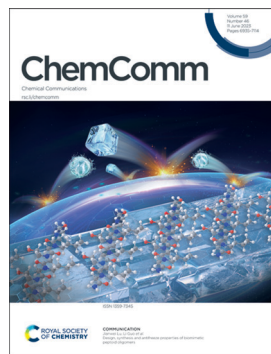


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### Inside cover

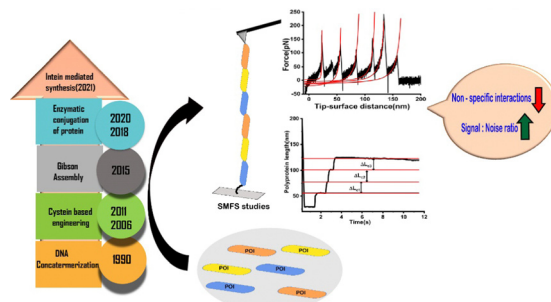
See Lei Zhao and Fen Ran, pp. 6969–6986. Image reproduced by permission of Fen Ran from *Chem. Commun.*, 2023, 59, 6969.

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### Polyprotein synthesis: a journey from the traditional pre-translational method to modern post-translational approaches for single-molecule force spectroscopy

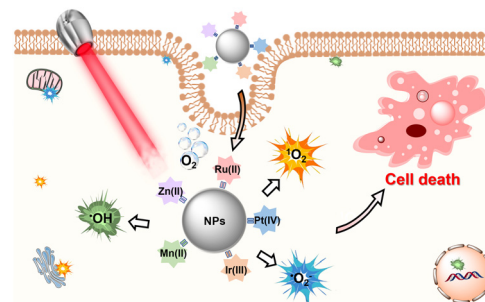
Veeral Kaur, Surbhi Garg\* and Sabyasachi Rakshit\*



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### Recent progress in metal complexes functionalized nanomaterials for photodynamic therapy

Fangmian Wei, Zhuoli Chen, Xing-Can Shen,\*  
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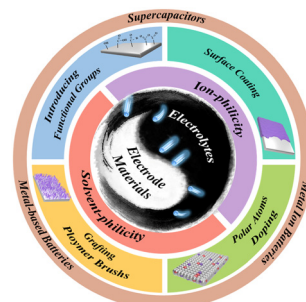


## FEATURE ARTICLES

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## Electrolyte-philicity of electrode materials

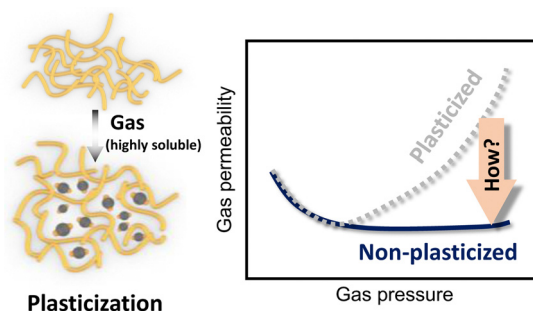
Lei Zhao and Fen Ran\*



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## Covalent and non-covalent approaches to suppress plasticization of polymer membranes for gas separation

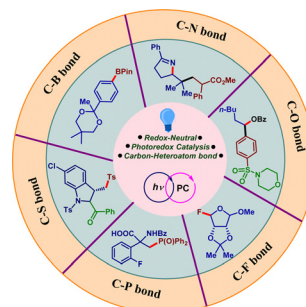
Ji Woo Kim, Jin Hui Jo, Songah Jeong, Won Seok Chi\* and Hyungwoo Kim\*



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## Redox-neutral carbon–heteroatom bond formation under photoredox catalysis

Sumit Ghosh, Souvik Majumder, Debashis Ghosh and Alakananda Hajra\*

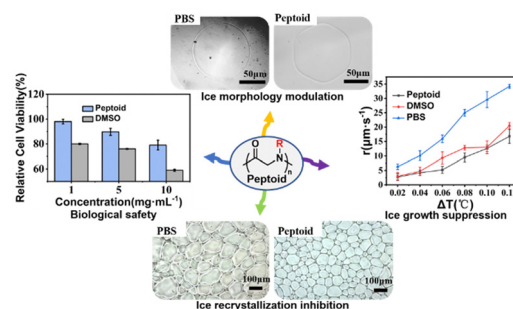


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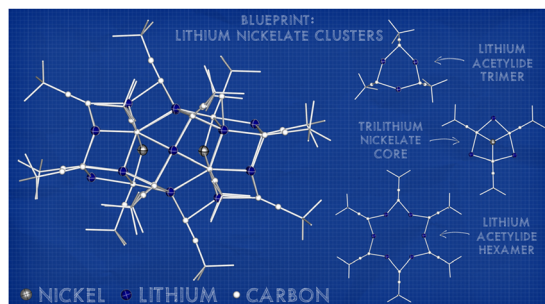
## Design, synthesis and antifreeze properties of biomimetic peptoid oligomers

Min Zhang, Zhifeng Qiu, Kang Yang, Wencheng Zhou, Wenqi Liu, Jianwei Lu\* and Li Guo\*



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### Organolithium aggregation as a blueprint to construct polynuclear lithium nickelate clusters

Andryj M. Borys\* and Eva Hevia\*

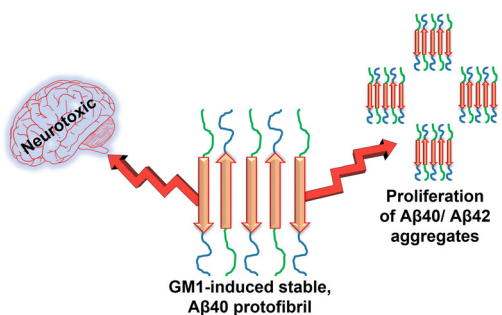
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### A red ambient afterglow material with lifetime of 0.5 s and efficiency over 12%

Xingsha Shen, Yanju Luo, Kuan Chen, Caixia Fu, Ruyi Liu, Yan Huang,\* Kaiqun Wu, Juan Luo and Zhiyun Lu\*

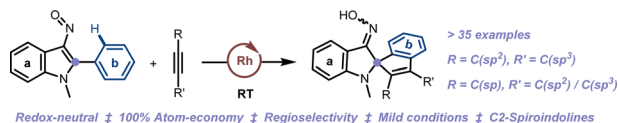
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### Ganglioside GM1 produces stable, short, and cytotoxic Aβ<sub>40</sub> protofibrils

Manjeet Kumar, Magdalena I Ivanova and Ayyalusamy Ramamoorthy\*

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### Rhodium(III)-catalyzed mild and regioselective dearomative spirocyclization of 2-aryl-3-nitrosoindoles with alkynes

Cheng Li, Bin Zhao, Guojiang Mao and Guo-Jun Deng\*

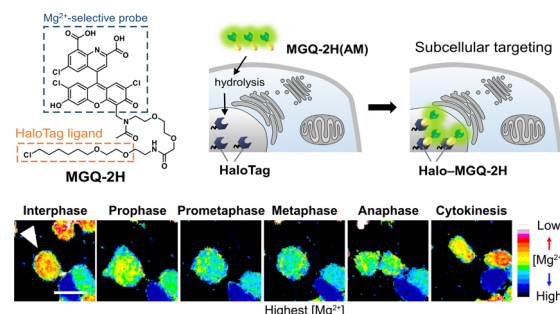


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Long-term imaging of intranuclear  $\text{Mg}^{2+}$  dynamics during mitosis using a localized fluorescent probe

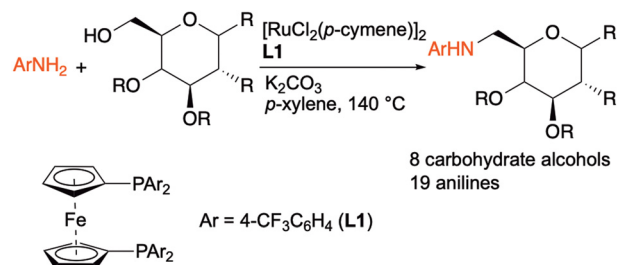
Yusuke Matsui, Toshiyuki Kowada, Yi Ding, Priya Ranjan Sahoo, Kazuya Kikuchi\* and Shin Mizukami\*



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Ruthenium-catalysed *N*-alkylation of anilines with primary carbohydrate alcohols via borrowing hydrogen strategy

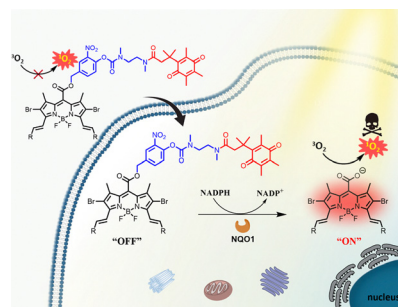
Kouki Tsuge, Shunnichi Kubota, Kana Sakamoto, Kenji Kitayama and Takahiro Nishimura\*



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## Design and synthesis of a NAD(P)H:quinone oxidoreductase 1-activatable photosensitizer for controlled photodynamic therapy

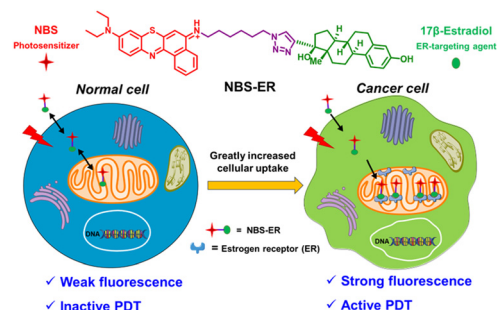
Evelyn Y. Xue, Fangyuan Kang, Yimin Zhou and Dennis K. P. Ng\*



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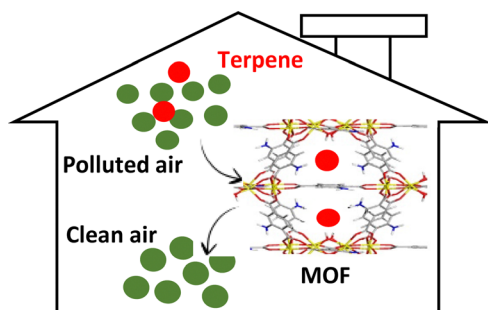
## An estradiol-functionalized red-emissive photosensitizer for enhanced and precise photodynamic therapy of breast cancers

Xiuxiu Yue, Tao Guo, Hankun Zhang, Benhua Wang,\* Minhuan Lan and Xiangzhi Song\*





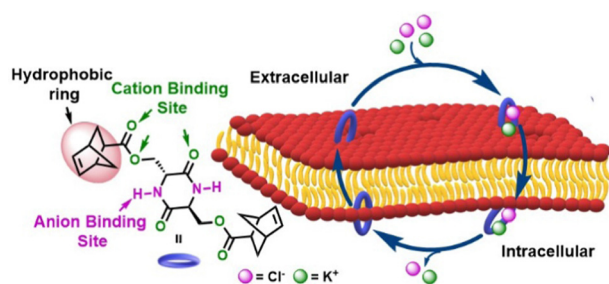
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### Metal–organic frameworks for the capture of $\alpha$ -pinene traces

Patrick P. Conti, Kamal Batra, Paul Iacomì, Carla Vieira Soares, Sanchari Dasgupta, Nathalie Steunou, Agnès Lattuati-Derieux, Noëlle Timbart, Mélanie Nicolas, Rukshala Anton, Stéphane Moullarat, Guillaume Maurin and Sabine Devautour-Vinot\*

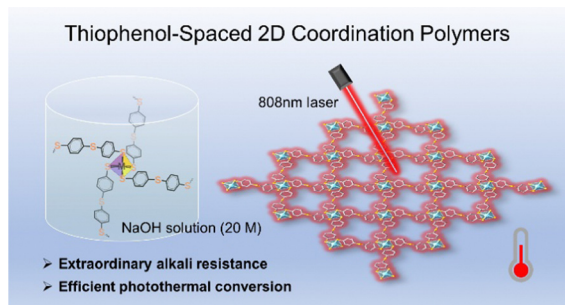
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### Hydrophobic cyclic dipeptides as $M^+/Cl^-$ carriers

Umatai A. Hale and Nandita Madhavan\*

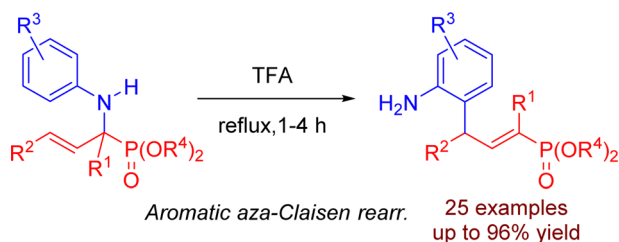
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### Thiophenol-spaced 2D coordination polymers with extraordinary alkali resistance and efficient photothermal conversion

Qin Hou, Li-Jun Chen, Jing He, Er-Xia Chen, Bo Wang, Xuechou Zhou, Yumei Dai, Liang He\* and Qipu Lin\*

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### Stereoselective synthesis of vinylphosphonates through aromatic aza-Claisen rearrangement of $\alpha$ -aminophosphonates

Babak Kaboudin,\* Mojtaba Ghashghaee, Haruhiko Fukaya and Hikaru Yanai\*

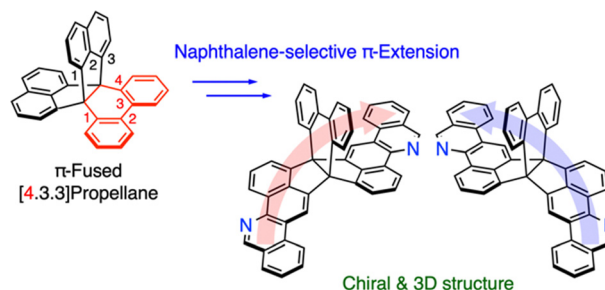


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Efficient synthesis and unit-selective  $\pi$ -extension of  $\pi$ -fused [4.3.3]propellane as a chiral building block

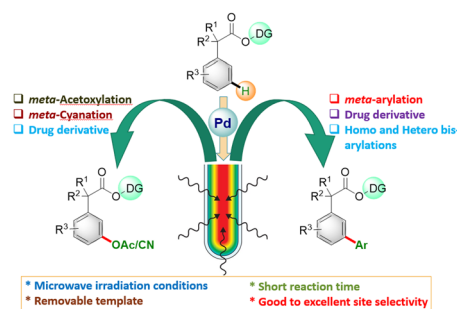
Kenichi Kato,\* Seigo Tanaka, Nobuyoshi Seto, Keisuke Wada, Masayuki Gon, Shixin Fa, Shunsuke Ohtani, Kazuo Tanaka and Tomoki Ogoshi\*



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Functionalization of arylacetic acids via directing-group-assisted remote *meta*-C–H activation

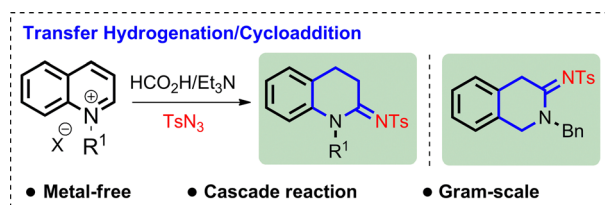
Dasari Srinivas, Kurella Mounika and Gedu Satyanarayana\*



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## Metal-free transfer hydrogenation/cycloaddition cascade of activated quinolines and isoquinolines with tosyl azides

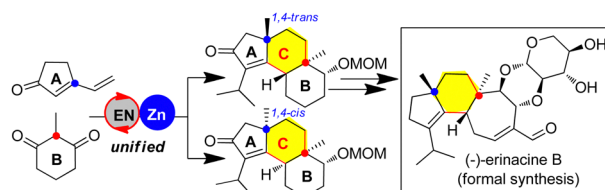
Suman Yadav, Ruchir Kant and Malleswara Rao Kuram\*



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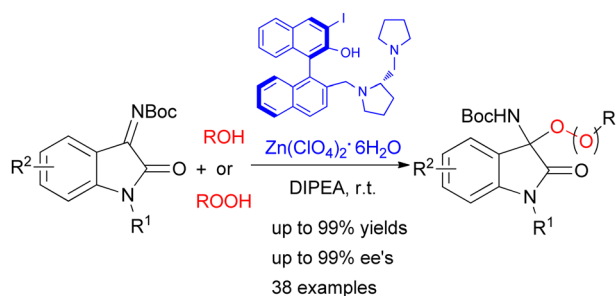
## A formal synthesis of (–)-erinacine B enabled by asymmetric organocatalysis

Jiahang Yan, Dongyang Xu, Zhiqiang Zhou, Long He, Jin-Ming Gao,\* Hongbo Wei\* and Weiqing Xie\*



## COMMUNICATIONS

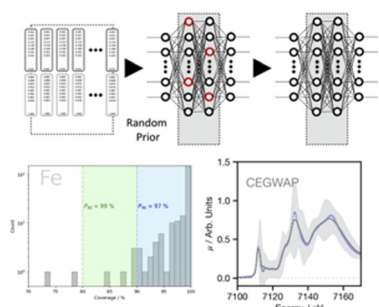
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### Zn(II)-catalysed enantioselective addition of alcohols and *tert*-butyl hydroperoxide to isatin-derived *N*-Boc ketimines

Jiaqi Hou, Leipeng Xue, Tianxu Yu, Jiahui Li, Shibo Yu, Chao Yao\* and Yue-Ming Li\*

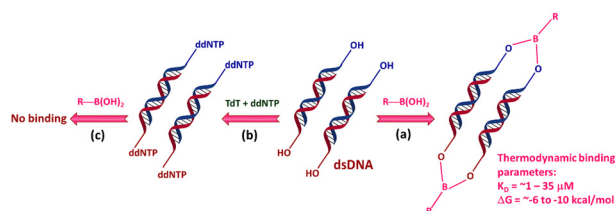
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### Uncertainty quantification of spectral predictions using deep neural networks

Sneha Verma, Nik Khadijah Nik Aznan, Kathryn Garside and Thomas J. Penfold\*

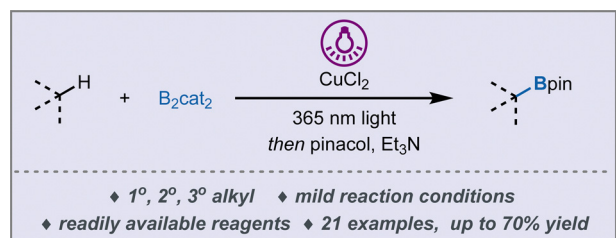
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### Direct experimental evidence for the boronic acid-mediated bridging of DNA hybrids

Pranay Amruth Maroju, Anindita Thakur, Ramakrishnan Ganesan\* and Jayati Ray Dutta\*

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### Photoinduced C(sp<sup>3</sup>)-H borylation of alkanes mediated by copper(II) chloride

Wen Fang, Huai-Qin Wang, Wei Zhou, Zhi-Wen Luo and Jian-Jun Dai\*





## CORRECTION

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**Correction: Co-electrocatalytic CO<sub>2</sub> reduction mediated by a dibenzophosphole oxide and a chromium complex**

Connor A. Koellner, Amelia G. Reid and Charles W. Machan\*

