

Volume 226, March 2015

JOURNAL OF SOLID STATE CHEMISTRY

CONTENTS

www.elsevier.com/locate/jssc

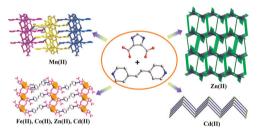
Abstracted/indexed in BioEngineering Abstracts, Chemical Abstracts, Coal Abstracts, Current Contents/Physics, Chemical, & Earth Sciences, Engineering Index, Research Alert, SCISEARCH, Science Abstracts, and Science Citation Index. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®.

Regular Articles

Assembly and property research on seven 0D–3D complexes derived from imidazole dicarboxylate and 1,2-bi(pyridin-4-yl)ethene

Bao Mu, Qian Li, Lei Lv, Dan-Dan Yang, Qing Wang and Ru-Dan Huang

page 1

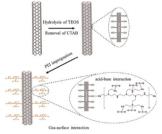


Seven new complexes based on different structural characteristics have been hydrothermally synthesized by the mixed ligands. The fluorescent properties, the magnetic property and the water vapor adsorption have been investigated.

Regular Articles—Continued

Silica-coated multi-walled carbon nanotubes impregnated with polyethyleneimine for carbon dioxide capture under the flue gas condition

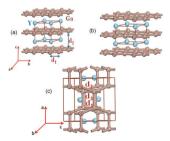
Min-Sang Lee and Soo-Jin Park *page 17*



Fabrication and CO_2 adsorption process of the S-MWCNTs impregnated with PEI.

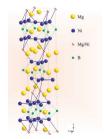
High pressure structural behavior of YGa₂: A combined experimental and theoretical study

M. Sekar, N.V. Chandra Shekar, R. Babu, P. Ch. Sahu, A.K. Sinha, Anuj Upadhyay, M.N. Singh, K. Ramesh Babu, S. Appalakondaiah, G. Vaitheeswaran and V. Kanchana *page 11*



High pressure X-ray diffraction patterns of YGa_2 up to ~35 GPa shows an isostructural phase transition at ~5 GPa and transition to an orthorhombic structure ~14 GPa.

Preparation and properties of a new ternary phase $\mathrm{Mg}_{3+x}\mathrm{Ni}_{7-x}\mathrm{B}_2$ (0.17 $\leq x \leq$ 0.66) and its Cu-doping effect Chang-Zhong Liao, Cheng Dong, Kaimin Shih, Lingmin Zeng, Bing He, Wenhuan Cao and Lihong Yang page 24

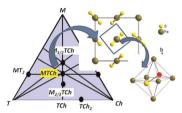


The crystal structure of the $Mg_{3+x}Ni_{7-x}B_2$ phase

Phase stabilities of pyrite-related MTCh compounds (M=Ni, Pd, Pt; T=Si, Ge, Sn, Pb; Ch=S, Se, Te): A systematic DFT study

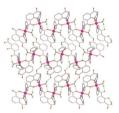
Frederik Bachhuber, Alexander Krach, Andrea Furtner, Tilo Söhnel, Philipp Peter, Jan Rothballer and Richard Weihrich

page 29



Compositional and structural stability of MTCh compounds is investigated from first principle calculations. A conceptional approach is presented to study and predict novel stable and metastable compounds and structures of low gap semiconductors with TCh dumbbell units that are isoelectronic and structurally related to pyrite (FeS₂).

One-dimensional Co(II)/Ni(II) complexes of 2-hydroxyisophthalate: Structures and magnetic properties Kai Wang, Hua-Hong Zou, Zi-Lu Chen, Zhong Zhang, Wei-Yin Sun and Fu-Pei Liang page 36



Synopsis: Two Co(II)/Ni(II) complexes with zig-zag chain structures have been reported. 1-Co shows cant-antiferromagnetism while 2-Ni shows ferromagnetism. Magnetocaloric effect is also found in both of them.

Uranium(VI) coordination polymers with pyromellitate ligand: Unique 1D channel structures and diverse fluorescence

Yingjie Zhang, Mohan Bhadbhade, Inna Karatchevtseva, Jason R. Price, Hao Liu, Zhaoming Zhang, Linggen Kong, Jiří Čejka, Kim Lu and Gregory R. Lumpkin *page 42*

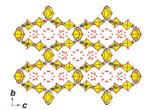
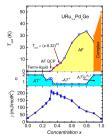


Table of content: three new uranium(VI) coordination polymers with pyromellitic acid (H_4 btca) have been synthesized via room temperature and hydrothermal synthesis methods, and structurally characterized. Two to three dimensional (3D) frameworks are revealed. All 3D frameworks have unique 1D large channels. Their vibrational modes, thermal stabilities and photoluminescence properties have been investigated.

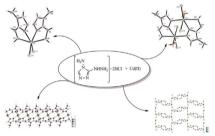
Magnetic phase diagram of pseudo-ternary solid solution URu_{1-x}Pd_xGe

D. Gralak and V.H. Tran page 50



Magnetic phase diagram of $URu_{1-x}Pd_xGe$. Middle and bottom panel: concentration dependence of the exponent n in the resistivity AT^n term and the Sommerfeld ratio of $URu_{1-x}Pd_xGe$ at 2 K, respectively.

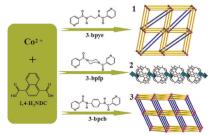
Cd(II) complexes with different nuclearity and dimensionality based on 3-hydrazino-4-amino-1,2,4-triazole Cai-Xia Xu, Jian-Guo Zhang, Xin Yin, Xin Jin, Tong Li, Tong-Lai Zhang and Zun-Ning Zhou page 59



Four Cd(II) complexes based on 3-hydrazino-4-amino-1,2,4-triazole ligands exhibit diverse structures from mononuclear to 2D networks.

Effect of three bis-pyridyl-bis-amide ligands with various spacers on the structural diversity of new multifunctional cobalt(II) coordination polymers

Hong-Yan Lin, Huizhe Lu, Mao Le, Jian Luan, Xiu-Li Wang, Guocheng Liu and Juwen Zhang page 66



Three multifunctional cobalt(II) complexes constructed from three bispyridyl-bis-amide and 1,4-naphthalenedicarboxylic acid have been hydrothermally synthesized and characterized. The fluorescent, electrochemical and magnetic properties of 1–3 have been investigated.

Download English Version:

https://daneshyari.com/en/article/1328924

Download Persian Version:

https://daneshyari.com/article/1328924

<u>Daneshyari.com</u>