

# Dalton Transactions

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**Cover**  
See Venishaa Sethumadhavan and Nonappa, pp. 11770–11789.

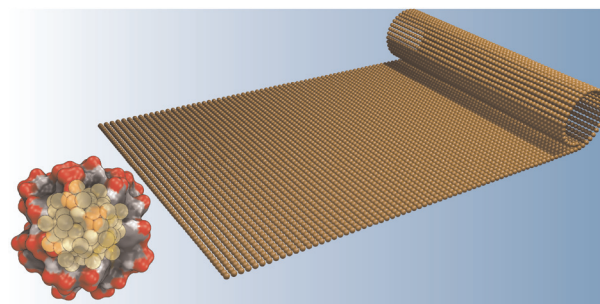
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## PERSPECTIVES

11770

### Atomically precise noble metal nanoclusters for engineering self-assembled two-dimensional materials

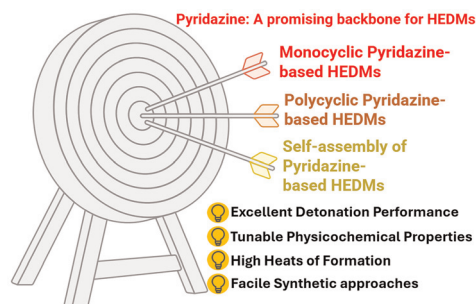
Venishaa Sethumadhavan and Nonappa\*



11790

### Unlocking the potential of pyridazine: a promising backbone for high-energy density compounds

Parasar Kumar, Shreyasi Banik and Srinivas Dharavath\*



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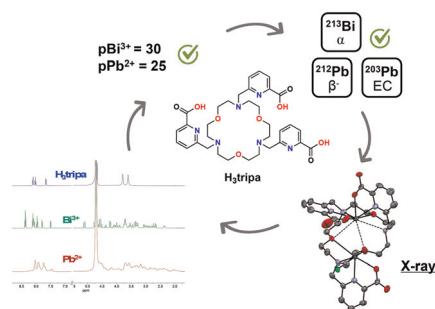
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## COMMUNICATIONS

11801

Evaluating a triaza-18-crown-6 picolinate chelator for [ $^{212}/^{203}\text{Pb}$ ]Pb $^{2+}$  and [ $^{212}/^{213}\text{Bi}$ ]Bi $^{3+}$  theranostics

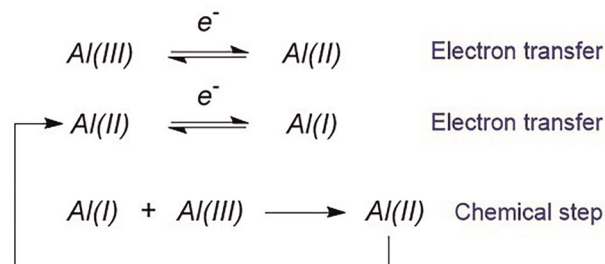
Desiree Fiaccabrino, Tinotenda Masvikeni, Brooke L. McNeil, Brian O. Patrick, María de Guadalupe Jaraquemada-Peláez,\* Paul Schaffer\* and Chris Orvig\*



11808

Probing the redox chemistry of  $\beta$ -diketiminato supported aluminium complexes

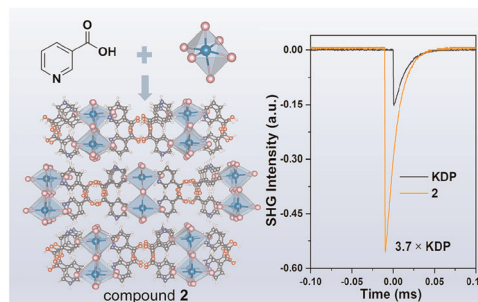
Fáinché Murphy, Madeleine Bell, Elyse Aitken, Brian G. McMillan\* and Catherine E. Weetman\*



11812

## Strong second-harmonic generation response in an organic–inorganic hybrid antimony bromide

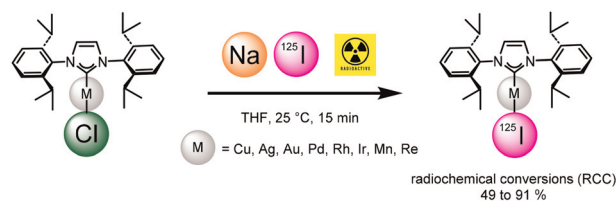
Xuemei Wen, Gangji Yi, Qinglan Zhong, Caihong Guo,\* Hongmei Zeng, Guohong Zou and Zhien Lin\*



11817

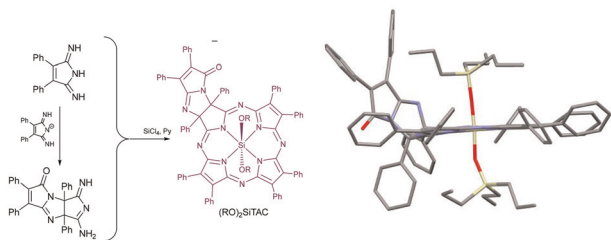
## Chloride-to-(radio)iodide exchange on NHC–metal complexes

Ginevra Giobbo, Killian Henault, Gauthier Foucras, Anais Prigent, Sylvain Gaillard\* and Thomas Cailly\*



## COMMUNICATIONS

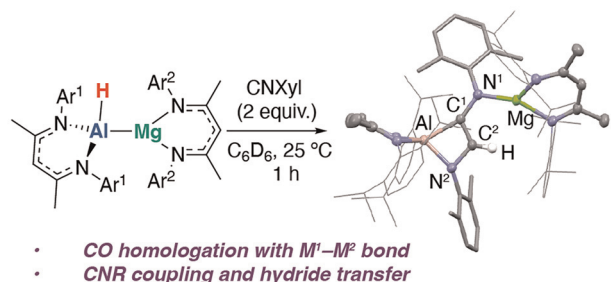
11822



### Silicon(IV) tetraazachlorin – an unusual cycloaddition product from 3,4-diphenyl-1H-pyrrole-2,5-diimine

Ekaterina D. Rychikhina, Svetlana S. Ivanova,\*  
Nikolay V. Somov, Dmitry A. Lazovskiy and  
Pavel A. Stuzhin\*

11828

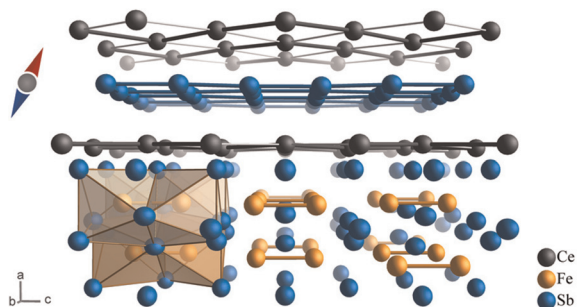


### Homocoupling of C<sub>1</sub> building blocks by a heterometallic Mg–Al complex

Wenbang Yang, Andrew J. P. White and  
Mark R. Crimmin\*

## PAPERS

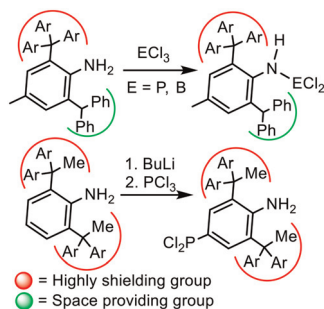
11833



### Synthesis, structure, magnetic and transport properties of CeFeSb<sub>3</sub>

Manuel Schulze, Bastian Rubrecht, Felix Seewald,  
Kati Finzel, Bernd Büchner, Anja U. B. Wolter,  
Hans-Henning Klaus, Thomas Doert\* and  
Michael Ruck

11845



### The investigation of the steric hindrance of anilines by means of reactions with PCl<sub>3</sub> and BCl<sub>3</sub>

Vlastimil Němec, Maksim A. Samsonov,  
Zdeňka Růžicková, Jan Vrána\* and Aleš Růžička

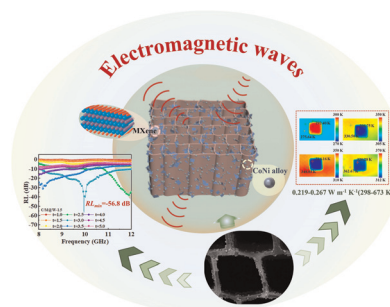


## PAPERS

11857

### Bifunctional CoNi/MXene@Wood with vertical aperture structure for electromagnetic wave absorption and infrared stealth

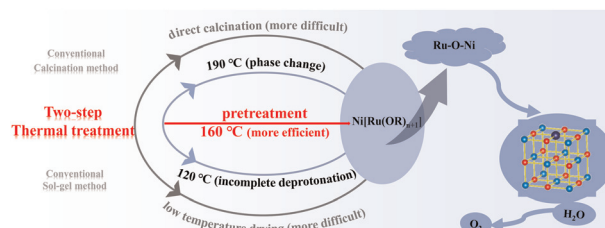
Yuanyuan Li, Mingqiang Ning,\* Zhe Zou, Ming Gao and Qikui Man



11868

### Construction of Ni<sup>3+</sup>-rich, Ru-doped NiO nanoparticles with lattice strain for enhanced OER performance

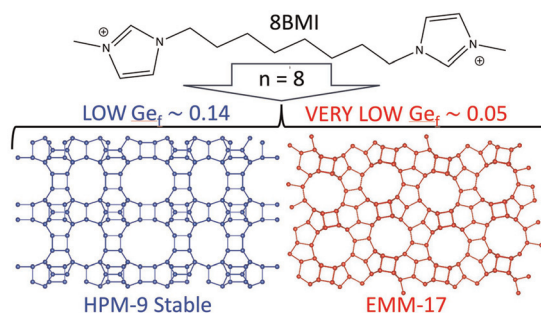
Yi Wang, Yu Zhang, Jingce Bi, Huichun Xue, Ningning Liu, Jie Sun, Xia Zhang, Zhuopeng Wang, Lin Zhu and Yide Han\*



11878

### An imidazolium dication affords a stable UWY-like zeolite and enables a subtle structure direction towards EMM-17

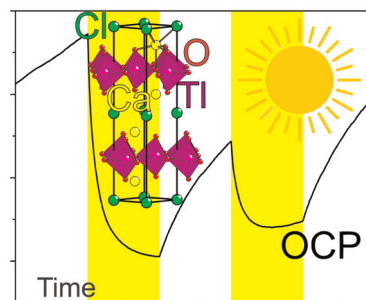
Huajian Yu, Peng Lu, Zihao Rei Gao,\* Alvaro Blanco and Miguel A. Cambor\*



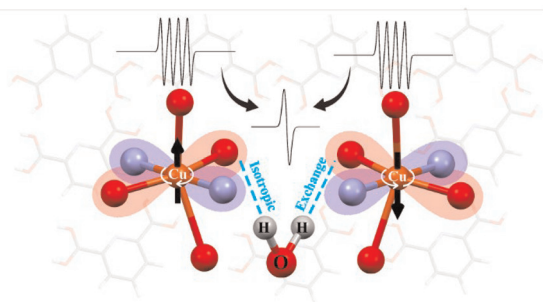
11887

### Layered anion ordering in oxide chloride Ca<sub>2</sub>TiO<sub>3</sub>Cl

Lars Botolv Ekei Bråtalen, Ola Nilsen, Dipankar Saha, Chris Erik Mohn, Athanasios Chatzitakis and Martin Valldor\*



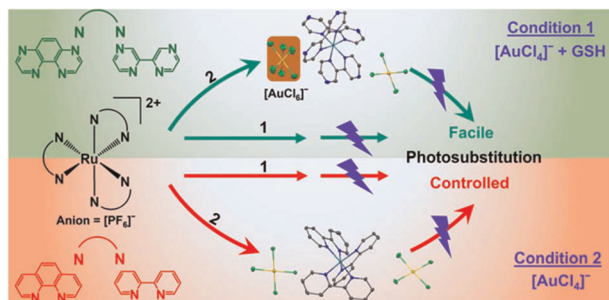
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### Water-mediated isotropic exchange in an extended Cu(II) crystal lattice: a structural, magnetic and EPR study

Ana L. Pérez, Axel Kemmerer, María de los Milagros Citta, Sebastián Suarez, Ricardo Baggio, Ayelén F. Crespi, Juan M. Lázaro-Martínez, Carlos A. Ramos, Marcelo Vasquez Mansilla and Carlos D. Brondino\*

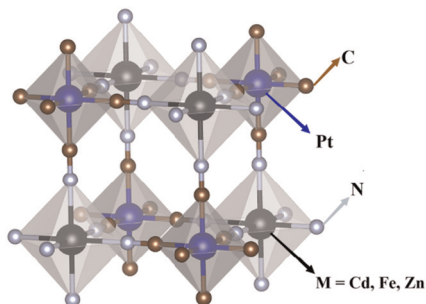
11905



### Controlled photosubstitution of Ru(II) polypyridyl complexes with gold chloride

Jitendra K. Sahu, Anju Pal, Mohit Kulshrestha, Srinu Tothadi and Kalyan K. Sadhu\*

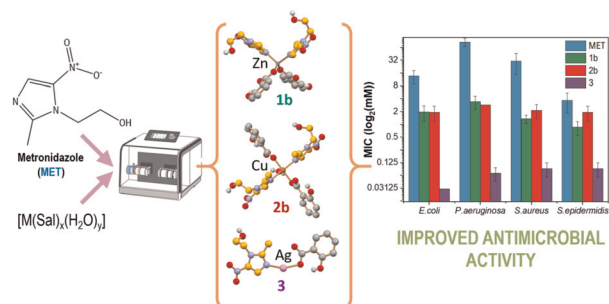
11914



### Anharmonic properties of Prussian blue analogues $M^{II}Pt^{IV}(CN)_6$ ( $M^{II} = Cd, Fe, Zn$ )

Geng Wang, Zhi-Hao Yao, Ken Suzuki, Ying Chen and Lei Wang\*

11925



### Zinc(II), copper(II) and silver(I) salicylate-metronidazole complexes as novel antimicrobial agents

Laura Contini, Raymond J. Turner\* and Fabrizia Grepioni\*

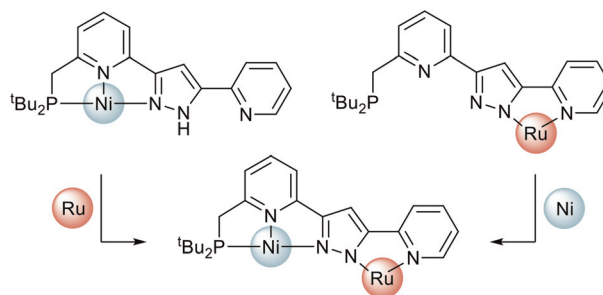


## PAPERS

11935

## Nickel–ruthenium heterobimetallic complexes of a dinucleating unsymmetrical pincer ligand

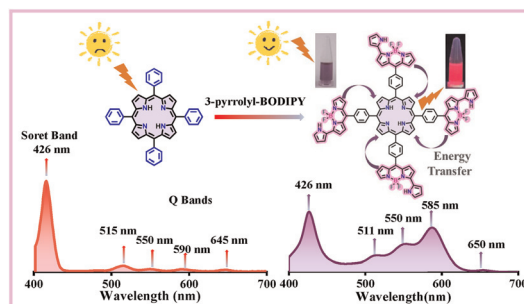
Vuyelwa Ngwenya, Michael A. Stevens, Michael G. Gardiner and Annie L. Colebatch\*



11943

Synthesis and studies of *meso*-3-pyrrolyl BODIPYnyl porphyrins

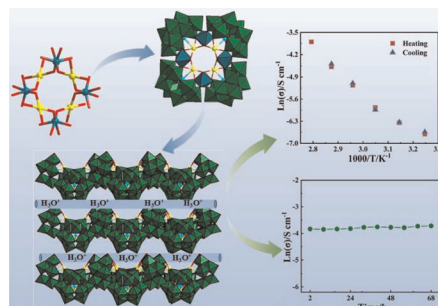
Abani Sarkar, Debendra Tewary, Ankit Kumar and Mangalampalli Ravikanth\*



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## Crown-type tetranuclear Ag-POM exhibits excellent proton conductivity performance

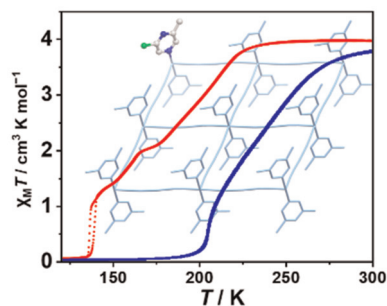
Yahao Sun, Minzhen Cai, Pengtao Ma, Jingyang Niu\* and Jingping Wang\*



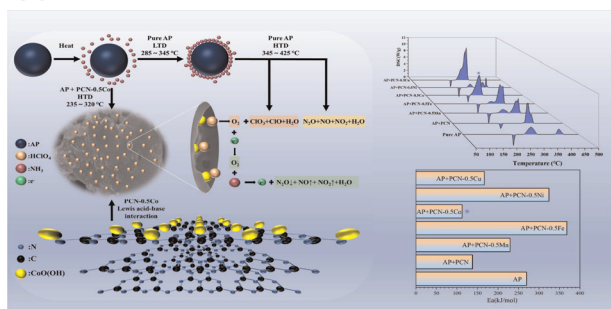
11958

## Multi-step spin-crossover in a 2D Hofmann-type clathrate with bisubstituted pyrazine

Xiangkun Wen, Mengling Wu, Yancong Chen, Yanru Chen, Zhaoping Ni\* and Mingliang Tong



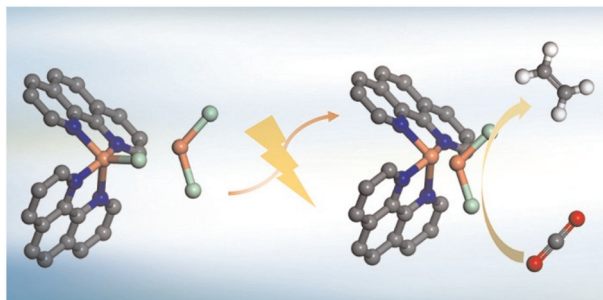
11964



### Transition metal-doped porous carbon nitride composites serve as highly reactive catalysts for thermal decomposition of ammonium perchlorate

Qin Liu, Siyu Ma, Xingyang Cui, Shuyue Xu, Jinchao Ma\* and Hua Qian\*

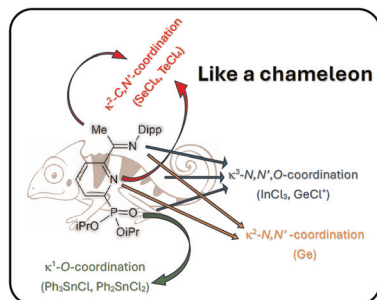
11977



### Reconfiguration of a mixed-valence copper complex during CO<sub>2</sub> electroreduction promotes CO<sub>2</sub>-to-C<sub>2</sub>H<sub>4</sub> conversion

Xinkai Wang, Yang Yang and Xian-Ming Zhang\*

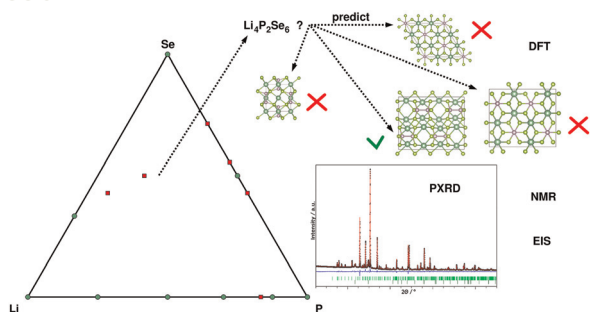
11985



### Conformational and electronic variability of *N,N',O*-ligand documented on its coordination to main group halides

Yaraslava Milasheuskaya, Zdeňka Růžicková, Aleš Růžička, Štěpán Podzimek, Roman Jambor and Miroslav Novák\*

11996



### Li<sub>4</sub>P<sub>2</sub>Se<sub>6</sub> – structure and properties

Sven Neuberger, Neeshma Mathew, Sheyi Clement Adediwura, Hector Javier Cortes Sanchez and Jörn Schmedt auf der Günne\*

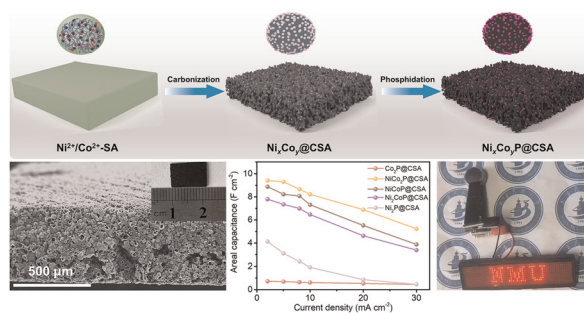


## PAPERS

12006

### Porous carbon membrane embedded with high-loading NiCoP nanoparticles as bifunctional electrodes for supercapacitors and electrocatalytic water splitting

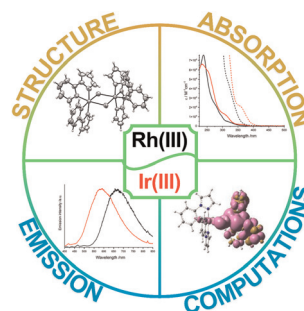
Fang Wang, Mengjuan Xu, Jinyu Ma, Yiming Li, Jiao Zhang, Zhengguo Zhang and Shixiong Min\*



12018

### Spectroscopic, structural and photophysical characterization of chloro-bridged iridium(III) and rhodium(III) dinuclear complexes with 1-phenyl-1H-pyrazole and their analogues with 1-(2,4-difluorophenyl)-1H-pyrazole

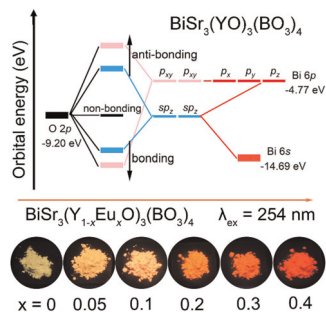
Patryk Wójcik, Camille Latouche,\* Kinga Suwińska and Anna Kamecka\*



12030

### Electronic structure analysis, a large Stokes shift of Bi<sup>3+</sup> in BiSr<sub>3</sub>(YO)<sub>3</sub>(BO<sub>3</sub>)<sub>4</sub> and color-tunable emissions by energy transfer to Eu<sup>3+</sup> dopants

Yan Gao,\* Guangxiang Lu, Rihong Cong\* and Tao Yang\*



12041

### Constructing crystalline NiCo<sub>2</sub>O<sub>4</sub>/amorphous MoNiCo-LDH through high valence Mo doping for high-performance hybrid supercapacitors

Juan Lei, Yan Zhang, Yujing Wang, Xiaoli Ren, Lijun Cheng, Qinqin He and Shuang Wang\*

