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Cover

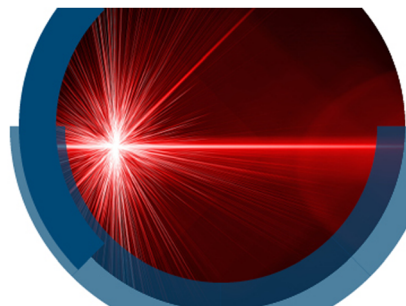
See Shuntaro Takahashi, Yuichi Negishi *et al.*, pp. 4000–4003. Image reproduced by permission of Yuichi Negishi from *Chem. Commun.*, 2023, 59, 4000.

CONFERENCE REPORT

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Highlights from *Faraday Discussion*: From optical to THz control of materials, London, UK, May 2022

Aswathy V. Girija,* Martina Basini and Habib Rostami

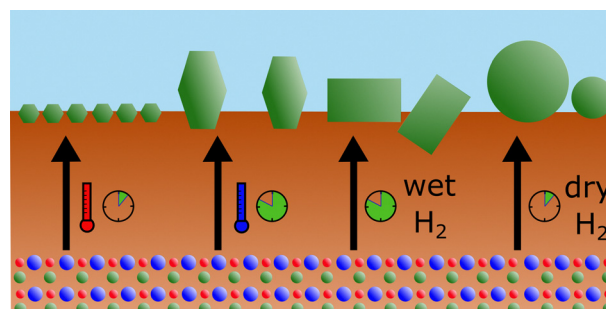


HIGHLIGHT

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Exsolution on perovskite oxides: morphology and anchorage of nanoparticles

Thomas Ruh, Dominic Berkovec, Florian Schrenk and Christoph Rameshan*



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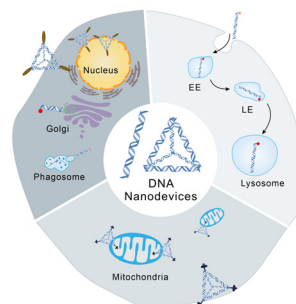


FEATURE ARTICLES

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Subcellular localization of DNA nanodevices and their applications

Xia Liu, Shuting Cao, Yue Gao, Shihua Luo, Ying Zhu and Lihua Wang*



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Recent advances in the synthesis and electrocatalytic application of MXene materials

Ting-Yu Shuai, Qi-Ni Zhan, Hui-Min Xu, Chen-Jin Huang, Zhi-Jie Zhang and Gao-Ren Li*

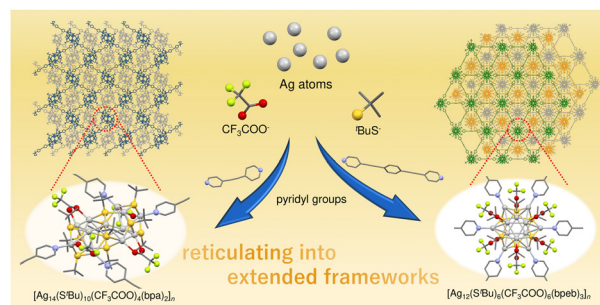


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Silver cluster-assembled materials for label-free DNA detection

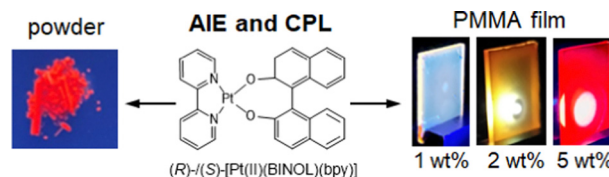
Saikat Das, Taishu Sekine, Haruna Mabuchi, Sakiat Hossain, Subhabrata Das, Shun Aoki, Shuntaro Takahashi* and Yuichi Negishi*



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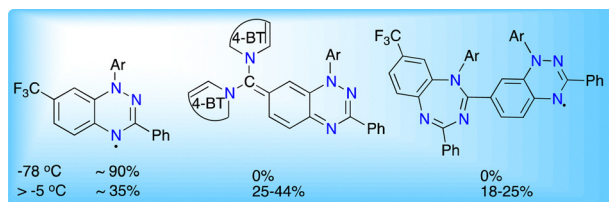
Aggregation-induced circularly polarized phosphorescence of Pt(II) complexes with an axially chiral BINOL ligand

Daiki Tauchi, Taiki Koida, Yuki Nojima, Masahi Hasegawa, Yasuhiro Mazaki, Akiko Inagaki, Ken-ichi Sugiura, Yuki Nagaya, Kazunori Tsubaki, Takuya Shiga, Yuuya Nagata and Hiroyuki Nishikawa*



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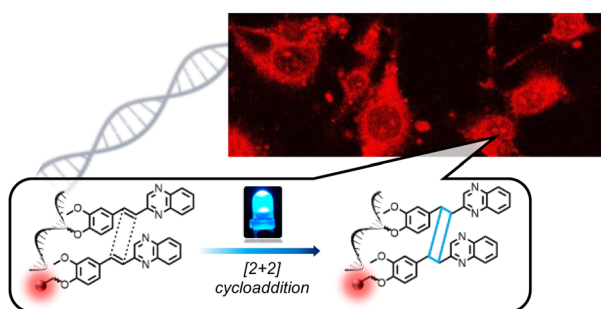
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“Super stable” Blatter radicals through ArLi addition: surprising chemistry of 7-(trifluoromethyl)benzo[e][1,2,4]triazine

Emilia Obijalska, Anna Pietrzak, Christos P. Constantinides, Roger D. Sommer and Piotr Kaszyński*

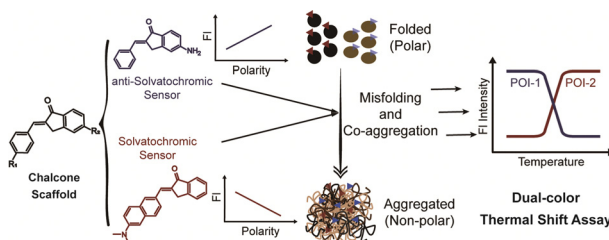
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DNA labelling in live cells *via* visible light-induced [2+2] photocycloaddition

Rita T. Michenfelder, Laura Delafresnaye, Vinh X. Truong,* Christopher Barner-Kowollik* and Hans-Achim Wagenknecht*

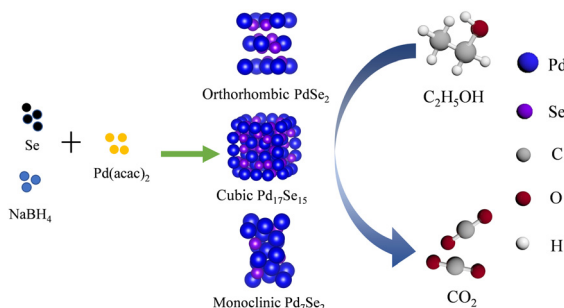
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Tailoring the positive and negative solvatochromism for chalcone analogues to detect heterozygous protein co-aggregation

Bai Yulong, Wan Wang, Huang Yanan, Wu Jichun, Liu Lihua, Jing Biao, Chen Junlin, Zhang Xin* and Liu Yu*

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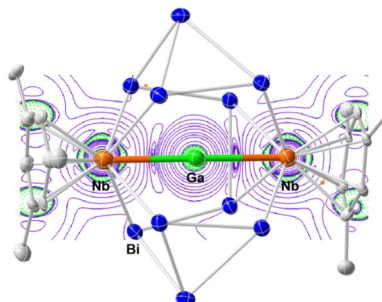
Synthesis of unconventional Pd–Se nanoparticles for phase-dependent ethanol electrooxidation

Zhenya Hu, Niuwa Yang, Yongjun Feng, Lin Xu, Chaoquan Hu, Hui Liu,* Shaonan Tian* and Jun Yang*

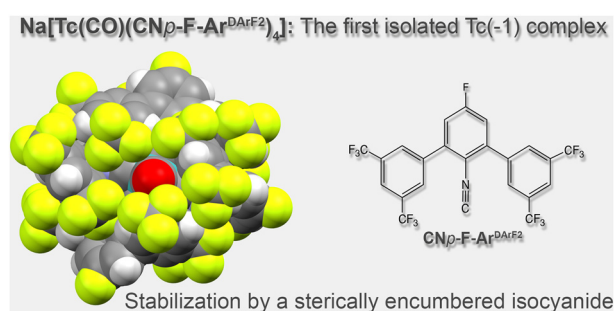


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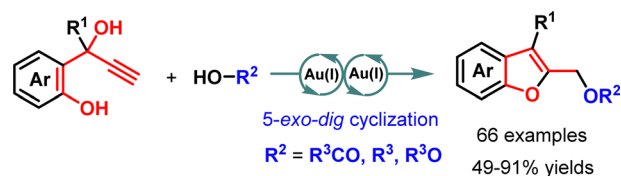
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[Ga@Bi₁₀(NbMes)₂]^{3−}: a linear Nb–Ga^I–Nb filament coordinated by a bismuth cageLei Qiao, Tao Yang,^{*} Gernot Frenking and Zhong-Ming Sun^{*}

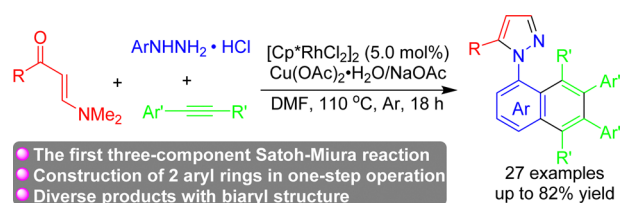
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Na[Tc(CO)(CN*p*-F-Ar^{DArF2})₄]: an isocyanide analogue of the elusive Na[Tc(CO)₅]Federico Salsi, Adelheid Hagenbach, Joshua S. Figueroa^{*} and Ulrich Abram^{*}

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Gold self-relay catalysis enabling annulative oxygenation of propargylic alcohols with O-nucleophilesMeng-Ying Hao, Yin Zhang, Na Lin, Rong Fu, Xiao-Shuang Ji, Bo Jiang,^{*} Shu-Jiang Tu^{*} and Wen-Juan Hao^{*}

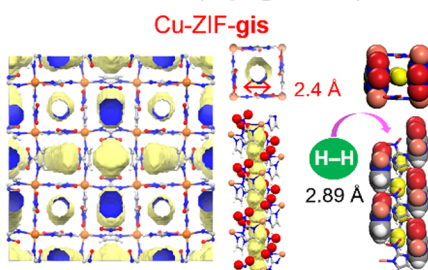
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Three-component synthesis of *N*-naphthyl pyrazoles via Rh(III)-catalyzed cascade pyrazole annulation and Satoh–Miura benzannulationDemaio Chen, Liyun Zhou, Yunyun Liu^{*} and Jie-Ping Wan^{*}

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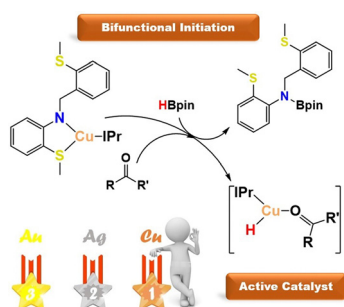
Cu-ZIFs (sql, gis, rho)



Porous zeolitic imidazolate frameworks assembled with highly-flattened tetrahedral copper(II) centres and 2-nitroimidazoles

Cheolwon Jung, Sang Beom Choi, Jaewoo Park, Minji Jung, Jonghoon Kim, Hyunchul Oh* and Jaheon Kim*

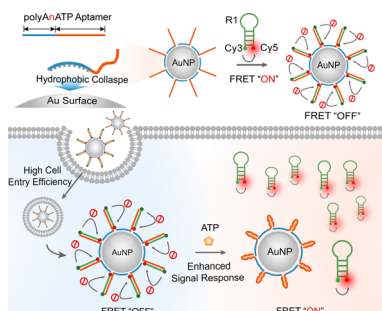
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Coinage metal amido and thiolate SNS complexes: consequences of catalyst speciation in Cu(I)-catalysed carbonyl hydroboration

Saeed Ataie, Maxwell Lohar, Loïc P. Mangin and R. Tom Baker*

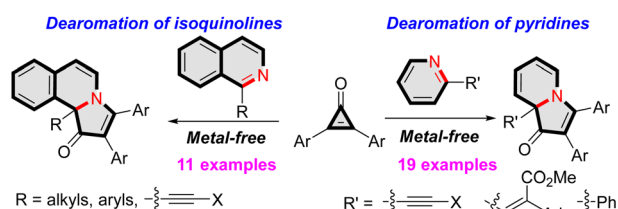
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Programmably engineered FRET-nanoflare for ratiometric live-cell ATP imaging with anti-interference capability

Hongyu Wu, Chengwen Zhang, Fulin Zhu, Yu Zhu, Xinhui Lu, Ying Wan, Shao Su, Jie Chao, Lianhui Wang and Dan Zhu*

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Dearomative cyclization of pyridines/isoquinolines with cyclopropanones: access to indolizinones and benzo-fused indolizinones

Xiang Liu, Xiaotian Shi, Jinlei Zhou, Changfeng Huang, Yu Lin, Chen Zhang and Hua Cao*

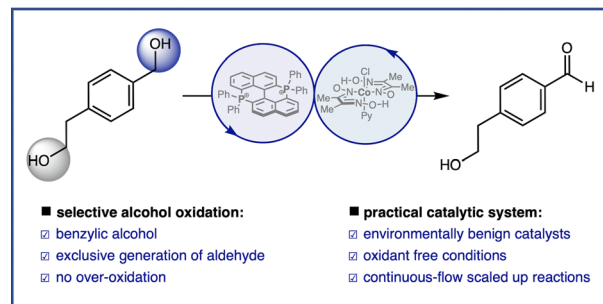


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Selective oxidation of benzylic alcohols via synergistic bisphosphonium and cobalt catalysis

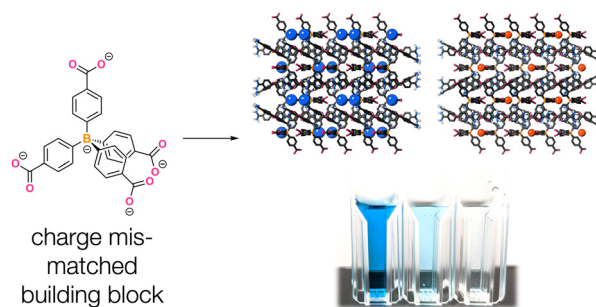
Jia Ding, Shuaishuai Luo, Yuanli Xu, Qing An, Yi Yang* and Zhiwei Zuo*



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Charge “mis-matched” hydrogen bonded frameworks for cation exchange and dye sorption

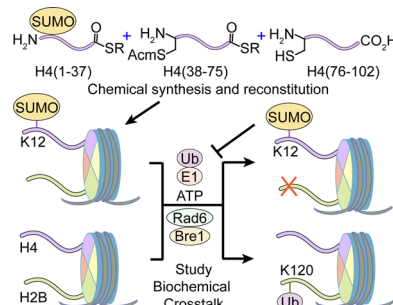
Phonlakrit Muang-Non, Adrian W. Markwell-Heys, Christian J. Doonan and Nicholas G. White*



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Total chemical synthesis of sumoylated histone H4 reveals negative biochemical crosstalk with histone ubiquitylation

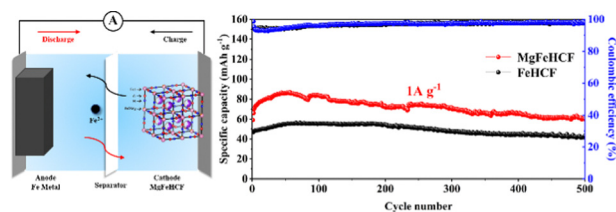
Sumeet K. Singh, Andres Reyna, Xiaowen Xie, Haibin Mao, Meihuan Ji, Ning Zheng, Peter L. Hsu and Champak Chatterjee*



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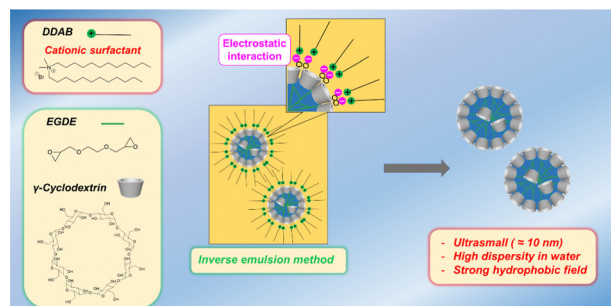
Mg-substituted Prussian blue as a low-strain cathode material for aqueous Fe-ion batteries

Ge Huang, Zefeng Lao, Ze He, Fangyu Xiong, Shuangshuang Tan, Meng Huang, Greta Thompson, Qinyou An* and Liqiang Mai*



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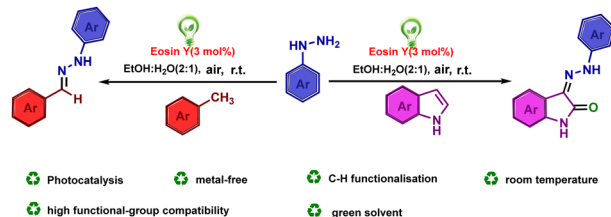
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Preparation of ultrasmall cyclodextrin nanogels by an inverse emulsion method using a cationic surfactant

Satomi Takeuchi, Andrea Cesari, Suzuka Soma, Yota Suzuki, Maria Antonietta Casulli, Kai Sato, Fabrizio Mancin, Takeshi Hashimoto and Takashi Hayashita*

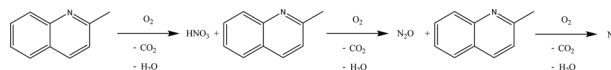
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Visible-light-absorbing C–N cross-coupling for the synthesis of hydrazones involving C(sp²)–H/C(sp³)–H functionalization

Ambuj Kumar Kushwaha, Suresh Kumar Maury, Arsala Kamal, Himanshu Kumar Singh, Shikha Pandey and Sundaram Singh*

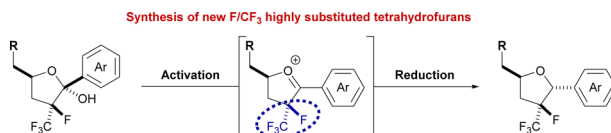
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Revealing the nitrogen reaction pathway for the catalytic oxidative denitrification of fuels

Michael Huber, Maximilian J. Poller, Jens Tochtermann, Wolfgang Korth, Andreas Jess and Jakob Albert*

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Exploring F/CF₃ substituted oxocarbenium ions for the diastereoselective assembly of highly substituted tetrahydrofurans

Anthony J. Fernandes, Bastien Michelet, Armen Panossian, Agnès Martin-Mingot, Frédéric R. Leroux* and Sébastien Thibaudau*

