perfect 1-butene selectivity

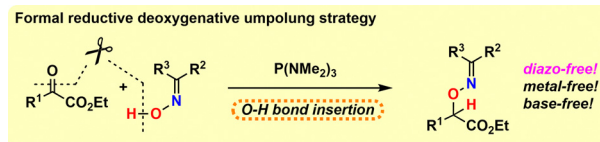
Nguyen Thi Kim Chau, Seungwan Kim, Hyo-Jun Lee, Minjae Lee and Young-Min Chung*



172

Synthesis of oxime ethers via a formal reductive O–H bond insertion of oximes to α -keto esters

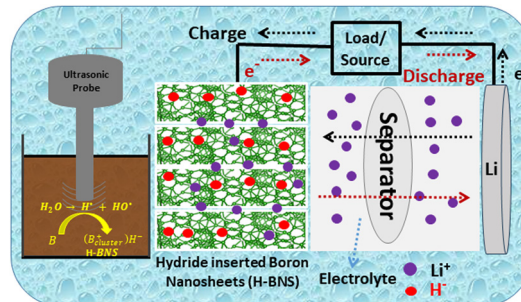
Norihiko Takeda, Ryoya Maeda, Motohiro Yasui and Masafumi Ueda*



176

Sonochemically synthesized hydride-stabilized boron nanosheets via radical-assisted oxidative exfoliation for energy storage applications

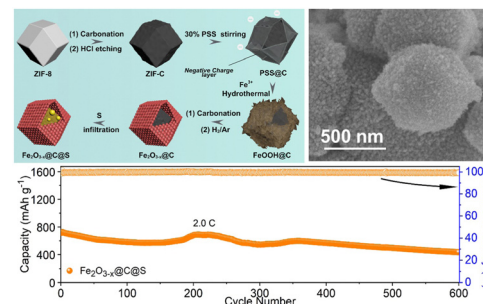
Anandhakumar Sukeri, Swati Panigrahi and Kothandaraman Ramanujam*



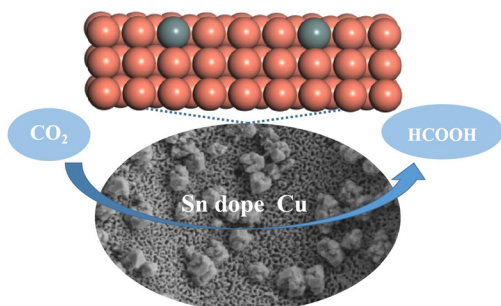
180

Core-shell oxygen-deficient Fe_2O_3 polyhedron serves as an efficient host for sulfur cathode

Jun Pu,* Ziyang Huang, Jie Wang,* Yun Tan, Shanshan Fan and Zhenghua Wang



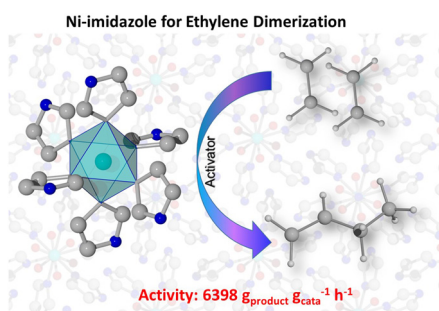
184



Dealloying-derived nanoporous Sn-doped copper with prior selectivity toward formate for CO₂ electrochemical reduction

Hefeng Yuan,* Bohao Kong, Zehao Liu, Li Cui and Xiaoguang Wang*

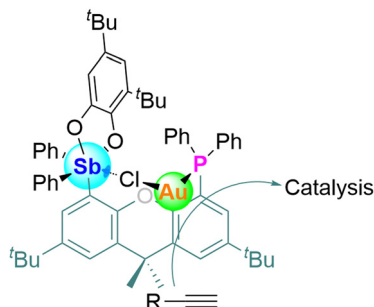
188



Facile preparation of a Ni-imidazole compound with high activity for ethylene dimerization

Zhaohui Liu, Guanxing Li, Mohammed R. Alalouni, Ziyin Chen, Xinglong Dong,* Jianjian Wang and Cailing Chen*

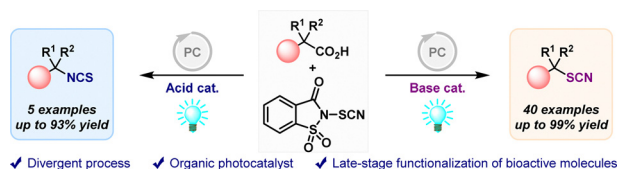
192



Pnictogen bonding at the service of gold catalysis: the case of a phosphinostiborane gold complex

Benyu Zhou, Shantabh Bedajna and François P. Gabbaï*

196



Divergent process for the catalytic decarboxylative thiocyanation and isothiocyanation of carboxylic acids promoted by visible light

Jordan Vigier, Mélissa Gao, Philippe Jubault, H el ene Lebel* and Tatiana Besset*

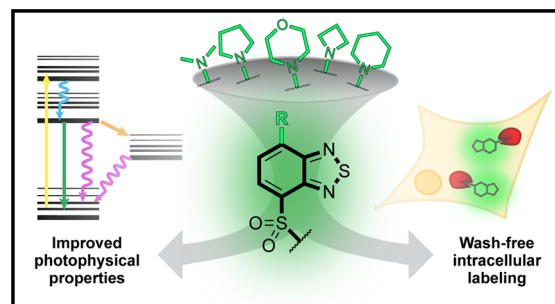


COMMUNICATIONS

200

Engineered fluorogenic HaloTag ligands for turn-on labelling in live cells

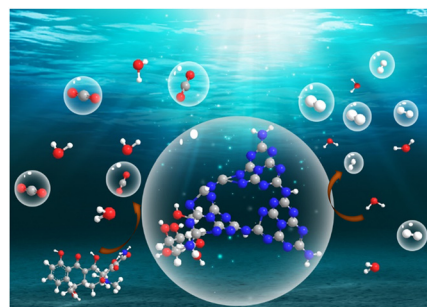
Bryan J. Lampkin* and Joshua A. Kritzer*



204

Critical role of hydrogen bonding between microcrystalline cellulose and g-C₃N₄ enables highly efficient photocatalysis

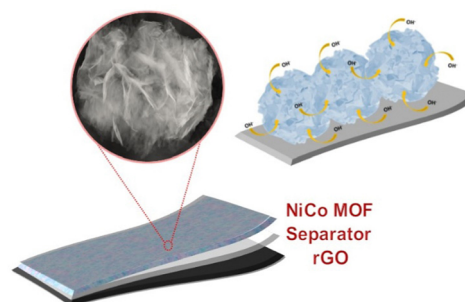
Zhaoqiang Wang, Guixiang Ding, Juntao Zhang, Xianqing Lv, Peng Wang, Li Shuai, Chunxue Li,* Yonghao Ni* and Guangfu Liao*



208

A high valence binary metalorganic framework as an electrode material for aqueous asymmetric supercapacitors

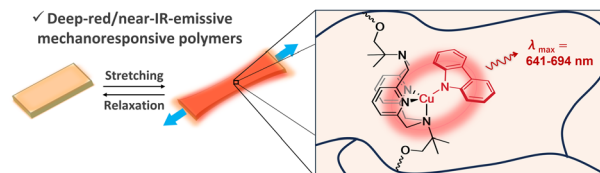
T. B. Naveen, D. Durgalakshmi,* S. Balakumar and R. Ajay Rakkesh*



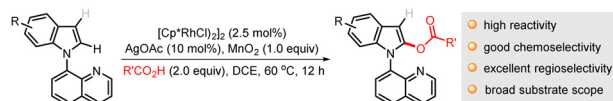
212

Deep-red photoluminescent mechanoresponsive polymers with dynamic Cu^I-arylamide mechanophores

Tatiana Gridneva, Ayumu Karimata, Richa Bansal, Robert R. Fayzullin, Serhii Vasylevskyi, Andrew Bruhacs and Julia R. Khusnutdinova*



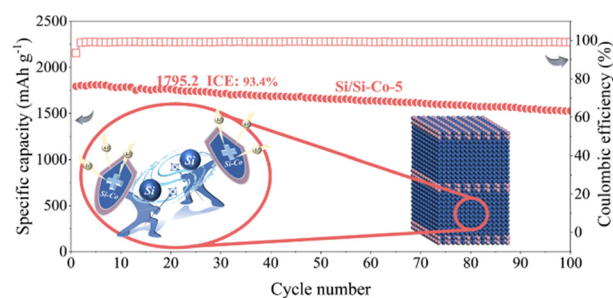
216



Rh(III)-catalyzed selective C2 C–H acyloxylation of indoles

Chaoying Fang, Li Li, Haitao Yang, Caiyang Kong, Jitan Zhang,* Meihua Xie* and Jiaping Wu*

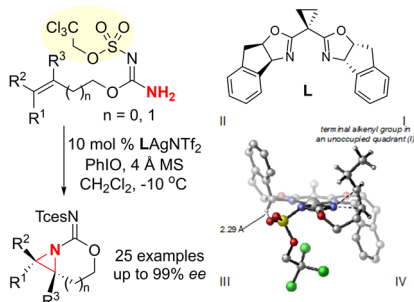
220



Interfacial engineering of Si anodes by confined doping of Co toward high initial coulombic efficiency

Yuanyuan Han, Haoyu Fu, Guihuan Chen,* Xiaoshan Wang, Yue Zhao, Xiang Sui, Zhiqiang Zhao, Xiancheng Sang, Qinghao Li and Qiang Li*

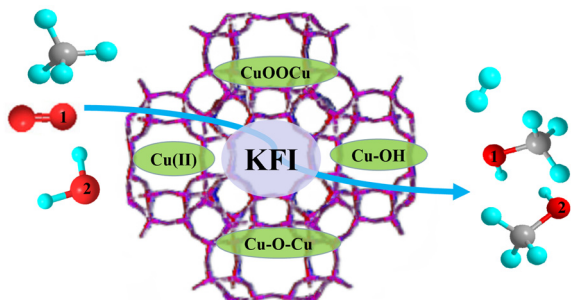
224



Chemo- and enantioselective intramolecular silver-catalyzed aziridinations of carbamimidates

Tuan Anh Trinh, Yue Fu, Derek B. Hu, Soren A. Zappia, Iliia A. Guzei, Peng Liu and Jennifer M. Schomaker*

228



Continuous selective conversion of methane to methanol over a Cu-KFI zeolite catalyst using a water–O₂ mixture as the oxygen source

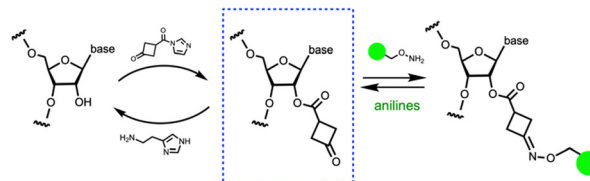
Hailong Zhang,* Jiaxiu Guo and Yi Cao*



232

Efficient post-synthesis incorporation and conjugation of reactive ketones in RNA *via* 2'-acylation

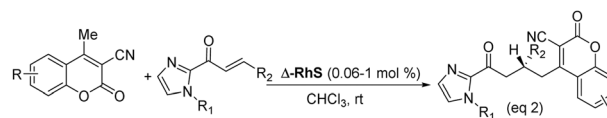
Ryuta Shioi, Lu Xiao, Linglan Fang and Eric T. Kool*



236

Catalytic asymmetric conjugate addition of coumarins to unsaturated ketones catalyzed by a chiral-at-metal Rh(III) complex

Xiangjie Chen, Yujie Zhao, Cheng Huang, Zhifei Zhao, Weiwei Zhao* and Shi-Wu Li*



- ▾ 23 examples, 41-99% yields, 84-99% ee
- ▾ mild reaction conditions and broad scope
- ▾ high enantioselectivity and lower catalyst loading

