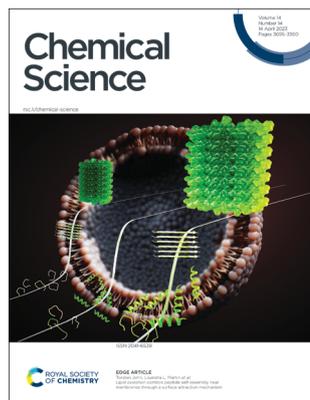


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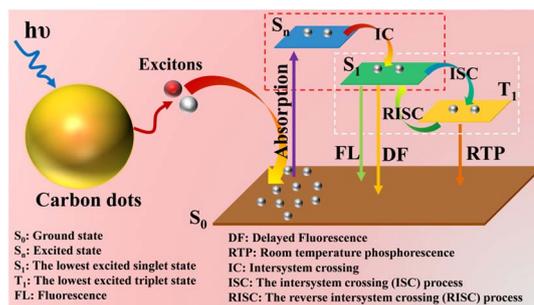
**Cover**  
See Torsten John, Lisandra L. Martin *et al.*, pp. 3730–3741.  
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## REVIEW

3705

### Evolution and fabrication of carbon dot-based room temperature phosphorescence materials

Jiurong Li, Yongzhong Wu and Xiao Gong\*

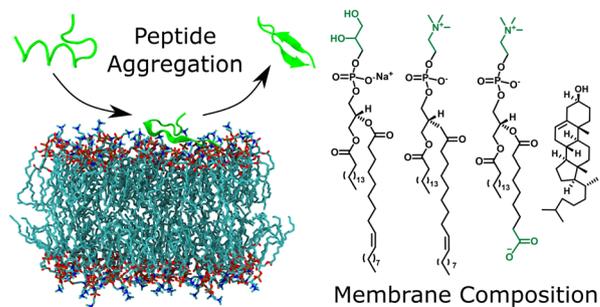


## EDGE ARTICLES

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### Lipid oxidation controls peptide self-assembly near membranes through a surface attraction mechanism

Torsten John,\* Stefania Piantavigna, Tiara J. A. Dealey, Bernd Abel, Herre Jelger Risselada and Lisandra L. Martin\*



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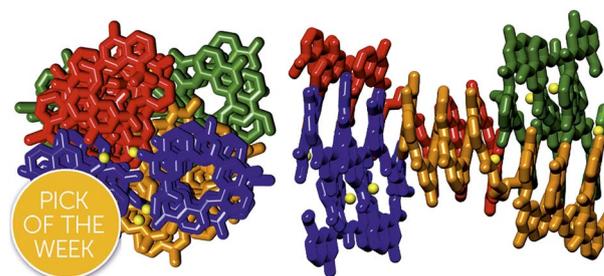
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**An abiotic, tetrameric, eight-helix bundle**

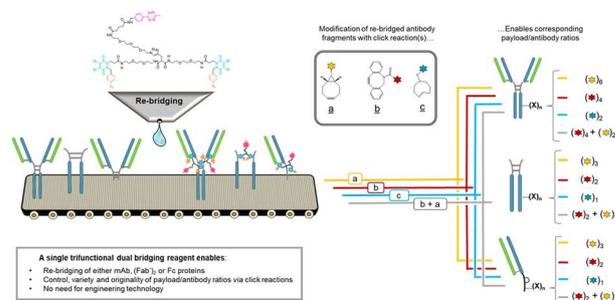
Friedericke S. Menke, Barbara Wicher, Lars Allmendinger, Victor Maurizot and Ivan Huc\*



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**Enabling the formation of native mAb, Fab' and Fc-conjugates using a bis-disulfide bridging reagent to achieve tunable payload-to-antibody ratios (PARs)**

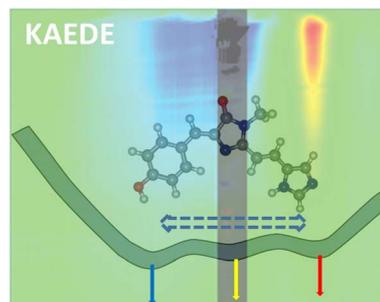
Fabien Thoreau,\* Léa N. C. Rochet, James R. Baker\* and Vijay Chudasama\*



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**Photophysics of the red-form Kaede chromophore**

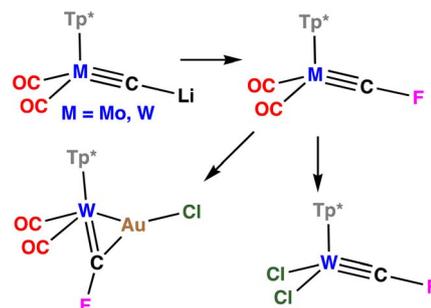
Kiri Addison, Palas Roy, Giovanni Bressan, Karolina Skudaite, Josh Robb, Philip C. Bulman Page, Eleanor K. Ashworth, James N. Bull and Stephen R. Meech\*



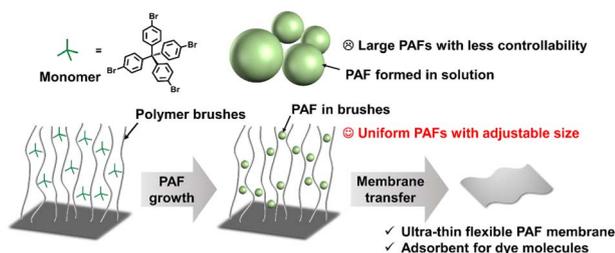
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**Fluorocarbyne complexes via electrophilic fluorination of carbido ligands**

Richard A. Manzano and Anthony F. Hill\*



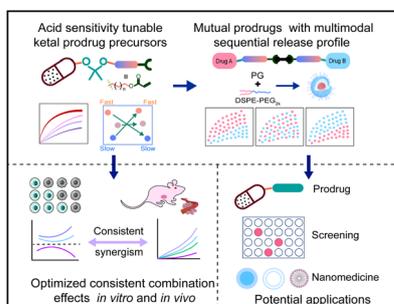
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### Tailored preparation of porous aromatic frameworks in a confined environment

Ruihe Yu, Lin Liu, Liying Yin, Yege Jing, Ning Zhang,\*  
Hang Bian\* and Guangshan Zhu\*

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### Fine-tuning the sequential drug release of nano-formulated mutual prodrugs dictates the combination effects

Haiping Zhong, Xingwei Li, Na Yu, Xi Zhang, Jingqing Mu,  
Tao Liu, Bo Yuan, Xiaoyong Yuan and Shutao Guo\*

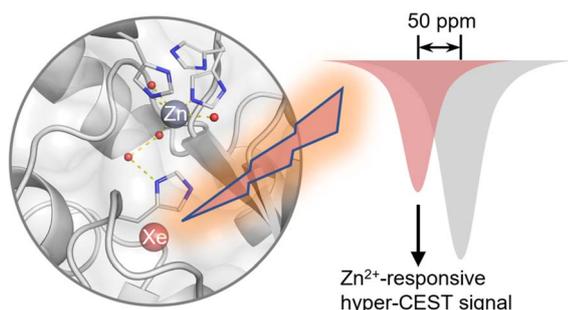
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### C-H bond activation *via* concerted metalation-deprotonation at a palladium(III) center

Bailey S. Bouley, Fengzhi Tang, Dae Young Bae and  
Liviu M. Mirica\*

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### Rational design of a genetically encoded NMR zinc sensor

Zhuangyu Zhao, Mingyang Zhou, Serge D. Zemerov,  
Ronen Marmorstein and Ivan J. Dmochowski\*



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### Probing the donor strength of ylidiide ligands: synthesis, structure and reactivity of rhodium complexes with a $PC_{ylide}N$ pincer ligand

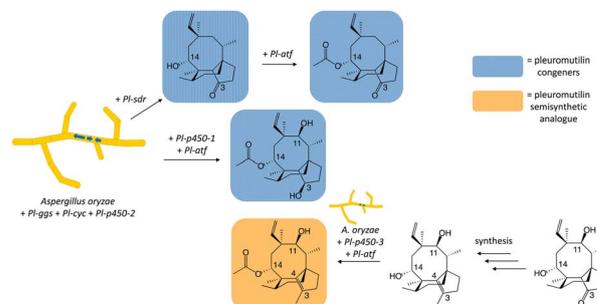
Sébastien Lapointe, Prakash Duari and Viktoria H. Gessner\*



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### Biosynthesis of pleuromutilin congeners using an *Aspergillus oryzae* expression platform

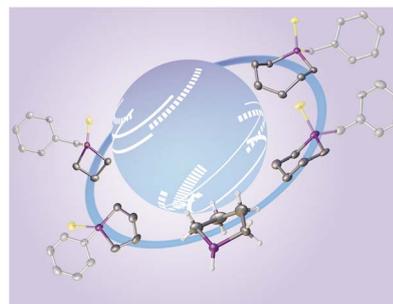
Fabrizio Alberti,\* Khairunisa Khairudin, Jonathan A. Davies, Suphattra Sangmalee, Christine L. Willis, Gary D. Foster and Andy M. Bailey\*



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### Novel synthetic route for (parent) phosphetanes, phospholanes, phosphinanes and phosphepanes

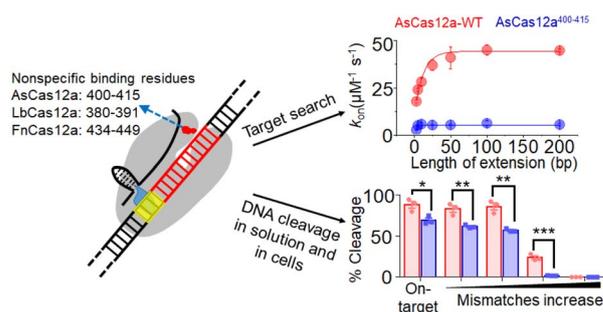
Stephan Reichl, Gábor Balázs and Manfred Scheer\*



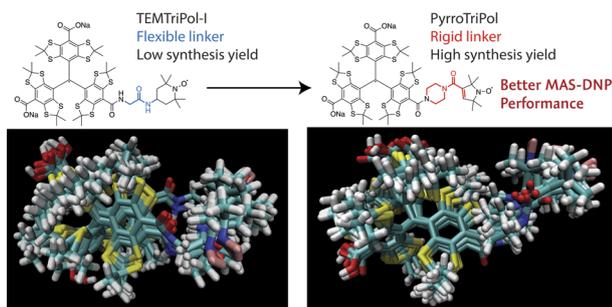
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### Nonspecific interactions between Cas12a and dsDNA located downstream of the PAM mediate target search and assist AsCas12a for DNA cleavage

Ruirui Sun, Yuqian Zhao, Wenjuan Wang, Jun-Jie Gogo Liu and Chunlai Chen\*



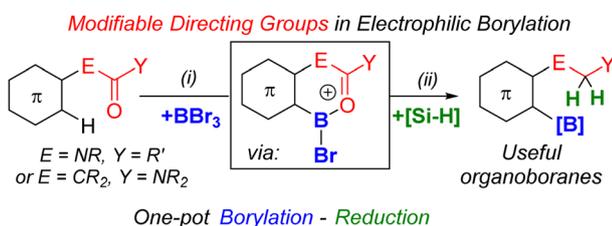
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### PyrroTriPol: a semi-rigid trityl-nitroxide for high field dynamic nuclear polarization

Thomas Halbritter, Rania Harrabi, Subhradip Paul, Johan van Tol, Daniel Lee, Sabine Hediger, Snorri Th. Sigurdsson,\* Frédéric Mentink-Vigier\* and Gaël De Paëpe\*

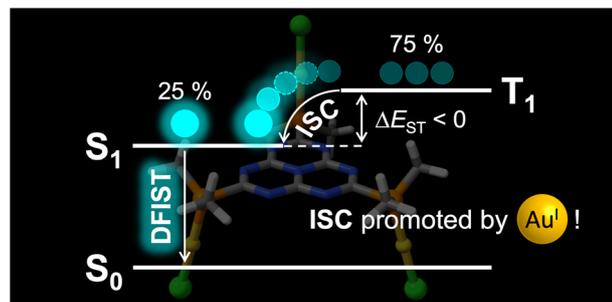
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### Amides as modifiable directing groups in electrophilic borylation

Saqib A. Iqbal, Marina Uzelac, Ismat Nawaz, Zhongxing Wang, T. Harri Jones, Kang Yuan, Clement R. P. Millet, Gary S. Nichol, Ghayoor Abbas Chotana and Michael J. Ingleson\*

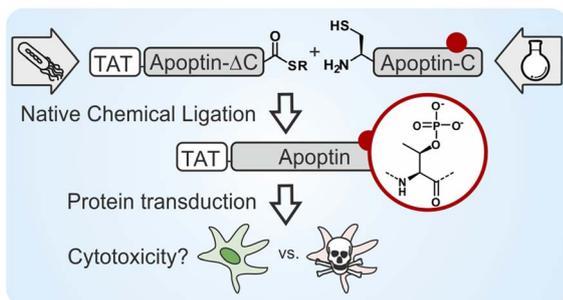
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### Gold(I)-containing light-emitting molecules with an inverted singlet-triplet gap

Daniel Blasco, Rinat T. Nasibullin, Rashid R. Valiev and Dage Sundholm\*

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### Semisynthesis reveals apoptin as a tumour-selective protein prodrug that causes cytoskeletal collapse

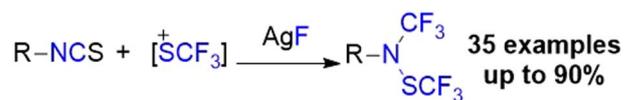
Jasmine Wyatt, Yuen Ka Chan, Mateusz Hess, Mahvash Tavassoli\* and Manuel M. Müller\*



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### Novel N(SCF<sub>3</sub>)(CF<sub>3</sub>)-amines: synthesis, scalability and stability

Yi Yang, Nathalie Saffon-Merceron, Julien C. Vantourout and Anis Tlili\*

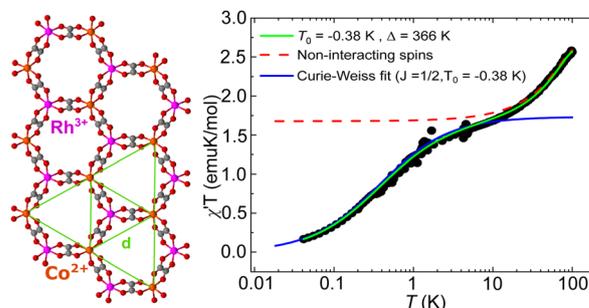


- New motif - 2 sets of conditions - Scalable

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### A quantum spin liquid candidate isolated in a two-dimensional Co<sup>II</sup>Rh<sup>III</sup> bimetallic oxalate network

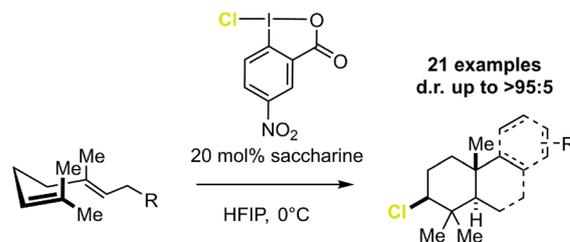
Enrique Burzuri,\* María José Martínez-Pérez, Carlos Martí-Gastaldo, Marco Evangelisti, Samuel Mañas-Valero, Eugenio Coronado, Jesús I. Martínez, Jose Ramon Galan-Mascaros and Fernando Luis\*



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### Biomimetic chlorine-induced polyene cyclizations harnessing hypervalent chloriodane-HFIP assemblies

Julia Binder, Aniruddha Biswas and Tanja Gulder\*



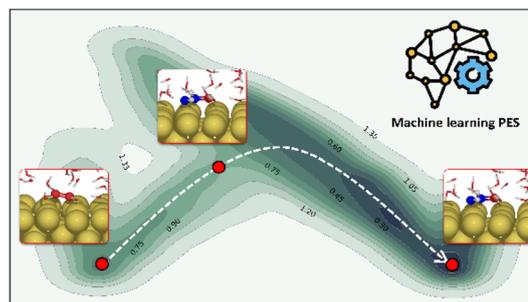
*Bio-inspired concept for emulating the cyclization phase*

+ activating Cl<sup>⊕</sup> + controlling conformation + stabilizing polar intermediates

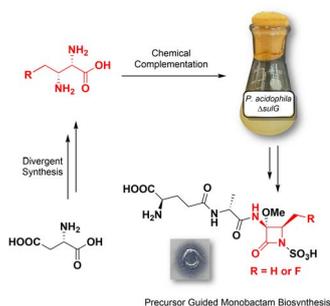
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### Neural network potentials for accelerated metadynamics of oxygen reduction kinetics at Au-water interfaces

Xin Yang, Arghya Bhowmik, Tejs Vegge and Heine Anton Hansen\*



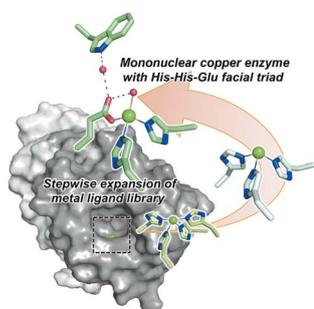
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### Synthesis of functionalized 2,3-diaminopropionates and their potential for directed monobactam biosynthesis

Michael S. Lichstrahl, Lukas Kahlert, Rongfeng Li, Trevor A. Zandi, Jerry Yang and Craig A. Townsend\*

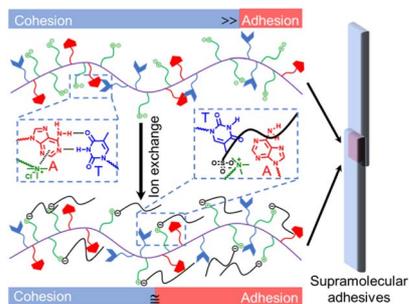
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### An artificial metallolyase with pliable 2-His-1-carboxylate facial triad for stereoselective Michael addition

Ryusei Matsumoto, Saho Yoshioka, Miho Yuasa, Yoshitsugu Morita, Genji Kurisu and Nobutaka Fujieda\*

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### Bioinspired nucleobase-containing polyelectrolytes as robust and tunable adhesives by balancing the adhesive and cohesive properties

Zhi Dong, Jiang Wu, Xinyi Shen, Zan Hua\* and Guangming Liu\*

