Dalton Transactions

An international journal of inorganic chemistry incorporating Acta Chemica Scandinavica

rsc.li/dalton

The Royal Society of Chemistry is the world's leading chemistry community. Through our high impact journals and publications we connect the world with the chemical sciences and invest the profits back into the chemistry community.

IN THIS ISSUE

ISSN 1477-9226 CODEN DTARAF 53(2) 367–822 (2024)

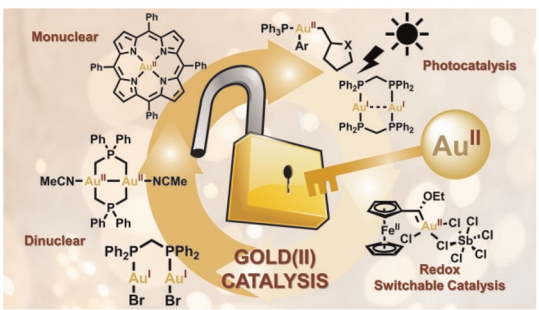
Cover
See Mika Takeuchi and Yutaka Amao, pp. 418–422.

Image reproduced by permission of Yutaka Amao from *Dalton Trans.*, 2024, **53**, 418.

Inside cover
See Teng-Fei Zheng, Sui-Jun Liu *et al.*, pp. 394–409.

Image reproduced by permission of Sui-Jun Liu from *Dalton Trans.*, 2024, **53**, 394.

PERSPECTIVE



FRONTIERS

ROYAL SOCIETY OF CHEMISTRY

Advance your career in science

with professional recognition that showcases your **experience, expertise and dedication**

Stand out from the crowd

Prove your commitment to attaining excellence in your field

Gain the recognition you deserve

Achieve a professional qualification that inspires confidence and trust

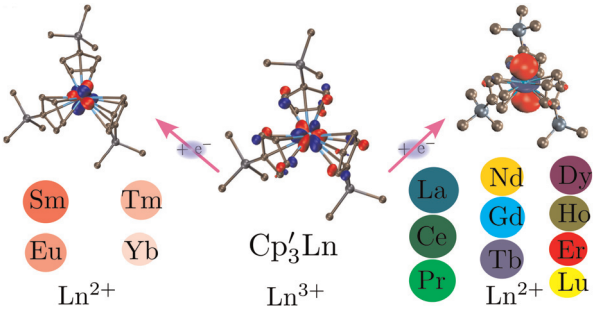
Unlock your career potential

Apply for our professional registers (RSci, RSciTech) or chartered status (CChem, CSci, CEnv)

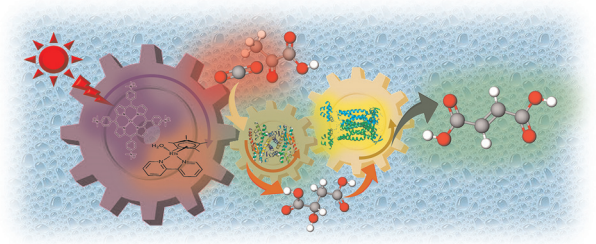
Apply now

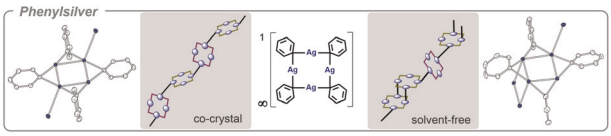
rsc.li/professional-development

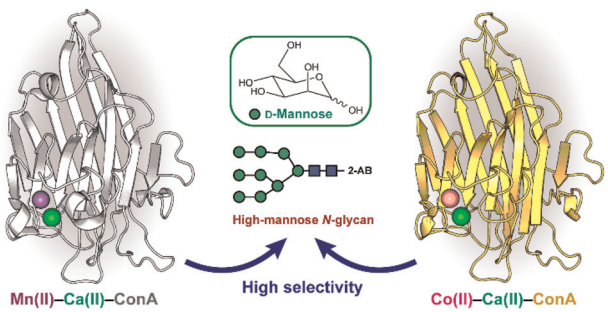
FRONTIERS



COMMUNICATIONS



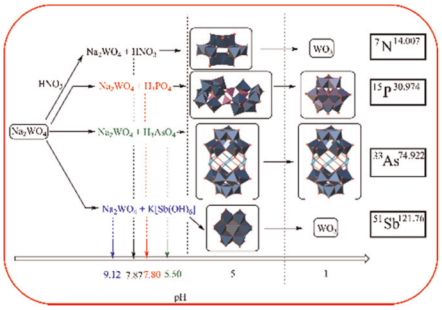


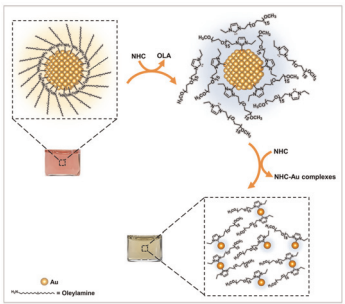


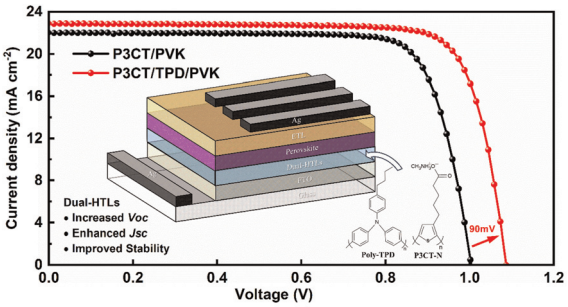
COMMUNICATIONS

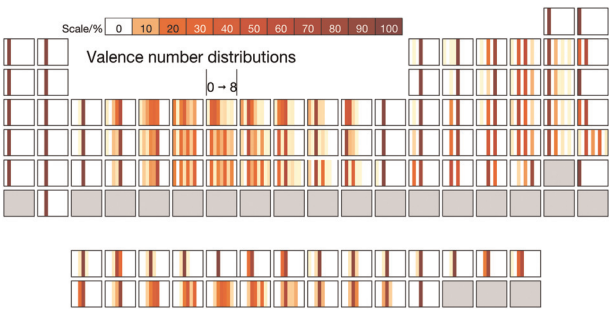
PAPERS

PAPERS



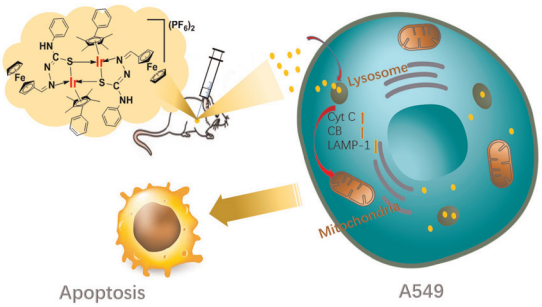


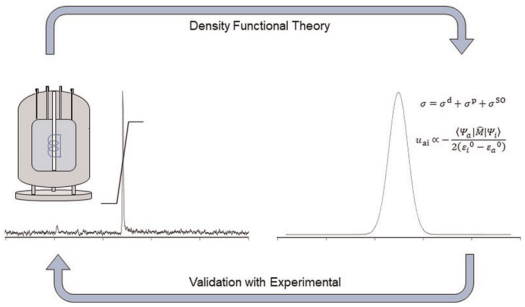


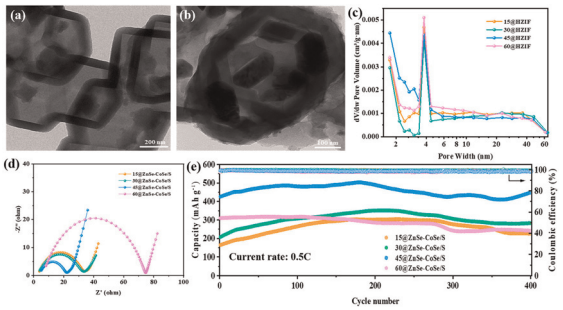


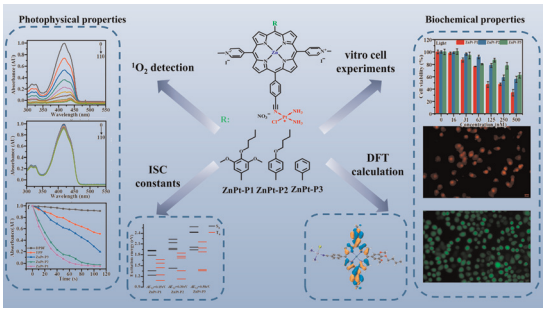
PAPERS

PAPERS



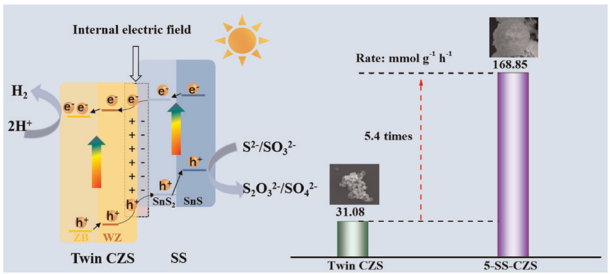






PAPERS

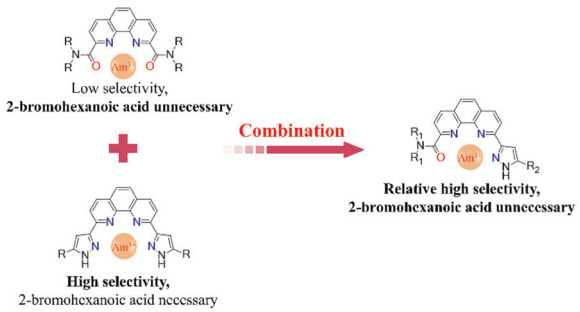
591



Green synthesis of 3D core–shell SnS_2/SnS-$Cd_{0.5}$-$Zn_{0.5}S$ multi-heterojunction for efficient photocatalytic H_2 evolution

Haitao Zhao,* Baohua Zhao, Heyuan Liu and Xiyou Li*

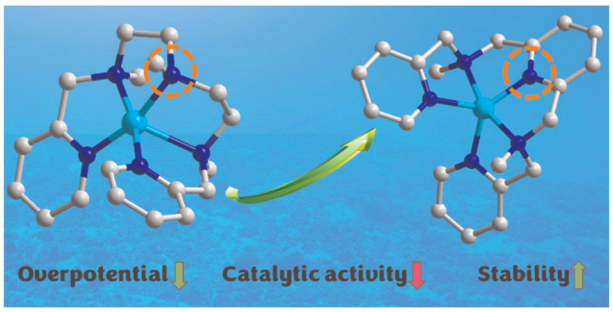
601



New asymmetric tetradentate phenanthroline chelators with pyrazole and amide groups for complexation and solvent extraction of Ln(III)/Am(III)

Haolong Wang, Pengyuan Gao, Tengfei Cui, Dongqi Wang, Jinping Liu, Hui He, Zongyuan Chen, Qiang Jin and Zhijun Guo*

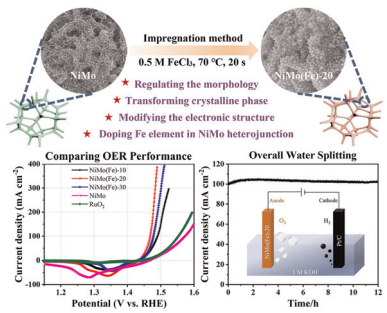
612



Impact of the hybridization form of the coordinated nitrogen atom on the electrocatalytic water oxidation performance of copper complexes with pentadentate amine-pyridine ligands

Kaishan Yu, Tao Wang, Yue Sun, Mei Kang, Xinxin Wang, Dingwei Zhu, Siyi Xue, Junyu Shen,* Qijian Zhang* and Jinxuan Liu*

619



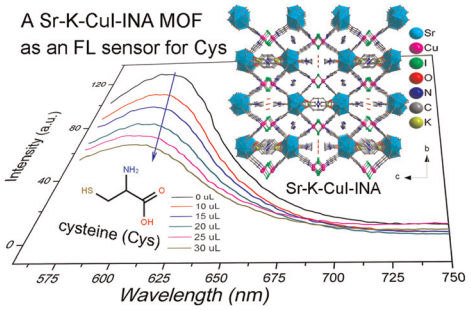
Fe-induced crystalline–amorphous interface engineering of a NiMo-based heterostructure for enhanced water oxidation

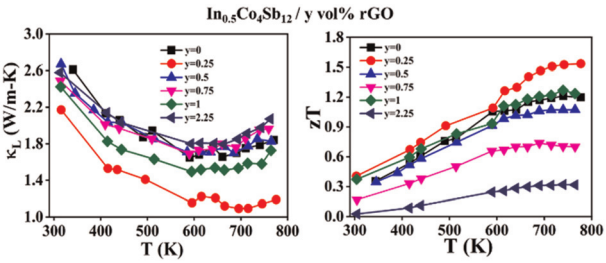
Junming Zhang,* Yingjian Fang, Yao Chen, Yang Gao, Xiaojie Zhang, Tao Tang, Baoqiang Tian, He Xiao, Man Zhao, Ergui Luo,* Tianjun Hu, Jianfeng Jia* and Haishun Wu

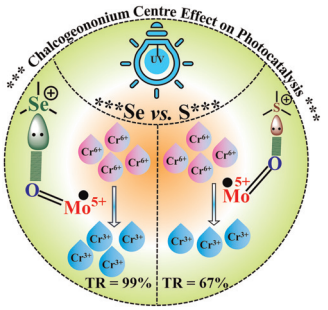
PAPERS

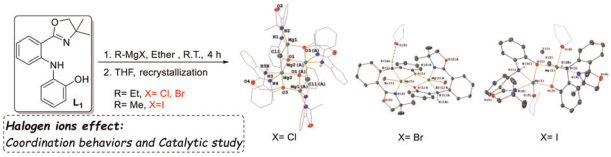
PAPERS

PAPERS









PAPERS

PAPERS