

ChemComm

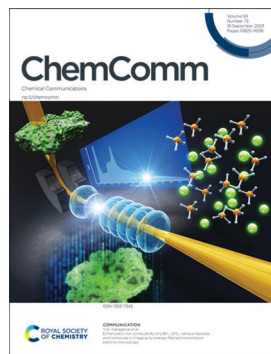
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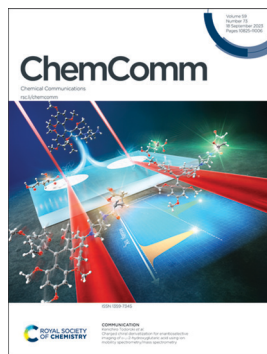
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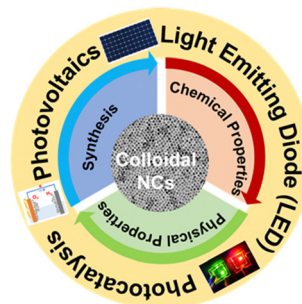
See Kenichiro Todoroki *et al.*, pp. 10916–10919. Image reproduced by permission of Eiji Sugiyama and Kenichiro Todoroki from *Chem. Commun.*, 2023, 59, 10916.

FEATURE ARTICLES

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Colloidal semiconductor nanocrystals: from bottom-up nanoarchitectonics to energy harvesting applications

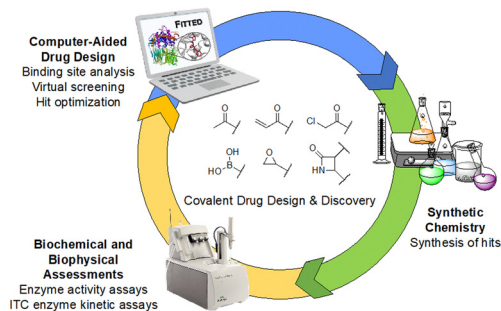
Amit Dalui, Katsuhiko Ariga and Somabrata Acharya*



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Computational and biophysical methods for the discovery and optimization of covalent drugs

Guanyu Wang, Nicolas Moitessier* and Anthony K. Mittermaier*



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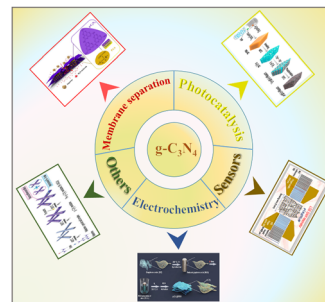


FEATURE ARTICLES

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Synthesis and up-to-date applications of 2D microporous g-C₃N₄ nanomaterials for sustainable development

Yuanyuan Wang, Suyue Zhong, Zhenhua Niu, Yangyang Dai and Jian Li*

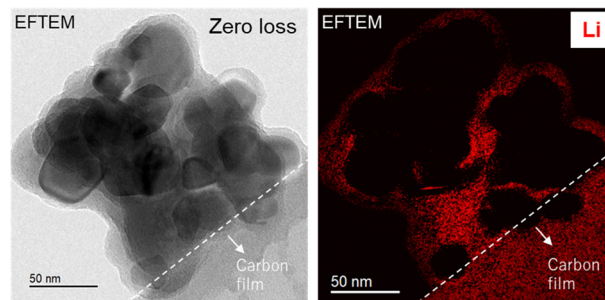


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Enhanced Li-ion conductivity in LiBH₄-ZrO₂ nanocomposites and nanoscale Li imaging by energy-filtered transmission electron microscopy

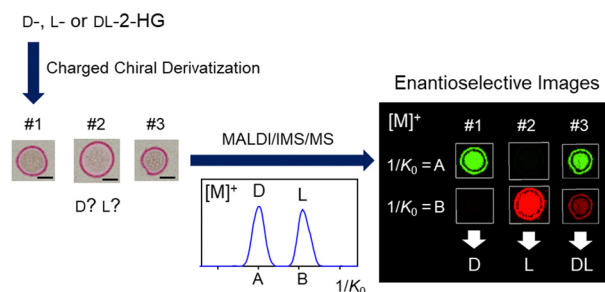
Yuki Nakagawa,* Tsubasa Sendo and Tamaki Shibayama



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Charged chiral derivatization for enantioselective imaging of D-,L-2-hydroxyglutaric acid using ion mobility spectrometry/mass spectrometry

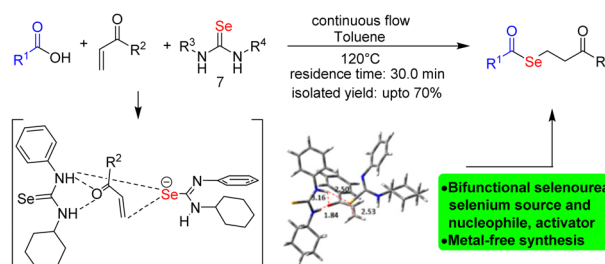
Eiji Sugiyama, Yuki Nishiya, Kenji Yamashita, Ryo Hirokawa, Yoshiteru Iinuma, Takashi Nirasawa, Hajime Mizuno, Yoshitaka Hamashima and Kenichiro Todoroki*



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Metal-free synthesis of selenoesters directly from carboxylic acids using bifunctional selenoureas under batch and continuous-flow conditions

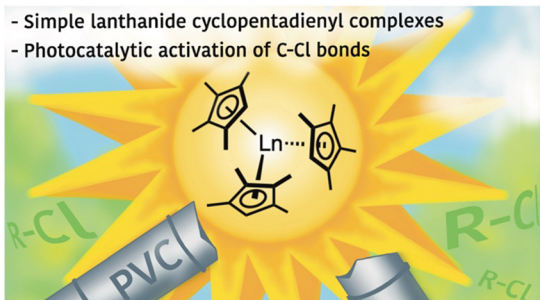
Mouzma Mhate, Chandra Sekhara Mahanta, Devendra K. Dhaked, Velyutham Ravichandiran and Sharada Prasanna Swain*



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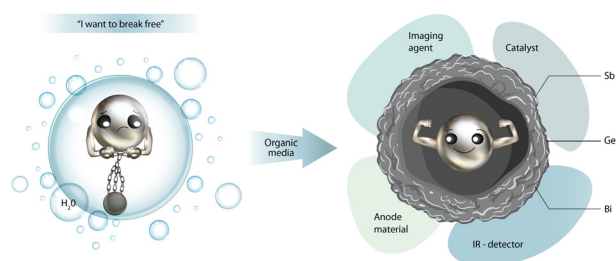
- Simple lanthanide cyclopentadienyl complexes
- Photocatalytic activation of C-Cl bonds



Photocatalytic dechlorination of unactivated chlorocarbons including PVC using organolanthanide complexes

Amy E. Kynman, Stella Christodoulou, Erik T. Ouellette, Appie Peterson, Sheridan N. Kelly, Laurent Maron and Polly Arnold*

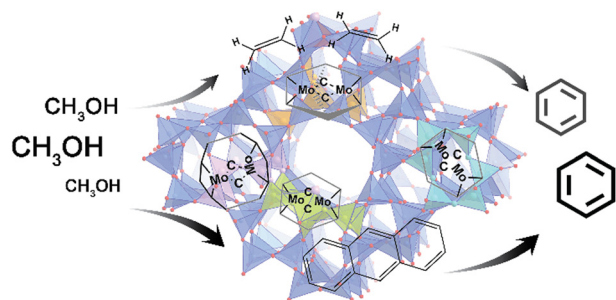
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Liquid metal-mediated fabrication of metalloidal nanoarchitectures

Ekaterina A. Sharova, Aleksandra S. Falchevskaya, Sergei S. Leonchuk, Alexey V. Redkov, Vitaly Nikolaev and Vladimir V. Vinogradov*

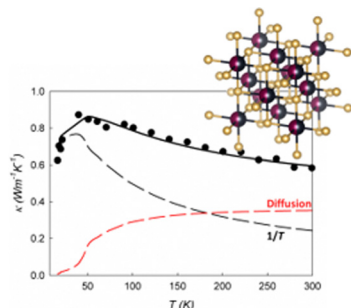
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Methane dehydroaromatization catalyzed by Mo/ZSM-5: location-steered activity and mechanism

Guanna Li

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Thermal properties of cubic NaSbS₂: diffusion dominant thermal transport above the Debye temperature

Wilarachchige D. C. B. Gunatilleke, Oluwagbemiga P. Ojo and George S. Nolas*

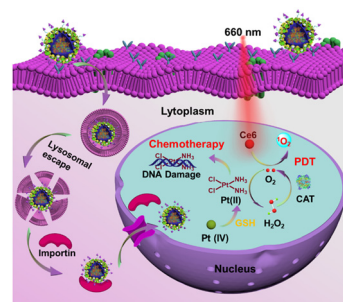


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Nucleus-selective self-augmenting cascade nanoassemblies for targeted synergistic photo-chemo therapy of tumors

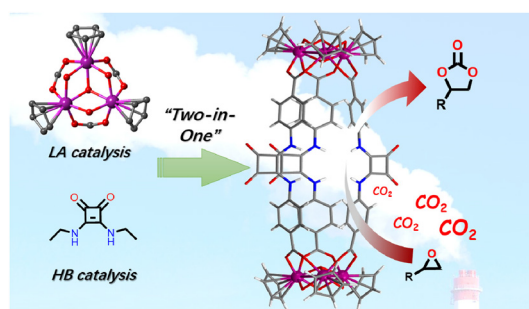
Lan Yang, Huijie Ma, Ye Liu, Rumeng Cao, Shaofeng Chen, Jiajia Wang, Ling Xiang, Jiumeng Zhang,* Xuli Feng* and Chenhui Wang*



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Zirconium metal–organic cage decorated with squaramides imparts dual activation for chemical fixation of CO₂ under mild conditions

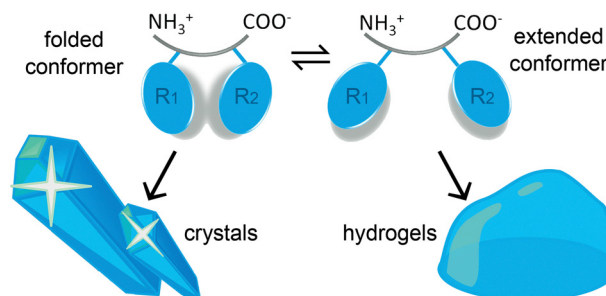
Xiaoli Zhao, Yue Tang, Yuxuan Wang, Xinjing Rong, Pengyan Wu,* Zihan Li, Ning Cai, Xinyi Deng and Jian Wang*



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Diverging conformations guide dipeptide self-assembly into crystals or hydrogels

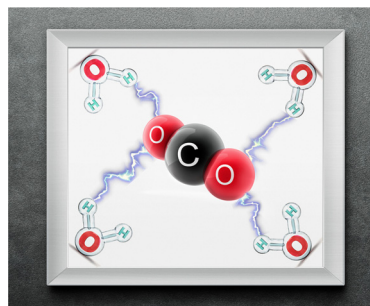
M. Monti, E. Scarel, A. Hassanali, M. Stener* and S. Marchesan*



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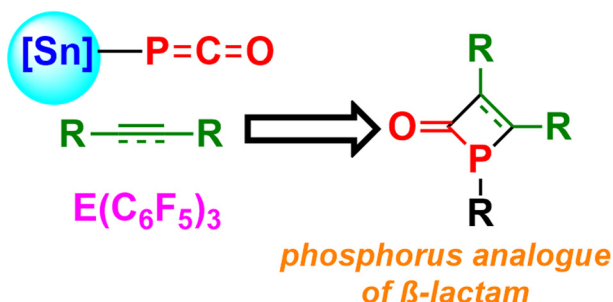
Inverse CO₂/C₂H₂ separation assisted by coordinated water in a dysprosium(III) metal–organic framework

Bo-Kai Ling, Min Zeng, Tao Zhang, Jian-Wei Cao, Rong Yang, Lu Cheng, Chi-Yu Zhang, Yu Wang* and Kai-Jie Chen*



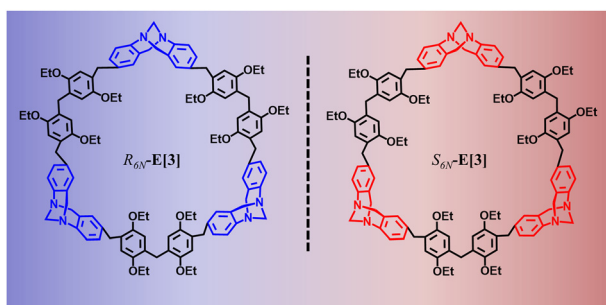
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**Stannyl phosphaketene as a synthon for phosphorus analogues of β -lactams**

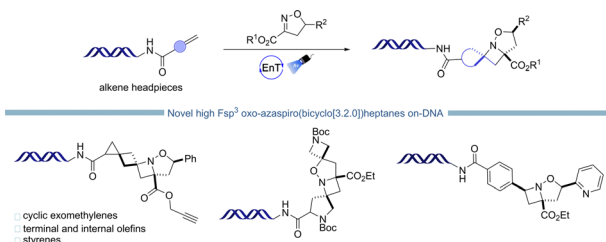
Yong-an Luo, Zhao Zhao, Ting Chen, Yanguo Li, Yufen Zhao, Douglas W. Stephan* and Yile Wu*

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**Synthesis of Tröger's base-based [3]arenes for efficient iodine adsorption**

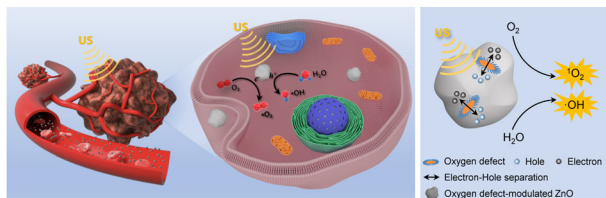
Pengbo Niu, Conghao Shi, Jianmin Jiao, Wang Xie, Heng Qiu, Zhen Yang, Juli Jiang* and Leyong Wang*

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**Diversifying chemical space of DNA-encoded libraries: synthesis of 2-oxa-1-azaspiro-(bicyclo[3.2.0])heptanes on-DNA via visible light-mediated energy transfer catalysis**

Bianca Matsuo, Saegun Kim, Scott T. Shreiber, Guillaume Levitre, Longbo Li, Erika A. Crane, Edward J. McClain, Eric A. Voight* and Gary A. Molander*

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**Oxygen-defective zinc oxide nanoparticles as highly efficient and safe sonosensitizers for cancer therapy**

Zifan Wang, Mingjie Wei, Qiyu Liu, Xihong Lu,* Jianhua Zhou* and Jianwei Wang*

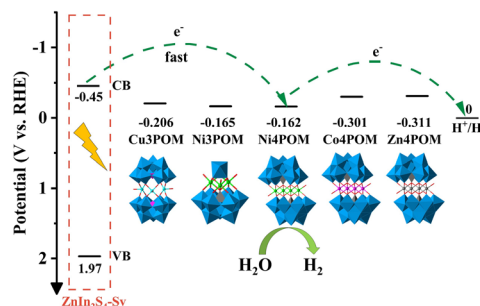


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Efficient photocatalytic hydrogen production over ZnIn_2S_4 by producing sulfur vacancies and coupling with nickel-based polyoxometalate

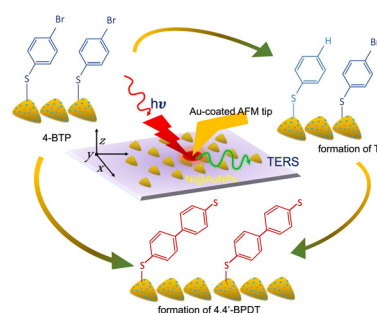
Kejia You, Bonan Li, Xiaohu Li, Rui Li, Junhao Wu, Baochun Ma* and Yong Ding*



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Tip-enhanced Raman imaging of plasmon-driven dimerization of 4-bromothiophenol on nickel-decorated gold nanoplate bimetallic nanostructures

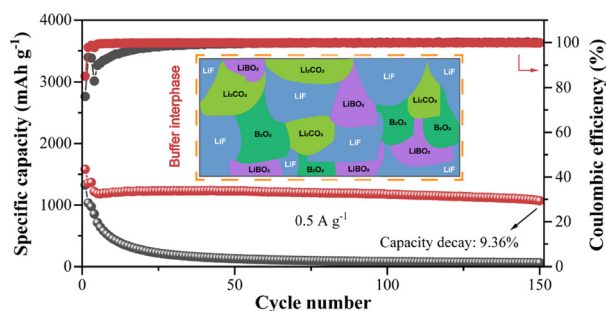
Swati J. Patil and Dmitry Kurouski*



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A B- and F-enriched buffering interphase enables a high-rate and high-stability SiO_x/C anode

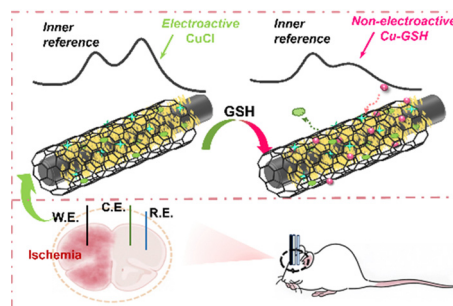
Zhaoyu Zhang, Yufei Zhang, Minghui Ye, Yongchao Tang, Zhipeng Wen, Xiaoqing Liu* and Cheng Chao Li*



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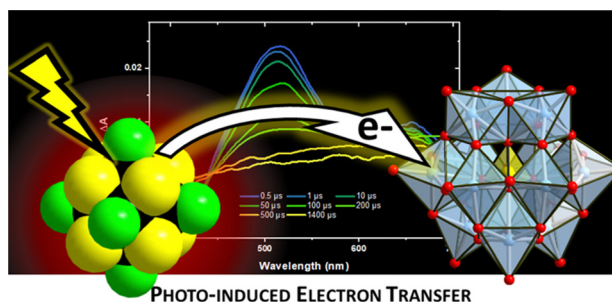
In vivo monitoring of glutathione in a live rat brain based on the ratiometric signal output of 2D Cu-TCPP(Fe) nanosheets

Fan Zhao,* Xuan Tang and Dongqing Guo



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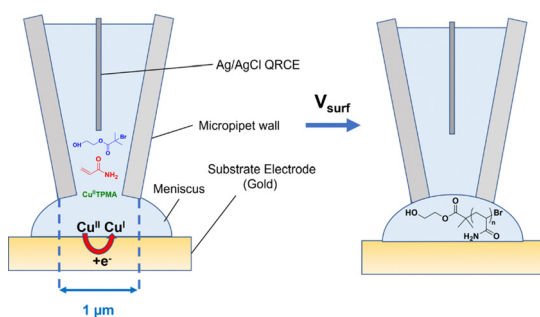
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Photoinduced electron transfer between a noble-metal-free $[\text{Mo}_6\text{I}_8\text{Cl}_6]^{2-}$ cluster and polyoxometalates

Anam Fatima, Yevheniia Smortsova, Clément Falaise,* Nathalie Leclerc, Mohamed Haouas, Emmanuel Cadot, Stéphane Cordier, Yann Molard, Thomas Pino, Céline Dablemont, Rachel Méallet,* Karine Steenkeste* and Minh-Huong Ha-Thi*

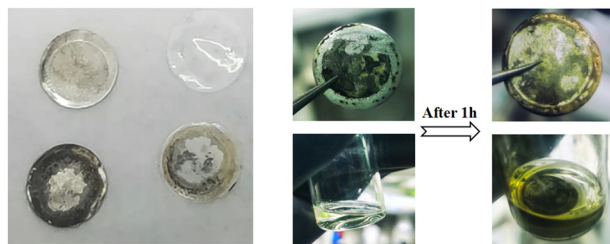
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Localised polymerisation of acrylamide using single-barrel scanning electrochemical cell microscopy

Mahir Mohammed, Bryn A. Jones, Evelina Liarou and Paul Wilson*

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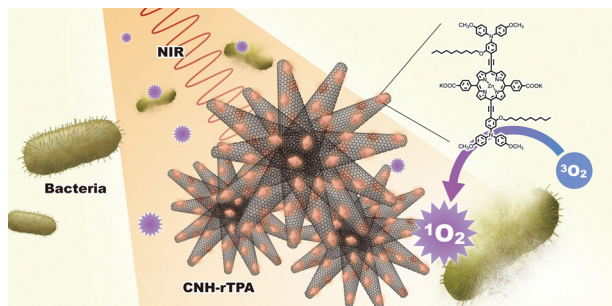


Anode protection & Dead Lithium Reactivation

Dendrite inhibited and dead lithium activated dual-function additive for lithium metal batteries

Erlei Zhang, Huijie Tian, Meng Li, Shiru Le, Bingjiang Li, Lijun Wu, Qixian Zhang and Lishuang Fan*

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An antibacterial conjugate of carbon nanohorns for NIR-light mediated peri-implantitis treatment

Eri Hirata,* Yuta Takano,* Daisuke Konishi, Yukari Maeda, Natsumi Ushijima, Masako Yudasaka and Atsuro Yokoyama

