

# Dalton Transactions

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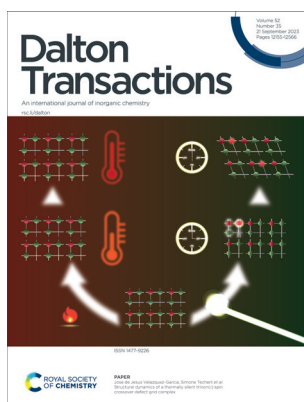
ISSN 1477-9226 CODEN DTARAF 52(35) 12155–12566 (2023)



### Cover

See Jan Kotek *et al.*,  
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2023, **52**, 12208.



### Inside cover

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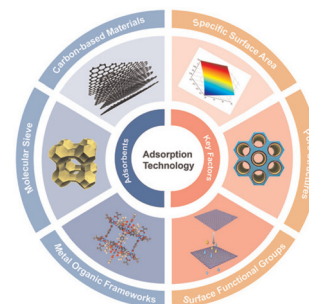
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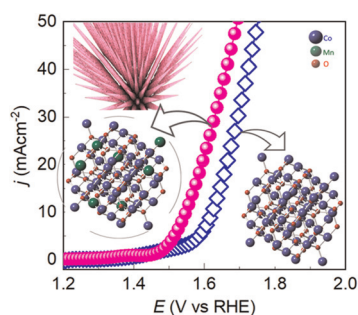


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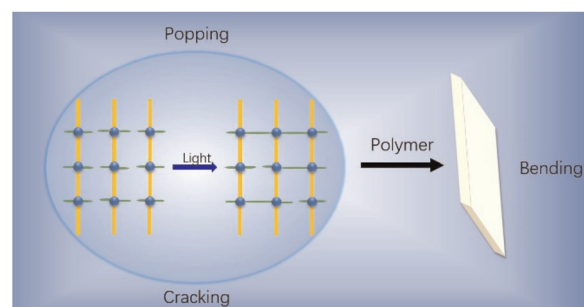


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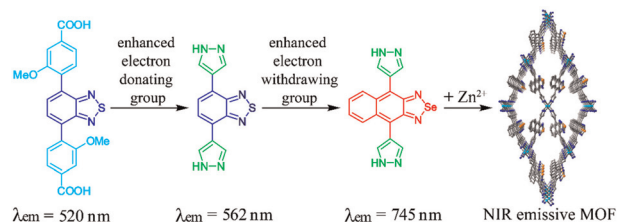
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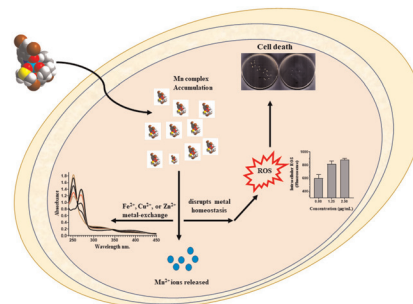
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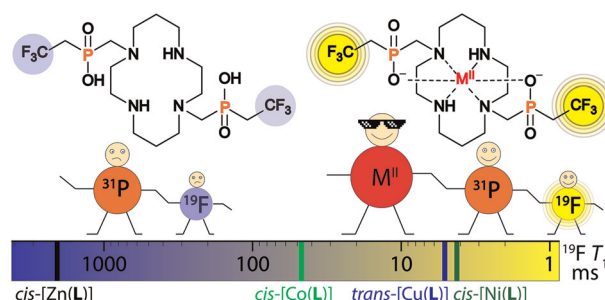


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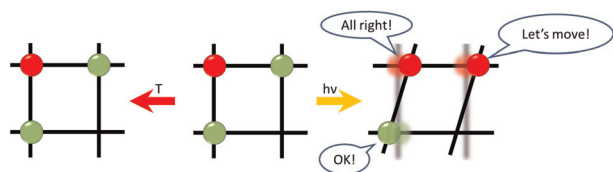
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Filip Koucký, Jan Kotek,\* Ivana Císařová, Jana Havlíčková, Vojtěch Kubíček and Petr Hermann



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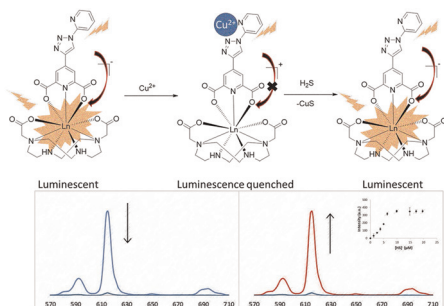
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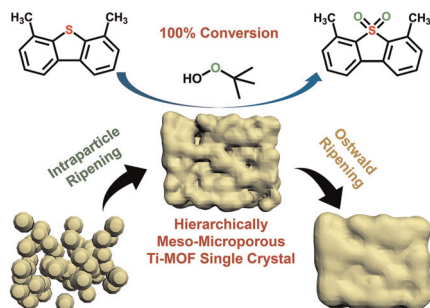
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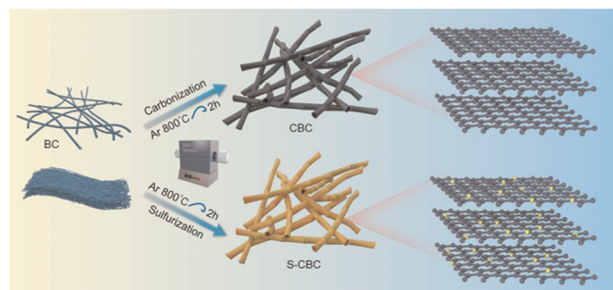
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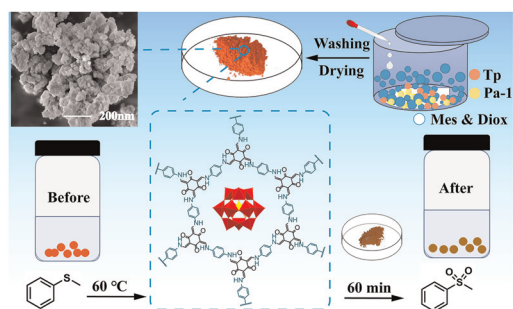


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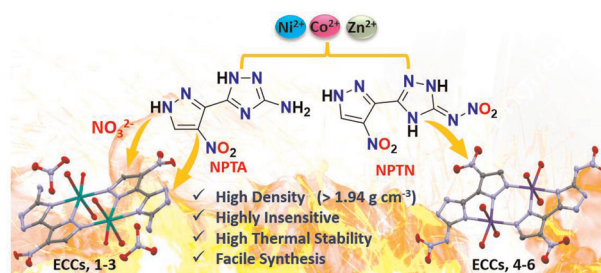
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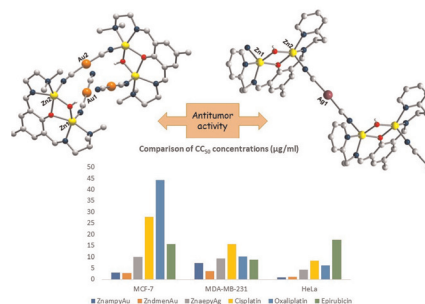
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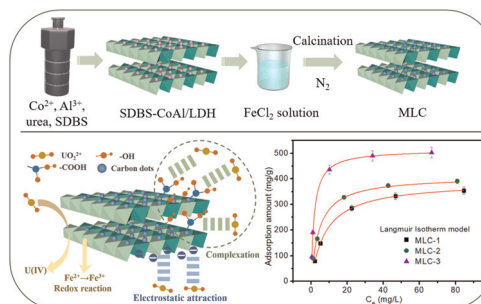
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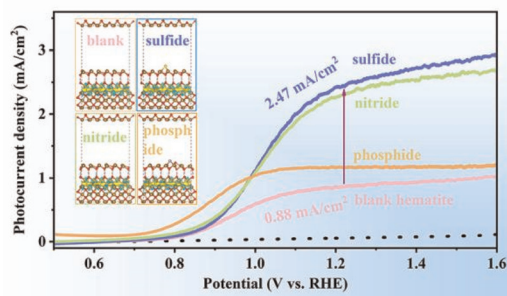
Yan Wang,\* Yong Zhang,\* Xiaolin Liu, Sen Sun, Shiyi Qin, Jiaqi Huang and Bowei Chen





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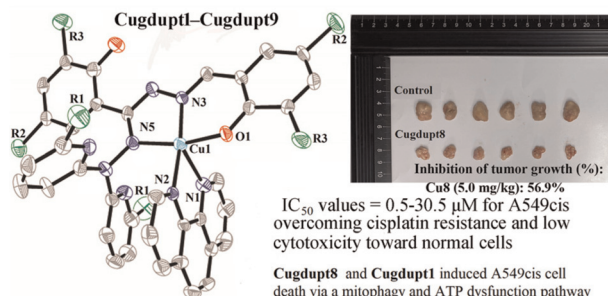
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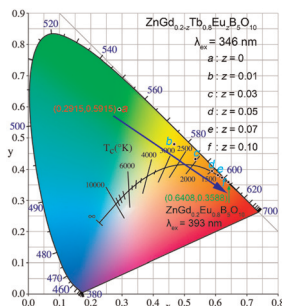
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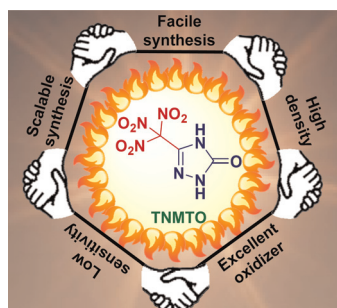
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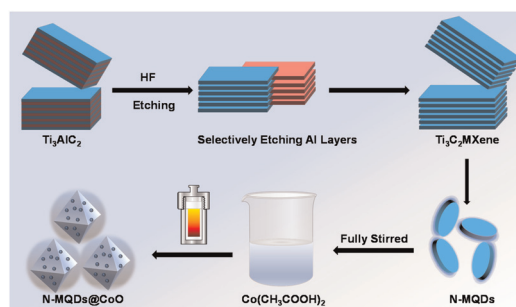


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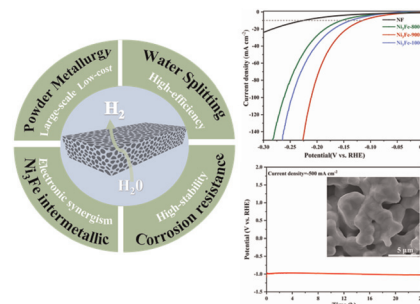
Lan Ding,\* Siyang Wang, Yaoyao Tang, Xinyi Chen and Hongjun Zhou\*



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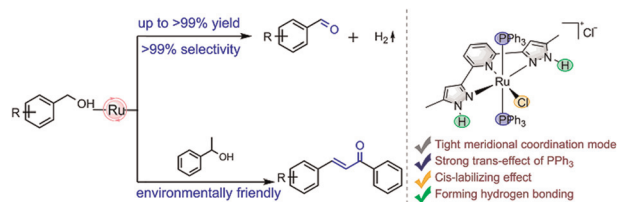
Li Li, Zhongzhe Bai, Pingping Gao\* and Ting Lei\*



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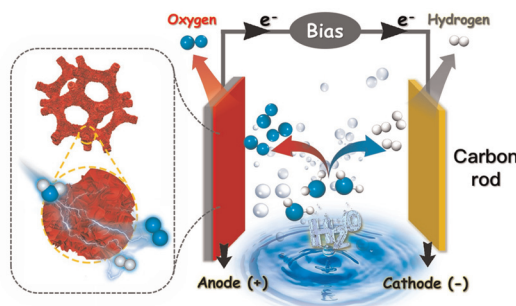
Yinyin Chen, Tianhua Cui, Hua Chen, Xue li Zheng, Haiyan Fu\* and Ruixiang Li\*



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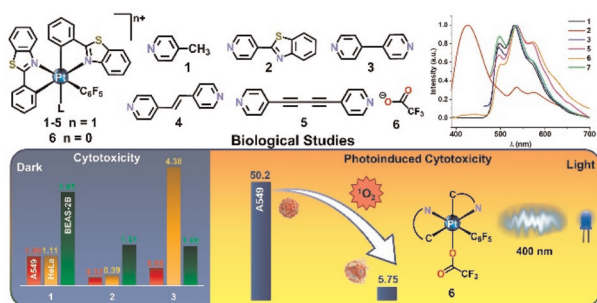
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Xiaomei Xu, Qiaoling Mo, Kuangqi Zheng, Zhaodi Xu\* and Hu Cai\*



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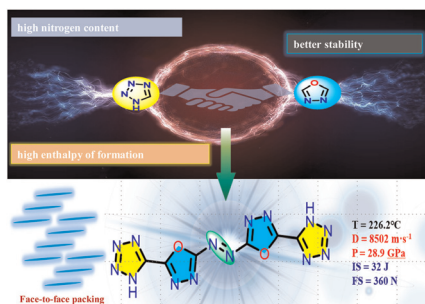
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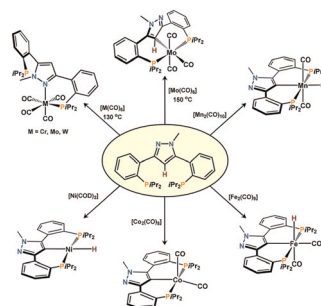
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Chao Zhang, Mei-Qi Xu, Wen-Shuai Dong, Zu-Jia Lu, Han Zhang, Xiao-Wei Wu, Zhi-Min Li and Jian-Guo Zhang\*

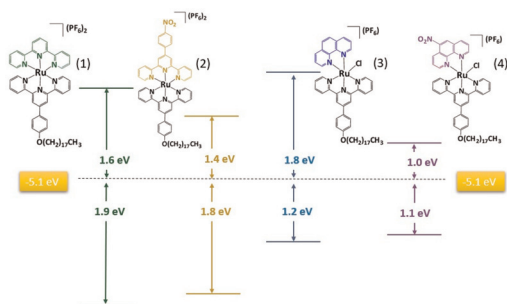
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### Base metal complexes featuring a new pyrazole-derived PCP pincer ligand

Heiko Schratzberger, Lorenzo A. Liebminger, Berthold Stöger, Luis F. Veiros and Karl Kirchner\*

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Samudra Amunugama, Eyrar Asempa, Elena Jakubikova\* and Cláudio N. Verani\*



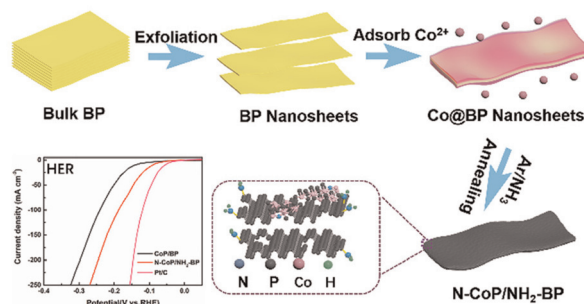


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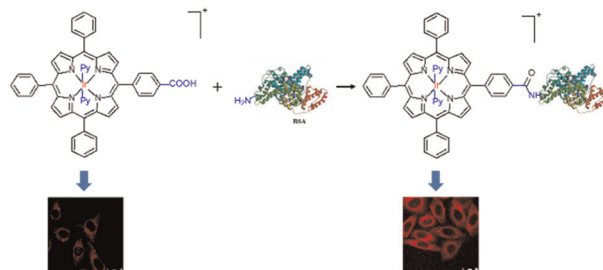
Liang Fang,\* Yanping Xie, Feiya Xu, Miao Wang and Gang Wang



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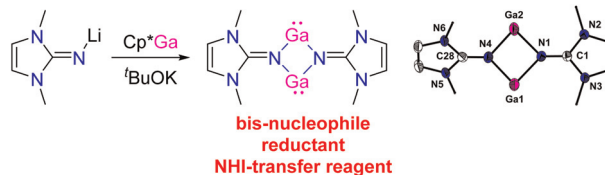
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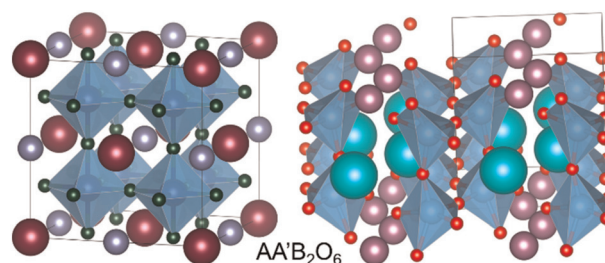
Bing Wang, Wenhao Chen, Jiangnan Yang, Linfang Lu, Jiyong Liu, Liang Shen and Di Wu\*



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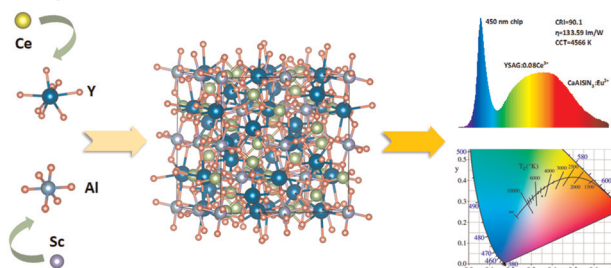
### Investigation on the predictive power of tolerance factor $\tau$ for A-site double perovskite oxides

Elisabeth K. Albrecht and Antti J. Karttunen\*



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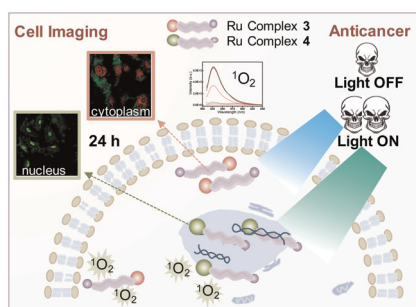
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Hanwei Zhao, Dashuai Sun,\* Zeyu Lyu, Sida Shen, Lixuan Wang, Luhui Zhou, Zheng Lu, Jianhui Wang, Jinhua He\* and Hongpeng You\*

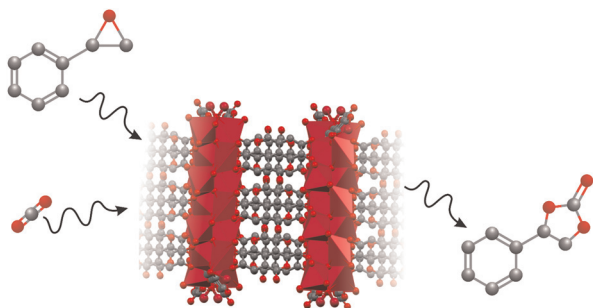
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### Ruthenium(II) polypyridyl complexes with visible light-enhanced anticancer activity and multimodal cell imaging

Yan Kang, Yao Zhao,\* Yuanyuan Wei, Yang Zhang, Zhaoying Wang, Qun Luo, Jun Du\* and Fuyi Wang\*

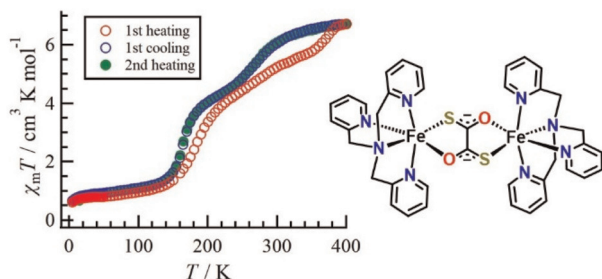
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Juan L. Obeso, J. Gabriel Flores, Catalina V. Flores, Valeria B. López-Cervantes, V. Martínez-Jiménez, José Antonio de los Reyes, Enrique Lima, Diego Solís-Ibarra, Ilich A. Ibarra,\* Carolina Leyva\* and Ricardo A. Peralta\*

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Takuya Kanetomo,\* Koki Yokoyama, Yudai Suzuki, Hiromichi Ida, Atsushi Okazawa and Masaya Enomoto\*

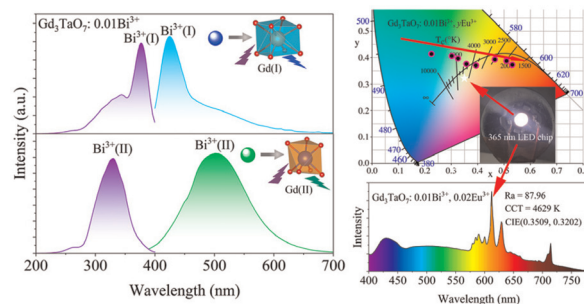


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# Investigation of the luminescence properties and energy transfer mechanisms in $\text{Gd}_3\text{TaO}_7:\text{Bi}^{3+}$ , $\text{Eu}^{3+}$ phosphors for their potential application in full-spectrum WLEDs

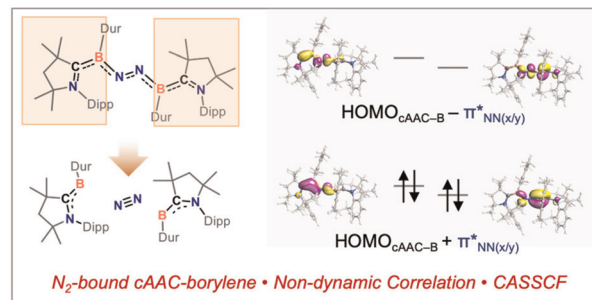
Zhicheng Liao, Liting Qiu, Qian Zhang, Xiantao Wei, Yonghu Chen\* and Min Yin\*



12517

# Revisiting the electronic structure of $\text{N}_2$ -bound cAAC-borylene at the CASSCF level: a detailed bonding picture of borylene- $\text{N}_2$ interaction

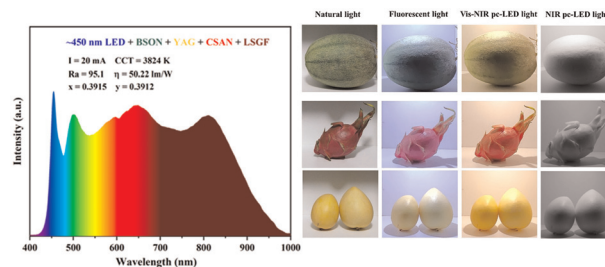
Susovon Ghosh, Akhil Bhardwaj and Bhaskar Mondal\*



12526

# An efficient $\text{LiSrGaF}_6:\text{Cr}^{3+}$ fluoride phosphor with broadband NIR emission towards sunlight-like full-spectrum lighting

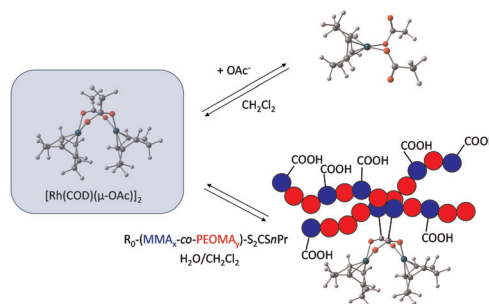
Di Wu, Yan Li, Yu Liao, Xixiang Pan, Songbin Liu,\* Wanfang Zou, Jiaqing Peng\* and Xinyu Ye\*



12534

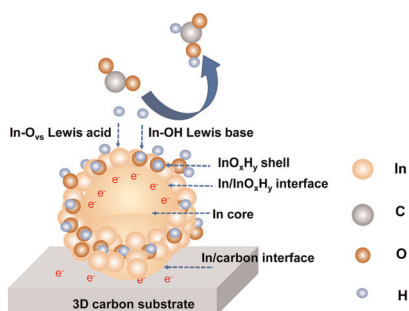
# Acetate ion addition to and exchange in (1,5-cyclooctadiene)rhodium(I) acetate: relevance for the coagulation of carboxylic acid-functionalized shells of core-crosslinked micelle latexes

Ambra Maria Fiore, Valentina Petrelli, Christophe Fliedel, Eric Manoury, Piero Mastroianni\* and Rinaldo Poli\*



## PAPERS

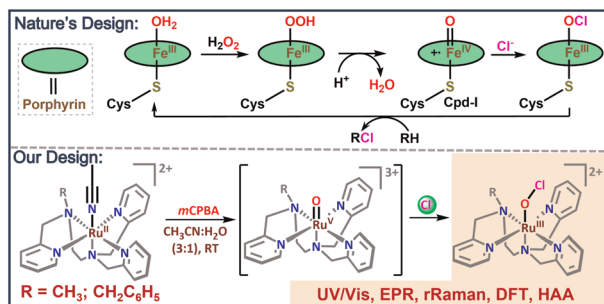
12543



### Native frustrated Lewis pairs on core-shell In@InO<sub>x</sub>H<sub>y</sub> enhances CO<sub>2</sub>-to-formate conversion

Hu Li, Yuandong Yan, Shicheng Yan,\* Zhentao Yu and Zhigang Zou

12552

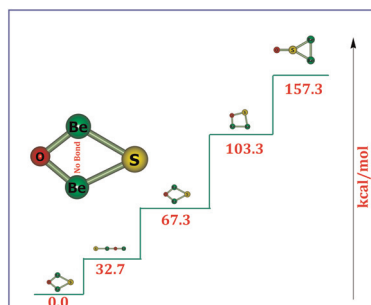


### Generation of Ru(III)-hypochlorite with resemblance to the heme-dependent haloperoxidase enzyme

Rakesh Kumar, Faiza Ahsan, Ayushi Awasthi, Marcel Swart\* and Apparao Draksharapu\*

## COMMENTS

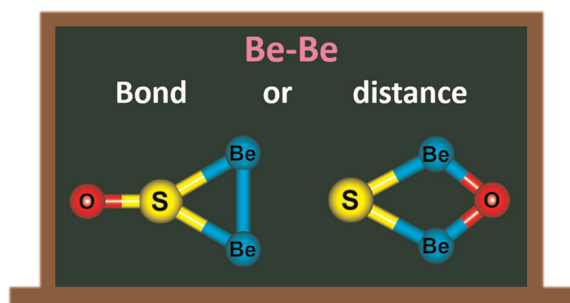
12560



### Comment on "Strong Be–Be bonds in double-aromatic bridged Be<sub>2</sub>(μ-SO) molecules" by F. Rezaie and S. Noorizadeh, *Dalton Transactions*, 2022, 51, 12596

Ankur Kanti Guha

12562



### Reply to the 'Comment on "Strong Be–Be bonds in double-aromatic bridged Be<sub>2</sub>(μ-SO) molecules"' by A. Guha, *Dalton Transactions*, 2023, 52, D3DT00774J

F. Rezaie and S. Noorizadeh\*

