

Graphical abstracts

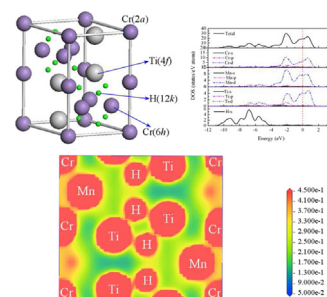
First-principles calculations of the stability and hydrogen storage behavior of C14 Laves phase compound TiCrMn

Zhi-Sheng Nong^{a,b}, Jing-Chuan Zhu^{a,b,*}, Xia-Wei Yang^{a,b}, Yong Cao^{a,b}, Zhong-Hong Lai^a, Yong Liu^{a,b}, Wen Sun^{a,b}

^aSchool of Materials Science and Engineering, Harbin Institute of Technology, Harbin 150001, Heilongjiang, China

^bNational Key Laboratory for Precision Hot Processing of Metals, Harbin Institute of Technology, Harbin 150001, Heilongjiang, China

Solid State Sci. 2014, 32, 1

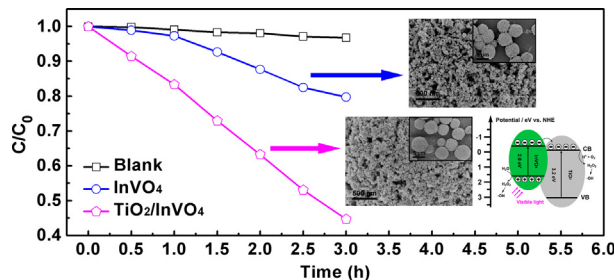

Synthesis of 3D hierarchical porous TiO₂/InVO₄ nanocomposites with enhanced visible-light photocatalytic properties

Jianchao Shen^a, Hui Yang^{a,b}, Yu Feng^a, Qifeng Cai^a, Qianhong Shen^{a,b,*}

^aState Key Laboratory of Silicon Materials, Department of Materials Science & Engineering, Zhejiang University, Hangzhou 310027, PR China

^bZhejiang California International NanoSystems Institute, Zhejiang University, Hangzhou 310027, PR China

Solid State Sci. 2014, 32, 8

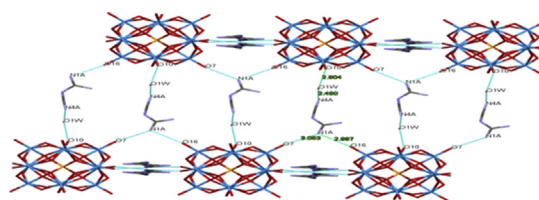

Synthesis, characterization and electrochemical investigation of a new inorganic–organic hybrid constructed by Keggin-type polyoxometalate and cyanoguanidine

Farrokhzad Mohammadi Zonoz^{a,*}, Irandokht Mohammadi Zonoz^b, Ali Jamshidi^c, Mohammad Hassan Alizadeh^d

^aDepartment of Chemistry, Hakim Sabzevari University, Sabzevar 96179-76487, Iran

A new inorganic–organic hybrid based on polyoxotungstate has been successfully synthesized. This hybrid constructed by $[PW_{12}O_{40}]^{3-}$ Keggin-type polyoxoanion and three $\{(HDCD)\}^+$ monocationic hydrogen-bonded fragments.

Solid State Sci. 2014, 32, 13



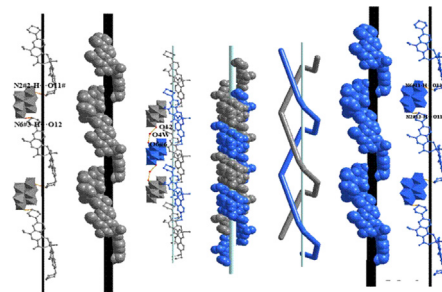
Assembly of an unprecedented metal-pipemidic acid complex modifying octamolybdates containing like DNA spiral chain

Qian-Nan Zhang, Jing-Quan Sha*, Hong Yan, Qing-Shan Yang, Yu Zhang, Liang Li, Dong-Wen Wang, Xiao-Ning Yang

The Provincial Key Laboratory of Biological Medicine Formulation, School of Pharmacy, Jiamusi University, Jiamusi 154007, PR China

The title compound contains the right- and left- double-stranded like DNA helical chains, which are assembled together forming the double intertwined inverted helices.

Solid State Sci. 2014, 32, 20



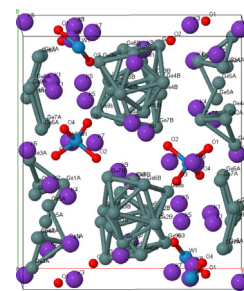
Electrical transport properties of potassium germanide tungstates ($K_{10}Ge_{18}WO_4$): A theoretical study

Sikander Azam^{a,*}, A.H. Reshak^{a,b}

^aNew Technologies – Research Center, University of West Bohemia, Univerzitni 8, Pilsen 306 14, Czech Republic

^bCenter of Excellence Geopolymer and Green Technology, School of Material Engineering, University Malaysia Perlis, 01007 Kangar, Perlis, Malaysia

Solid State Sci. 2014, 32, 26



$Nd_3Ge_{1.18}In_{0.82}$ and $Sm_3Ge_{1.33}In_{0.67}$ – New ternary indides with La_3GeIn type structure

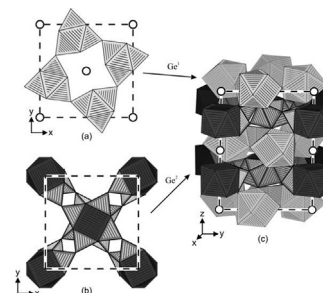
Oksana Kravets^a, Galyna Nychporuk^a, Ihor Muts^a, Viktor Hlukhyi^b, Rainer Pöttgen^c, Vasyli' Zarembo^{a,*}

^aDepartment of Inorganic Chemistry, Ivan Franko National University of Lviv, Kyryla and Mefodiya Street 6, 79005 Lviv, Ukraine

^bDepartment of Chemistry, Technische Universität München, Lichtenbergstrasse 4, D-85747 Garching, Germany

^cInstitut für Anorganische und Analytische Chemie, Universität Münster, Corrensstrasse 30, D-48149 Münster, Germany

Solid State Sci. 2014, 32, 35



Synthesis of Mg–Al–Fe–NO₃ layered double hydroxides via a mechano-hydrothermal route

Fengrong Zhang^a, Na Du^b, Haiping Li^c, Jianqiang Liu^d, Wanguo Hou^{b,*}

^aEnvironment Research Institute, Shandong University, Jinan 250100, PR China

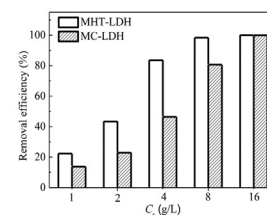
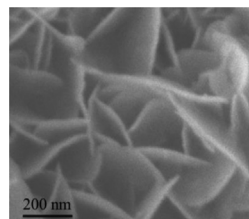
^bKey Laboratory of Colloid and Interface Chemistry (Ministry of Education), Shandong University, Jinan 250100, PR China

^cNational Engineering Technology Research Center for Colloidal Materials, Shandong University, Jinan 250100, PR China

^dSchool of Physics, Shandong University, Jinan 250100, PR China

High crystallized and well-dispersed Mg–Al–Fe–NO₃ LDHs were synthesized via mechano-hydrothermal route. The LDHs show high removal efficiency for heavy metal pollutants from aqueous solutions.

Solid State Sci. 2014, 32, 41



Download English Version:

<https://daneshyari.com/en/article/1504464>

Download Persian Version:

<https://daneshyari.com/article/1504464>

[Daneshyari.com](https://daneshyari.com)