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**Cover**
See Thomas Just Sørensen *et al.*, pp. 10079–10092.

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**Inside cover**
See Srinivas Dharavath *et al.*, pp. 10093–10098.

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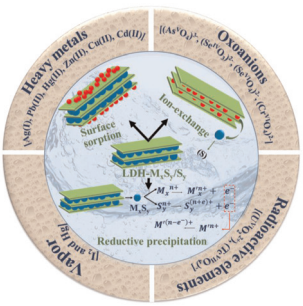

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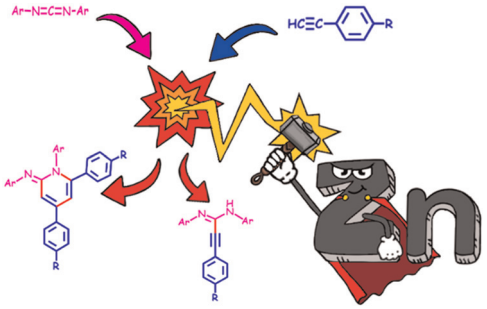
Blanca Parra-Cadenas, Carlos Ginés, Daniel García-Vivó, David Elorriaga* and Fernando Carrillo-Hermosilla*

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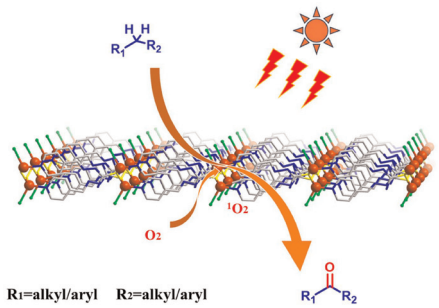
**A novel Cu(I)-based coordination polymer for efficient photocatalytic oxidation of C($sp^3$)–H bonds**

Jiangtao Deng, Huilin Huang, Zhentao Li, Xu Jing* and Chunying Duan

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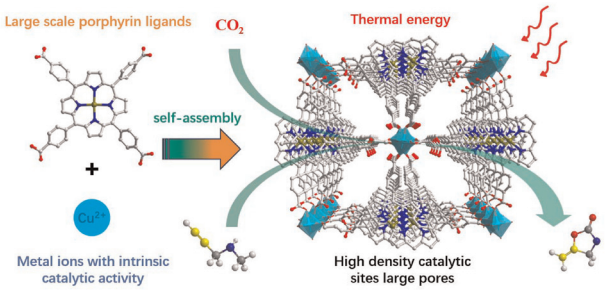
Zhitao Zhang, Kesheng Shen, Qian Zhang, Chunying Duan and Xu Jing*

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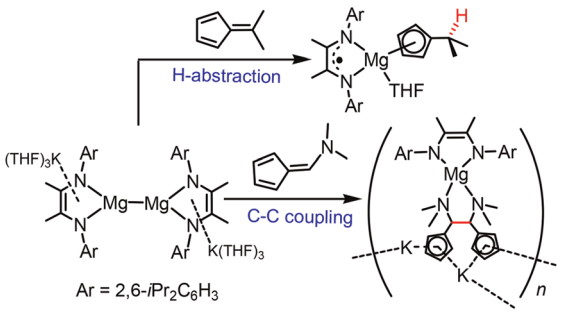
**Activation of cyclopentadiene derivatives by an α-diimine-ligated Mg–Mg-bonded compound**

Yao Qu, Zhixian Xi, Zhenzhou Sun, Li Yang, Rui Liu, Ben Dong, Biao Wu and Xiao-Juan Yang*



## COMMUNICATIONS

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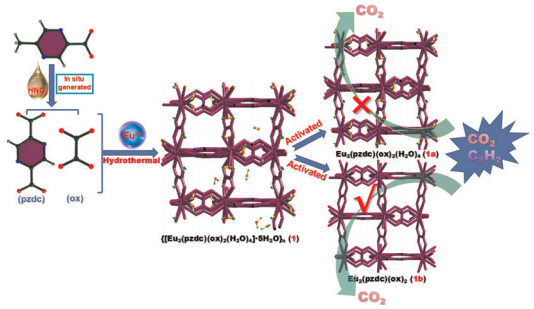


***In situ* generated 2,5-pyrazinedicarboxylate and oxalate ligands leading to a Eu-MOF for selective capture of $C_2H_2$ from $C_2H_2/CO_2$**

Fenglan Liang, Deyun Ma,* Liang Qin, Qiuqun Yu, Jing Chen, Rongxi Liang, Changheng Zhong, Huanzong Liao and Zhiyi Peng

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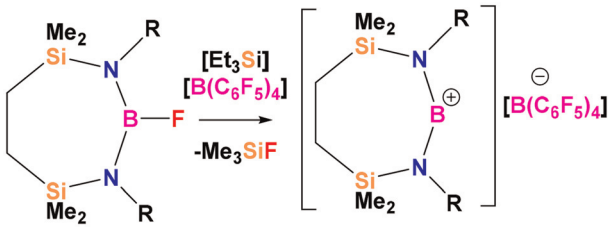


**A chelated borinium cation**

Christopher Major, Alan Lough and Douglas W. Stephan*

## PAPERS

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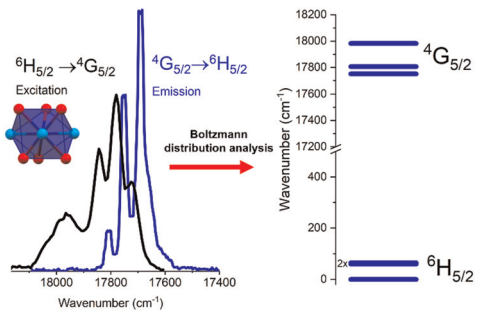


**Contrasting impact of coordination polyhedra and site symmetry on the electronic energy levels in nine-coordinated Eu(III) and Sm(III) crystals structures determined from single crystal luminescence spectra**

Sabina Svava Mortensen, Villads R. M. Nielsen and Thomas Just Sørensen*

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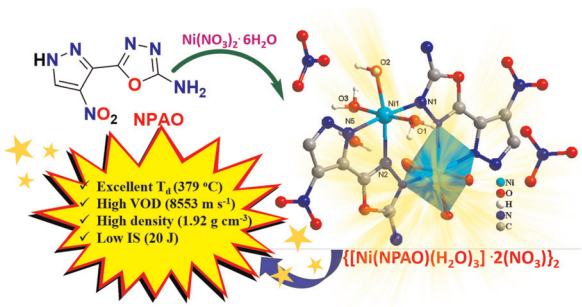


**Elevating the energetic capabilities of metal coordination compounds by incorporating nitrate anions**

Abhishek Kumar Yadav, Richa Rajak and Srinivas Dharavath*

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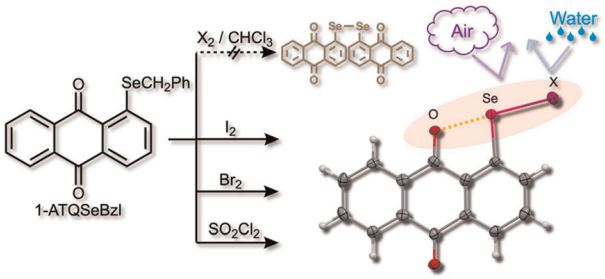
Naoki Ogawa, Nobuhiro Suzuki, Yoshifumi Katsura, Mao Minoura, Waro Nakanishi and Satoko Hayashi*

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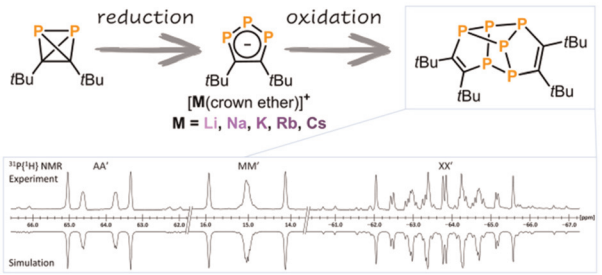
**Access to 1,2,3-triphospholide ligands by reduction of di-*tert*-butyldiphosphatetrahedrane**

Maria K. Uttendorfer, Gabriele Hierlmeier, Gábor Balázs and Robert Wolf*

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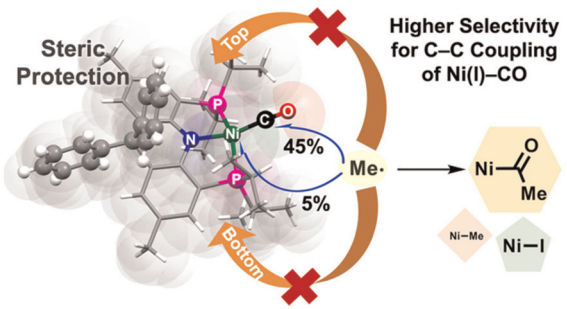
**Reactivity of low-valent nickel carbonyl species supported by acridane based PNP ligands towards iodoalkanes**

Sanha Park, Mi Sook Seo, Mingi Kim, Kang Mun Lee, Peter M. Graham* and Yunho Lee*

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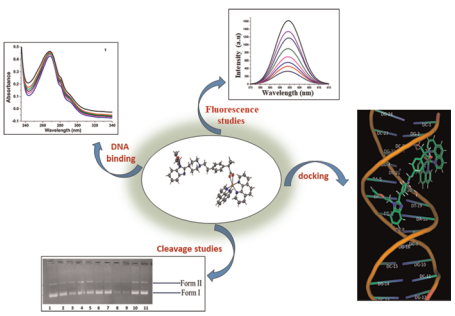
Rijwan, Farukh Arjmand and Sartaj Tabassum*



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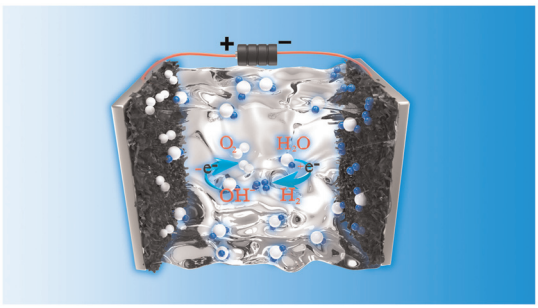


**Engineering hierarchical snowflake-like multi-metal selenide catalysts anchored on Ni foam for high-efficiency and stable overall water splitting**

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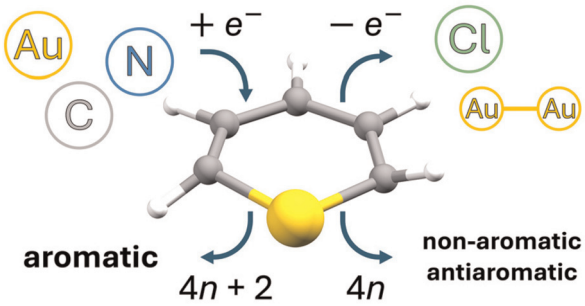


**The aromatic nature of auracycles and diauracycles based on calculated ring-current strengths**

Daniel Blasco* and Dage Sundholm*

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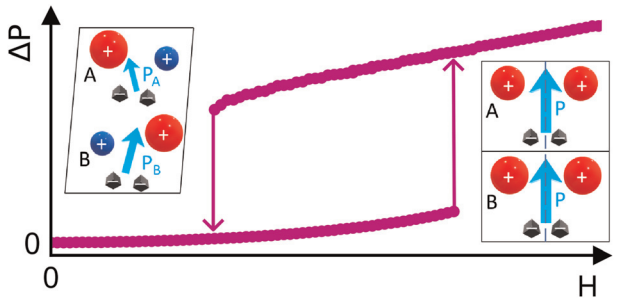


**Magnetoelectric and MIESST effects in spin crossover materials exhibiting symmetry-breaking**

Ricardo G. Torres Ramírez, Elzbieta Trzop and Eric Collet*

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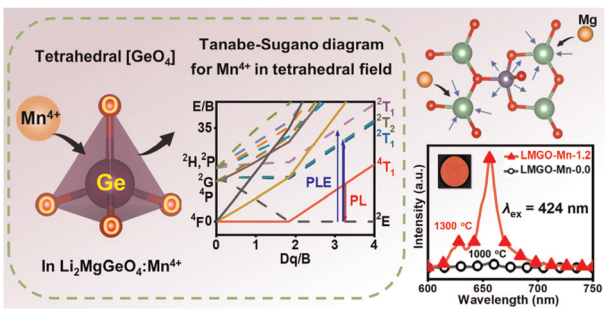


**Unveiling the luminescence property of $Li_2MgGeO_4:Mn^{4+}$ featuring the tetrahedral crystallographic-site occupancy of $Mn^{4+}$**

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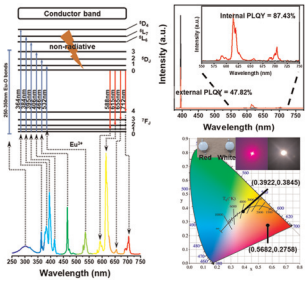


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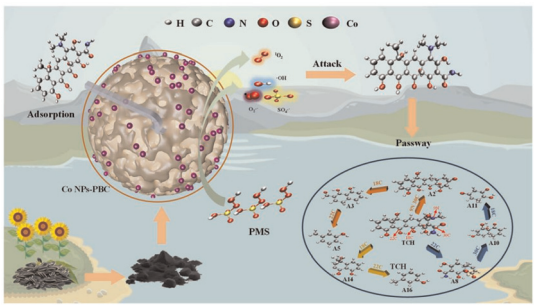
Yunpeng Wang, Ting Jiao, Peng Zhang, Wanyi Hou, Zhongping Li,* Chuan Dong, Wanying Zhang and Lei Zhang

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**Homo- and heterobimetallic transition metal cluster derived from [Cp*Fe($\eta^5$-$E_5$)] (E = P, As) – unprecedented structural motifs of the resulting polypnictogen ligands**

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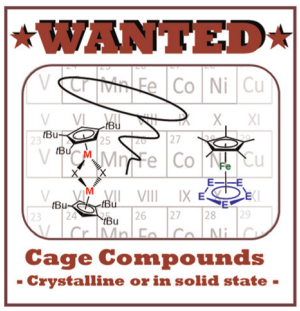


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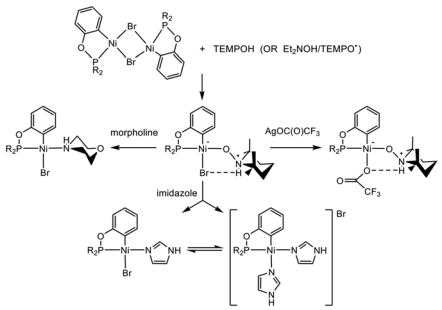
**Reactions of cyclonickelated complexes with hydroxylamines and TEMPO$^{\bullet}$: isolation of new TEMPOH adducts of Ni(II) and their reactivities with nucleophiles and oxidants**

Rajib K. Sarker and Davit Zargarian*



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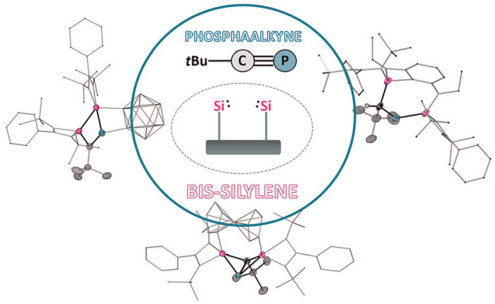


**Reactivities of phosphaalkynes towards diverse bis-silylenes**

Xiaofei Sun, Da Jin, Stefanie Maier, Alexander Hinz and Peter W. Roesky*

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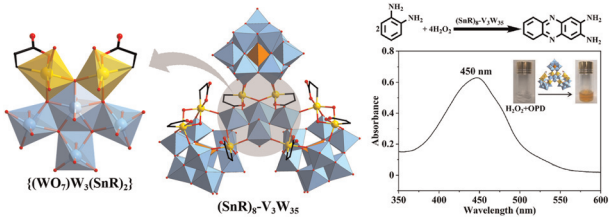


**Self-assembly of a unique triangle-like tungstovanadate containing pentagonal $\{(WO_7)W_3(SnR)_2\}$ cluster**

Hao-Tian Zhu, Yang Sun, Fang Su,* Ya-Jun Zhang, Xiao-Jing Sang, Jing Ren and Lan-Cui Zhang*

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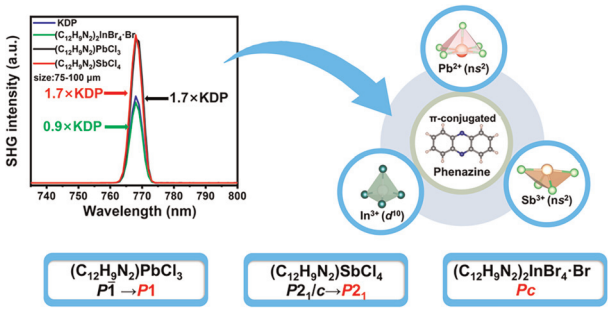


**Advancing nonlinear optics: discovery and characterization of new non-centrosymmetric phenazine-based halides**

Yibo Cui, Jindong Cao, Jiawei Lin, Chunxiao Li, Jiyong Yao, Kunjie Liu, An Hou, Zhongnan Guo, Jing Zhao* and Quanlin Liu*

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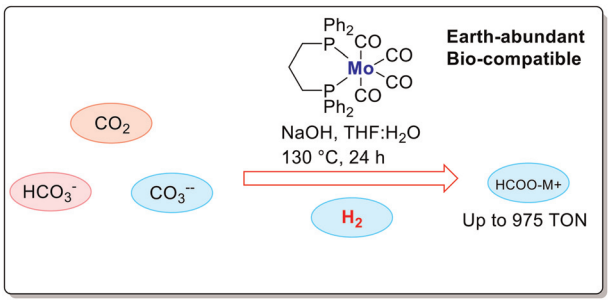


**Molybdenum-catalyzed hydrogenation of carbon dioxide, bicarbonate, and inorganic carbonates to formates**

Tushar Singh and Subrata Chakraborty*

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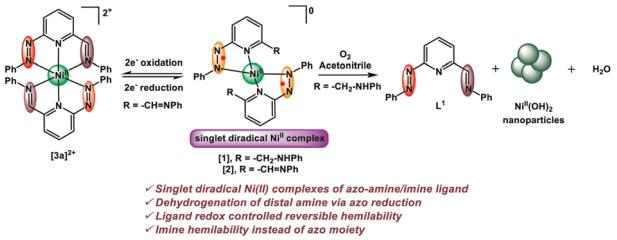
Bappaditya Goswami, Manas Khatua, Ambika Devi, Shivali Hans, Robindo Chatterjee and Subhas Samanta*

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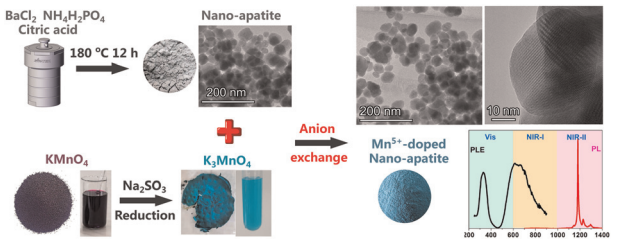
### Hydrothermal and anion exchange synthesis of Mn(v)-doped $Ba_5(PO_4)_3Cl$ nano-apatite toward NIR-II temperature sensing

Wenjing Huang, Jiahui Zhang, Yuchuan Zheng, Linyun Zeng, Wei Liu, Zafari Umar, Mubiao Xie, Yuliya Bokshyts, Jialiang Pan* and Xinguo Zhang*

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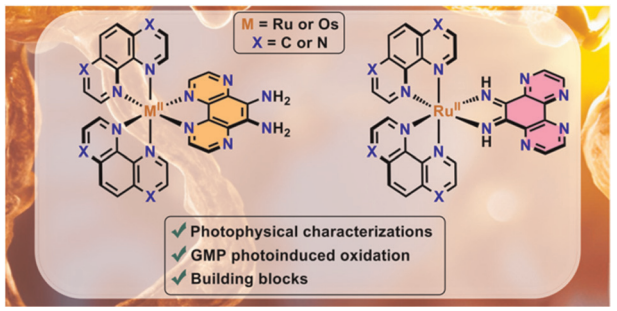
### Synthesis of Ru(II) and Os(II) photosensitizers bearing one 9,10-diamino-1,4,5,8-tetraazaphenanthrene scaffold

Simon De Kreijger, Emilie Cauët, Benjamin Elias* and Ludovic Troian-Gautier*

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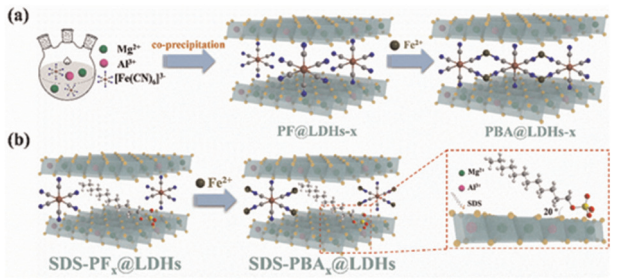
### Enhanced dispersion of prussian blue *via* intercalation into layered double hydroxides for efficient solar seawater evaporation

Weixin Mo, Qianqian Hu, Jun Guan, Yu Jiang, Weiliang Tian, Huiyu Li,* Fabrice Leroux and Yongjun Feng*



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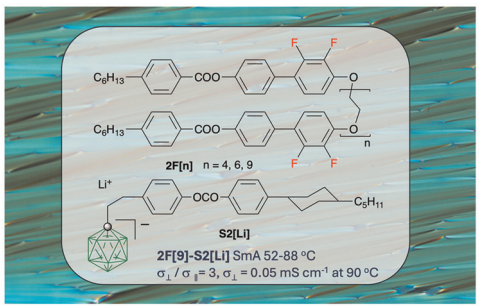


**Lithium salt of a pro-mesogenic [*closo*-$CB_{11}H_{12}$]$^-$ derivative: anisotropic $Li^+$ ion transport in liquid crystalline electrolytes**

Litwin Jacob, Leszek Niedzicki, Rafał Jakubowski, Damian Pociecha and Piotr Kaszyński*

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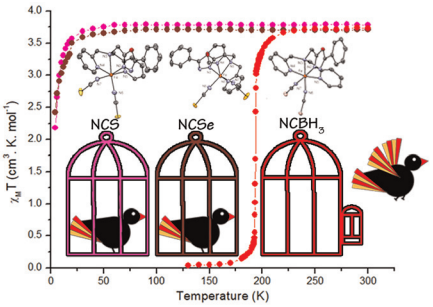


**A combined theoretical and experimental approach to determine the right choice of co-ligand to impart spin crossover in Fe(II) complexes based on 1,3,4-oxadiazole ligands**

Sriram Sundaresan, Julian Eppelsheimer, Esha Gera, Lukas Wiener, Luca M. Carrella, Kuduva R. Vignesh* and Eva Rentschler*

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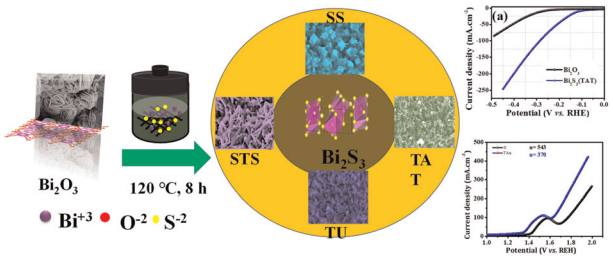


**Sulfur ion-exchange strategy to obtain $Bi_2S_3$ nanostructures from $Bi_2O_3$ for better water splitting performance**

Hamdan M. Danamah, Tariq M. Al-Hejri, Vijakumar V. Jadhav, Zeenat A. Shaikh, T. A. J. Siddiqui, Shoyebmohamad F. Shaikh* and Rajaram S. Mane*

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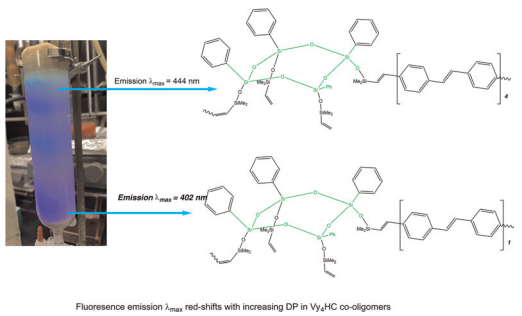


**Conjugation through Si–O–Si bonds, silsesquioxane (SQ) half cage copolymers, extended examples *via* $SiO_{0.5}/SiO_{1.5}$ units: multiple emissive states in violation of Kasha's rule**

Zijing Zhang, Jose Jonathan Rubio Arias, Hana Kaehr, Yujia Liu, Ryoga Murata, Masafumi Unno, Nuttapon Yodsin, Pimjai Pimbaotham, Siriporn Jungsuttiwong, Matt Rammo, Jung-Moo Heo, Jinsang Kim, Aleksander Rebane and Richard M. Laine*

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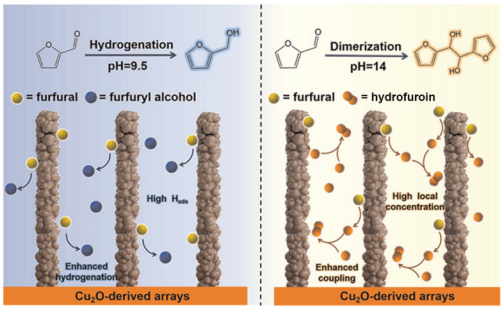
**Switchable selectivity to electrocatalytic reduction of furfural over $Cu_2O$-derived nanowire arrays**

Li Ma, Huiling Liu* and Cheng Wang*

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**Exploring novel Cd(II) complexes with 5-methyl-4-imidazolecarboxaldehyde: synthesis, structure, computational insights, and affinity to DNA through switchSense methodology**

Mateusz Kowalik,* Paulina Nowicka, Jakub Brzeski, Natalia Żukowska, Joanna Masternak, Katarzyna Kazimierczuk and Mariusz Makowski