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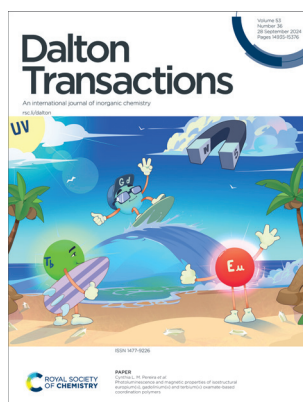
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ISSN 1477-9226 CODEN DTARAF 53(36) 14935–15376 (2024)



Cover
See Kensuke Naka *et al.*,
pp. 14986–14994.

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Inside cover
See Cynthia L. M. Pereira
et al., pp. 14995–15009.

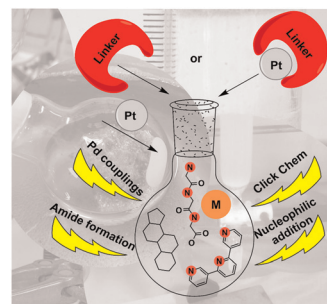
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PERSPECTIVE

14949

Synthetic routes and chemical structural analysis for guiding the strategies on new Pt(II) metallodrug design

Francisco Aguilar Rico, Maryam Derogar, Leticia Cubo and Adoracion G. Quiroga*

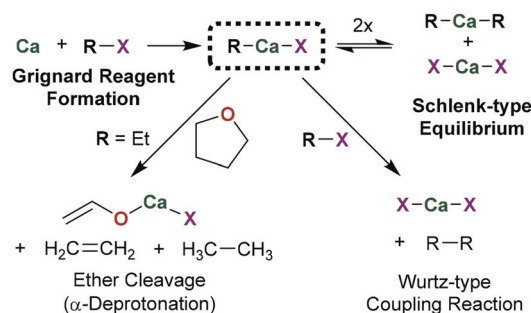


FRONTIER

14961

In situ generation of organocalcium compounds for a calcium-based Grignard-type chemistry

Simon Sengupta, Sven Kriek and Matthias Westerhausen*



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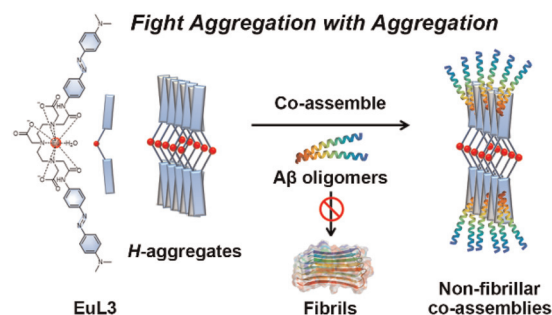
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COMMUNICATIONS

14966

Fighting fire with fire: remodeling A β aggregation with H-aggregates of a europium(III) complex

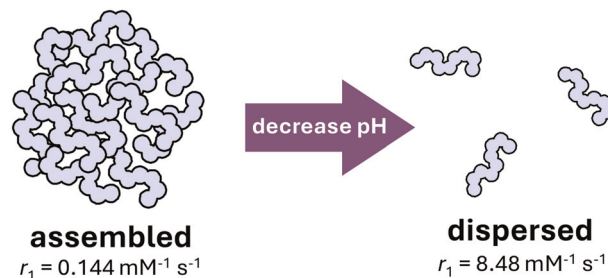
Yuancun Zhou, Jiacheng Zhu, Furong Gao, Ming Hu,* Chengyuan Qian, Xin Wang and Xiaohui Wang*



14971

A Gd(III)-labelled self-assembling peptide as a potential pH-responsive MRI contrast agent

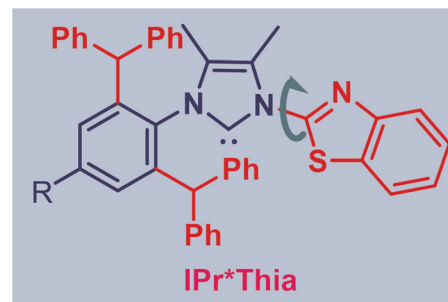
Carlo Martin M. Ocampo and Aaron Joseph L. Villaraza*



14975

IPr*Thia – wingtip-flexible, sterically hindered, modular, N,C/S,C-chelating thiazole-donor N-heterocyclic carbene ligands

Pamela Podchorodecka, Błażej Dziuk, Robert Junga, Roman Szostak, Michał Szostak* and Elwira Bisz*

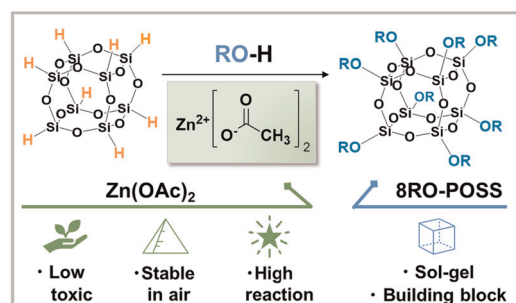


PAPERS

14986

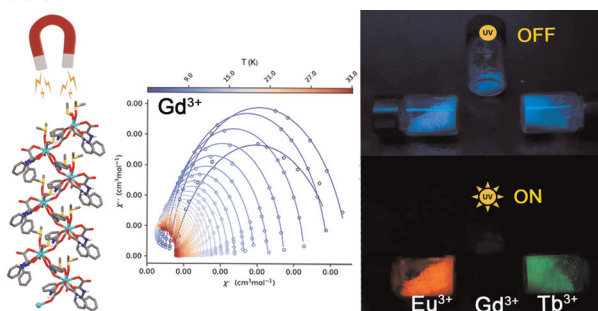
Synthesis of a series of octaalkoxy-substituted cage silsesquioxanes catalyzed by zinc acetate

Naoki Watanabe, Hiroaki Imoto and Kensuke Naka*



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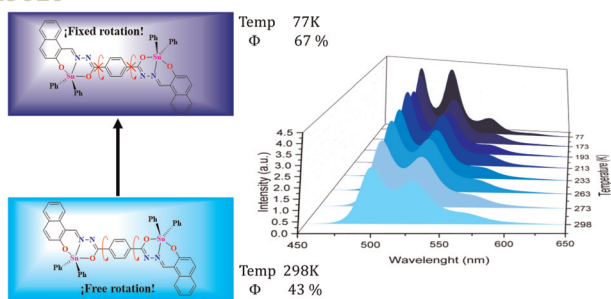
14995



Photoluminescence and magnetic properties of isostructural europium(III), gadolinium(III) and terbium(III) oxamate-based coordination polymers

Cleverton O. C. da Silveira, Willian X. C. Oliveira, Cynthia L. M. Pereira*, *et al.*

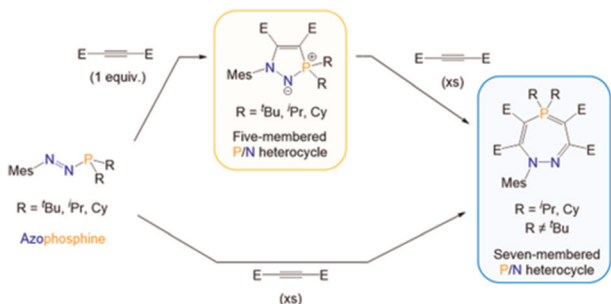
15010



Temperature-dependent photoluminescence down to 77 K of organotin molecular rotors: eco-friendly synthesis, photophysical characterization, X-ray structures, and DFT studies

Arelly M. Cantón-Díaz, Blanca M. Muñoz-Flores, Luis F. Macías-Gamboa, Ivana Moggio, Eduardo Arias, Gleb Turlakov, H. V. Rasika Dias, Gioele Colombo, Stefano Brenna and Víctor M. Jiménez-Pérez*

15032



Accessing five- and seven-membered phosphorus-based heterocycles via cycloaddition reactions of azophosphines

Ethan D. E. Calder, Louise Male and Andrew R. Jupp*

15040



Multiphase interface coupling of Ni-based sulfide composites for high-current-density oxygen evolution electrocatalysis in alkaline freshwater/simulated seawater/seawater

Jing Liang, Zhifeng Zhao,* Zhanhua Su, Weili Qu, Rui Guo, Xiaofeng Li* and Yongchen Shang*

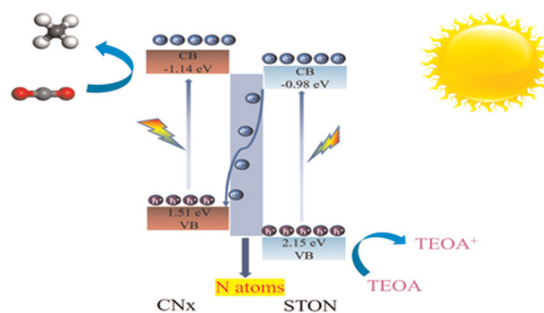


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15048

Sharing N atoms boosting Z-scheme charge transfer in SrTiO₂N/CNx heterojunctions for selective photoreduction of CO₂ to CH₄

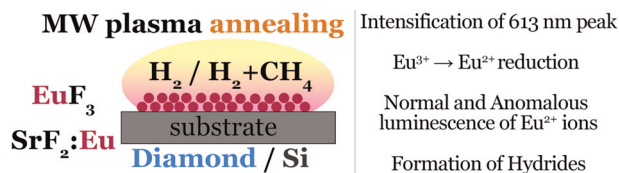
Qing-shan Wang, Yi-chao Yuan,* Wei-guo Pan* and Rui-tang Guo*



15059

Structure and luminescence properties of EuF₃ and SrF₂:Eu nanoparticles after microwave plasma annealing in “methane–hydrogen”

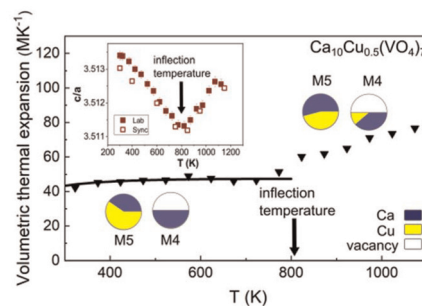
I. A. Tiazhelov, V. S. Sedov, A. K. Martyanov, A. F. Popovich, A. A. Alexandrov, Yu. A. Ermakova, V. V. Voronov, A. V. Tsorieva, V. M. Korshunov, I. V. Taydakov and S. V. Kuznetsov*



15070

Synthesis, dopant solubility, and thermostructural properties of Ca_{10.5-x}TM_x(VO₄)₇ (TM = Co, Cu) as function of transition metal content

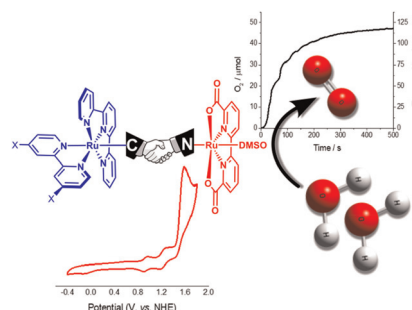
Houri S. Rahimi Mosafer,* Wojciech Paszkowicz, Roman Minikayev, Andrew Fitch and Marek Berkowski



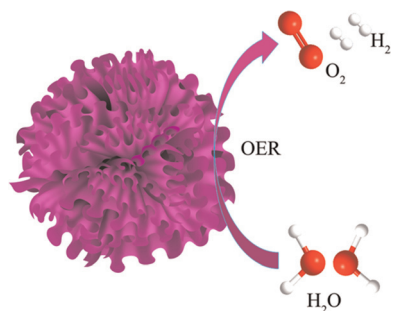
15083

A ruthenium catalyst linked to a redox-active ruthenium polypyridine for water oxidation

Fernando F. Salomón, Pedro O. Abate and Luis M. Baraldo*



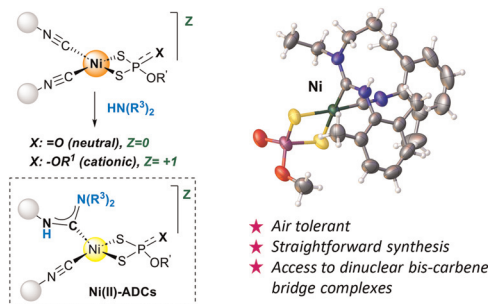
15093



Zn-facilitated surface reconstruction of Ni-MOF for an enhanced oxygen evolution reaction

Fang Wu,* Yuhong Jiao, Jin-long Ge, Yujun Zhu,*
Chao Feng, Zhong Wu and Qiu Li

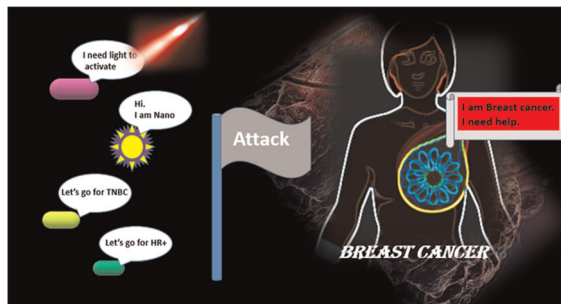
15101



Synthesis and reactivity of air stable Ni(II) complexes with isocyanides and dialkyldithiophosphate ligands: acyclic diaminecarbene formation

Lucía Álvarez-Miguel,* Clara del Carmen-Rodríguez,
María Valle, Celedonio M. Álvarez, José M. Martín-
Álvarez, Raúl García-Rodríguez and Daniel Miguel

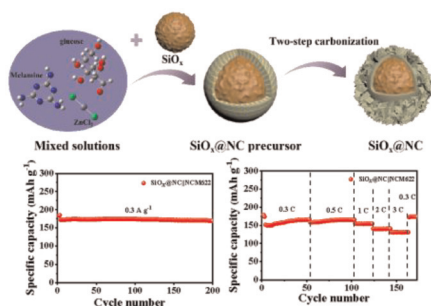
15113



Recent trends in the design and delivery strategies of ruthenium complexes for breast cancer therapy

Utpal Das, Uttara Basu and Priyanka Paira*

15158



A highly pyrrolic-N doped carbon modified SiO_x anode for superior lithium storage

Ziqiao Yan, Xiuhuan Huang, Xiujuan Wei,* Manyuan Xu,
Jinqiu Huang, Shuxing Wu, Kai-Hang Ye and Zhan Lin*

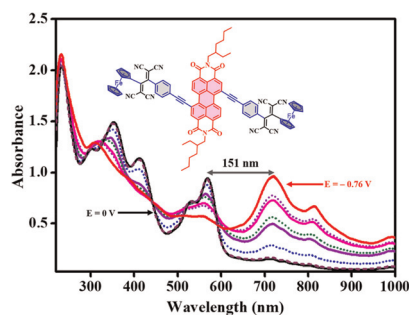


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NIR absorbing ferrocenyl perylene-3,4,9,10-tetracarboxylic diimide-based donor–acceptor chromophores

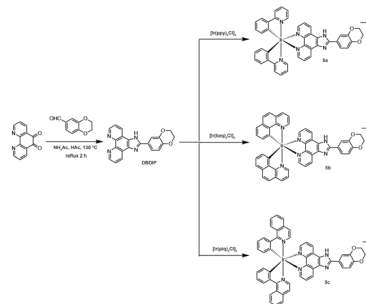
Mohd Wazid and Rajneesh Misra*



15176

Anticancer activity and mechanism studies of photoactivated iridium(III) complexes toward lung cancer A549 cells

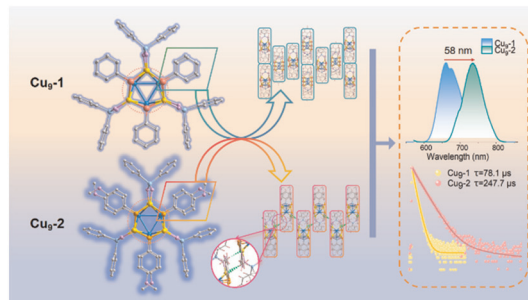
Lin Zhou, Jiongbang Li, Ju Chen, Xin Yao, Xiandong Zeng,* Yunjun Liu,* Yi Wang and Xiuzhen Wang*



15190

Ligand effects in photoluminescence of copper nanoclusters

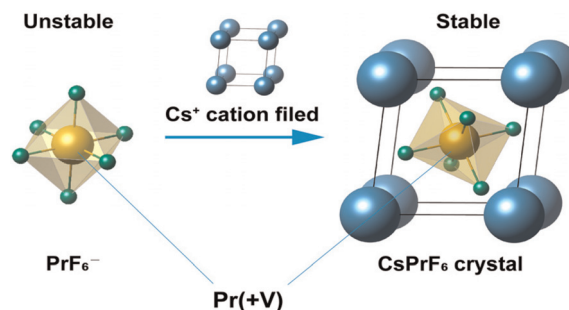
Peiling Du, Sachurilatu, Wenya Jiang, Jianyu Wei,* Simin Li* and Hui Shen*



15198

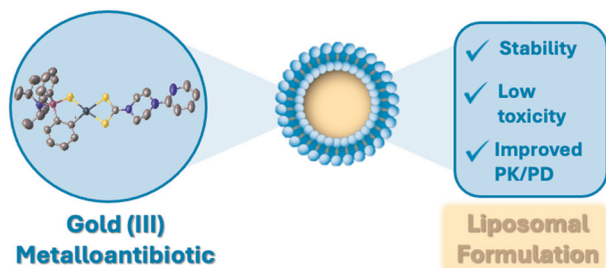
Is pentavalent Pr(v) feasible in solid CsPrF₆?

Lian-Wei Ye, Zi-He Zhang, Yang He, Shi-Ru Wei, Jun-Bo Lu, Han-Shi Hu* and Jun Li*



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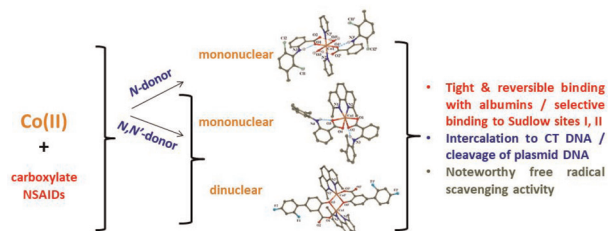
15205



Liposomal formulation of a gold(III) metalloantibiotic: a promising strategy against antimicrobial resistance

Alejandro Llamedo, Pablo Rodríguez, Yaiza Gabasa, Raquel G. Soengas,* Humberto Rodríguez-Solla, David Elorriaga, Francisco J. García-Alonso* and Sara M. Soto*

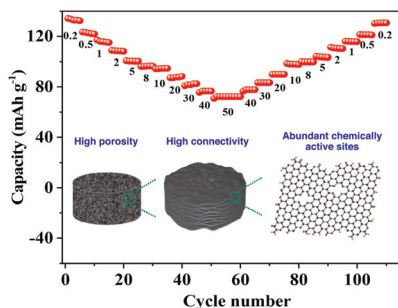
15215



Coordination compounds of cobalt(II) with carboxylate non-steroidal anti-inflammatory drugs: structure and biological profile

Spyros Perontsis, Antonios G. Hatzidimitriou and George Psomas*

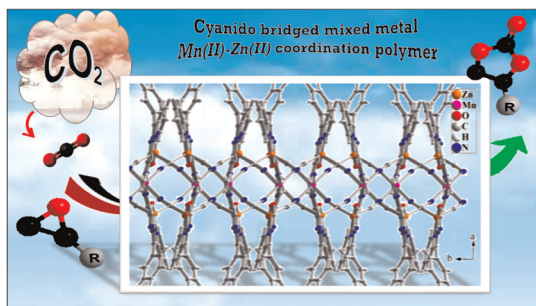
15236



Boosting the performance of Zn ion hybrid supercapacitors by regulating the chemically and physically active sites of graphene films

Hedong Jiang,* Mengxue Jin, Lingling Sun, Dandan Huang, Pingchun Guo, Jiake Li, Hua Zhu and Yanxiang Wang*

15246



Chemical CO₂ fixation using a cyanido bridged heterometallic Zn(II)-Mn(II) 2D coordination polymer

Parvaneh Dadmehr, Rahman Bikas* and Tadeusz Lis

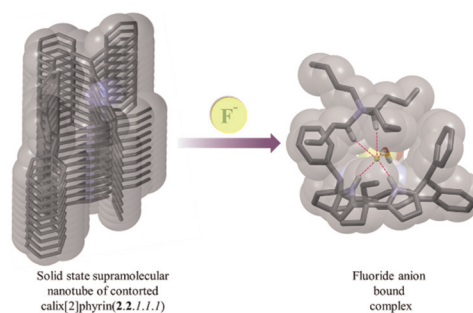


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15258

De novo fabrication of higher arene ring incorporated contorted calix[2]phyrin(2.2.1.1.1) and its F⁻ bound complex

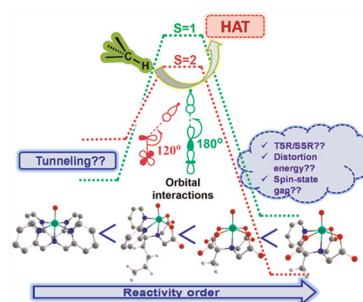
Sourav Ranjan Pradhan, Chetan Kumar Prasad, Mainak Das* and A. Srinivasan*



15264

Impact of carboxylate ligation on the C–H activation reactivity of a non-heme Fe(IV)O complex: a computational investigation

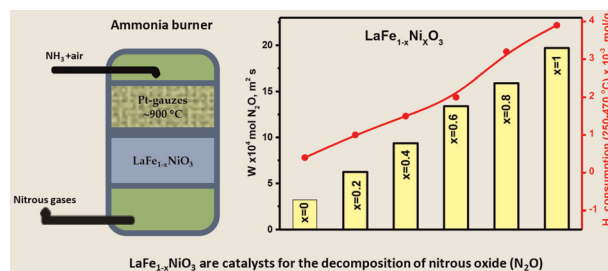
Akanksha Katoch and Debasish Mandal*



15273

LaFe_{1-x}Ni_xO₃ perovskites in the catalytic reaction of high-temperature decomposition of nitrous oxide

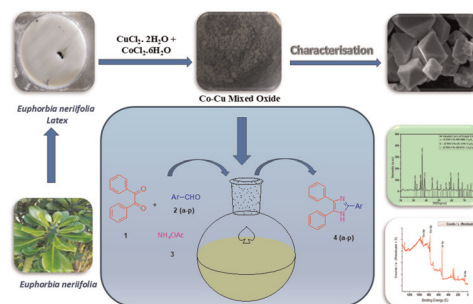
L. A. Isupova,* Yu. A. Ivanova, I. P. Prosvirin and E. Yu. Gerasimov



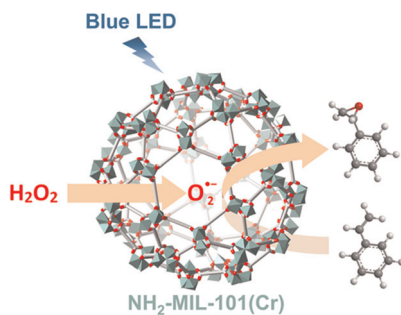
15284

Co(II)–Cu(II) mixed-oxide catalysts for single-step synthesis of 2,4,5-triaryl-1H-imidazole derivatives under microwave irradiation

Manohar K. Jopale, Zhiyong Zheng, Soowon Choi, Bharat N. Shelke, Nilesh Mharsale, Shripad Patil, Sonali S. Chine, Vilas Gade, Shital V. Kahane, Ravindra N. Bulakhe,* Ji Man Kim* and Amol H. Kategaonkar*



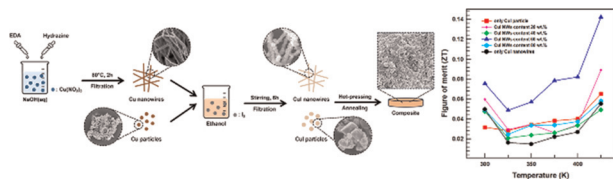
15297



Mesoporous metal–organic framework NH₂-MIL-101(Cr) as an efficient photocatalyst for the epoxidation of styrene

Xue-Zhi Wang, Bing-Chen Cai, Yi-Jie Zhou, Chuang-Wei Zhou, Ming-Min Wu, Xian-Chao Zhou, Fu-Li Wang,* Xiao-Ping Zhou* and Dan Li

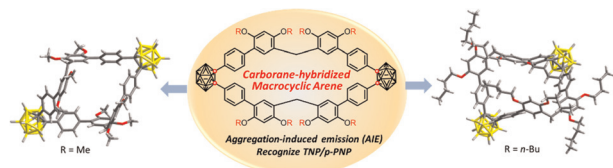
15305



Enhanced thermoelectric performance of copper iodide particles/nanowires composite in the low-temperature range

Oju Kwon, Minsu Kim, Dabin Park and Jooheon Kim*

15316



The synthesis and application of *o*-carborane-based macrocyclic arenes

Jiayi Liu, Meigui Fu, Shuai Yuan, Caixia Lin* and Yaofeng Yuan*

15324



Synthesis of C–C bonded trifluoromethyl-based high-energy density materials *via* the ANRORC mechanism

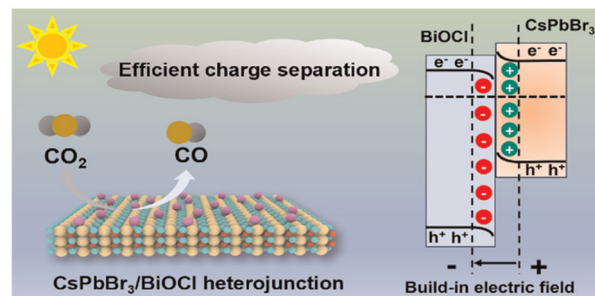
Parasar Kumar, Ramling S. Mathpati, Vikas D. Ghule and Srinivas Dharavath*



15330

Enhanced photocatalytic CO₂ conversion over 0D/2D CsPbBr₃/BiOCl S-scheme heterojunction via boosting charge separation

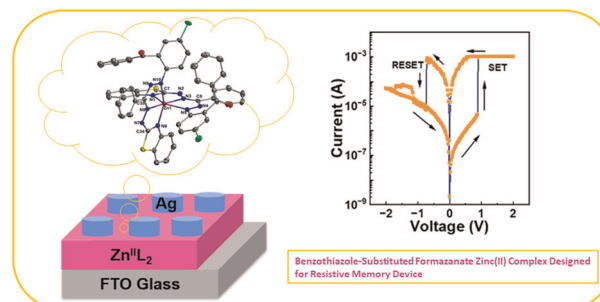
Fangzheng Qi, Zengsheng Guo, Yuhan Zhang, Xue-Na Tang, Yiqiang Sun, Bo Xu, Guang-Ning Liu* and Cungheng Li*



15338

A solution-processable benzothiazole-substituted formazanate zinc(II) complex designed for a robust resistive memory device

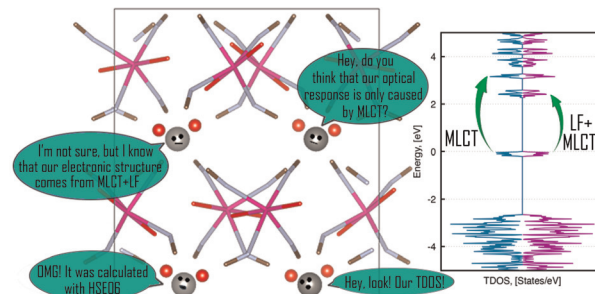
Sunita Birara, Shalu Saini, Moumita Majumder,* Shree Prakash Tiwari* and Ramesh K. Metre*



15350

Impact of metal exchange on the electronic structure and optical properties of isostructural octa-coordinated Mo^{IV}/Cd^{II} and W^{IV}/Cd^{II} polynuclear cyanide polymers

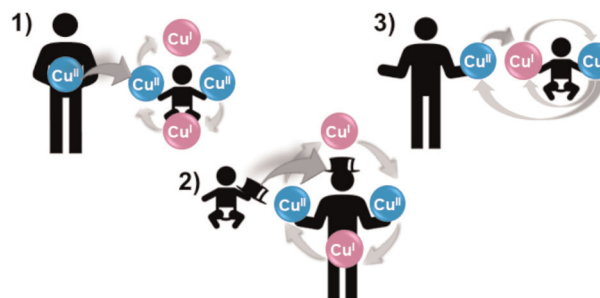
R. Mojica,* Y. Avila, P. Morgado, M. C. Vázquez, J. Rodríguez-Hernández, P. M. Crespo and E. Reguera*



15359

The effect of histidine, histamine, and imidazole on electrochemical properties of Cu(II) complexes of Aβ peptides containing His-2 and His-3 motifs

Aleksandra Tobolska, Agnieszka E. Jabłońska, Aleksandra Suwińska, Urszula E. Wawrzyniak, Wojciech Wróblewski and Nina E. Wezynfeld*



CORRECTION

15372

Correction: Reactivity study of Lewis superacidic carborane-based analogue of 9-bromo-9-borfluorene towards Lewis bases

Libo Xiang, Alexander Matler, Leibo Tan and Qing Ye*

