CrystEngComm

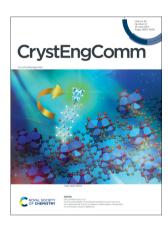
A journal at the forefront of the design and understanding of solid-state and crystalline materials

rsc.li/crystengcomm

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 1466-8033 CODEN CRECF4 26(22) 2845-3006 (2024)

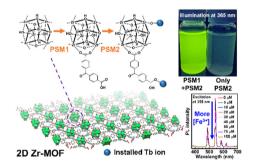


Cover See Chung-Wei Kung et al., pp. 2852-2861. Image reproduced by permission of Chung-Wei Kung from CrystEngComm, 2024, 26, 2852.

PAPERS

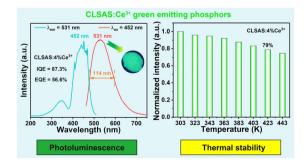
Dual modifications of sensitizers and lanthanide ions on a two-dimensional zirconium-based metalorganic framework for photoluminescent detection

Jhe-Wei Chang, Tzu-Chi Lin, You-Liang Chen, Po-Chun Han, Shang-Cheng Yang, Meng-Dian Tsai, Kevin C.-W. Wu and Chung-Wei Kung*



Dazzling Ca₂LuScAl₂Si₂O₁₂:Ce³⁺ green-emitting garnet-type phosphors for blue-chip-pumped white light-emitting diodes: broad emission band, high quantum efficiency and excellent thermal stability

Cheng Xian, Xiaoyuan Chen, Balaji Devakumar and Xiaoyong Huang*





Royal Society of Chemistry approved training courses

Explore your options. Develop your skills. Discover learning that suits you.

Courses in the classroom, the lab, or online

Find something for every stage of your professional development. Search our database by:

- subject area
- location
- event type
- skill level

Members get at least 10% off

Visit rsc.li/cpd-training





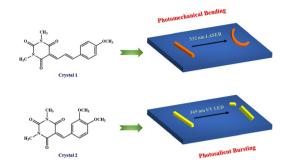
Registered charity number: 207890

PAPERS

2871

Distinct photomechanical responses of two new 1,3-dimethylbarbituric acid derivative crystals

Sayak Nag, Franziska Emmerling, Srinu Tothadi, Biswajit Bhattacharya* and Soumyajit Ghosh*



2883

A homochiral polar molecular piezoelectric material with phase transition and high piezoelectricity precisely designed by cyanomethyl group substitution

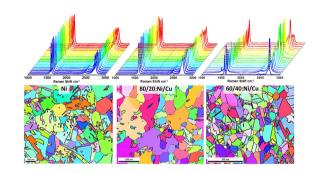
Shu-Jing Yang, Yong-Ju Bai, Jun-Chao Qi, Xiao-Yun Huang, Xin Shen, Yan-Zi Lu, Zhang-Tian Xia, Hui-Peng Lv* and Wei-Qiang Liao*



2891

Graphene growth via chemical vapour deposition on cross-rolled surface-textured nickel-copper foils

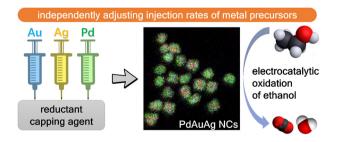
Palash Chandra Maity, Narasimha Vinod Pulagara, Mamleshwar Kumar, K. N. Chaithanya Kumar, Taraknath Das, K. S. Suresh* and Indranil Lahiri*



2906

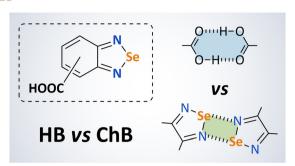
One-pot synthesis of PdAuAg nanocrystals for efficient electrocatalytic oxidation of ethanol: achieving morphology control by independently adjusting metal-atom concentrations

Quanlin Wu, Yuanyuan Min, Yunchi Yang, Yingying Wang,* Yanyun Ma* and Yiqun Zheng*



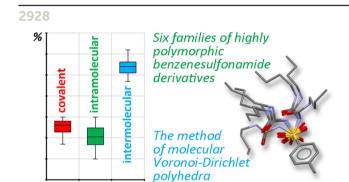
PAPERS

2918



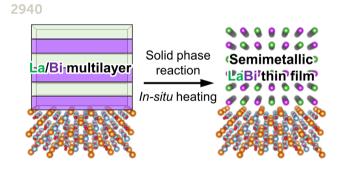
Hydrogen and chalcogen bonds in crystals of chalcogenadiazolecarboxylic acids - competition or cooperation?

Jan Alfuth,* Agnieszka Czapik, Beata Zadykowicz and Teresa Olszewska



Features of noncovalent interactions in the group of highly polymorphic benzenesulfonamide derivatives

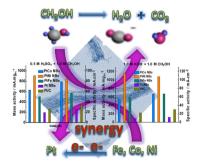
Arina V. Kazakova and Anton V. Savchenkov*



Semimetallic electrical properties of rock salt-type LaBi thin films grown by solid-phase reaction of La/ Bi multilayer precursors

Kenshin Yoshikawa, Hideyuki Kawasoko* and Tomoteru Fukumura*

2945



Bimetallic Pt-M (M = Fe, Co, Ni) nanobunches composed of ultrathin nanowires with strong synergy and rich surface defects for enhanced methanol oxidation electrocatalysis

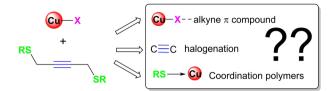
Suwen Li, Yu Zhang, Yulan Liu, Fangfei Lv, Yiming Yan, Baocang Liu and Lili Huo*

PAPERS

2953

Polymeric CuX coordination compounds assembled from acetylenic thioether ligands $RSCH_2C \equiv CCH_2R$ (R = C_6H_{11} , t-Bu): effect of the RS-group, halide and stoichiometry on the network architecture and the luminescence properties

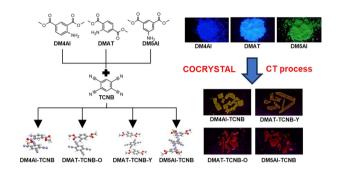
Michael Knorr,* Lydie Viau,* Lena Knauer, Carsten Strohmann, Yoann Rousselin and Marek M. Kubicki



2976

Modulation of luminescence properties of cocrystals composed of amino substituted dimethyl phthalates and 1,2,4,5-tetracyanobenzene by crystal engineering

Xiaokai Zhang, Zhonghua Li, Rui Han, Jiawei Lin, Maolin Li, Jianmin Zhou, Songgu Wu* and Junbo Gong



2989

Mechanical properties and behavior of the Ti-45Nb alloy subjected to extreme conditions

Dejan Zagorac,* Dasari L. V. K. Prasad,* Tamara Škundrić, Kedar Yadav, Surender Singh, Slađana Laketić, Jelena Zagorac, Miloš Momčilović and Ivana Cvijović-Alagić*

