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See Michael D. Ward,
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Kellie L. Tuck *et al.*,
pp. 11802–11814.

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11802.



Inside cover

See Tosapol Maluangnont
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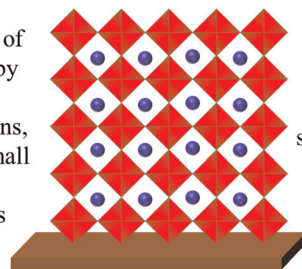
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Recent progress in the stabilization of low band-gap black-phase iodide perovskite solar cells

Mona Mittal, Rahul Garg and Atanu Jana*

Stabilization of
black phase by
metal ions,
organic cations,
polymers, small
molecules,
quantum dots



Long-term
stability, high
PCEs

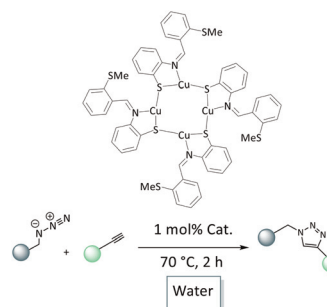
Black phase halide perovskite

COMMUNICATIONS

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Tetracopper(I) thiolate- and amido-(SNS) complexes and copper-catalyzed azide–alkyne cycloaddition in water

Atousa Khanzadeh, Saeed Ataie and R. Tom Baker*



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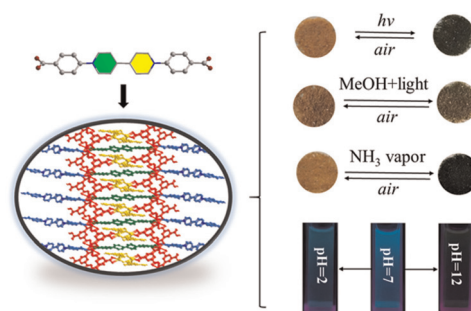


COMMUNICATIONS

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A viologen-based Cd(II) coordination polymer as a multifunctional platform for photochromism, chemochromism and a broad range of fluorescence pH sensing

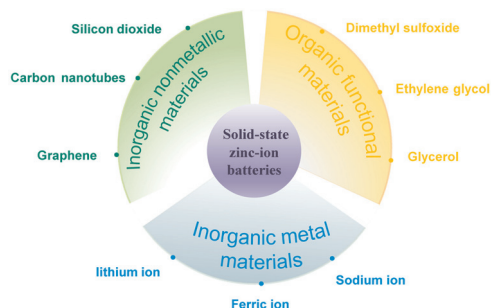
Shi Zhang, Kai Zhang, Shengliang Du, Shufan Chen, Qingfu Zhang, Xinyu Shi, Qinghua Meng, Yanli Gai* and Kecai Xiong*



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Recent progress in structural modification of polymer gel electrolytes for use in solid-state zinc-ion batteries

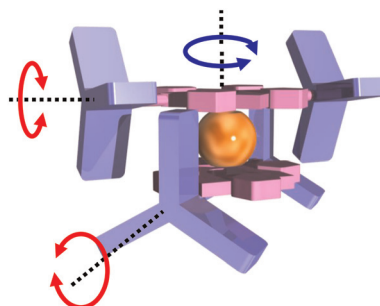
Yifan Li, Jingjing Yuan,* Yifan Qiao, Hui Xu, Zhihao Zhang, Wenyao Zhang, Guangyu He and Haiqun Chen*



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Multiply engaged molecular gears composed of a cerium(IV) double-decker of a triptycene-functionalized porphyrin

Toshio Nishino,* Masafumi Fukumura, Shohei Katao, Kazuma Yasuhara and Gwénaél Rapenne*

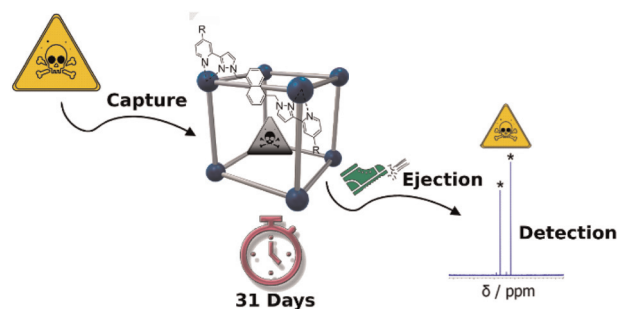


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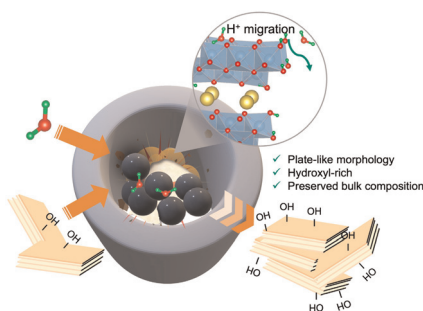
The preservation of sarin and O,O'-diisopropyl fluorophosphate inside coordination cage hosts

Jack C. Dorrat, Rosemary J. Young, Christopher G. P. Taylor, Max B. Tipping, Andrew J. Blok, David R. Turner, Alasdair I. McKay, Simon Ovenden, Michael D. Ward,* Genevieve H. Dennison* and Kellie L. Tuck*



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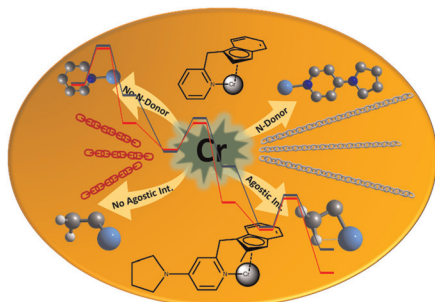
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Electrochemical and electrical characteristics of ball milled $\text{Cs}_2\text{Ti}_6\text{O}_{13}$ modified by the surface-to-bulk migration of hydroxyl groups

Tosapol Maluangnont,* Phieraya Pulphol, Kanisorn Klangvijit, Khemjirane Bowornthommatadsana, Narong Chanlek, Makoto Ogawa and Winadda Wongwiriyan

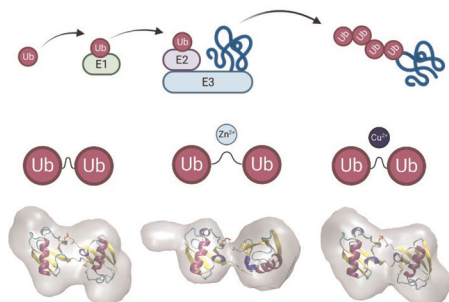
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Thakur Rochak Kumar Rana, Abinash Swain and Gopalan Rajaraman*

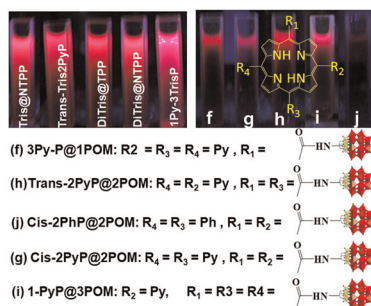
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Stretching the chains: the destabilizing impact of Cu^{2+} and Zn^{2+} ions on K48-linked diubiquitin

Vincenzo Mangini, Giulia Grasso, Benny Danilo Belviso, Michele F. M. Sciacca, Valeria Lanza, Rocco Caliendo* and Danilo Milardi*

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Designing diverse coordination modes for the covalent attachment of Wells–Dawson type polyoxometalate onto porphyrins

Hafiz Muhammad Asif, Hafiza Fareeha Ashfaq, Yunshan Zhou,* Lijuan Zhang,* Arshad Iqbal, Xin Hu and Farooq Khurum Shehzad

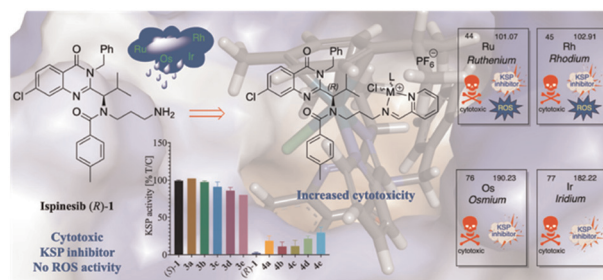


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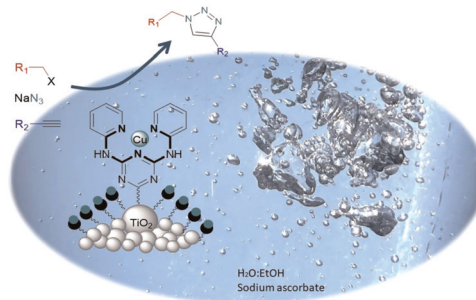
Michał Łomzik, Andrzej Błauz, Marta Głodek, Anna Makal, Daniel Tchoń, Daniel Moscoh Ayine-Tora, Christian Hartinger, Błażej Rychlik and Damian Plažuk*



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Sustainable catalysts for efficient triazole synthesis: an immobilized triazine-based copper-NNN pincer complex on TiO₂

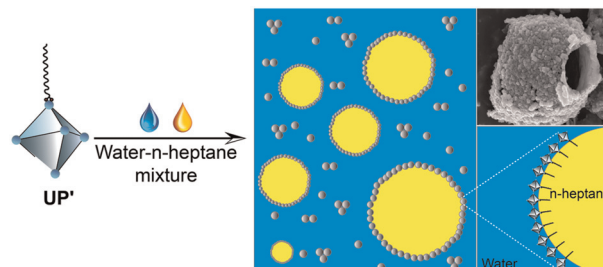
Mitra Esfandiari, Gholamhossein Mohammadnezhad,* Oluseun Akintola, Felix Otto, Torsten Fritz and Winfried Plass*



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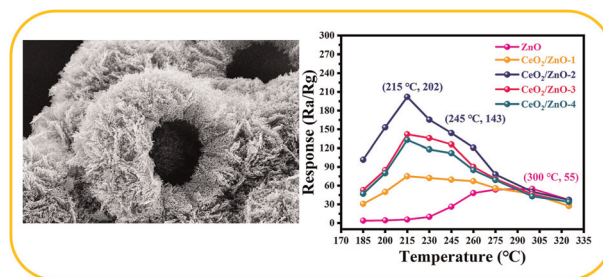
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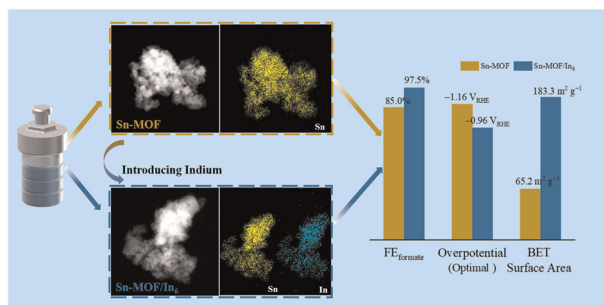
Facile and template-free fabrication of hierarchical coral spheres for acetone gas sensors

Ying Liu, Baoteng Li, Sailong Xu* and Ying Guo*



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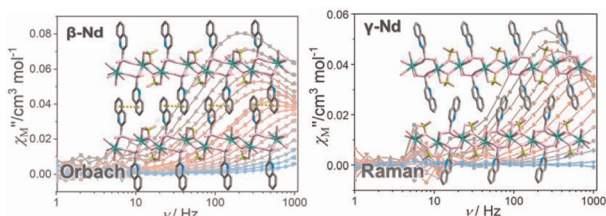
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In-modified Sn-MOFs with high catalytic performance in formate electrocatalysis from aqueous carbon dioxide

Jiaying Yan, Xuanyu Wang, Fanghua Ning, Jin Yi, Yuyu Liu* and Kai Wu*

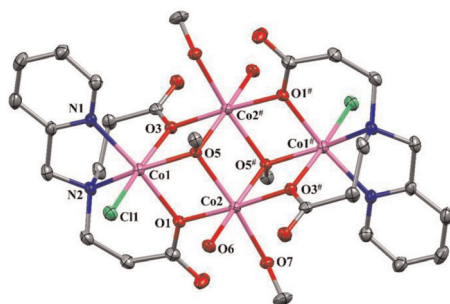
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Layered lanthanide phosphonates Ln(2-qph)(SO₄)(H₂O)₂ (Ln = La, Ce, Pr, Nd, Sm): polymorphism and magnetic properties

Xiu-Fang Ma, Dai Zeng, Chang Xu, Song-Song Bao and Li-Min Zheng*

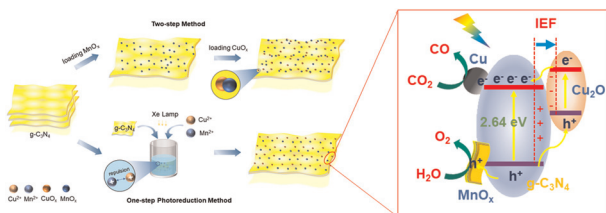
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A tetracobalt(II) cluster with a two vertex truncated dicubane topology endogenously supported by carboxylate-based (2-pyridyl)methylamine ligands: magneto-structural and DFT studies

Shashi Kant, Sayan Saha, Francesc Lloret, Joan Cano* and Rabindranath Mukherjee*

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One-step photodeposition of spatially separated CuO_x and MnO_x dual cocatalysts on g-C₃N₄ for enhanced CO₂ photoreduction

Fengyu Tian,* Xinyao Wu, Junhong Chen, Xuebiao Sun, Xuemin Yan* and Guangfu Liao*

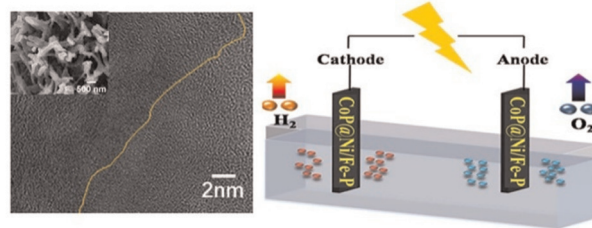


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Crystalline/amorphous composite interface of CoP@Ni/Fe-P as a boosted electrocatalyst for full water splitting

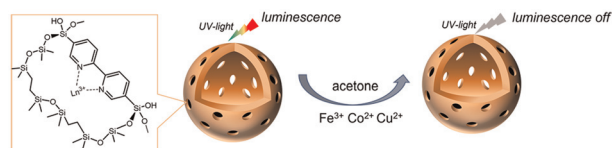
Lijuan Yu, Peilin Wu, Tenghui Tian, Xingquan He, Meihong Fan and Lili Cui*



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Lanthanide-grafted hollow bipyridine-based periodic mesoporous organosilicas as chemical sensors

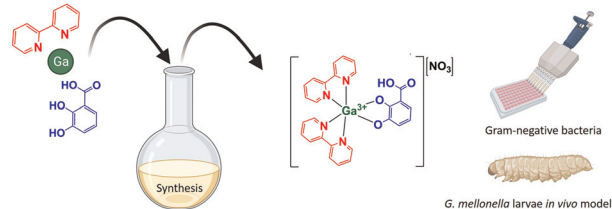
Wanlu Liu, Chunhui Liu, Luca Pilia, Hongliang Zhang, Pascal Van Der Voort, Anna M. Kaczmarek and Rik Van Deun*



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Synthesis, characterisation and antibacterial activity of novel Ga(III) polypyridyl catecholate complexes

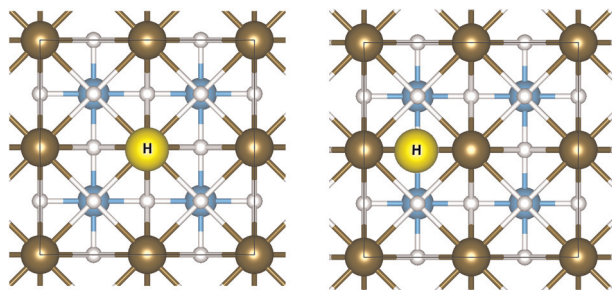
Lewis More O'Ferrall, Magdalena Piatek, Brendan Twamley, Kevin Kavanagh, Christine O'Connor* and Darren M. Griffith*



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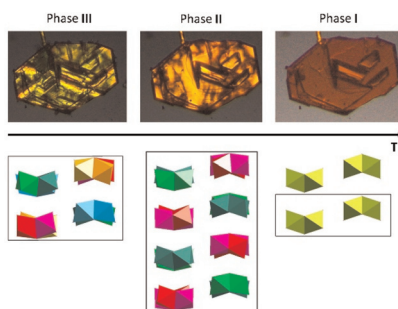
Electronic and electrocatalytic properties of PbTiO₃: unveiling the effect of strain and oxygen vacancy

L. Bendaoudi, T. Ouahrani,* A. Daouli, B. Rerbal, R. M. Boufatah, Á. Morales-García, R. Franco, Z. Bedrane, M. Badawi and D. Errandonea*



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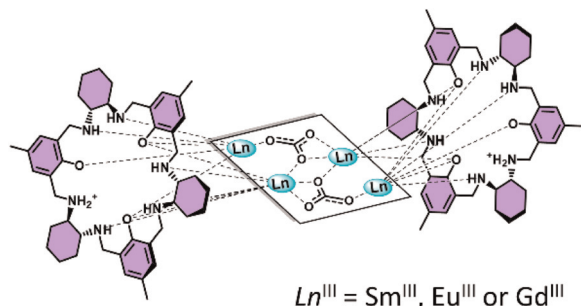
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Temperature symmetry breaking and properties of lead-free organic–inorganic hybrids: bismuth(III) iodide and antimony(III) iodide: $(\text{S}(\text{CH}_3)_3)_3[\text{Bi}_2\text{I}_9]$ and $(\text{S}(\text{CH}_3)_3)_3[\text{Sb}_2\text{I}_9]$

Przemysław Szklarz,* Anna Gągor, Ryszard Jakubas, Wojciech Medycki and Grażyna Bator

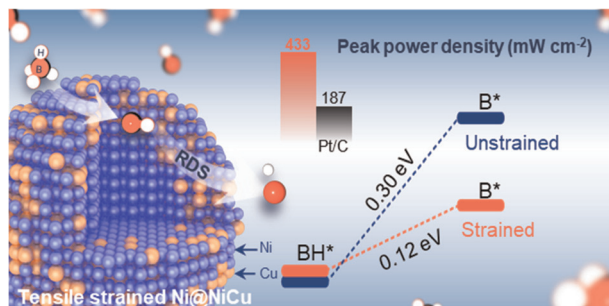
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Solid state structures and solution behaviour of tetranuclear lanthanide(III) carbonate-bridged coordination compounds of chiral 3 + 3 amine macrocycle

Karol Wydra,* Vasyl Kinzhybalo, Jerzy Lisowski,*
Karol Wydra,* Vasyl Kinzhybalo and Jerzy Lisowski*

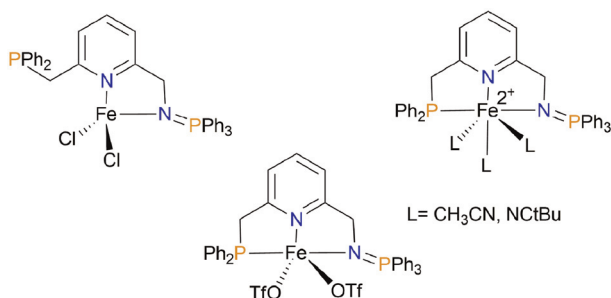
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Lattice strain controlled Ni@NiCu efficient anode catalysts for direct borohydride fuel cells

Bihao Hu, Yuxin Xie, Ying Yang, Jiazhi Meng, Jinliang Cai, Changguo Chen, Danmei Yu* and Xiaoyuan Zhou*

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Fe^{II} complexes supported by an iminophosphorane ligand: synthesis and reactivity

Thibault Tannoux, Louis Mazaud, Thibault Cheisson, Nicolas Casaretto and Audrey Auffrant*

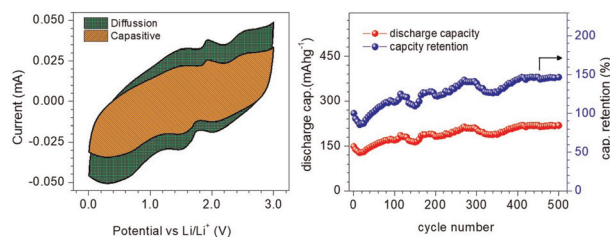


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Highly durable and sustainable copper–iron–tin–sulphide ($\text{Cu}_2\text{FeSnS}_4$) anode for Li-ion batteries: effect of operating temperatures

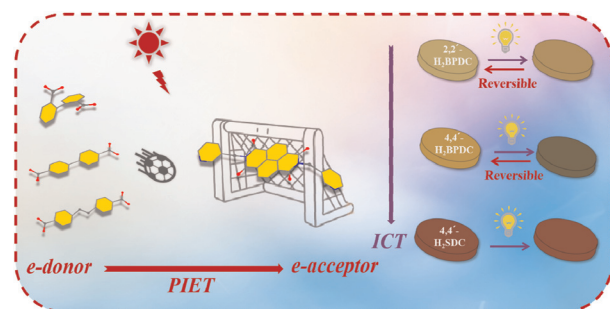
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The effect of conjugation degree of aromatic carboxylic acids on electronic and photo-responsive behaviors of naphthalenediimide-based coordination polymers

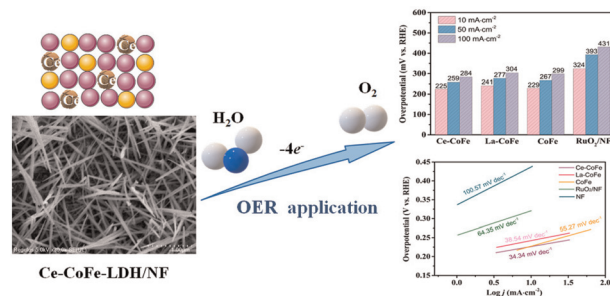
Ming Kang, Bohong Gao, Shimin Zhang, Pengfei Hao,* Gaopeng Li, Junju Shen and Yunlong Fu*



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3D nanostructured Ce-doped CoFe-LDH/NF self-supported catalyst for high-performance OER

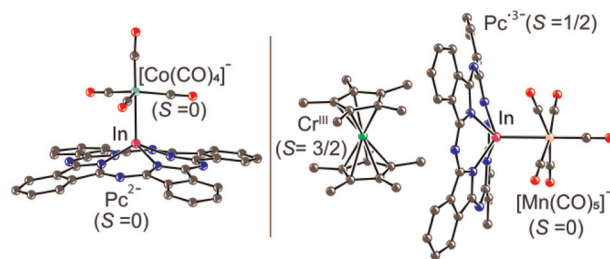
Lu Wang,* Yi Liu, Xiaoheng Liu and Wei Chen*



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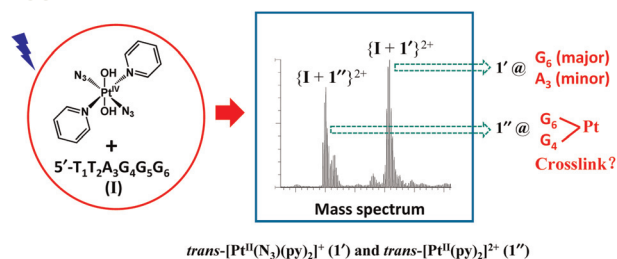
Bimetallic neutral and anionic complexes of transition metal (Co, Mn) carbonyls with indium(III) phthalocyanine

Maxim A. Faraonov,* Evgeniya I. Yudanova, Alexey V. Kuzmin, Ilya A. Yakushev, Salavat S. Khasanov, Akihiro Otsuka, Hideki Yamochi, Hiroshi Kitagawa and Dmitri V. Konarev*



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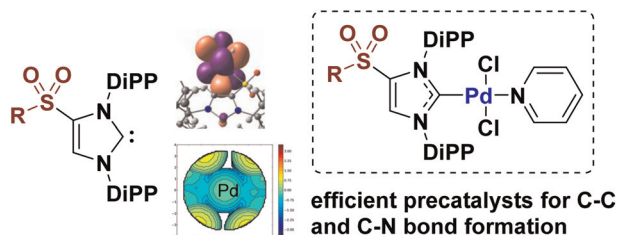
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Reaction of human telomeric unit TTAGGG and a photoactivatable Pt(IV) anticancer prodrug

Jiafan Lin, Jishuai Zhang, Ziqi Ma, Xiaoqin Wu, Fuyi Wang, Yao Zhao,* Kui Wu* and Yi Liu*

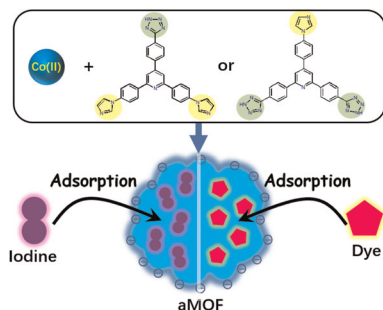
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New class of RSO₂-NHC ligands and Pd/RSO₂-NHC complexes with tailored electronic properties and high performance in catalytic C–C and C–N bonds formation

Dmitry V. Pasyukov, Maxim A. Shevchenko, Alexander V. Astakhov, Mikhail E. Minyaev, Yu Zhang, Victor M. Chernyshev* and Valentine P. Ananikov*

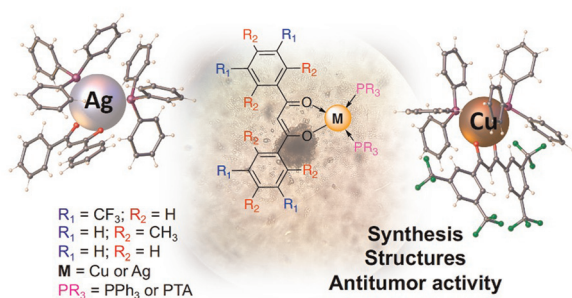
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Porous amorphous metal–organic frameworks based on heterotopic triangular ligands for iodine and high-capacity dye adsorption

Ying Feng, Liang-Hua Wu, Chu-Hong Zhang, Bing-Xun Zhou, Sheng-Run Zheng,* Wei-Guang Zhang,* Song-Liang Cai and Jun Fan

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Synthesis and cytotoxicity studies of Cu(I) and Ag(I) complexes based on sterically hindered β-diketonates with different degrees of fluorination

Maura Pellei,* Jo' Del Gobbo, Miriam Caviglia, Deepika V. Karade, Valentina Gandin, Cristina Marzano,* Anurag Noonikara Poyil, H. V. Rasika Dias* and Carlo Santini

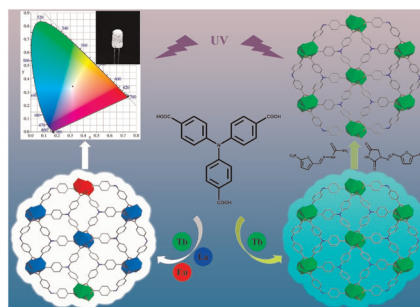


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Single-phase white light material and antibiotic detection of lanthanide metal–organic frameworks

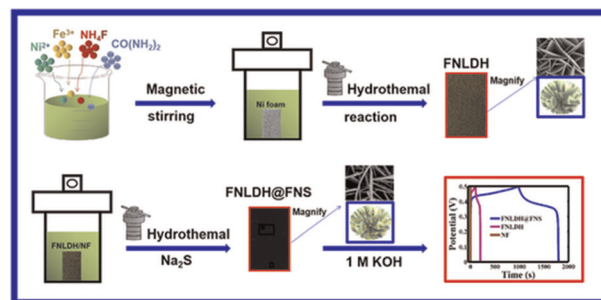
Shunan Ding, Qi Zhou, Guojian Ren,* Yonghang Yang, Cong Wang, Guang Che, MeiLing Li, Danfeng He and Qinhe Pan*



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Porous nanosheet–nanosphere@nanosheet FeNi₂-LDH@FeNi₂S₄ core–shell heterostructures for asymmetric supercapacitors

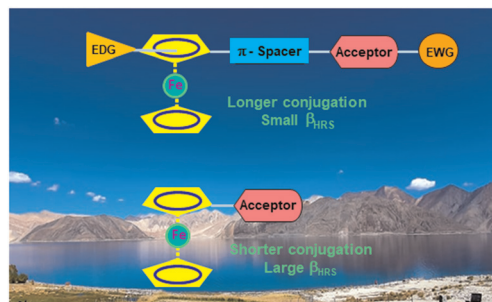
Xiaoqin Min, Zhitao Bo, ZhiKun Xu, Junhui Feng, Xiaoyun Lin* and Yongnian Ni



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Size economy and first hyperpolarizability: synthesis and nonlinear optical behavior of ferrocene-based donor–acceptor chromophores lacking π -linkers

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Defective MOF-74 with ancillary open metal sites for the enhanced adsorption of chemical warfare agent simulants

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