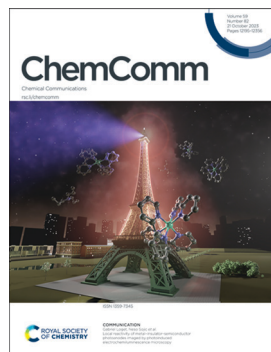


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ISSN 1359-7345 CODEN CHCOFS 59(82) 12195-12356 (2023)



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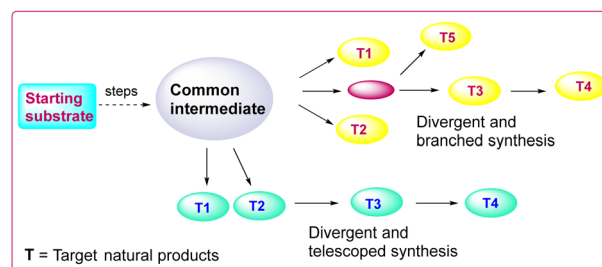
See Gabriel Loget, Neso Sojic *et al.*, pp. 12262-12265. Image reproduced by permission of Jean-François Bergamini from *Chem. Commun.*, 2023, 59, 12262.

HIGHLIGHT

12205

Deciphering the quest in the divergent total synthesis of natural products

Rodney A. Fernandes*

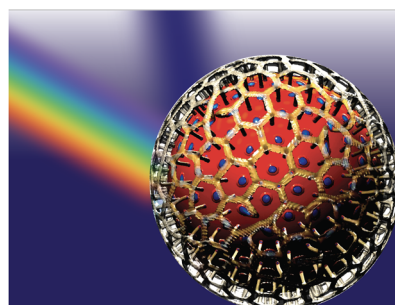


FEATURE ARTICLES

12231

Photonic features of blue phase liquid crystals under curved confinement

Jeremy Money, Juan G. Munguia-Fernández, Sepideh Norouzi, Mohsen Esmaeili, José A. Martínez-González and Monirosadat Sadati*



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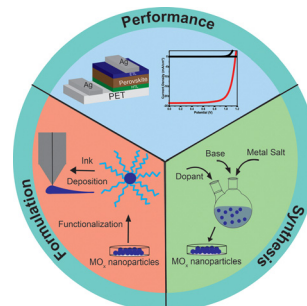


FEATURE ARTICLES

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Synthesizing and formulating metal oxide nanoparticle inks for perovskite solar cells

Peter J. Armstrong, Sashil Chapagain, Rojita Panta, Craig Grapperhaus and Thad Druffel*

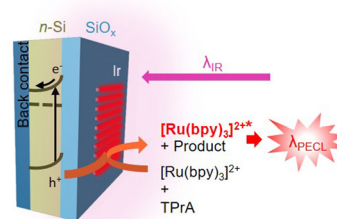


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Local reactivity of metal–insulator–semiconductor photoanodes imaged by photoinduced electrochemiluminescence microscopy

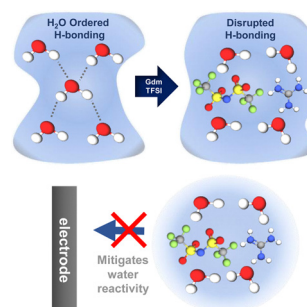
Julie Descamps, Yiran Zhao, Julie Le-Poulquien, Bertrand Goudeau, Patrick Garrigue, Karine Tavernier, Yoan Léger, Gabriel Loget* and Neso Sojic*



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A guanidinium salt as a chaotropic agent for aqueous battery electrolytes

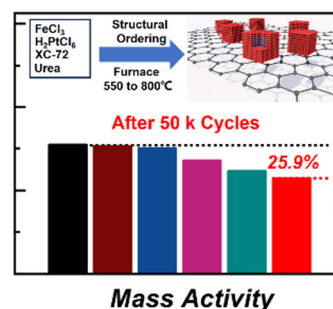
John Brown, Juan Forero-Saboya, Benoît Baptiste, Martin Karlsmo, Gwenaëlle Rouse and Alexis Grimaud*



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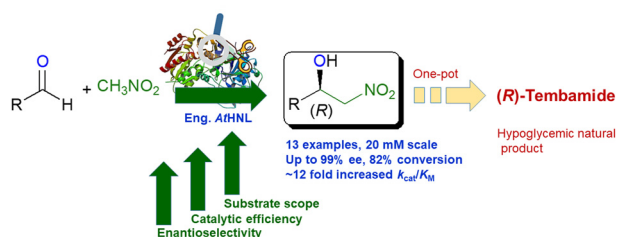
Facile synthesis of L1₀-PtFe/C intermetallic catalysts with superior catalytic durability for the oxygen reduction reaction

Shengwei Yu, Liyuan Bi, Xiang Xie, Jiyuan Lu, Aiping Chen and Haibo Jiang*



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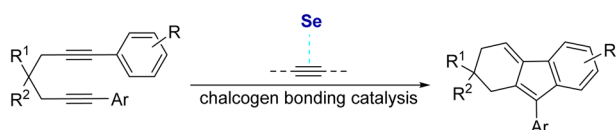
12274



Hydroxynitrile lyase engineering for promiscuous asymmetric Henry reaction with enhanced conversion, enantioselectivity and catalytic efficiency

Badipatla Vishnu Priya, D. H. Sreenivasa Rao, Ayon Chatterjee and Santosh Kumar Padhi*

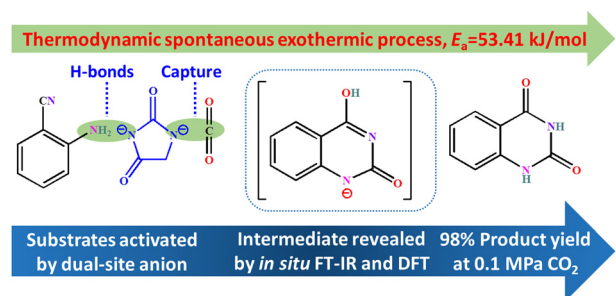
12278



Activation of alkynes by chalcogen bonding: a Se... π interaction catalyzed intramolecular cyclization of 1,6-diynes

Yuanling Pang, Zhiguo Zhao and Yao Wang*

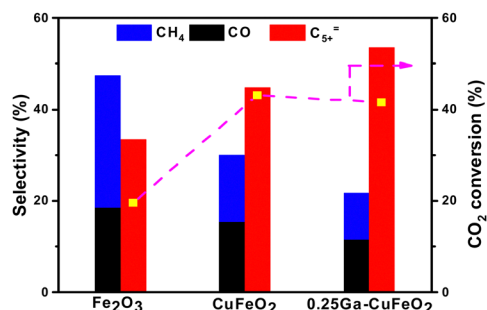
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Efficient catalytic conversion of CO₂ to quinazoline-2,4(1H,3H)-diones by a dual-site anion-functionalized ionic liquid: reconsidering the mechanism

Tingting Chen, Yujun Guo and Yingjie Xu*

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Selective conversion of carbon dioxide into heavy olefins over Ga modified delafossite-CuFeO₂

Chide Chen, Xiaoting Wu, Shuxian Zhang, Ming Qing, Mengying La, Jifan Li,* Chun-Ling Liu and Wen-Sheng Dong*

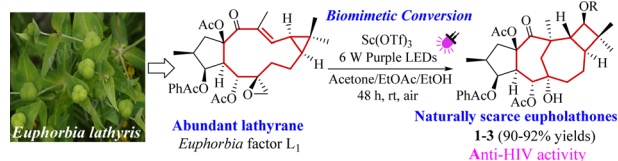


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Photo-induced scandium-catalyzed biomimetic skeleton conversion of lathyrane to naturally rare eupholathone *Euphorbia* diterpenes

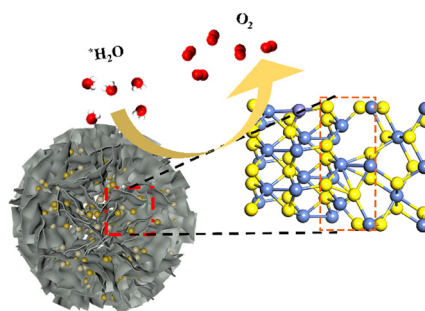
Jin-Bu Xu, Peng Wen, Neng Wang, Xiaohuan Li, Jia-Hong Li, Steven De Jonghe, Dominique Schols, Feng-Zheng Chen* and Feng Gao*



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Insights into Fe-doping effect-induced heterostructure formation for the oxygen evolution reaction

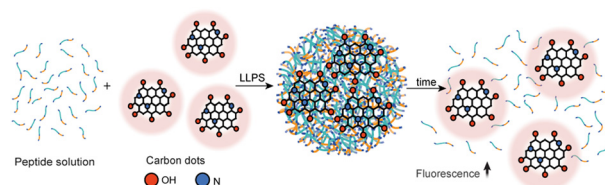
Xingyu Huang, Lice Yu, Xinzhong Wang and Ligang Feng*



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Modulating the optical properties of carbon dots by peptide condensates

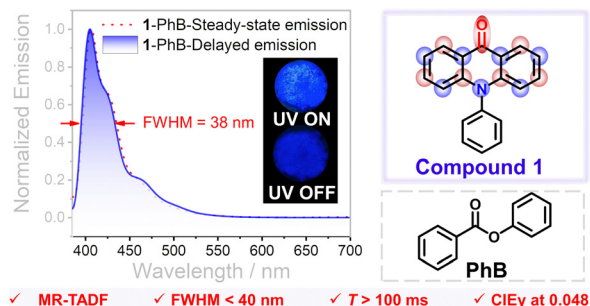
Dor Gaash, Simran Dewan, Avigail Baruch Leshem, Kumar Sagar Jaiswal, Raz Jelinek and Ayala Lampel*



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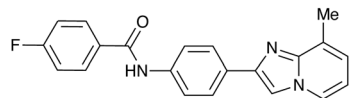
A narrow-band deep-blue MRTADF-type organic afterglow emitter

Guangming Wang, Shuhui Ding, Jiuyang Li, Zi Ye, Wen Xia, Xuefeng Chen and Kaka Zhang*



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**Compound 5**

**Completely inhibit
cell death at 10 nM**

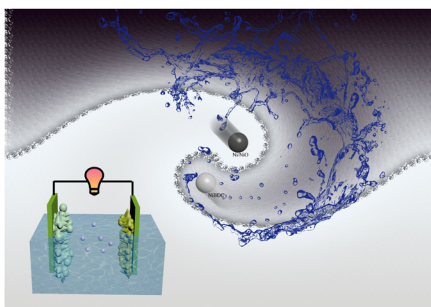
**High solubility and
metabolic stability**

**Significantly inhibit
motility dysfunction**

**Beneficial effects of a new neuroprotective
compound in neuronal cells and MPTP-
administered mouse model of Parkinson's disease**

Izumi Kato,* Yudai Ogawa, Fumika Yakushiji, Jiro Ogura,
Masaki Kobayashi, Naoya Shindo, Satoshi Ichikawa,
Katsumi Maenaka* and Masahiro Sakaitani*

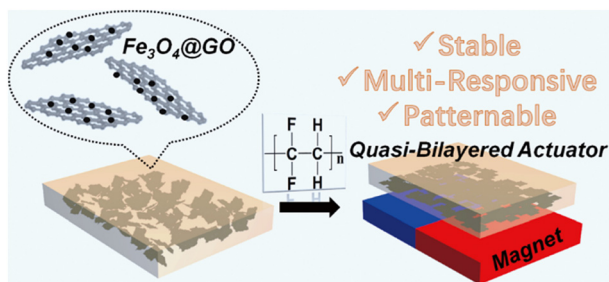
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**Multi-component carbon-based composites
containing high crystallinity NiBDC as
high-performance electrodes for supercapacitors**

Mei Han, Jingce Bi, Ningning Liu, Zhiqiang Liang,
Yi Wang, Zhuopeng Wang, Xia Zhang, Yu Song* and
Yide Han*

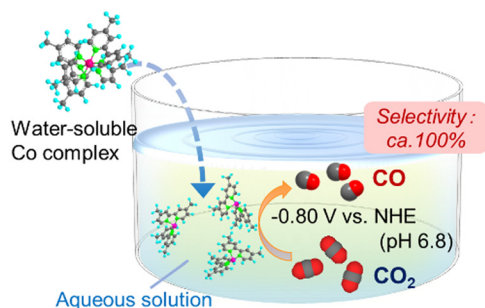
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**Magnetic field-assisted fabrication of
quasi-bilayered, multi-responsive and
patternable actuators**

Yiping Lu, Jun Wu,* Wenjiang Chen, Hu Pan, Yuan Wang,
Shumei Gao, Huichen Dong, Yan Wang, Jin Zhou* and
Hong Huang*

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**Highly selective CO₂ electrolysis in aqueous media
by a water-soluble cobalt dimethyl-bipyridine
complex**

Tomiko M. Suzuki,* Kengo Nagatsuka,
Takamasa Nonaka, Yuichi Yamaguchi,
Naonari Sakamoto, Takeshi Uyama, Keita Sekizawa,
Akihiko Kudo* and Takeshi Morikawa*

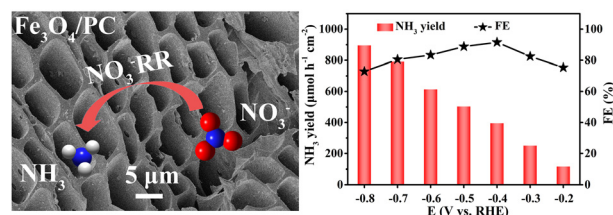


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Fe₃O₄ nanoparticle-decorated 3D pinewood-derived carbon for high-efficiency electrochemical nitrate reduction to ammonia

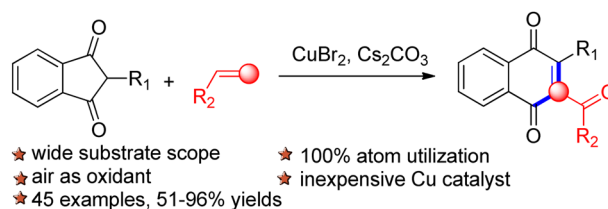
Ting Xie, Zhengwei Cai, Xuwei Liu, Jun Li, Xiaoya Fan, Xun He, Yonglan Luo, Dongdong Zheng, Shengjun Sun, Sulaiman Alfaifi, Chenggang Xu* and Xuping Sun*



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CuBr-mediated synthesis of 1,4-naphthoquinones via ring expansion of 2-aryl-1,3-indandiones

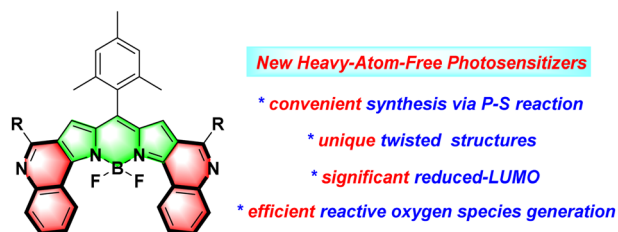
Xu Zhang,* Di Wang, Mengfan Chang, Wanya Wang, Zhi Shen and Xuefeng Xu



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Pictet–Spengler synthesis of twisted quinoline-fused BODIPYs as heavy-atom-free photosensitizers

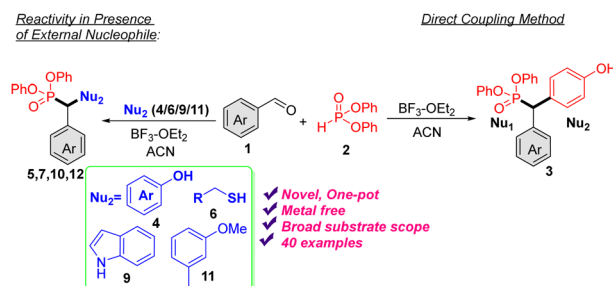
Wanwan Li, Qingbao Gong,* Qinghua Wu,* Luying Guo, Xing Guo, Dianjun Guo, Lijuan Jiao and Erhong Hao*



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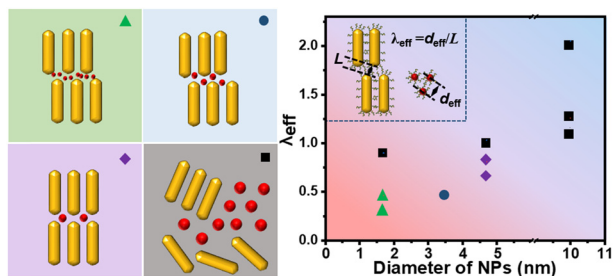
BF₃–Et₂O promoted bifunctionalization of aldehydes for the synthesis of arylmethyl substituted organophosphorus compounds

Sajjad Ahmed, Zoya Shafeeq, Feroze Hussain and Qazi Naveed Ahmed*



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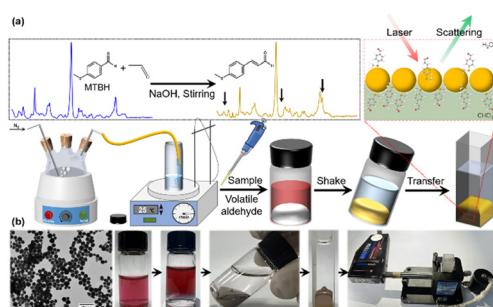
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Entropy-driven formation of binary superlattices assembled from polymer-tethered nanorods and nanospheres

Jinlan Li, Xin Yu, Jianing Zhang, Nan Yan,* Jing Jin* and Wei Jiang*

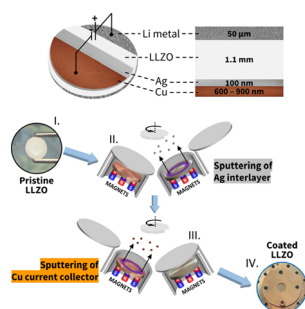
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Portable SERS sensing of volatile aldehydes in alcohols by aldol condensation reaction on liquid interfacial plasmonic arrays

Hao Wang, Yujiao Wei, Liming Wang, Cheng Qu, Honglin Liu and Shengnan He*

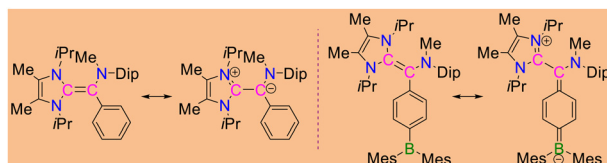
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Towards lithium-free solid-state batteries with nanoscale Ag/Cu sputtered bilayer electrodes

Lorenzo Fallarino, Uzair Naveed Chishti, Arianna Pesce, Grazia Accardo, Amna Rafique, Montserrat Casas-Cabanas and Pedro López-Aranguren*

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Introducing an orthogonally polarized electron-rich alkene: synthesis of a zwitterionic boron-containing π-conjugated system

Nicolas Chrysochos, Sebastian Pätzsch, Benedict J. Elvers, Ivo Krummenacher, Muneshwar Nandeshwar, Ganesan Prabusankar,* Holger Braunschweig,* Carola Schulzke,* Prince Ravat* and Anukul Jana*

