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See Yesmin Akter Rina and Joseph A. R. Schmidt, pp. 13232–13247.

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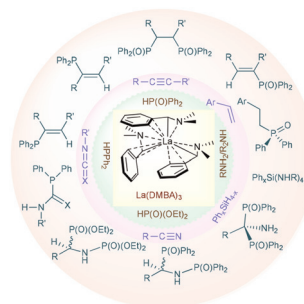
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PERSPECTIVES

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Alpha-metallated *N,N*-dimethylbenzylamine rare-earth metal complexes and their catalytic applications

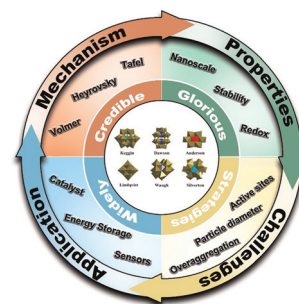
Yesmin Akter Rina and Joseph A. R. Schmidt*



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Polyoxometalate-derived electrocatalysts enabling progress in hydrogen evolution reactions

Shaohua Zhu, Haijun Pang,* Zhe Sun, Shifa Ullah Khan,* Ghulam Mustafa, Huiyuan Ma,* Xinming Wang and Guixin Yang



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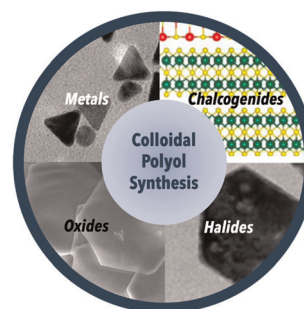
Fundamental questions
Elemental answers

PERSPECTIVES

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Colloidal synthesis of two-dimensional nanocrystals by the polyol route

Tanner Q. Kimberly, Michelle H. Frasch and Susan M. Kauzlarich*

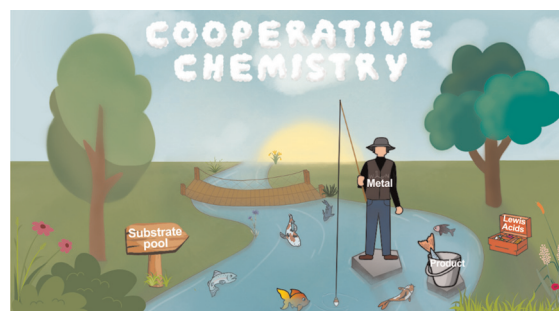


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A catalytic collaboration: pairing transition metals and Lewis acids for applications in organic synthesis

A. Dina Dilinaer, Gabriel J. Jobin and Marcus W. Drover*



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Application and prospects of EMOFs in the fields of explosives and propellants

Bojun Tan,* Jinkang Dou, Xiong Yang, Wenjie Li, Jing Zhang, Pengfeng Zhang, Hongchang Mo, Xinming Lu, Bozhou Wang and Ning Liu*

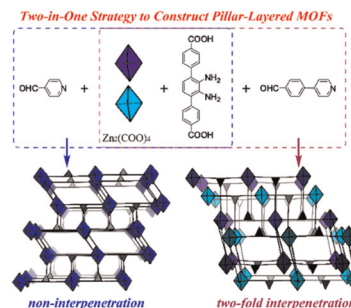


COMMUNICATIONS

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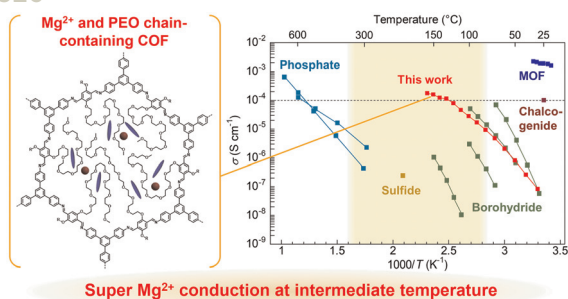
Reticular chemistry guided single-linker constructed pillar-layered metal–organic frameworks via an *in situ* “one-pot” strategy

Zhen-Sha Ma, Hui Yang, Kai Xing,* Kang Zhou, Gonghao Lu* and Xiao-Yuan Liu*



COMMUNICATIONS

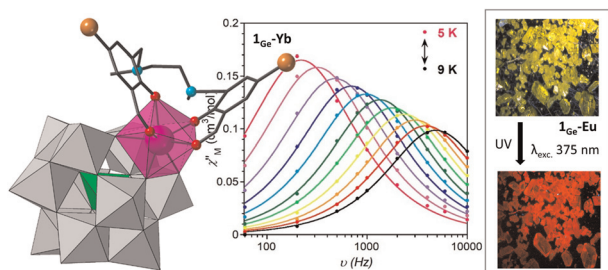
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Superionic conduction in a Mg²⁺-containing covalent organic framework at intermediate temperature

Akinori Mohri, Yuki Oami and Masaaki Sadakiyo*

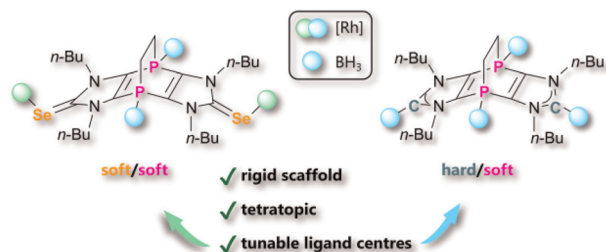
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Effect of the heteroatom on the magnetic and luminescence properties of hybrid lanthanide-substituted Keggin-type polyoxometalates

Janire Bustamante-Fernández, Estibaliz Ruiz-Bilbao, Corina Rodríguez-Esteban, Mathieu Gonidec, José A. García, Luis Lezama, Juan M. Gutiérrez-Zorrilla, Itziar Oyarzabal* and Beñat Artetxe*

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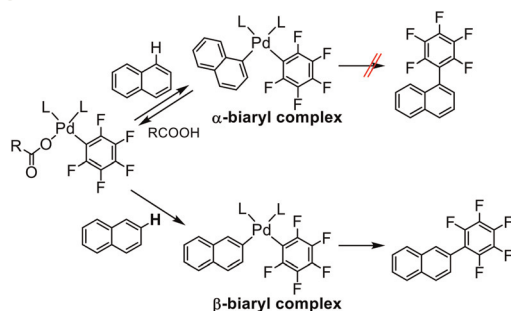


Tapping into the coordinative potential of a C-functional 1,4-diphosabarrelene using two sets of complementary ligand centres

Tatjana Terschüren, Gregor Schnakenburg and Rainer Streubel*

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Mechanistic study on the reductive elimination of (aryl)(fluoroaryl)palladium complexes: a key step in regioselective dehydrogenative cross-coupling

Tomoki Iida, Ryota Sato, Yusuke Yoshigoe, Takaki Kanbara* and Junpei Kuwabara*

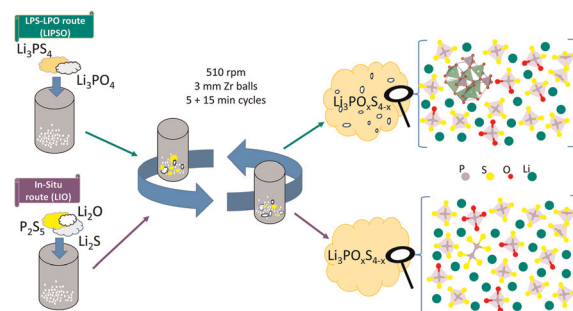


PAPERS

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Influence of oxygen distribution on the Li-ion conductivity in oxy-sulfide glasses – taking a closer look

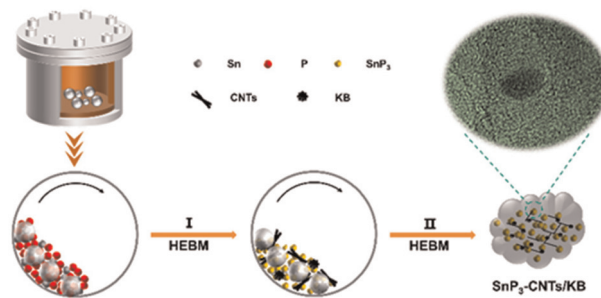
Ramon Zimmermanns, Xianlin Luo, Anna-Lena Hansen,* Marcel Sadowski, Qiang Fu, Karsten Albe, Sylvio Indris, Michael Knapp and Helmut Ehrenberg



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Multi-geometric carbon encapsulated SnP₃ composite for superior lithium/potassium ion batteries

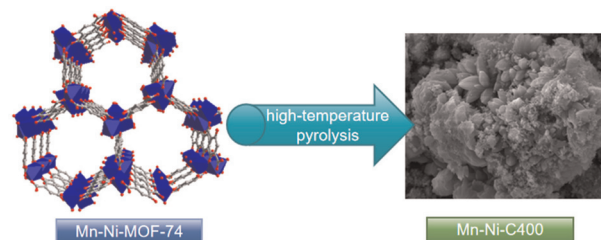
Zhongliang Hu, Xixia Zhao,* Yanqing Zhao, Qian Zhao, Xin Zhao, Guijuan Wei* and Honglei Chen*



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Fabrication of bimetallic MOF-74 derived materials for high-efficiency adsorption of iodine

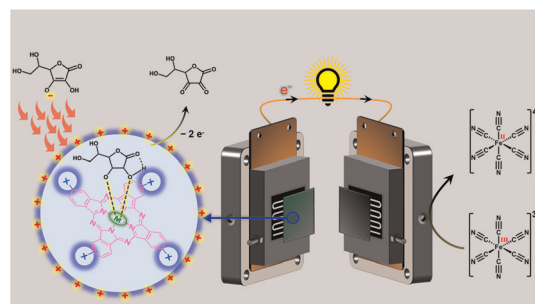
Wen-Ze Li, Fu-Yu Guo, Jing Li, Xiao-Sa Zhang, Yu Liu and Jian Luan*



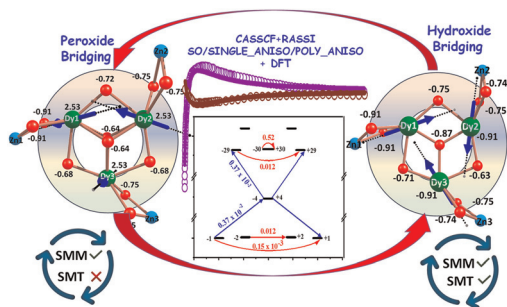
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Synergistic effects of the substrate–ligand interaction in metal–organic complexes on the de-electronation kinetics of a vitamin C fuel cell

Muskan Parmar, Sanchayita Mukhopadhyay, Ritwik Mondal, Bhojkumar Nayak, Neethu Christudas Dargily, Harish Makri Nimbegondi Kotresh, Chathakudath Prabhakaran Vinod and Musthafa Ottakam Thotiyil*



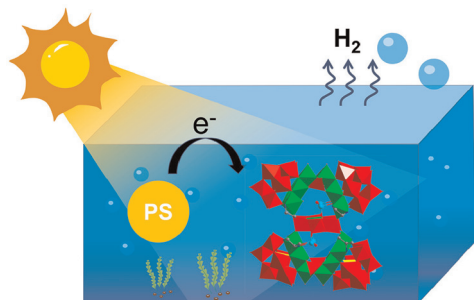
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Theoretical exploration of single-molecule magnetic and single-molecule toric behaviors in peroxide-bridged double-triangular $\{M_3Ln_3\}$ ($M = Ni, Cu$ and Zn ; $Ln = Gd, Tb$ and Dy) complexes

Amit Gharu and Kuduva R. Vignesh*

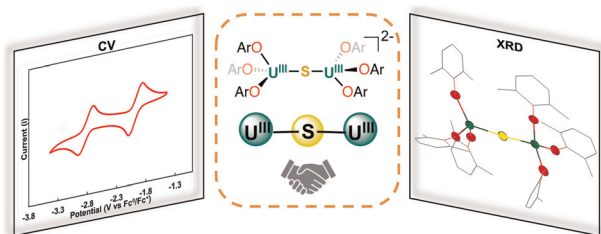
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Two nickel-added poly(polyoxometalate)s built of Keggin-type $\{Ni_6PW_9\}$ and Anderson-type NiW_6O_{24} via WO_4/Sb_2O bridges and $Ni-O-W$ linkages with efficient hydrogen evolution activity

Peng-Yun Zhang, Chen Lian, Zhen-Wen Wang, Juan Chen, Hongjin Lv* and Guo-Yu Yang*

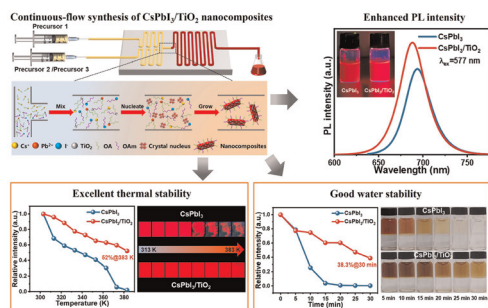
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Synthesis, structure and redox properties of single-atom bridged diuranium complexes supported by aryloxides

Fang-Che Hsueh, Luciano Barluzzi, Thayalan Rajeshkumar, Rosario Scopelliti, Ivica Zivkovic, Laurent Maron* and Marinella Mazzanti*

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Continuous-flow synthesis of $CsPbI_3/TiO_2$ nanocomposites with enhanced water and thermal stability

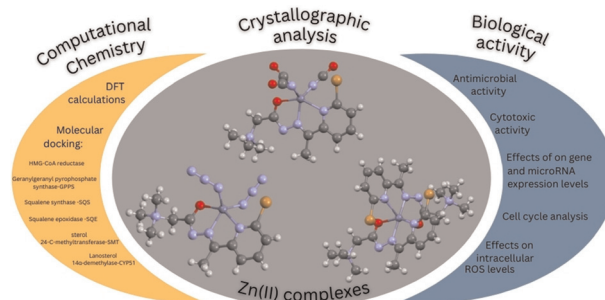
Jingshan Hou,* Jiafeng Hu, Jianguhua Wu, Qing Zhang, Zhifu Liu, Langping Dong, Guangxiang Jiang, Yufeng Liu, Wei Gao* and Yongzheng Fang*



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Synergy of experimental and computational chemistry: structure and biological activity of Zn(II) hydrazone complexes

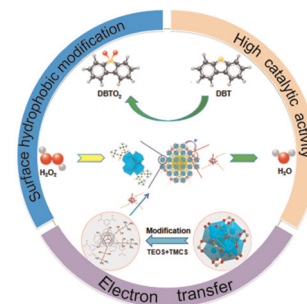
Milica Savić, Andrej Pevec, Nevena Stevanović, Irena Novaković, Ivana Z. Matic, Nina Petrović, Tatjana Stanoković, Karla Milčić, Matija Zlata, Iztok Turel, Božidar Čobeljić, Miloš Milčić* and Maja Gruden*



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A novel MOF-808 derived material for oxidative desulfurization: the synergistic effect of hydrophobicity and electron transfer

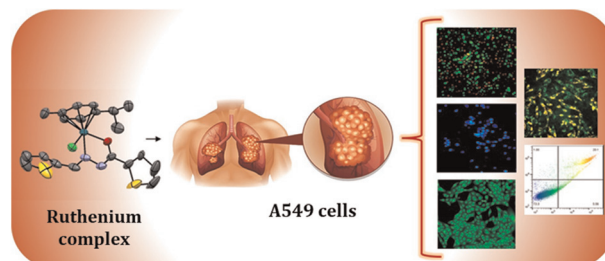
Chengzhao Zhu, Miaomiao Zheng, Mingyu Liao, Nan Jiang, Yuanjie Xiao, Jianbin Liu, Linfeng Zhang, Jia Guo, Huadong Wu* and Hao Yan*



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Analysis of antiproliferative activity of new half-sandwich arene Ru(II) thiophene based aroylhydrazone complexes

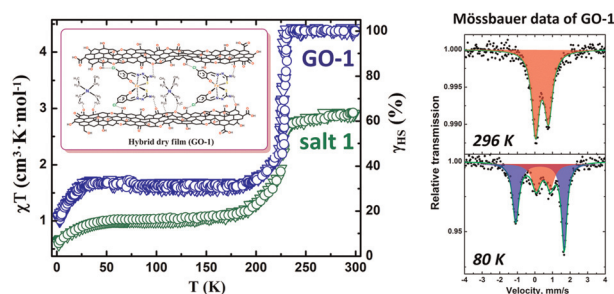
Ramya Prabakaran, Abirami Arunachalam and Ramesh Rengan*



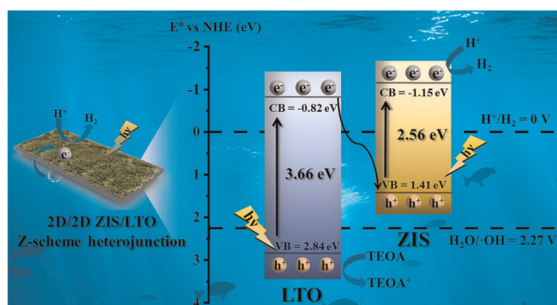
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Creation of spin switching in graphene oxide-based hybrid film materials with an anionic Fe(III) 5Cl-salicylaldehyde-thiosemicarbazone complex

Nataliya G. Spitsyna,* Anatoly S. Lobach, Maxim A. Blagov, Nadezhda N. Dremova, Alexei I. Dmitriev, Mikhail V. Zhidkov and Sergei V. Simonov



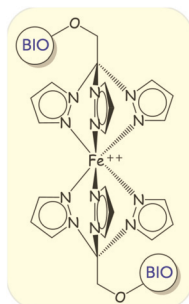
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Ultrathin 2D/2D ZnIn₂S₄/La₂Ti₂O₇ nanosheets with a Z-scheme heterojunction for enhanced photocatalytic hydrogen evolution

Hanbing Wang, Yunqi Ning, Qi Tang, Xueyang Li, Mengdi Hao, Qun Wei, Tingting Zhao, Daqi Lv and Hongwei Tian*

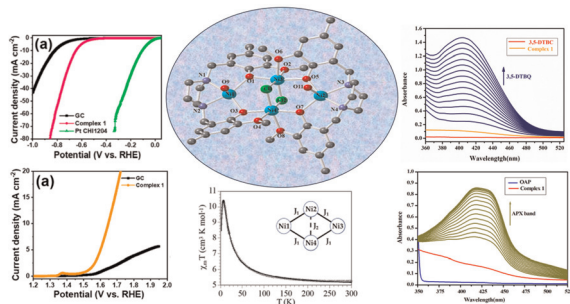
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Anticancer potential of NSAID-derived tris(pyrazolyl)methane ligands in iron(II) sandwich complexes

Alberto Gobbo, Sarah A. P. Pereira, Fátima A. R. Mota, Irina Sinenko, Kseniya Glinkina, Dario Rocchi, Massimo Guelfi, Tarita Biver, Chiara Donati, Stefano Zacchini, M. Lúcia M. F. S. Saraiva, Paul J. Dyson and Fabio Marchetti*

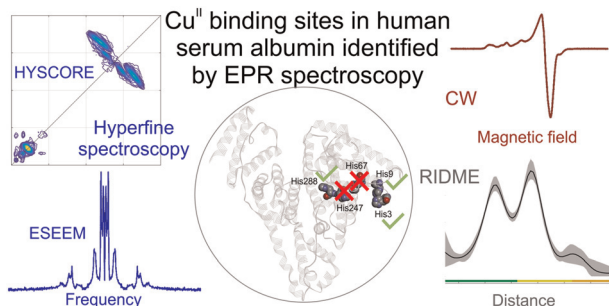
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Tetranuclear Ni^{II}-Mannich base complex with oxygenase, water splitting and ferromagnetic and antiferromagnetic coupling properties

Arka Patra, Avijit Das, Abhimanyu Sarkar, Carlos J. Gómez-García and Chittaranjan Sinha*

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EPR spectroscopic characterisation of native Cu^{II}-binding sites in human serum albumin

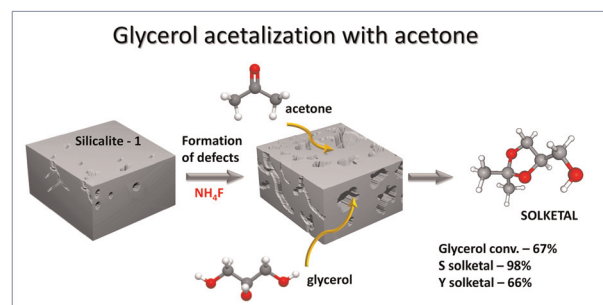
Katrin Ackermann, Dongmei Wu, Alan J. Stewart* and Bela E. Bode*



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Enhancing the catalytic properties of silicalite-1 through ammonium fluoride modification for waste glycerol acetalization

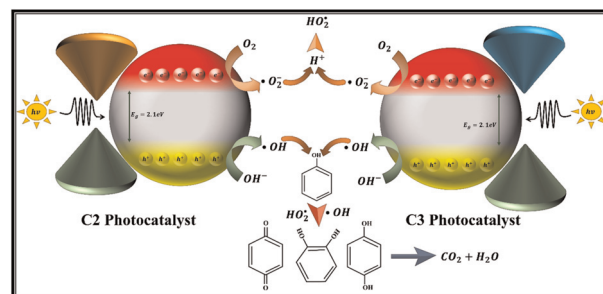
Jolanta Kowalska-Kuś,* Ewa Janiszewska, Kinga Góra-Marek, Aldona Jankowska and Agnieszka Held



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Synergistically enhanced photocatalytic properties of Co_3O_4 -G/GO nanocomposites: unravelling their interactions and charge-transfer dynamics using XAS

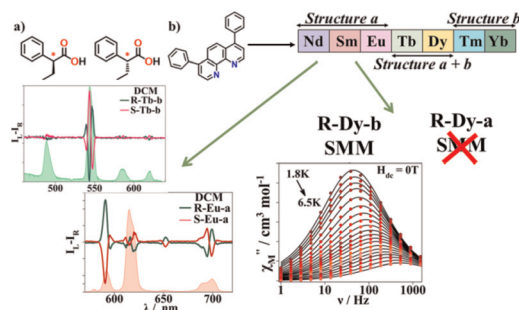
Ankit Kadian,* V. Manikandan, C. L. Chen, C. L. Dong and S. Annapoorni*



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Dinuclear enantiopure Ln^{3+} complexes with (*S*-) and (*R*-) 2-phenylbutyrate ligands. Luminescence, CPL and magnetic properties

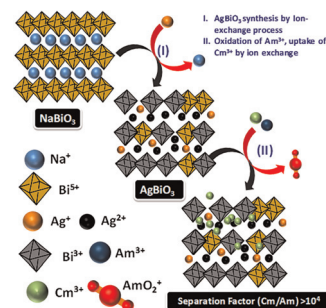
Ànnia Tubau, Francesco Zinna, Lorenzo Di Bari,* Mercè Font-Bardía and Ramon Vicente*



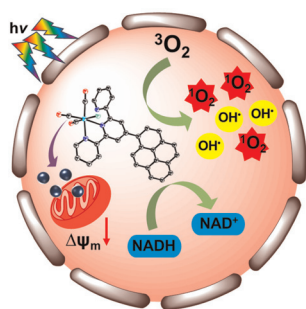
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A highly efficient *in situ* redox stabilization strategy for Am–Cm separation using AgBiO_3

Parveen K. Verma, Arunasis Bhattacharyya,* Soumen Samanta and Prasanta K. Mohapatra*



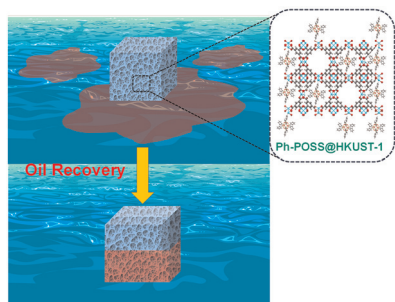
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Cancer phototherapy by CO releasing terpyridine-based Re(I) tricarbonyl complexes *via* ROS generation and NADH oxidation

Rajesh Kushwaha, Aarti Upadhyay, Sukanta Saha, Ashish Kumar Yadav, Arpan Bera,* Arnab Dutta and Samya Banerjee*

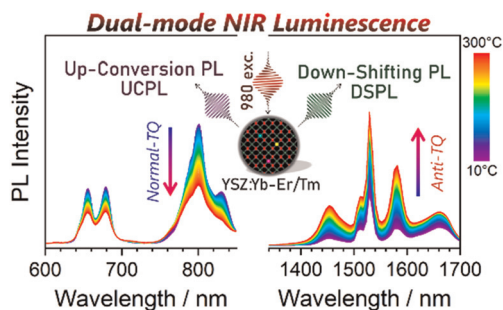
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Eco-friendly porous composite of octaphenyl polyhedral oligomeric silsesquioxane and HKUST-1 with hydrophobic–oleophilic properties towards sorption of oils and organic solvents

Kanararasu Dharmaraj, Mohandas Sanjay Kumar, Nallasamy Palanisami, Muthuramalingam Prakash, Pushparaj Loganathan and Swaminathan Shanmugan*

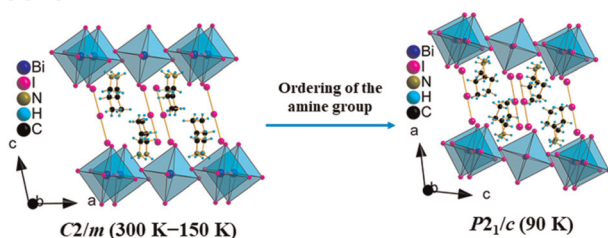
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Er³⁺/Tm³⁺ co-doped Zr_{0.85}Y_{0.15}O_{1.925}:Yb³⁺ phosphors: dual-mode ratiometric thermometry based on near infrared up-conversion/down-shifting photoluminescence

Takuya Hasegawa,* Yuki Takahashi, Tomoyo Goto, Yasushi Sato, Ayahisa Okawa and Shu Yin

13628



(C₃H₇NH₃)₄Bi_{1-x}Sb_xI₉: 0D hybrid halide perovskite-like compounds with isolated triiodide units

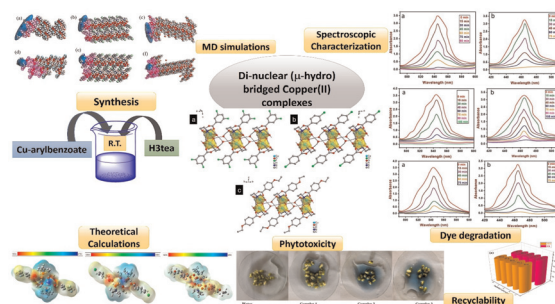
Abinash Pradhan, Rajanikanta Rana, Gopalan Rajaraman, Monalisa Pradhan and Saroj L. Samal*



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Synthesis, structural characterization, DFT and molecular dynamics simulations of dinuclear (μ -hydroxo)-bridged triethanolamine copper(II) complexes: efficient candidates towards visible light-mediated photo-Fenton degradation of organic dyes

Chetan Chauhan, Tanuj, Rajesh Kumar, Jitendra Kumar, Subhash Sharma, Samia Benmansour* and Santosh Kumar*



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New palladium(II) β -ketoesterates for focused electron beam induced deposition: synthesis, structures, and characterization

A. Butrymowicz-Kubiak, T. M. Muzioł, A. Kaczmarek-Kędziera, C. S. Jureddy, K. Maćkosz, I. Utke and I. B. Szymańska*

