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Cover
See Nazli Farajzadeh Öztürk
et al., pp. 14664–14676.

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Inside cover
See Mahesh Sundararajan
et al., pp. 14677–14686.

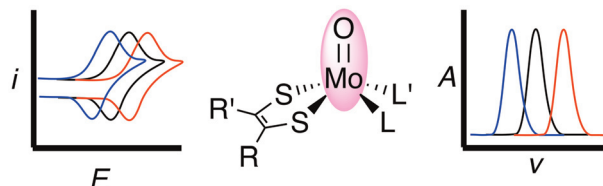
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PERSPECTIVES

14611

Synthesis and characterisation of Mo^{IV}-oxo dithiolenes: formate dehydrogenase active site mimetics

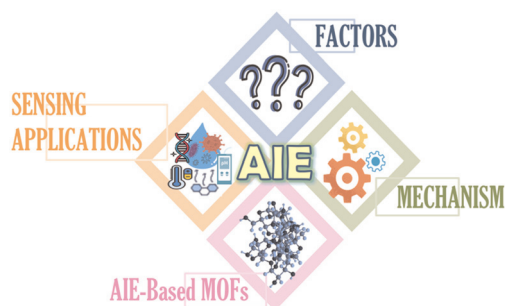
Isaac J. Furney and Joseph A. Wright*



14618

Design and transformation of ACQphores into AIEgens: toward MOF-based advanced sensing applications

Khushboo Rathore, Anita Nehra* and Ritambhara Jangir*



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Structural and electronic tuning of hybrid metal thiocyanate *N*-oxides

Facile time-controlled synthesis of two-dimensional Zr-perylenediimide MOF nanosheets for ultrasensitive DNA fluorescent biosensing

A straightforward approach to robust thiazolylidene gold complexes: efficient catalysts for propargylamide cycloisomerizations



- *Bench-stable thiazolylidene-Au(I) complexes*
- *Thiazolylidene-Au(I) alkoxide*
- *Facile synthesis*
- *Highly active catalysts*

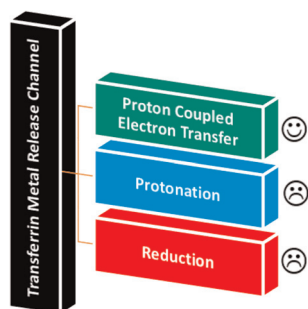
X = Cl, (CF₃)₂CHO

PAPERS

Biological activities of metallic nanostructures functionalized with hexadeca-substituted copper(II) and cobalt(II) phthalocyanines

PAPERS

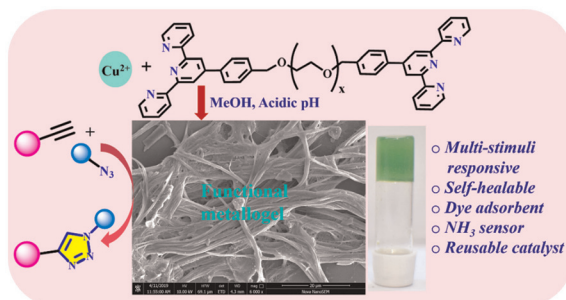
14677



Proton-coupled electron transfer modulates the metal release of blood serum iron transferrin

Mahesh Sundararajan,* Lokpati Mishra, Naman K. Bharti and Swarna P. Mantry

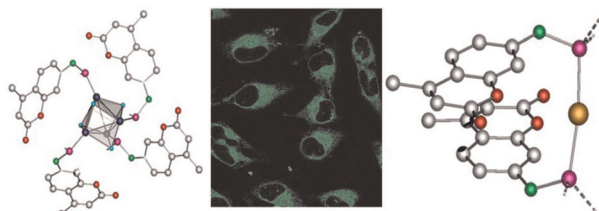
14687



A highly selective Cu^{2+} -coordination triggered multi-stimuli responsive and functional metallogel of bis-terpyridyl-based low molecular weight (LMW) gelator

Poulami Panja, Utsav Ghosh, Amit Sil and Sanjib K. Patra*

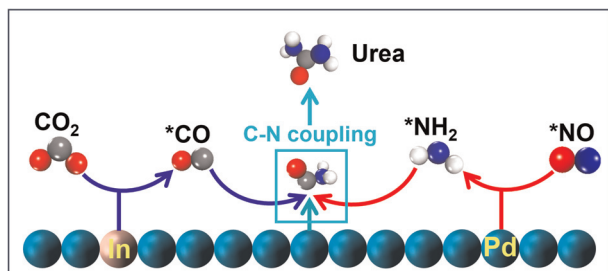
14701



Phosphinoamine coinage metal complexes with a coumarin fluorophore: synthesis, characterization, and *in vitro* (photo)cytotoxicity

Vanitha R. Naina, Shubham, Franziska Röncke, Hans-Achim Wagenknecht and Peter W. Roesky*

14710



Electrocatalytic urea synthesis from NO and CO_2 on In_1Pd single atom alloys

Tingting Wu,* Zihan Tian, Ziyang Zhang, Ye Tian and Ke Chu*

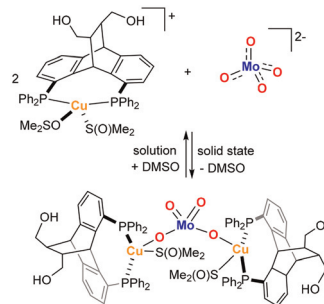


PAPERS

14716

Heterodinuclear Cu(I)/Mo(VI) chemistry with bifunctional dibenzobarreleone ligands

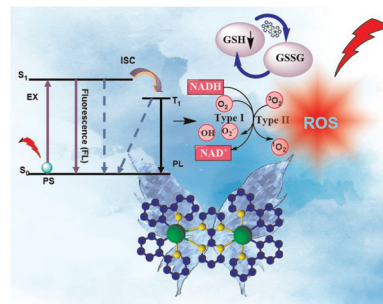
A. M. Buddhika Chandima, Griffyn Sgro, Sierra M. Hilditch, Umesh I. Kaluarachchige Don, Cassandra L. Ward, Dennis P. Anderson, Limor Herman, Dmitri Gelman,* Richard L. Lord* and Stanislav Groysman*



14728

Butterfly-like photo-responsive cyclometalated Ir(III) complex: emergence of a future cancer therapeutic agent

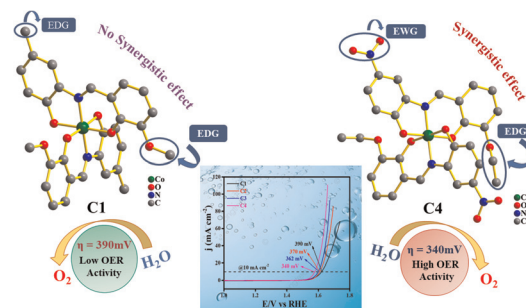
Sreelekha U, Rishav Das, Indrani Paramasivan Latha Laxmi, Nilmadhab Roy, Riona Roy, Logesh Mathivathanan, Tamizhselvi Ramasamy, Rinku Chakrabarty* and Priyanka Paira*



14740

Tuning the ligand periphery in homoleptic Co(III) complexes: a versatile strategy to modulate electrocatalytic oxygen evolution reaction efficiency

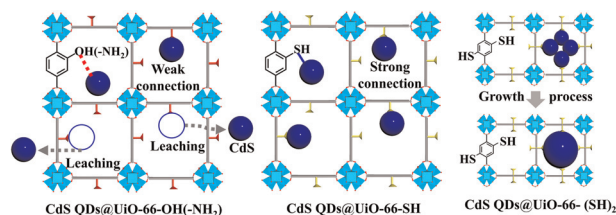
Janardhanan Aiswarya, Ragunath Madhu, Ottoor Anitha, Jan Grzegorz Malecki, Subrata Kundu* and Balasubramanian Murugesapandian*



14753

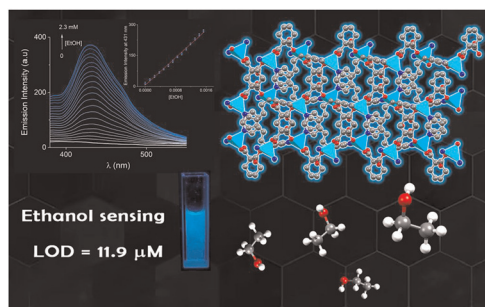
Precisely engineered Cd–S bonds in CdS-QDs@ZrMOF-SH toward enhanced photocatalytic CO2 reduction

Dongyang Liu, Dong Zhang, Mingsheng Wang, Ren Ma, Zhengqiang Xia,* Qi Yang, Gang Xie and Sanping Chen*



PAPERS

14763



Zn-cycloalkyldicarboxylate 2D-coordination polymers bearing 4,4'-trimethylenebipyridine: crystal structures, solid state CPMAS ^{13}C NMR structural correlations and luminescence sensing of ethanol

Jonathan Jaramillo-García, Víctor Sánchez-Mendieta,* Luis D. Rosales-Vázquez, Raúl A. Morales-Lukie, Diego Martínez-Otero, Juan M. German-Acacio, Cristian Pinzón-Vanegas, Juan Pablo León-Gómez and Alejandro Dorazco-González*

14779

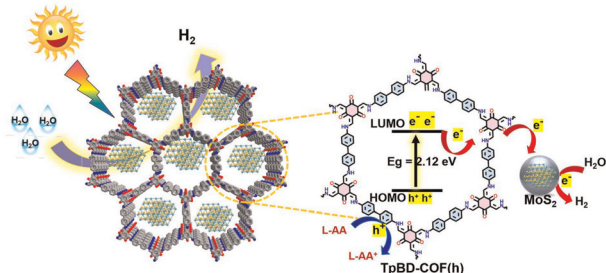
C-terminal FeoB region

E. coli RRARSRV**DI**ELLATRKSVSS**CC**AASTT**GDCH**
Y. pestis RRARSRVTVRLQ--**NSE**PAN**CCRS**-SGSN**CH**
K. pneumoniae RRARSRV**DV**SLLATRKTPAS**CCSS**-PAG**DCH**
S. typhimurium RRARSRV**DI**ELLATRKNVSS**CCSG**-TAGN**CH**

Comparative analysis of metal-binding properties of C-terminal FeoB peptide models from selected Gram-negative bacteria

Bartosz Orzel, Malgorzata Ostrowska, Slawomir Potocki, Henryk Kozlowski, Massimiliano Peana and Elzbieta Gumienna-Kontecka*

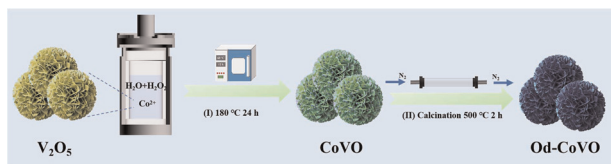
14790



Heterojunction and crystallinity-mediated charge separation in β -ketoenamine covalent organic frameworks for synergistically improved photocatalytic H_2 evolution

Heng Yang,* Le Wang, Yang Xia, Xiao-fang Li, Jun-tao Yan and Li-li Wen*

14800



Oxygen vacancy-rich Co-doped V_2O_5 as a high-performance cathode for aqueous zinc-ion batteries

Wei Cao,* Chenhan Xiong, Yanqiu Yu, Xiang Ji, Hao Xu, Yingge Guo, Ziwei Chen and Jun Chen*

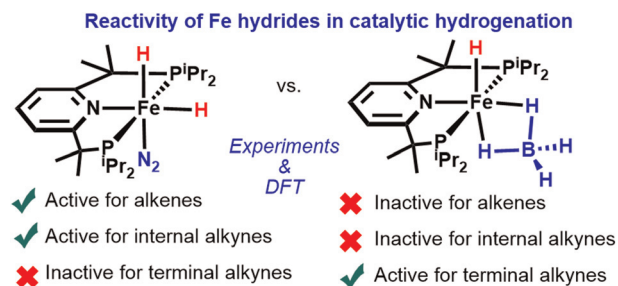


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14809

Distinct reactivity of iron dihydride vs. iron(hydride) (borohydride) bearing the same bulky PNP ligand in hydrogenation of alkenes and alkynes

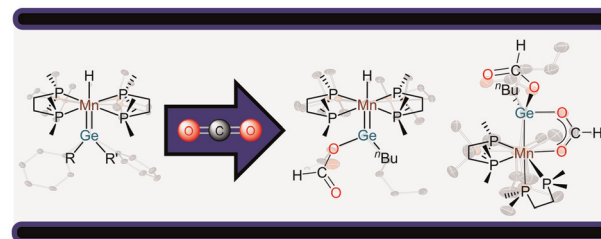
Dilip K. Pandey, Tatiana Gridneva, Eugene Khaskin, Robert R. Fayzullin, Serhii Vasylevskyi and Julia R. Khusnutdinova*



14821

Manganese germylene hydride complexes: reactivity with carbon dioxide, benzophenone, and diisopropylcarbodiimide

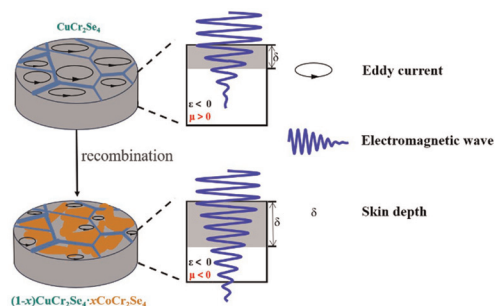
Jeffrey S. Price and David J. H. Emslie*



14838

Random metamaterials with double negative electromagnetic parameters in dense CuCr₂Se₄–CoCr₂Se₄ binary spinels

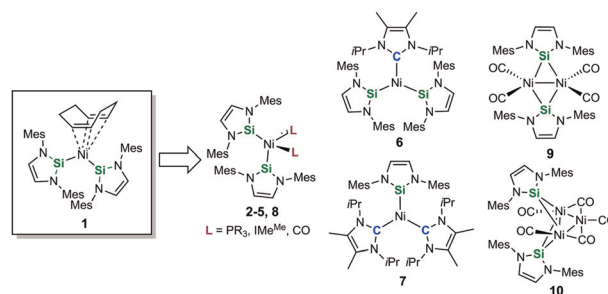
Jun Cao, Chengsheng Wang, Zechao Xu, Kelan Yan,* Liming Shen, Zheng Huang, Lingjie Zhang, Runhua Fan and Ningzhong Bao*



14846

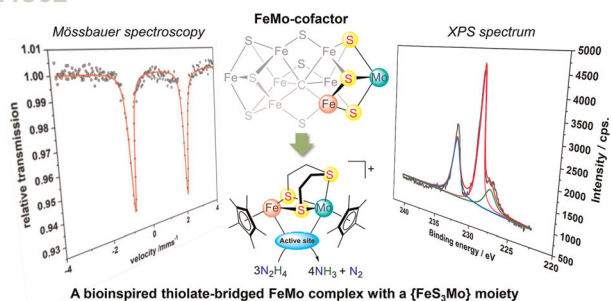
N-Heterocyclic silylene complexes of nickel(0)

Eduard Glok, Luis Werner and Udo Radius*



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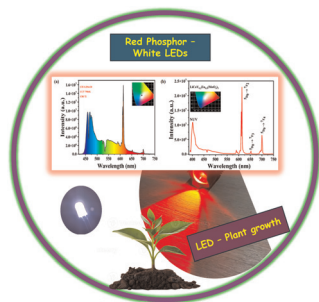
14862



A bioinspired hetero-binuclear iron–molybdenum complex supported by tridentate sulfur donors and its catalytic activity toward hydrazine disproportionation

Xiang Xu, Ronghuan Du, Luyang Sun, Dawei Yang,*
Baomin Wang and Jingping Qu*

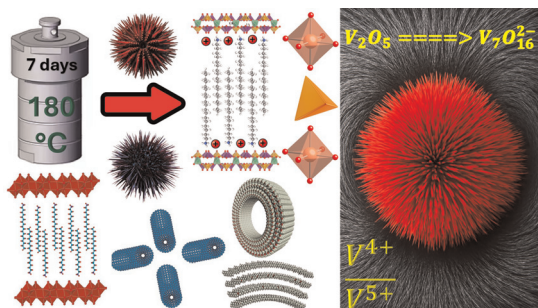
14868



Synthesis and optical properties of a LiCaY(MoO₄)₃:Eu³⁺ red phosphor with negligible concentration quenching for highly efficient white LED and plant growth applications

Priyansha Sharma, Jaya Prakash Madda and
Sivakumar Vaidyanathan*

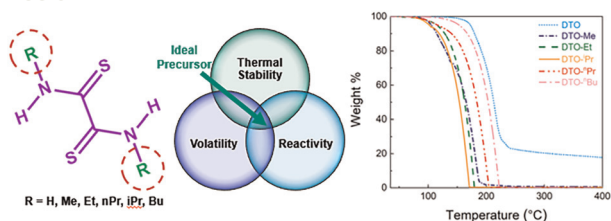
14882



Redox transition and property modulation in vanadium oxide nanourchins: from V₂O₅ to long hydrocarbon alkylammonium V₇O₁₆^{2−}

Tamara Bruna, Andres Ibañez and Daniel Navas*

14896



New dithiooxamide derivatives as promising precursors for ALD/MLD applications

Parmish Kaur, Mikko Nisula, Christophe Detavernier and
Anjana Devi*

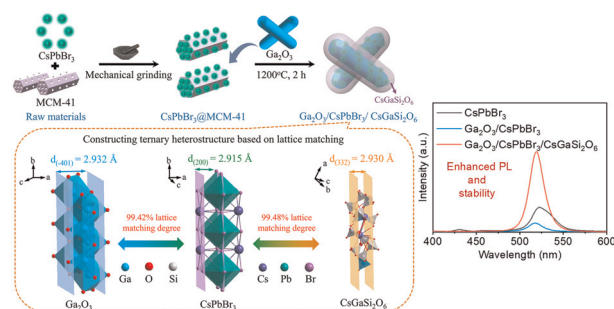


PAPERS

14904

Double epitaxial growth of an ultra-stable $\text{Ga}_2\text{O}_3/\text{CsPbBr}_3/\text{CsGaSi}_2\text{O}_6$ heterostructure for multimodal applications

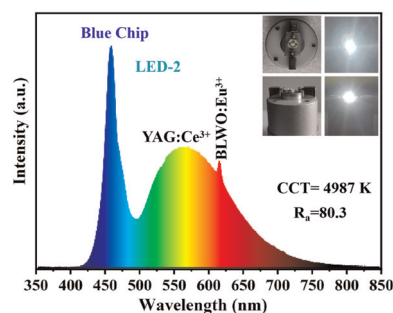
Guofu Wei, Wei Wang, Jian Ma, Peng Liu,*
Mingdong Zhou* and Yan Xu*



14914

A novel red phosphor $\text{Ba}_3\text{La}_2\text{W}_2\text{O}_{12}:\text{Eu}^{3+}$ with intense $^5\text{D}_0-^7\text{F}_4$ transition and excellent thermal stability for white LEDs

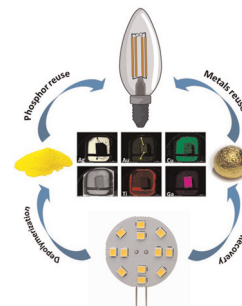
Fei Wang* and Huihui Chen



14926

Advanced approach for phosphor recovery and characterization of LED components

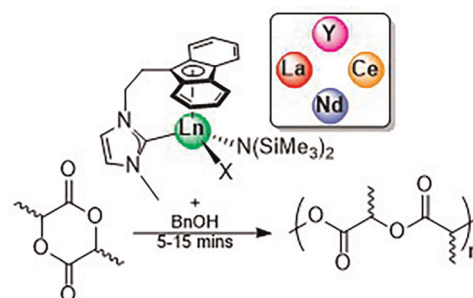
Moheddine Wehbie,* Stéphanie Delannoy, Fan Sun,
Michel Minier and Vincent Semetey*



14937

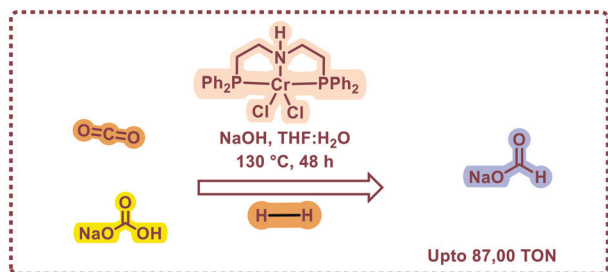
Heteroleptic tethered NHC rare earth initiators for the ring opening polymerisation of *rac*-lactide

Joseph W. Walker, Tajrian Chowdhury,
Georgina M. Rosair, Joy H. Farnaby,
Stephen M. Mansell* and Ruairaidh D. McIntosh*



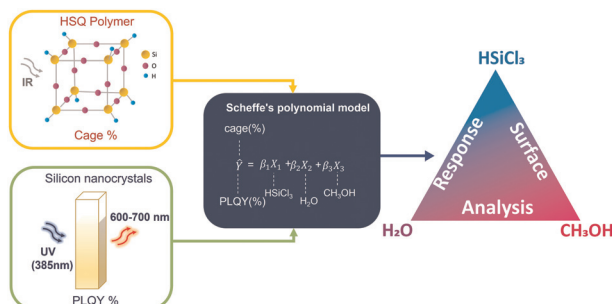
PAPERS

14947

Pincer chromium(II)-catalyzed hydrogenation of CO_2 and bicarbonate to formate

Tushar Singh and Subrata Chakraborty*

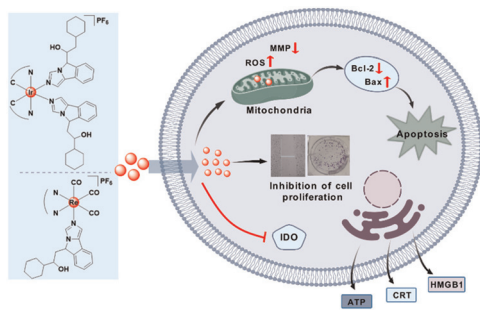
14954



Data-driven prediction of HSQ polymer structure and silicon nanocrystal photoluminescence

Maharram Jabrayilov, Jeremy B. Essner, Abhijit Bera, Vinny Paris and Matthew G. Panthani*

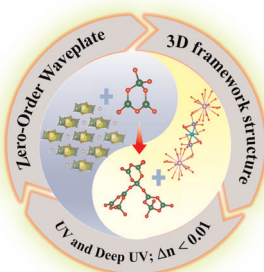
14962



Iridium(III)/rhenium(I) complexes bearing NLG919 as the ligand for enhanced triple-negative breast cancer therapy

Hou Zhu, Yong-Sheng Yang, Lin-Yuan Zhu, Chun-Rong Jiang, Zheng Zhang, Meng-Ting Xu, Rong-Tao Li and Rui-Rong Ye*

14969

 $\text{Li}_2\text{CeRbB}_{18}\text{O}_{30}$ and $\text{Li}_2\text{Cs}_2\text{SrB}_{18}\text{O}_{30}$: promising low-birefringence materials for UV and deep UV zero-order waveplates

Xiaoming Wang, Zhiyuan Zhang, Juanjuan Lu, Feng Zhang* and Shilie Pan*

