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IN THIS ISSUE

ISSN 1359-7345 CODEN CHCOFS 59(37) 5481-5632 (2023)



Cover

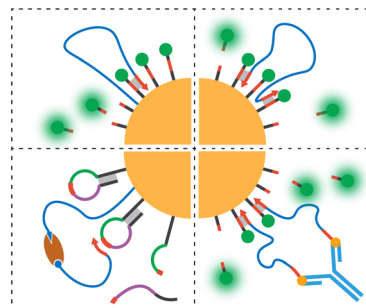
See Yoshiyuki Nonoguchi *et al.*, pp. 5531–5534.
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FEATURE ARTICLES

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Design and bioanalytical applications of stochastic DNA walkers

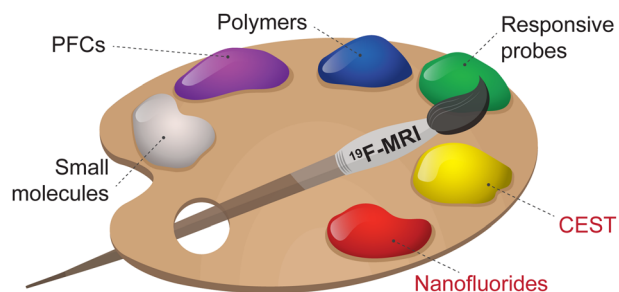
Guan A. Wang, Chuipeng Kong and Feng Li*



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Frontiers in ^{19}F -MR imaging: nanofluorides and ^{19}F -CEST as novel extensions to the ^{19}F -MRI toolbox

Andrea Galisova and Amnon Bar-Shir*



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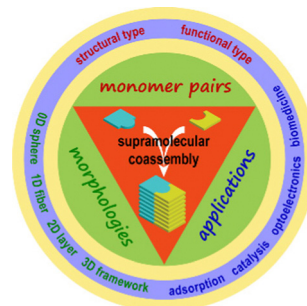


FEATURE ARTICLES

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Supramolecular coassembly: monomer pair design, morphology regulation and functional application

Bin Mu, Zhao Gao, Chengfei Liu, Xuedong Xiao and Wei Tian*

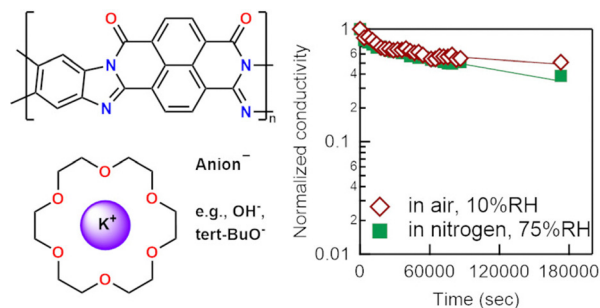


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Crown ether salt-doped ladder-type conducting polymers for air-stable n-type thermoelectric materials

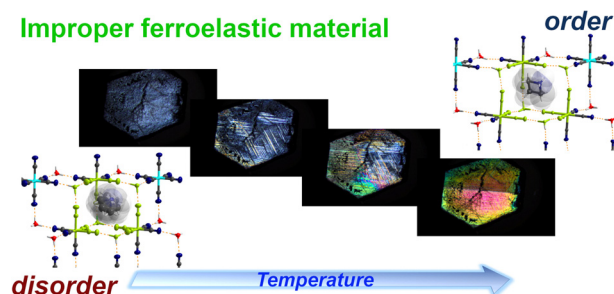
Ryoto Yura, Shohei Kumagai, Kiyohiro Adachi, Daisuke Hashizume, Toshihiro Okamoto and Yoshiyuki Nonoguchi*



5535

Improper ferroelastic phase transition in a hydrogen-bonded metallocyanide-based (azetidinium)₂(H₃O)[Co(CN)₆] framework

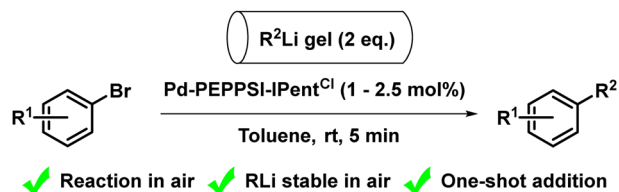
Marcin Moskwa,* Paweł Sobieszczyk, Julia W. Mikurenda, Piotr Zieliński and Magdalena Rok*



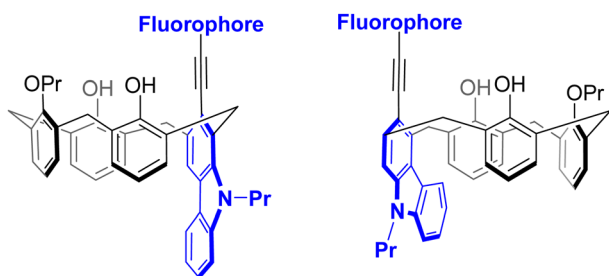
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Organogelation enables fast organolithium cross-coupling reactions in air

Paco Visser and Ben L. Feringa*



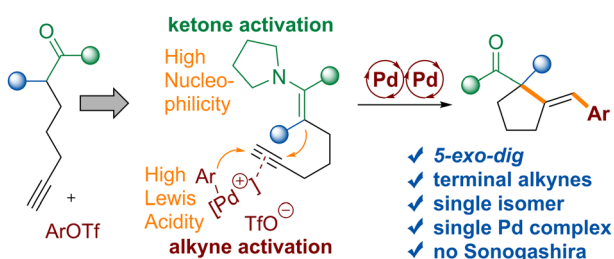
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Carbazole-fused calixarene cavities: single and mixed AIEn systems for NO detection

Varun Rawat, Abhishek Baheti, Om Shanker Tiwari and Arkadi Vigalok*

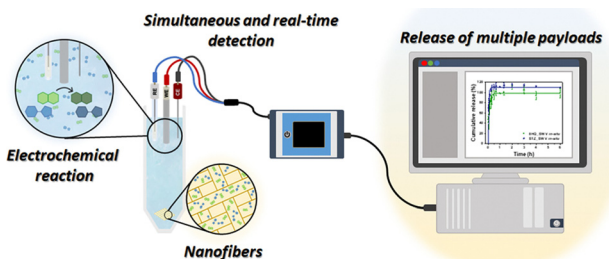
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Tandem Pd-catalyzed annulation/coupling of acetylenic enamines with aryl triflates

Aleksandra Błocka, Jakub Ostapko and Wojciech Chatadaj*

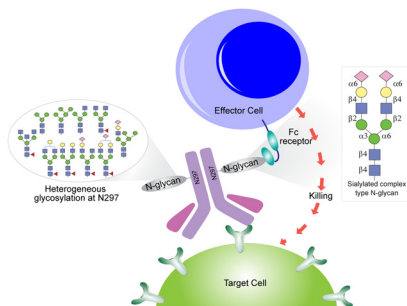
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Real-time monitoring of the release of multiple payloads from nanomaterials

Jindaporn Janprasit, Albert Schulte* and Daniel Crespy*

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Study on antibody Fc-glycosylation for optimal effector functions

Vidya S. Shivatare, Po-Kai Chuang, Tzu-Hao Tseng, Yi-Fang Zeng, Han-Wen Huang, Gannedi Veeranjeyulu, Han-Chung Wu and Chi-Huey Wong*

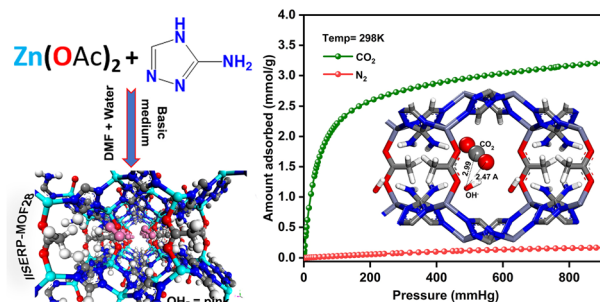


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Preferential CO₂ adsorption by an ultra-microporous zinc-aminotriazolato-acetate MOF

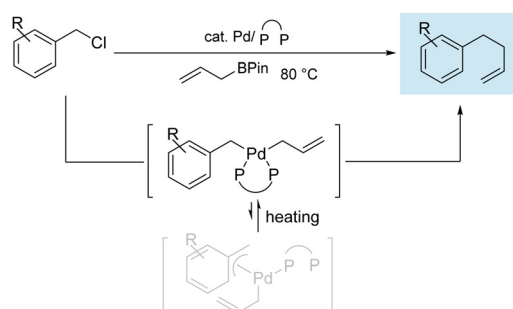
Piyush Singh, Himan Dev Singh, Abhijith Hari Menon and Ramanathan Vaidhyanathan*



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Regioselective coupling of benzyl chlorides with allyl and allenyl boronates catalysed by a bidentate phosphine ligand/palladium catalyst

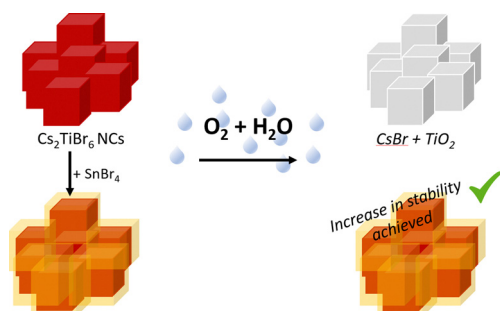
Sheng Zhang,* Junchao Yin, Ziyang Wang, Yang Li,* Yukang Fu, Ji Ma, Zhilong Xie and Ming Bao*



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Stabilization of environmentally-friendly Cs₂TiBr₆ perovskite nanocrystals with SnBr₄

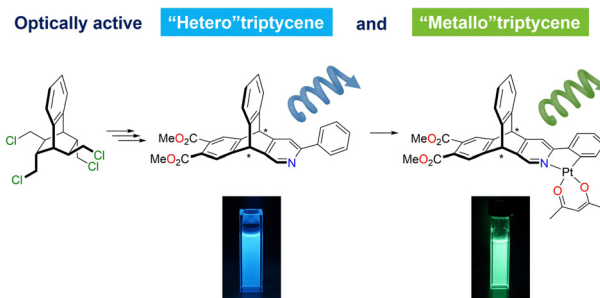
Shanti Maria Liga, Yongjie Wang and Gerasimos Konstantatos*



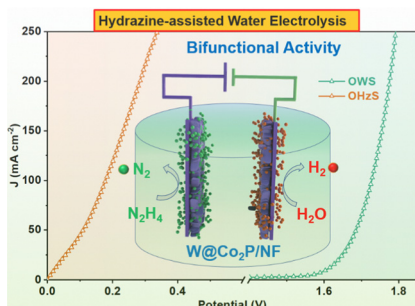
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Syntheses of heterotriptycenes and their Pt complexes that emit circularly polarised fluorescence and phosphorescence

Ryo Inoue,* Kyosuke Furumoto and Yasuhiro Morisaki*



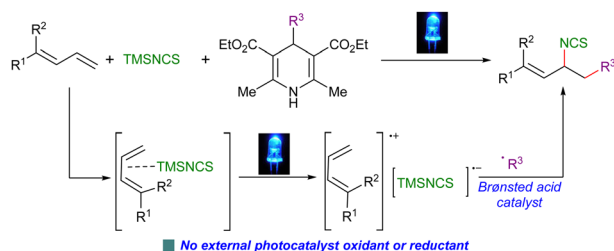
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Coupled W–Co₂P hybrid nanosheets as a robust bifunctional electrocatalyst for hydrazine-assisted hydrogen production

Kaixun Li, Xujiang Cen, JinFeng He and Yun Tong*

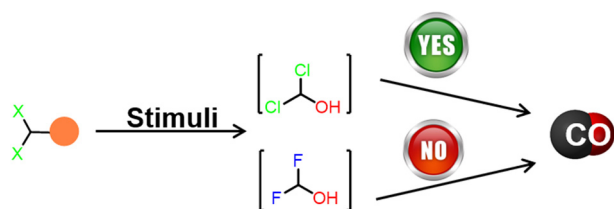
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Organocatalytic photoinduced carboamination of dienes

Arun Yadav, Sabhya Sandha and Chandra Bhushan Tripathi*

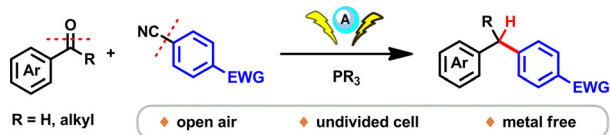
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Dichloromethanol but not difluoromethanol as a viable surrogate of carbon monoxide for prodrug design

Miao Liu, Zhang Li, Ziwei Hu, ZhiCheng Yan, Qingqiang Min, Wei Peng* and Xingyue Ji*

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Electrochemical deoxygenative arylation of aldehydes and ketones

Meng Li, Yue Tian, Kunhui Sun, Zhimin Xu, Lifang Tian* and Yahui Wang*

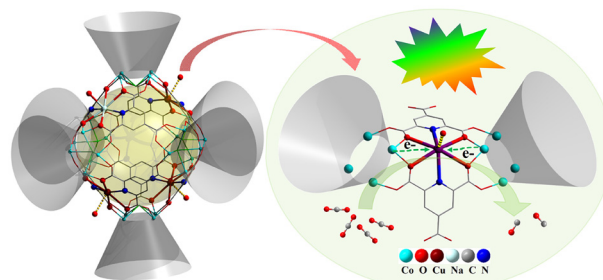


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Post-synthetic atomically precise single-Cu^{II} sites in a thiacalix[4]arene-supported octahedral Na@Co₂₄ cluster: the Cu–Co synergistic effect for selective photocatalytic conversion of CO₂ to CO

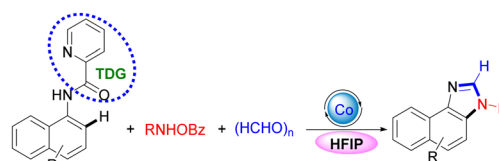
Yinjuan Guo, Jiahui Li, Guiyan Zhao,* Baokuan Chen, Xinxin Hang* and Yanfeng Bi*



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An HFIP-assisted, cobalt-catalyzed three-component electrophilic C–H amination/cyclization/directing group removal cascade to naphtho[1,2-d]imidazoles

Hasina Mamataj Begam, Kangkan Pradhan, Kasarla Varalaxmi and Ranjan Jana*

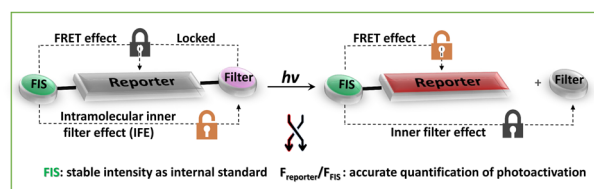


- Cobalt-catalysed electrophilic C-H amination
- First example using primary amine with cobalt
- Paraformaldehyde as one carbon synthon
- Picolinamide as traceless directing group
- Boosting effect of HFIP in whole process
- Highly ortho (no peri or para) selective
- External oxidant-free, mild condition
- Gram scale, application to Tomoxiprole

5599

Accurate photoactivation monitoring via the construction of an intramolecular synergistic counteracting mechanism of FRET and IFE

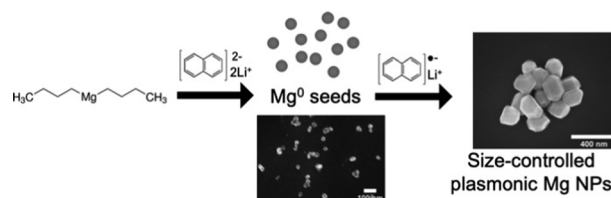
Siyue Ma, Yihan Wang, Chao Wang, Linlin Wang, Qing Miao, Yuxia Liu, Yangmin Ma* and Guang Chen*



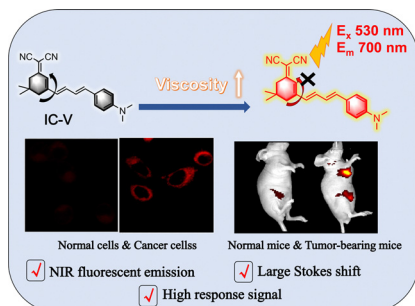
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Seed-mediated synthesis of monodisperse plasmonic magnesium nanoparticles

Vladimir Lomonosov, Elizabeth R. Hopper and Emilie Ringe*



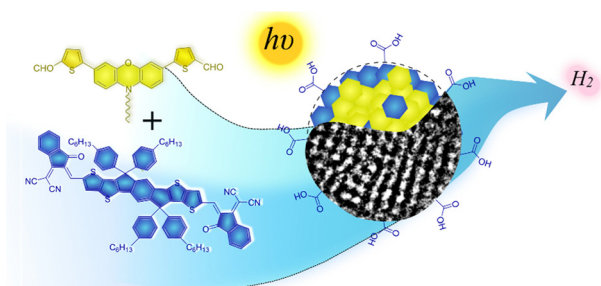
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A novel near-infrared fluorescent probe for the imaging of viscosity in cells and tumor-bearing mice

Qin-Ting Liao, Jing-Jing Chao, Wen-Xin Wang, Ting Liu, Guo-Jiang Mao, Fen Xu and Chun-Yan Li*

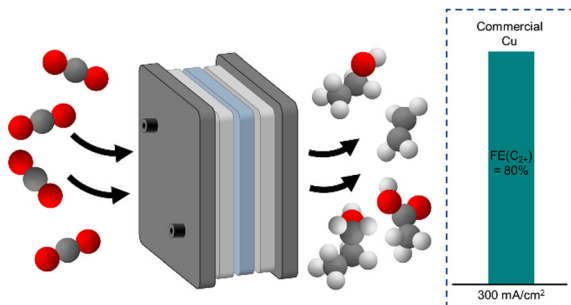
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Phenoxazine-based small molecule heterojunction nanoparticles for photocatalytic hydrogen production

Mariia V. Pavliuk, Sina Wrede and Haining Tian*

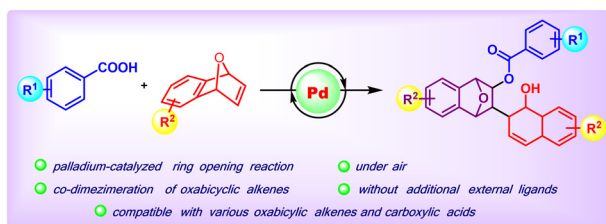
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Benchmarking of commercial Cu catalysts in CO₂ electro-reduction using a gas-diffusion type microfluidic flow electrolyzer

Haocheng Xiong, Jing Li, Donghuan Wu, Bingjun Xu* and Qi Lu*

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Palladium-catalyzed stereocontrolled ring-opening of 7-oxabenzonorbornadienes with organic carboxylic acids

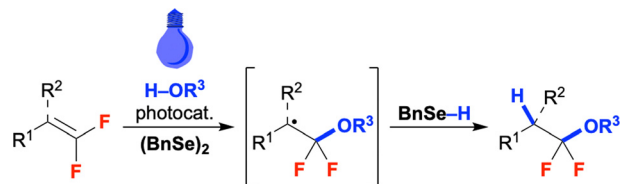
Velautham Saravanan and Masilamani Jegannathan*



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A diselenide additive enables photocatalytic hydroalkoxylation of *gem*-difluoroalkenes

Ryan M. Herrick, Mohammed K. Abd El-Gaber, Gabriela Coy and Ryan A. Altman*



• Expanded scope of accessible α,α -difluorinated ethers

• Uncommon diselenide co-catalyst enables hydrofunctionalization

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Stabilizing the oxide cathode/sulfide solid electrolyte interface *via* a novel polyaniline coating prepared by ball milling

Zhu Li, Jiayu Miao, Wen Hu, Yanna Liu, Ming Li, Menglong Zhao, Jinping Liu and Liang Xiao*

