

# ChemComm

Chemical Communications

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## IN THIS ISSUE

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### Cover

See Tsutomu Yokozawa  
et al., pp. 13139-13142.  
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Yu Tokita from  
*Chem. Commun.*,  
2023, 59, 13139.

## CONFERENCE REPORT

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### Highlights from *Faraday Discussion: Astrochemistry at high resolution*, Baltimore, USA, May 2023

Olivia Wilkins,\* Divita Gupta and Mathieu Bertin

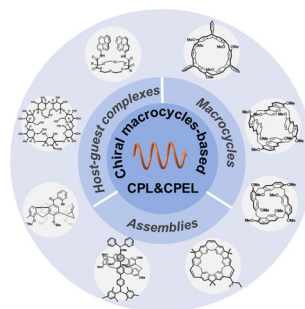


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### Advances in circularly polarized luminescence materials based on chiral macrocycles

Jia-Qi Wang, Xiao-Ni Han, Ying Han\* and Chuan-Feng Chen\*



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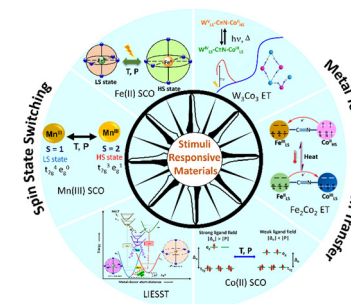


## FEATURE ARTICLES

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## Stimuli-responsive magnetic materials: impact of spin and electronic modulation

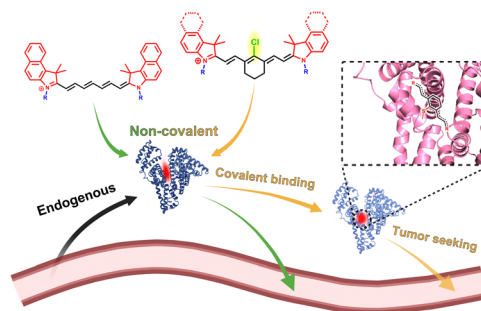
Krishna Kaushik, Sakshi Mehta,\* Mayurika Das, Sounak Ghosh, Sujit Kamilya and Abhishake Mondal\*



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## Site-specific albumin tagging with chloride-containing near-infrared cyanine dyes: molecular engineering, mechanism, and imaging applications

Qi Su, Yuewei Zhang\* and Shoujun Zhu\*

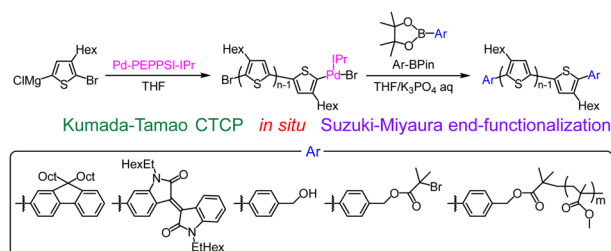


## COMMUNICATIONS

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## Tandem Kumada–Tamao catalyst-transfer condensation polymerization and Suzuki–Miyaura coupling for the synthesis of end-functionalized poly(3-hexylthiophene)

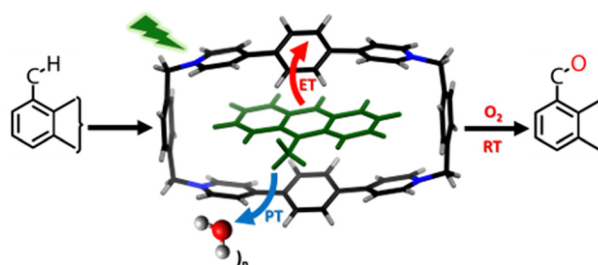
Yu Tokita, Tatsuya Uchida, Takeru Kamigawara, Kenta Hoka, Reo Nitto, Yoshihiro Ohta and Tsutomu Yokozawa\*



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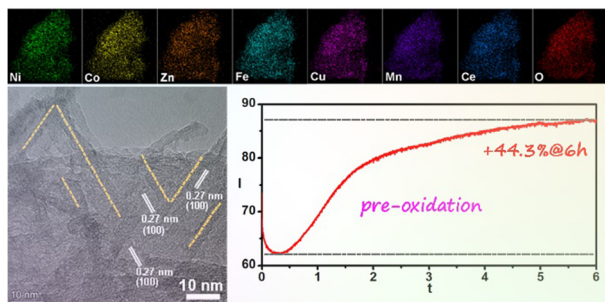
Visible light-mediated C(sp<sup>3</sup>)–H bond functionalization inside an all-organic nanocavity

Debojyoti Roy, Sunandita Paul and Jyotishman Dasgupta\*



## COMMUNICATIONS

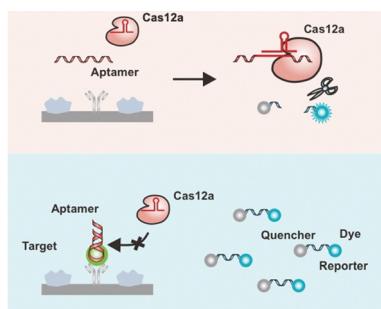
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### High-entropy wire-on-sheet nanoarray catalyst with boosted pre-oxidation for efficient oxygen evolution reaction

Min Hao, Jing Chen, Zimeng Liu, Xiaoning Sun, Shanshan Liu, Fengcai Lei, Xu Sun, Junfeng Xie\* and Bo Tang

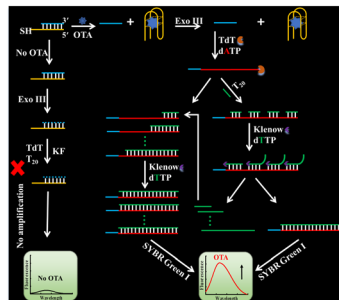
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### *trans*-Cleavage of the CRISPR-Cas12a-aptamer system for one-step antigen detection

Hongxuan Fan, Shi-hua Luo, Ying Zhu, Jiye Shi, Fangfei Yin\* and Jiang Li\*

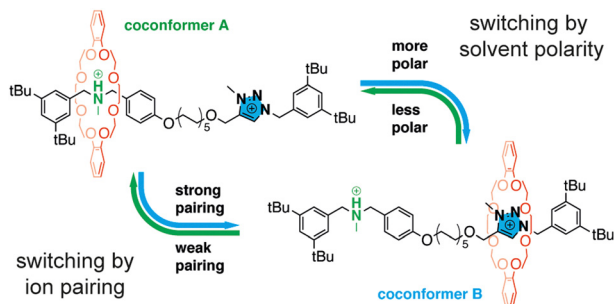
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### Target-initiated fluorescent aptasensor based on multisite strand displacement amplification for label-free detection of ochratoxin A

Dandan Zhang, Xiangyue Cai, Qian Zhang and Chunyang Zhang\*

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### Controlling molecular shuttling in a rotaxane with weak ring recognition sites

Nina Bukhtiarova, Alberto Credi\* and Stefano Corra\*

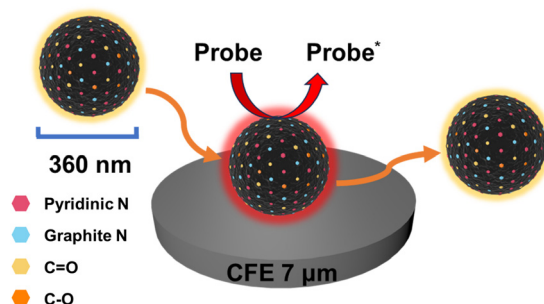


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## Insight into active sites of nitrogen-doped carbon catalyst by stochastic collision electrochemistry

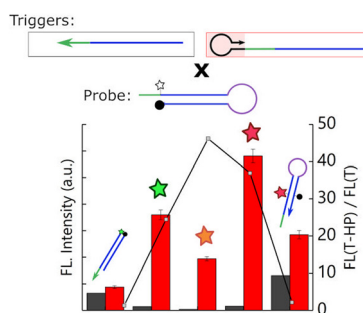
Jianwei Zong, Wenjie Wu, Lanqun Mao and Ping Yu\*



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## Design strategies for countering the effect of fluorophore-quencher labelling on DNA hairpin thermodynamics

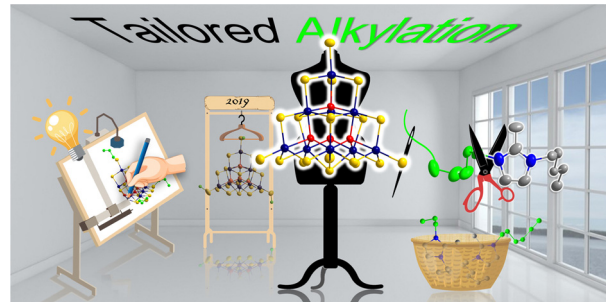
Yan Shan Ang and Lin-Yue Lanry Yung\*



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## Selective and benign alkylation of sulfido-oxo stannate clusters with propyl, pentyl, or hexyl substituents

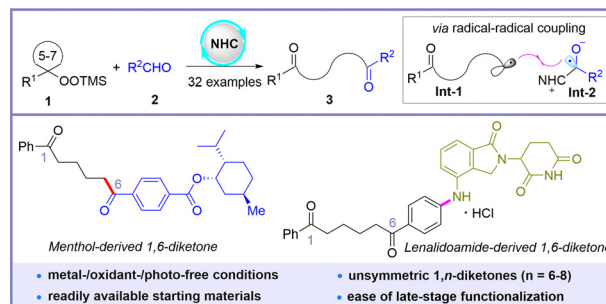
Gina Stuhmann, Jannik Schneider, Kilian Schmidt and Stefanie Dehnen\*



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## NHC-catalyzed radical acylation of cycloalkyl silyl peroxides to access 1,6-, 1,7-, and 1,8-diketones

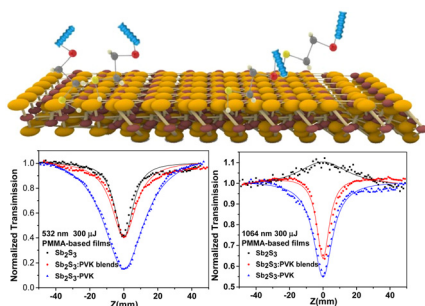
Chaolei Liu, Jingyi Wang, Xinlong Liu, Jie Feng\* and Ding Du\*





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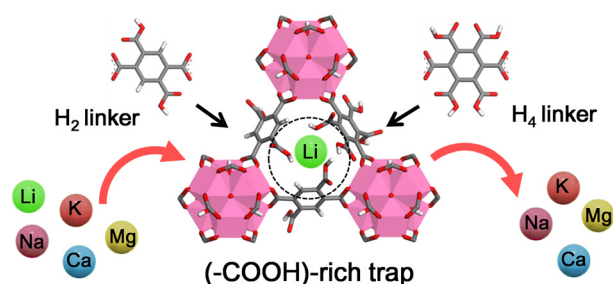
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### Covalent functionalization of $\text{Sb}_2\text{S}_3$ with poly(*N*-vinylcarbazole) for solid-state broadband laser protection

Guangwei Li, Ningning Dong, Xinzhu Wang,\*  
Xibin Shen, Jun Wang\* and Yu Chen\*

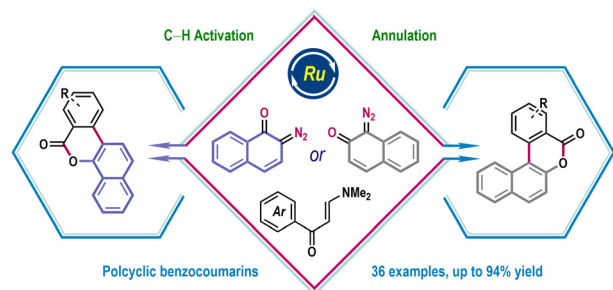
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### Constructing a carboxyl-rich angstrom-level trap in a metal-organic framework for the selective capture of lithium

Xinxin Gao, Rui Ding, Hongliang Huang,\* Baosheng Liu\*  
and Xudong Zhao\*

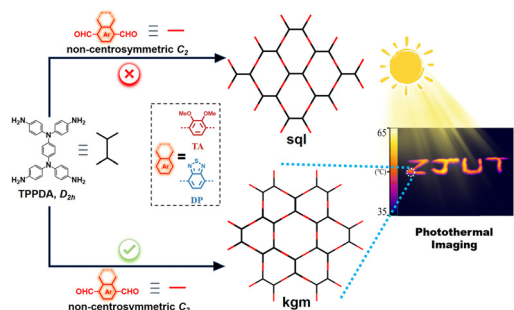
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### Enaminone-directed ruthenium(II)-catalyzed C–H activation and annulation of arenes with diazonaphthoquinones for polycyclic benzocoumarins

Sudeshna Mondal, Chandan Kumar Giri and  
Mahiuddin Baidya\*

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### Kagome-topology 2D covalent organic frameworks assembled from $D_{2h}$ -symmetric and non-centrosymmetric $C_2$ -symmetric blocks for photothermal imaging

Jiahao Li, Guinan Chen, Chunhong Chen, Yuanyuan Lou,  
Zhihao Xing, Tao Zhang, Chengtao Gong and  
Yongwu Peng\*

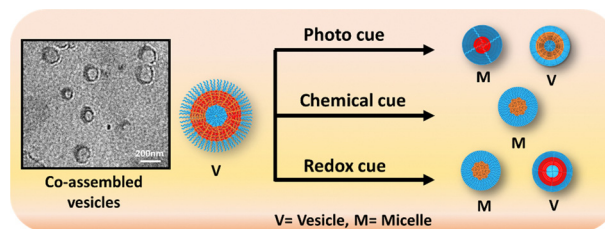


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### Orthogonal chain collapse in stimuli-responsive di-block polymers leading to self-sorted nanostructures

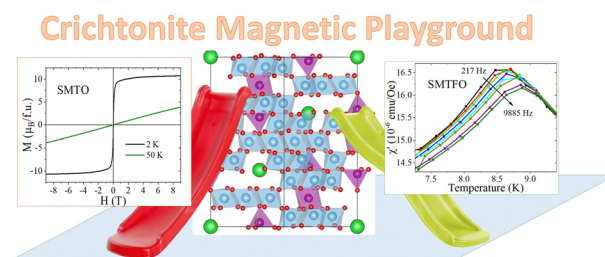
Chirag Miglani, Maqsuma Banoo, Debasish Nath, Jahanvi Ralhan, Soma Sil, Jojo P. Joseph, Santanu K. Pal, Ujjal Gautam\* and Asish Pal\*



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### Ferrimagnetic and spin glass behaviour in $\text{SrMn}^{2+}_3\text{Ti}^{4+}_{14}\text{M}^{3+}_4\text{O}_{38}$ (M = Ti and Fe) synthetic crichtonites

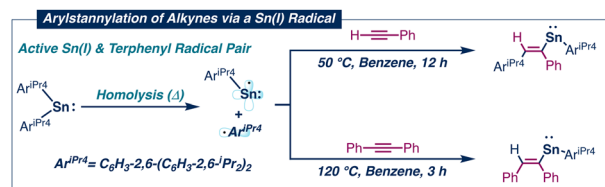
José Luis Rosas-Huerta,\* Ruiqi Chen, Clemens Ritter, Oleg Siidra, Marie Colmont and Angel M. Arévalo-López\*



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### Sn(II)–carbon bond reactivity: radical generation and consumption via reactions of a stannylene with alkynes

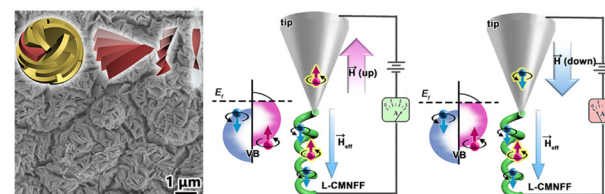
Wenxing Zou, Kristian L. Mears, James C. Fetting and Philip P. Power\*



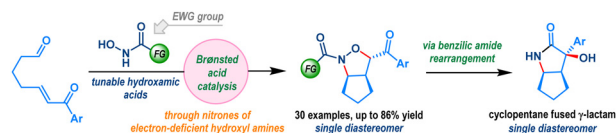
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### Chiral mesostructured $\text{NiFe}_2\text{O}_4$ films with chirality induced spin selectivity

Yiping Zhou, Te Bai and Yingying Duan\*



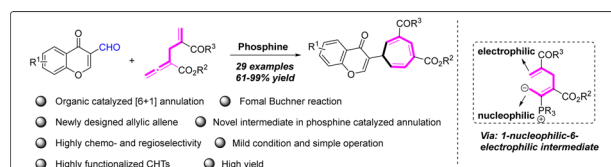
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### Brønsted acid-catalyzed annulation reaction of hydroxamic acids: synthesis of cyclopentane-fused isoxazolidines and their benzilic amide rearrangement

Swati Lekha Mondal, Vinod Bhajammanavar, Isai Ramakrishna and Mahiuddin Baidya\*

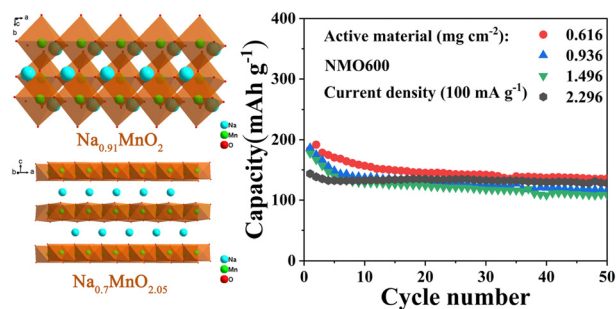
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Jingxiong Lai and You Huang\*

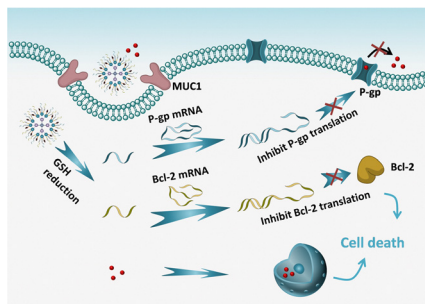
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### High-performance heterostructure $\text{Na}_{0.7}\text{MnO}_{2.05}$ – $\text{Na}_{0.91}\text{MnO}_2$ as a lithium-free cathode for lithium-ion batteries

Tianfeng Gao, Yanjun Cai,\* Qingrong Kong, Hualing Tian, Xiang Yao and Zhi Su\*

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### High-order framework nucleic acid for targeted-delivery of antisense peptide nucleic acids to overcome drug resistance

Shu Xing, Xiaoqian Lan, Jiaqian Zhang, Meng Li and Bing Wang\*

