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IN THIS ISSUE

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Cover
See Hidehiro Uekusa *et al.*,
pp. 5668–5674.

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2025, **54**, 5668.

EDITORIAL

5612

Main group element compounds in materials and catalysis

Selvarajan Nagendran,* Ramaswamy Murugavel* and
Eric Rivard*

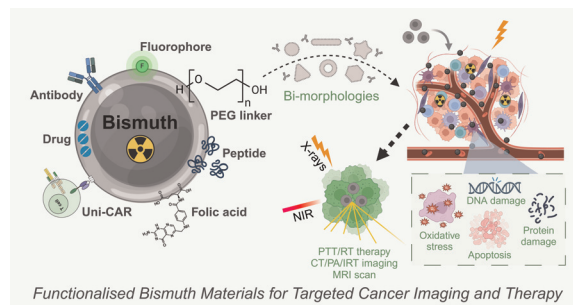


PERSPECTIVE

5614

Targeted bismuth-based materials for cancer

Amna Batool, Ina Kopp, Manja Kubeil,
Michael Bachmann,* Philip C. Andrews* and
Holger Stephan*



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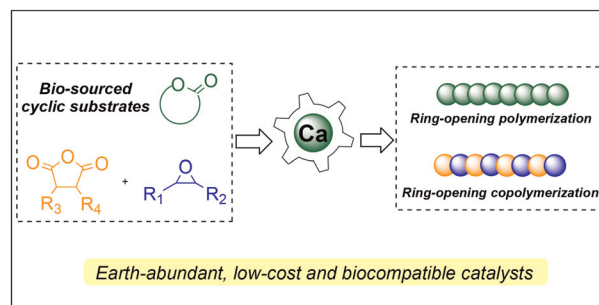
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5640

Recent progress in calcium-catalyzed polyester synthesis

Jesús Naranjo, José A. Castro-Osma, Felipe de la Cruz-Martínez* and Agustín Lara-Sánchez*

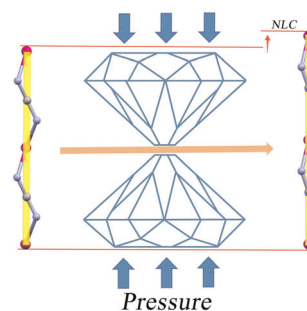


COMMUNICATIONS

5650

Negative linear compressibility from helix in zinc carbodiimide

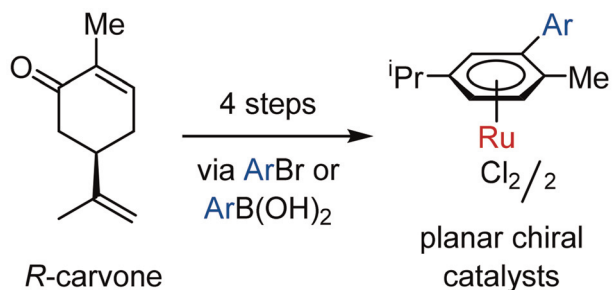
Chengxi Li, Qiulin Chen, Guohao Zhang, Gaofeng Zhang, Qingxin Zeng,* Jian Hao and Yinwei Li*



5655

Planar chiral arene ruthenium complexes derived from *R*-carvone

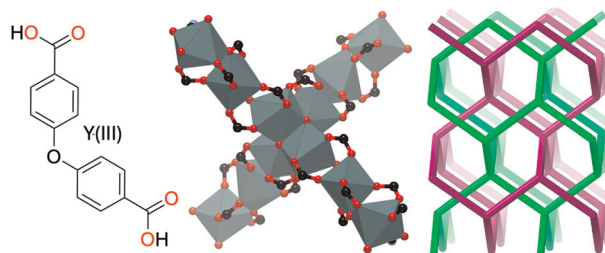
Mikhail A. Boym, Roman A. Pototskiy, Evgeniya S. Podyacheva, Dmitry V. Muratov, Yulia V. Nelyubina and Dmitry S. Perekalin*



5659

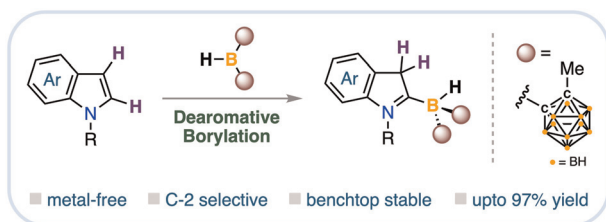
How metal ions link in metal–organic frameworks: dots, rods, sheets, and 3D secondary building units exemplified by a Y(III) 4,4'-oxydibenzoate

Cyrielle L. F. Dazem, Niklas Ruser, Erik Svensson Grape, A. Ken Inge, Davide M. Proserpio, Norbert Stock* and Lars Öhrström*



COMMUNICATIONS

5664

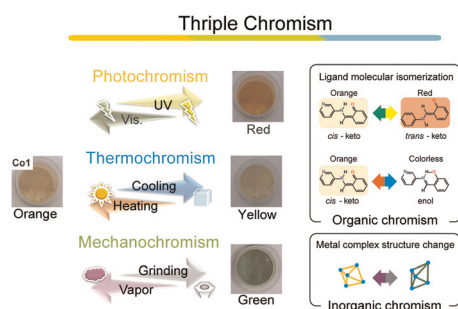


Dearomative C2-borylation of indoles

Ayesha Begum, Manjur O. Akram and Caleb D. Martin*

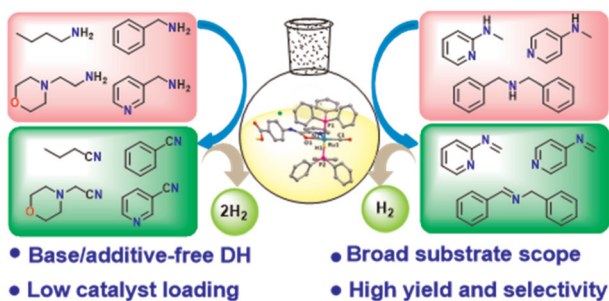
PAPERS

5668

Triple-chromic (photo-, thermo-, and mechano-chromic) metal complexes containing *N*-salicylideneaminopyridine ligands

Haruki Sugiyama, Atsuko Arita, Akiko Sekine and Hidehiro Uekusa*

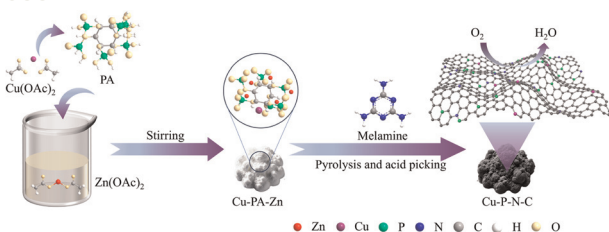
5675



Acceptorless oxidant-free dehydrogenation of amines catalyzed by Ru-hydride complexes of amide-acid/ester ligands

Samanta Yadav and Rajeev Gupta*

5685



Cu- and P-co-doped nitrogen-doped hierarchical carbon for enhanced oxygen reduction reaction in zinc-air batteries

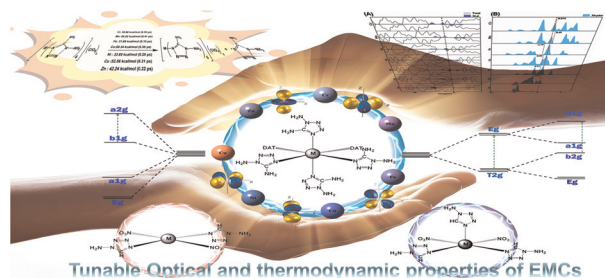
Zhongyuan Rong, Mengwei Li, Yijie Deng* and Haibo Tang*



5693

Tunable optical and thermodynamic properties: the ignition of energetic metal complexes with different crystal fields

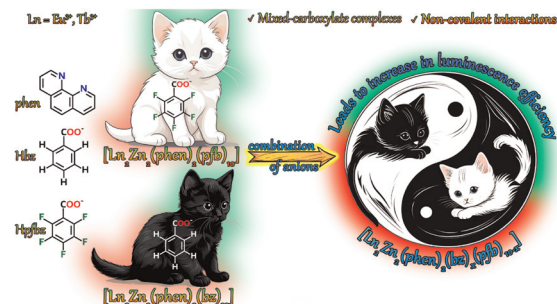
Kun Wang,* Xiaoqi Yang, Peipei Zhang, Shu Bu, Longjiu Cheng and Jianguo Zhang



5708

Luminescence enhancement by mixing carboxylate benzoate–pentafluorobenzoate ligands in polynuclear $\{Eu_2Zn_2\}$ and $\{Tb_2Zn_2\}$ complexes

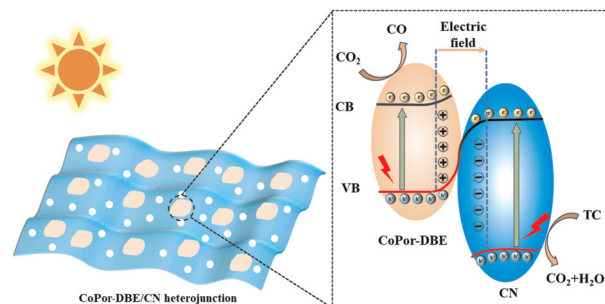
Alena E. Bolot'ko,* Maxim A. Shmelev, Alexandr S. Chistyakov, Julia K. Voronina, Evgeniya A. Varaksina, Natalia V. Gogoleva, Ilya V. Taydakov, Alexey A. Sidorov and Igor L. Eremenko



5721

A bi-functional S-scheme cobalt-porphyrin conjugated polymer/ C_3N_4 heterojunction for cooperative CO_2 reduction and tetracycline degradation

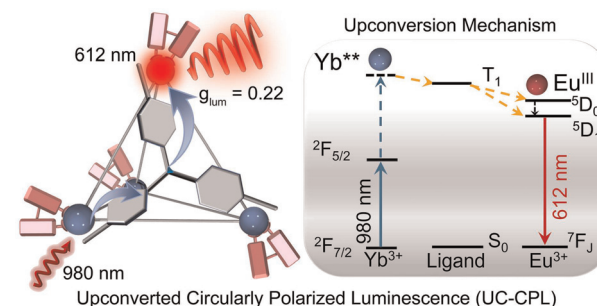
Chao Xu, Shien Guo,* Jiaxin Wang, Yiqing Jiang, Xiaomin Wu, Dandan Lin and Yuting Xiao*



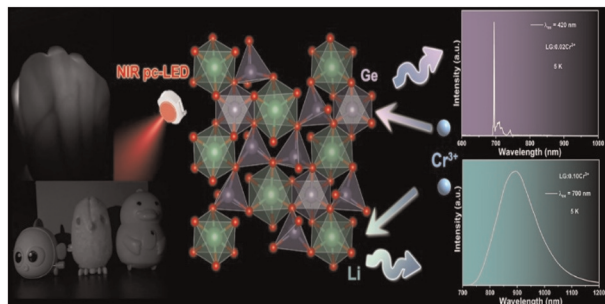
5731

Strong upconverted circularly polarized emission from a chiral tetrahedral Yb/Eu cage

Zhiwei Yao, Ting Gao, Pengfei Yan, Yanyan Zhou* and Hongfeng Li*



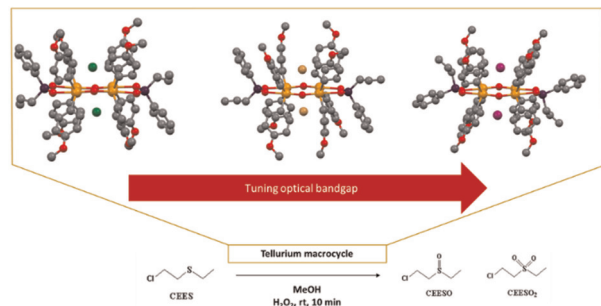
5739



Dual center luminescence characteristics and multifunctional applications of $\text{Li}_2\text{Ge}_7\text{O}_{15}:\text{Cr}^{3+}$ near-infrared phosphors

Luhui Zhou, Dashuai Sun,* Zeyu Lyu, Pengcheng Luo, Zheng Lu, Xiaowei Zhang, Shuai Wei and Hongpeng You*

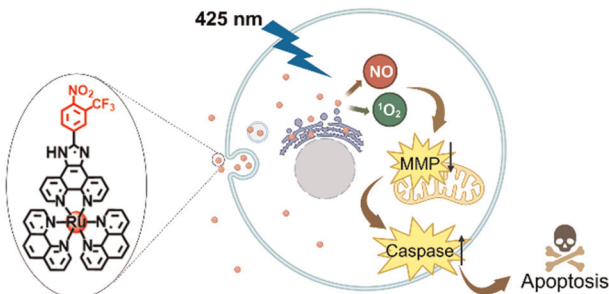
5747



Functionalized organotellurium macrocycles: tuning their optical bandgap and investigation of their catalytic activity

Calvin Samuel, Velpula Pramod, Swandhana V. S., Alexander Steiner* and Viswanathan Baskar*

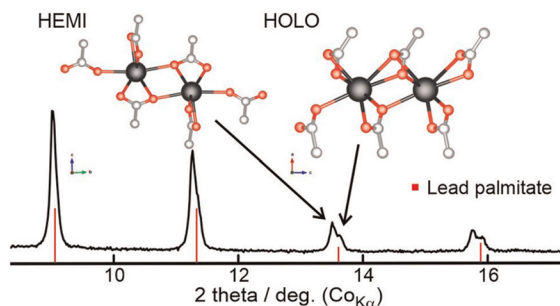
5753



Phototherapeutic activity of polypyridyl ruthenium(II) complexes through synergistic action of nitric oxide and singlet oxygen

Jia-Hao Dong, Bai-Hua Chen, Shan Jiang, Xiao-Yin Wu, Wen-Wen Feng, Jin-Hao Li, Zheng-Yin Pan,* Yingju Liu and Liang He*

5764



High temperature interactions of lead palmitate with linseed oil

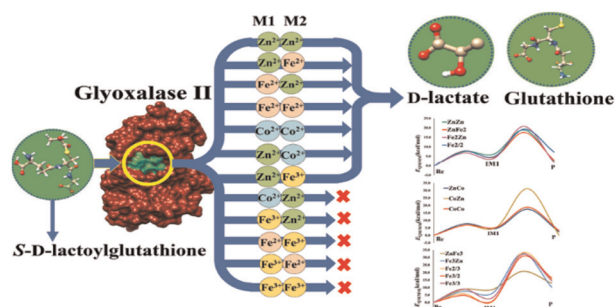
Ruslan Barannikov, Joen Hermans, Jiří Plocek, Petr Bezdička, Anna Vykydalová, Andrii Mahun, Libor Kobera and Silvie Švarcová*



5779

Metal preference of glyoxalase II, a quantum mechanics/molecular mechanics study

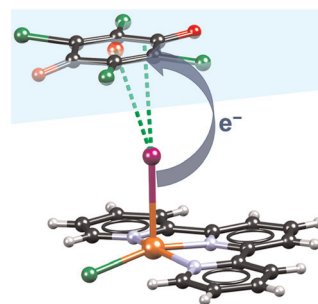
Javad Shirazi, Sonia Jafari, Ulf Ryde and Mehdi Irani*



5796

Charge transfer between a metal-bound halide and a quinone through π -hole interactions leads to bulk conductivity

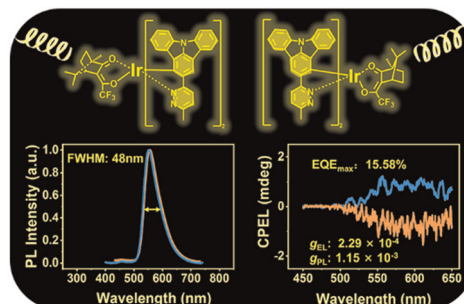
Lidija Molčanov, Anna Krawczuk,* Luka Pavić, Marijana Jurić, Lidija Androš Dubraja and Krešimir Molčanov*



5805

Circularly polarized narrowband phosphorescent organic light-emitting diodes

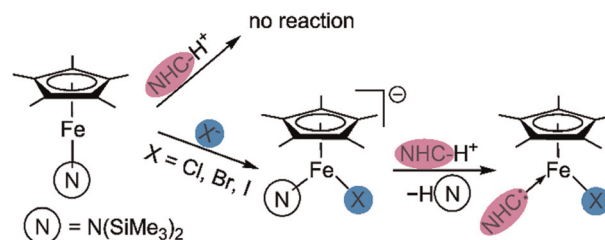
Shaohua Wu, Ping Chen, Xiaoyang Xia, Wenya Wang, Qifei Xie, Yanyu Qi,* Huabo Han,* Liang Zhou* and Guangzhao Lu*



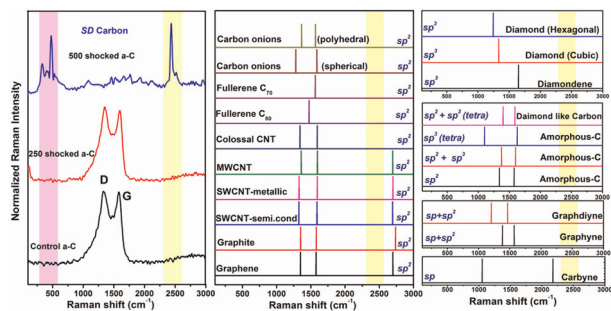
5812

The "pogo stick" complex $[\text{FeCp}^*\{\text{N}(\text{SiMe}_3)_2\}]$: spin state properties, adduct formation with Lewis bases, and reactivity towards weakly Brønsted acidic protonated NHCs

Julian Zinke, Clemens Bruhn, Serhiy Demeshko and Ulrich Siemeling*



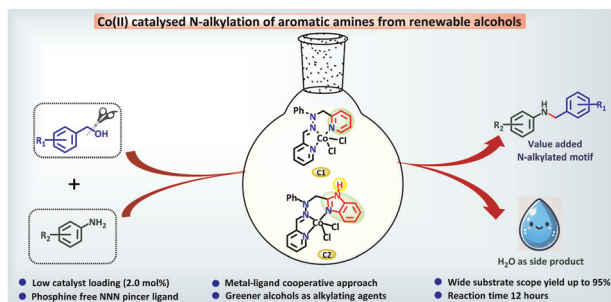
5829



Acoustic shock wave-induced formation of an undefined high-pressure carbon allotrope

Sivakumar Aswathappa, Lidong Dai,* Sahaya Jude Dhas Sathiyadhas and Raju Suresh Kumar

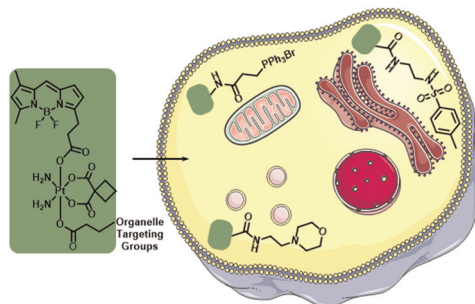
5838



A well-defined phosphine-free metal–ligand cooperative route for N-alkylation of aromatic amines via activation of renewable alcohols catalyzed by NNN pincer cobalt(II) complexes

Rahul Saini, Prashant Kukreti, Rahul Chauhan, Abhishek Panwar and Kaushik Ghosh*

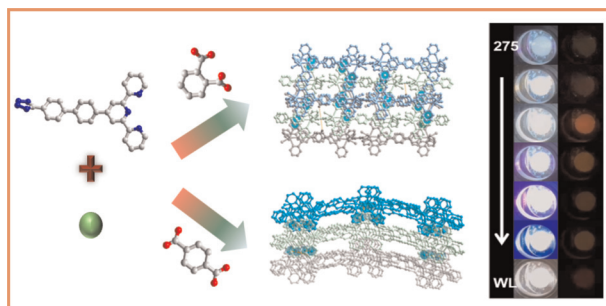
5849



Organelle-targeted BODIPY-conjugated platinum(IV) anticancer prodrugs for overcoming drug resistance

Yuelun Xu, Fengling Zhang, Miaomiao Li, Huimin Zhang, Yuhong Yuan, Siying Lin, Liuxuan Yao, Shunfang Xu, Tao Yuan* and Houzong Yao*

5859

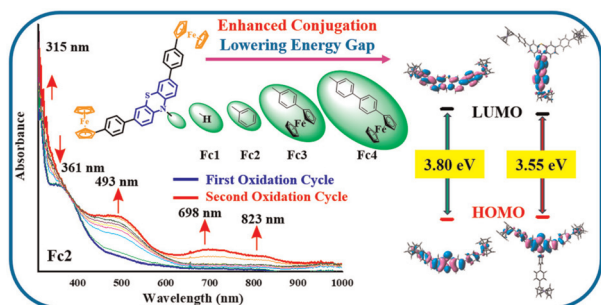


Broadly excited red long persistent luminescence from hetero-ligand MOFs

Jun-Ting Mo, Xin-Qi Chen, Su-Hua Wang, Jun-Jie Pan, Meng-Yang Li and Zheng Wang*



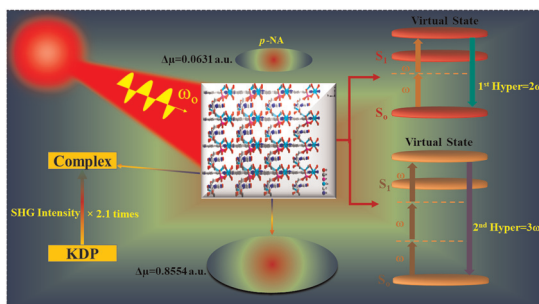
5906



Design, synthesis, and redox properties of donor- π -donor ferrocenyl functionalized phenothiazine derivatives

Deeksha Gupta, Nikhil Ji Tiwari, Prabal Pratap Singh and Rajneesh Misra*

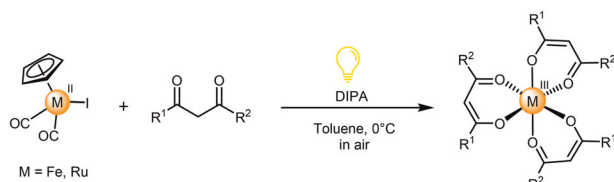
5921



Enhancements of the first and second hyperpolarizability of a GMP coordination polymer: crystal structure and computational studies

Mubashar Ilyas, Maroof Ahmad Khan, Lin Xiong, Li Zhang, Muhammad Lauqman, Muhammad Abbas, Hafiz Muhammad Zohaib, Nagesh Manurkar and Hui Li*

5935



Complete ligand substitution and oxidation of the metal center in the photochemical reaction of $\text{CpM}(\text{CO})_2\text{I}$ ($\text{M} = \text{Fe}, \text{Ru}$) with chelating β -diketones

Szymon Jarzyński, Cyprian Doroszko, Daria Jamroz, Kinga Stefanowska-Kątna, Jędrzej Walkowiak, Sławomir Wojtulewski, Janusz Zakrzewski and Bogna Rudolf*

5944



A novel type of heteroleptic Cu(I) complexes featuring nitrogen-rich tetrazine ligands: syntheses, crystal structures, spectral properties, cyclic voltammetry, and theoretical calculations

Adam Sztula, Peter Antal, Ivan Nemeč, Martin Kubala and Radovan Herchel*



CORRECTIONS

5953

Correction: Dual role of arsenite in hydrolysis and post-hydrolysis fluorescence sensing of selective pH-dependent probes

Pushpendra Singh and Kalyan K. Sadhu*

5954

Correction: Dicopper(i) complexes of a binucleating, dianionic, naphthyridine bis(amide) ligand

Laurent Sévery, T. Alexander Wheeler, Amelie Nicolay, Simon J. Teat and T. Don Tilley*

