

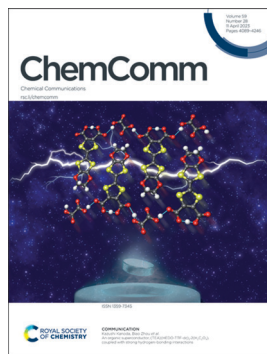
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ISSN 1359-7345 CODEN CHCOFS 59(28) 4089-4246 (2023)



### Cover

See Yongcan Guo, Ke Lv, Guoming Xie *et al.*, pp. 4158–4161. Image reproduced by permission of Guoming Xie from *Chem. Commun.*, 2023, 59, 4158.



### Inside cover

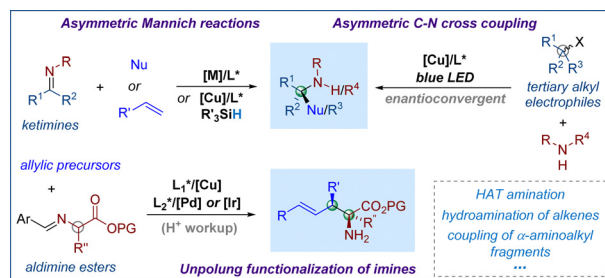
See Kazushi Kanoda, Biao Zhou *et al.*, pp. 4162–4165. Image reproduced by permission of Biao Zhou from *Chem. Commun.*, 2023, 59, 4162.

## HIGHLIGHT

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### Recent advances in the synthesis of chiral $\alpha$ -tertiary amines *via* transition-metal catalysis

Yongzhuo Xu, Jiajia Wang,\* Guo-Jun Deng and Wen Shao\*

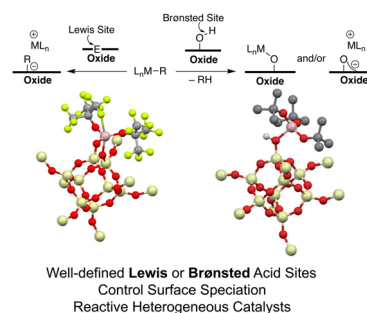


## FEATURE ARTICLES

4115

### Effects of surface acidity on the structure of organometallics supported on oxide surfaces

Kavyasripriya K. Samudrala and Matthew P. Conley\*



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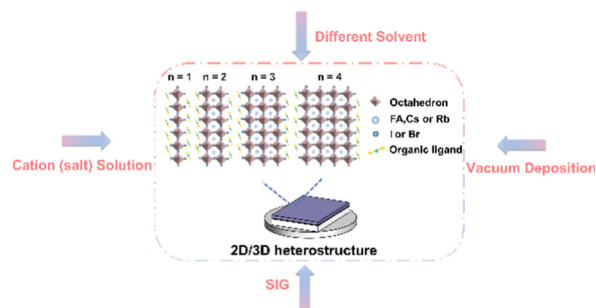


## FEATURE ARTICLES

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**Precise modulation strategies of 2D/3D perovskite heterojunctions in efficient and stable solar cells**

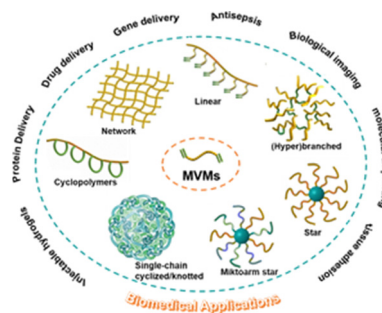
Qian Zhou, Baibai Liu, Xuxia Shai, Yuelong Li, Peng He,\*  
Hua Yu, Cong Chen,\* Zong-Xiang Xu,\* Dong Wei\* and  
Jiangzhao Chen\*



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**(Controlled) Free radical (co)polymerization of multivinyl monomers: strategies, topological structures and biomedical applications**

Zhili Li, Haiyang Yong, Kaixuan Wang, Ya-Nan Zhou,  
Jing Lyu,\* Lirong Liang\* and Dezhong Zhou\*

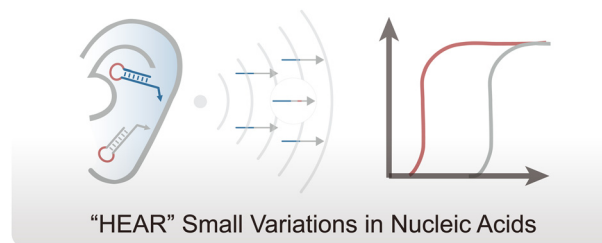


## COMMUNICATIONS

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**A hairpin probe-mediated exponential amplification reaction for highly sensitive and specific detection of microRNAs**

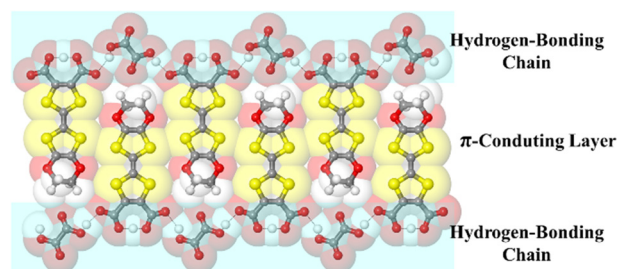
Hongyan Yu, Zhi Weng, Xi Zhou, Dan Bai, Wang Luo,  
Xiaole Han, Lin Song, Qian Liu, Junjie Li, Yujun Yang,  
Yongcan Guo,\* Ke Lv\* and Guoming Xie\*



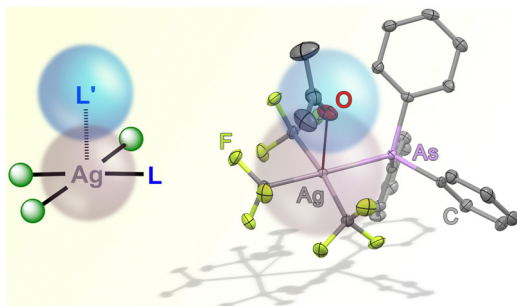
4162

**An organic superconductor, (TEA)(HEDO-TTF-dc)<sub>2</sub>·2(H<sub>2</sub>C<sub>2</sub>O<sub>4</sub>), coupled with strong hydrogen-bonding interactions**

Yuto Morimachi, Mizuki Urai, Ryota Nakajima,  
Hajime Kamebuchi, Kazuya Miyagawa, Kazushi Kanoda\*  
and Biao Zhou\*



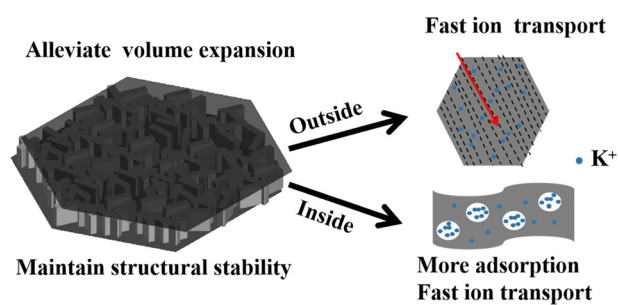
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### Electrophilicity of neutral square-planar organosilver(III) compounds

Daniel Joven-Sancho, Luca Demonti, Antonio Martín, Nathalie Saffon-Merceron, Noel Nebra,\* Miguel Baya and Babil Menjón\*

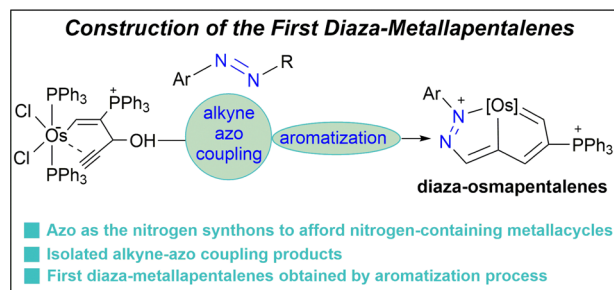
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### Plastic-derived sandwich-like porous carbon nanosheet-supported hexagonal carbon micro-flakes for K-ion storage

Tianci Kong, Yong Qian, Yang Li, Ning Lin\* and Yitai Qian\*

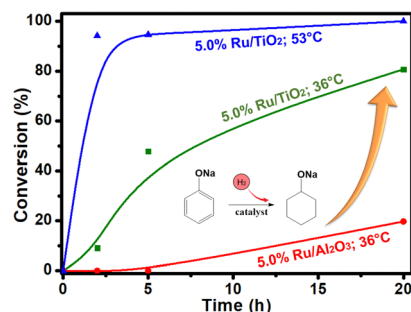
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### Hetero-carbolong chemistry: experimental and theoretical studies of diaza-metallapentalenes

Zhenwei Chu, Jinhua Li, Yuhui Hua, Ming Luo, Dafa Chen\* and Haiping Xia\*

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### Realizing room temperature catalytic hydrogenation of sodium phenoxide by Ru/TiO<sub>2</sub> for hydrogen storage

Khai Chen Tan, Qijun Pei, Jiafeng Yu, Hong Wen, Yang Yu, Jintao Wang, Nor Izzati Nordin, Teng He,\* Yong Shen Chua\* and Ping Chen

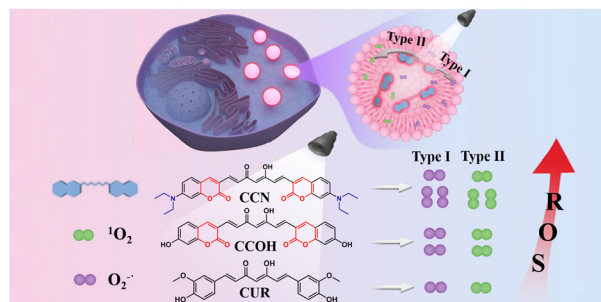


## COMMUNICATIONS

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**Lipid droplet targeting-guided hypoxic photodynamic therapy with curcumin analogs**

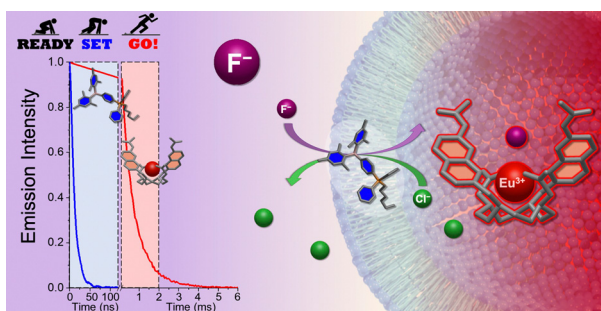
Xuwei Li, Weimin Liu,\* Xiuli Zheng, Meiyu Jiang, Yimin Guo, Jie Sha, Jiasheng Wu, Haohui Ren, Honglei Gao, Shuai Wang and Pengfei Wang\*



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**Transmembrane transport of fluoride studied by time-resolved emission spectroscopy**

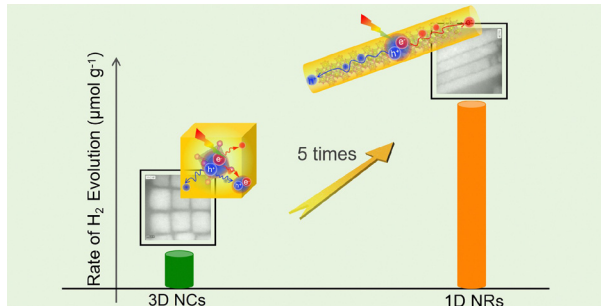
Alessio Cataldo, Matúš Chvojka, Gyeongjin Park, Vladimír Šindelář, François P. Gabbaï, Stephen J. Butler\* and Hennie Valkenier\*



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**Enhanced hydrogen evolution activity of CsPbBr<sub>3</sub> nanocrystals achieved by dimensionality change**

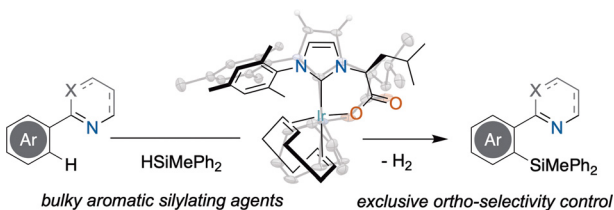
Qing Guo,\* Jin-Dan Zhang, Ya-Jing Chen, Ke-Yuan Zhang, Li-Na Guo, Qi-Chao Shan, Jun-Lin Lu, Xin-Hua Duan\* and Li-Zhu Wu



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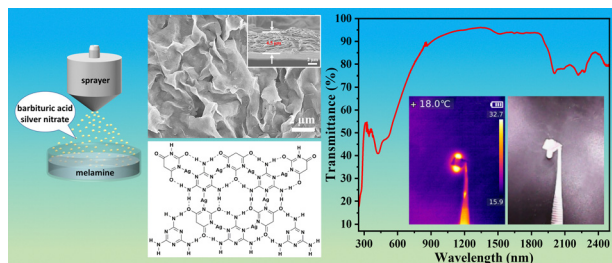
**Iridium(III) complexes with bidentate NHC ligands as catalysts for dehydrogenative directed C–H silylation**

Romane Manguin, Maria Galiana-Cameo, Tanakorn Kittikool, Cécile Barthes, Jompol Thongpaen, Etienne Bancal, Sonia Mallet-Ladeira, Sirilata Yotphan, Ricardo Castarlenas, Marc Mauduit, Jean-Baptiste Sortais\* and Olivier Baslé\*





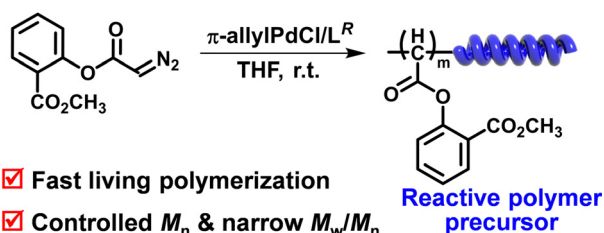
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### Fabrication of a self-standing supramolecular membrane by a "soft spray" technique

Yonghua Jiao, Bingbing Chen,\* Chaofan Zhong, Xiaojiao Hou, Yuanlin Fu, Fuqiang Fan, Tieqiang Wang and Yu Fu\*

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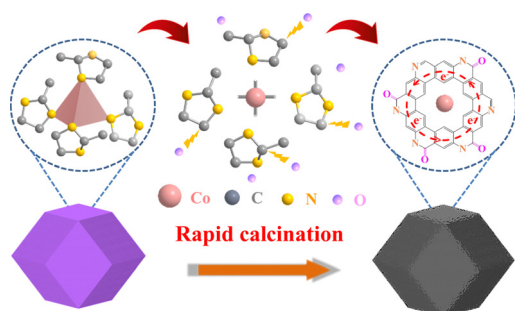


- ✓ Fast living polymerization
- ✓ Controlled  $M_n$  & narrow  $M_w/M_n$
- ✓ Helix-sense-selective polymerization
- ✓ Efficient postpolymerization modification

### Facile preparation of optically active helical polycarbonates with salicylate substituents and their postpolymerization modification

Hui Zou,\* Shan Tai, Shu-Yang Zhao, Li Zhou, Na Liu\* and Zong-Quan Wu\*

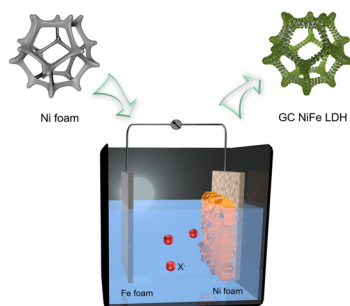
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### Highly efficient utilization of sodium storage sites for MOF-derived carbon by rapid carbonization

Hanqing Zhao,\* Gaobo Chang, Yaoyao Wang, Dan Zhao and Zhong Li\*

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### Facile method to activate substrate for oxygen evolution by a galvanic-cell reaction

Derun Li, Chenglin Zhong, Xiao-Lei Huo,\* Feng Ren\* and Qingwen Zhou\*

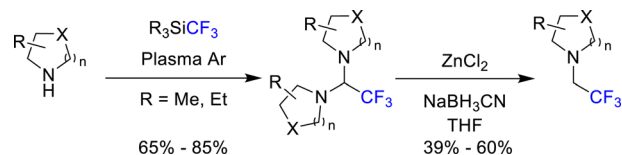


## COMMUNICATIONS

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### Synthesis of trifluoromethyl *N,N*-aminals from nitrogen containing heterocycles by using a plasma flow microreactor

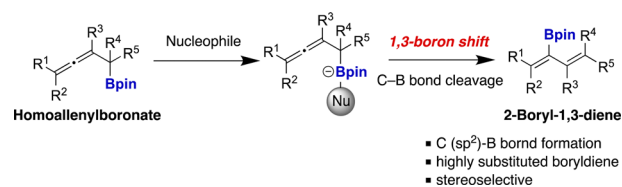
Elias Abedelnour, Stephanie Ognier,\* Olivier Venier, Laurent Schio, Michael Tatoulia and Janine Cossy\*



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### A 1,3-boron shift reaction of homoallenylboronates to synthesise 2-boryl-1,3-dienes

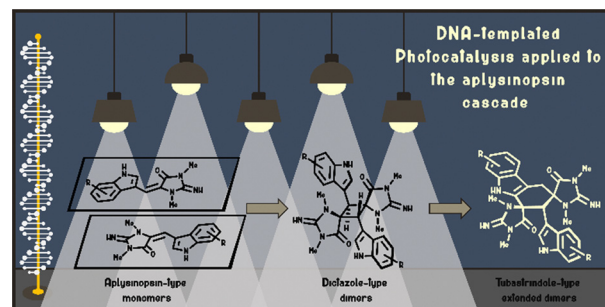
Ryota Sakamoto, Minami Odagi, Masahiro Yamanaka\* and Kazuo Nagasawa\*



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### Expanding the 'aplysinospin cascade' through DNA-templated [2+2] photocycloaddition

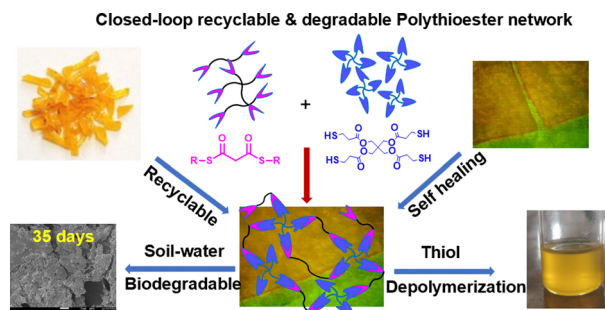
Samuel Oger, Nicolas Duchemin, Yara Mayssa Bendiab, Nicolas Birlirakis, Adam Skiredj, Somia Rharrabti, Jean-Christophe Jullian, Erwan Poupon,\* Michael Smietana,\* Stelios Arseniyadis\* and Laurent Evanno\*



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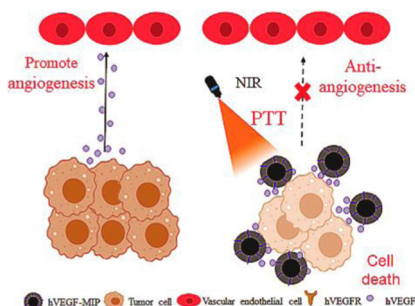
### Closed-loop recyclable and biodegradable thioester-based covalent adaptable networks

Pralay Ranjan Maity, Chandan Upadhyay, A. S. K. Sinha and Umamprasa Ojha\*



## COMMUNICATIONS

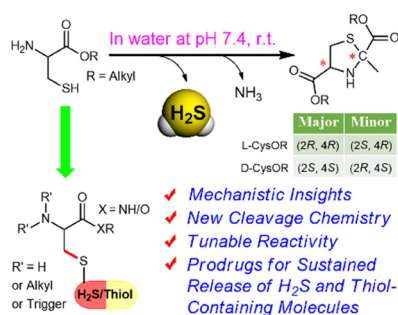
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### A human VEGF magnetic molecularly imprinted polymer for drug-free anti-angiogenesis and photothermal therapy of tumors

Mengzhao Wen, Haizhu Shi, Yu Wan, Jiateng Wu, Xiao Tian, Qian Chen, Ming-Yu Wu\* and Shun Feng\*

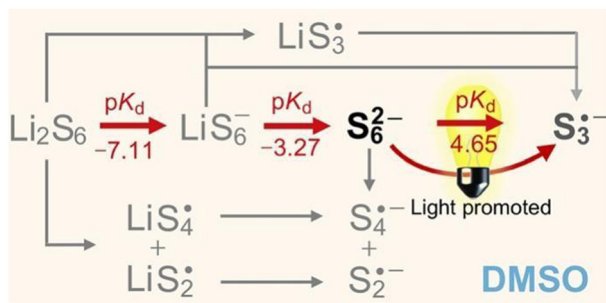
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### Insights into self-degradation of cysteine esters and amides under physiological conditions yield new cleavable chemistry

Xueying Kang, Haishun Ye, Shanshan Liu, Xiaoqiang Tu, Jiqin Zhu, Hongyan Sun and Long Yi\*

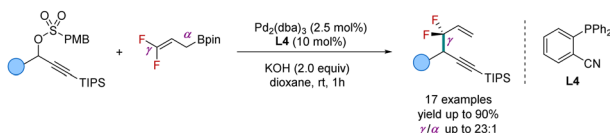
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### Unveiling light effect on formation of trisulfur radicals in lithium-sulfur batteries

Bohai Zhang, Zhenyu Wang, Huifu Ji, Hao Zhang, Lanlan Li, Jiandong Hu, Shixin Li and Junfeng Wu\*

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### Palladium-catalyzed highly selective *gem*-difluoroallylation of propargyl sulfonates with *gem*-difluoroallylboron

Hao-Wen Li, Yun-Cheng Luo, Ling-Chao Yu and Xingang Zhang\*

