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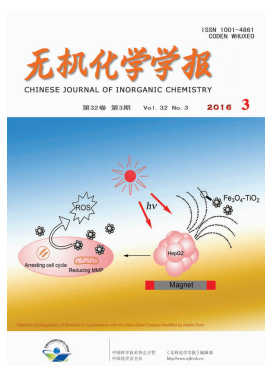
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WANG Ling, WEN Wen, LI Sha, FU Zheng-Qing, TONG Yue-Ju, WANG Juan, HAN Dong, ZHANG Ai-Ping

DOI:10.11862/CJIC.2016.033

Chinese J. Inorg. Chem., **2016**,**32**:393-404

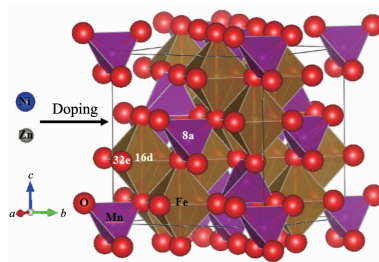
Articles

Study of the Site Occupancy Ordering Behaviors of Cations in the $\text{A}_x\text{Mn}_{1-x}\text{Fe}_2\text{O}_4$ Ferrites (A=Zn, Ni)

CHEN Zu-Hua, FANG Yuan, WU Bo, WU Yu-Feng, FAN Zhi-Yu, SA Bai-Sheng, ZHENG Fu-Nan, HUANG Jin-Tao

DOI:10.11862/CJIC.2016.026

Chinese J. Inorg. Chem., **2016**,**32**:377-385



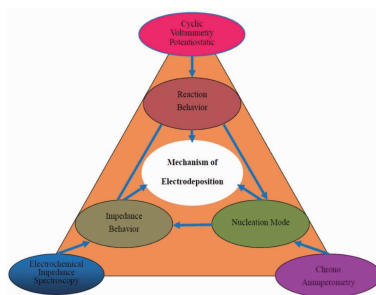
Based on the crystal structure of spinel, we applied the thermodynamic ternary sublattices model combining with first-principles calculations to investigate the site occupancy ordering behaviors of metal cation on the 8a and 16d sublattices in the $\text{Zn}_x\text{Mn}_{1-x}\text{Fe}_2\text{O}_4$ and $\text{Ni}_x\text{Mn}_{1-x}\text{Fe}_2\text{O}_4$.

Electrodeposition Mechanism of Zn(II) on Zinc Electrode

XU Shuang-Quan, LIU Chun-Xia, SHEN Qing-Feng, ZHANG Tao, NI Yuan, YU Xiao-Hua

DOI:10.11862/CJIC.2016.061

Chinese J. Inorg. Chem., **2016**,**32**:386-392



The mechanism of electrodeposition of zinc ions on the zinc electrode in $\text{Zn(II)-NH}_4\text{Cl}$ quasi neutral system is gradually studied by using three kinds of electrochemical test methods from different perspective.

Photocatalytic Killing Effect of $\text{Fe}_3\text{O}_4\text{-TiO}_2$ Nanoparticles on Hepatoma Carcinoma Cells for Targeting Photodynamic Therapy (English)

WANG Ling, WEN Wen, LI Sha,
FU Zheng-Qing, TONG Yue-Ju, WANG Juan,
HAN Dong, ZHANG Ai-Ping

DOI:10.11862/CJIC.2016.033

Chinese J. Inorg. Chem., **2016**,**32**:393-404



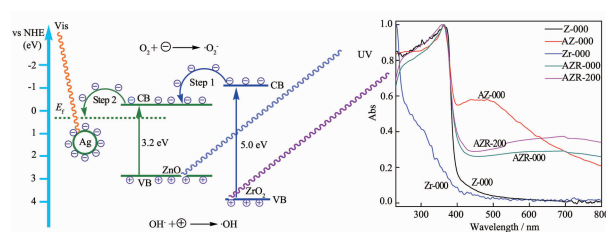
Under external magnetic field, HepG2 cells were killed by photocatalytic $\text{Fe}_3\text{O}_4\text{-TiO}_2$ NPs, and the photokilling mechanism was explored.

Circular-Sheet Nanocomposite Ag/ZnO-ZrO_2 : Microwave-Assisted Synthesis and Photocatalytic Degradation Rhodamine B under Multiple Modes

GAO Yu, LI Li, YI Chun-Xiong,
WANG Shuang, SONG Qiang,
ZHANG Jiang-Qi

DOI:10.11862/CJIC.2016.057

Chinese J. Inorg. Chem., **2016**,**32**:405-413



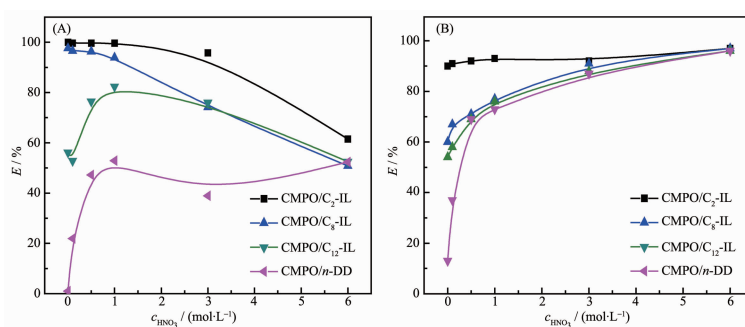
Under the function of microwave irradiation, the crystalline grain sizes, light absorption properties and specific surface area of Ag/ZnO-ZrO_2 were changed, especially its morphology presented circular-sheet structure. Furthermore, Ag/ZnO-ZrO_2 synthesized with 200 W showed the highest activities, suggested that the photocatalytic activities can be enhanced by the way of microwave-assisted.

Extraction Behavior of Eu^{3+} and UO_2^{2+} Using $\text{CMPO}/[\text{C}_n\text{mim}][\text{NTf}_2]$ Systems

SHI Jin-Qiang, YUAN Wei-Jin, DONG Zhen,
ZHAO Long, WEI Yue-Zhou, HE Lin-Feng,
TANG Fang-Dong

DOI:10.11862/CJIC.2016.048

Chinese J. Inorg. Chem., **2016**,**32**:414-420

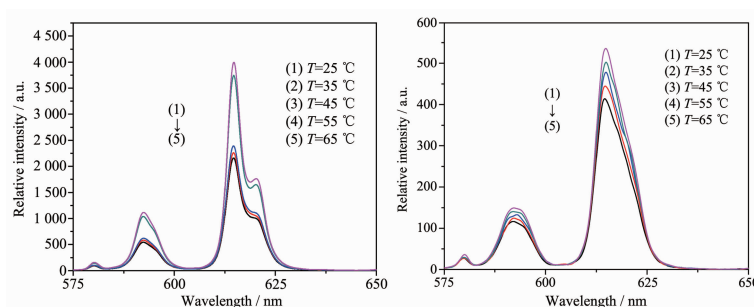


Preparation and Comparative Study of Temperature Sensitive Paint with Different Probe Molecules

ZHANG Min, SUN Jing, LIU Hui-Min,
SONG Huan-Huan, ZHANG Xin-Yang,
YU Wen-Sheng

DOI:10.11862/CJIC.2016.058

Chinese J. Inorg. Chem., **2016**,**32**:421-426

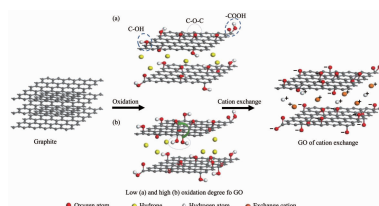


Effect of Oxidation Degree on Structure and Cation Exchange Capacity of Graphite Oxide

FENG Ming-Zhu, PENG Tong-Jiang,
SUN Hong-Juan, WANG Pei-Cao

DOI:10.11862/CJIC.2016.047

Chinese J. Inorg. Chem., **2016**,**32**:427-433



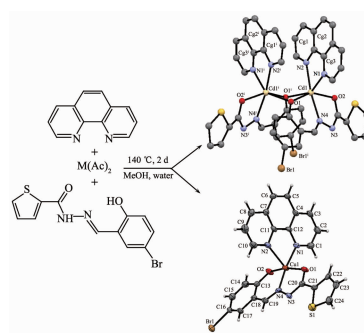
The graphite oxide has more C-OH functional groups in the carbon basal plane with additional KMnO_4 , and the content of C-OH is major factor to increase the cation exchange capacity of graphite oxide.

Hydrothermal Syntheses, Crystal Structures and Properties of Cadmium (II)/ Copper(II) Complexes with Acylhydrazone and Phenanthroline Ligands

CHEN Yan-Min, WANG Jing-Mei,
CHEN Fei-Peng, CHEN Ya-Xin,
ZENG Qian-Ru, XIE Qing-Fan

DOI:10.11862/CJIC.2016.043

Chinese J. Inorg. Chem., **2016**,**32**:434-440

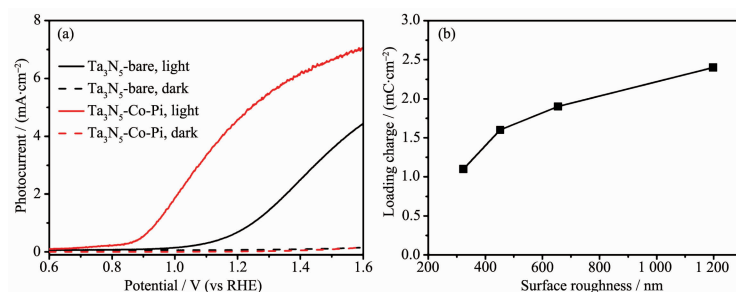


Effect and Mechanism of Co-catalyst Co-Pi Impregnation by Light Assisted Electrodeposition on Solar Water Splitting Properties of Ta_3N_5 Photoanodes

LI Ming-Xue, HAN Kui, LI Yan

DOI:10.11862/CJIC.2016.053

Chinese J. Inorg. Chem., **2016**,**32**:441-449

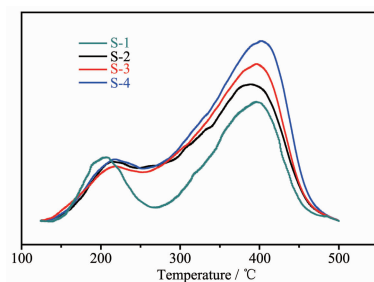


Influence of the Manner of Adding Aluminum Source on the SAPO-34 Molecular Sieves Synthesis and the MTO Catalytic Properties

LI Xiao-Feng, WANG Ping,
LIANG Guang-Hua, DI Chun-Yu,
LI Zhi-Hong, WANG Long, DOU Tao

DOI:10.11862/CJIC.2016.070

Chinese J. Inorg. Chem., **2016**,**32**:450-456



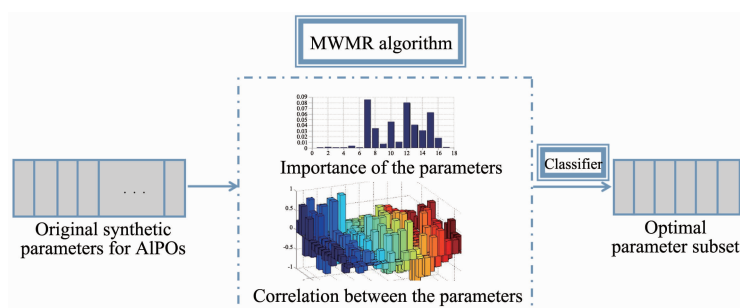
With the increase of the first addition amount of aluminum, the particle size of SAPO-34 molecular sieve became smaller and the amount of strong acidity and the acid density also increased.

Rational Synthetic Parameter Analysis of Open-Framework AIPOs Based on Data Mining Method

GUO Yu-Ting, GAO Na, SHI Rui-Xin,
QI Miao, WANG Jian-Zhong

DOI:10.11862/CJIC.2016.075

Chinese J. Inorg. Chem., **2016**,**32**:457-463

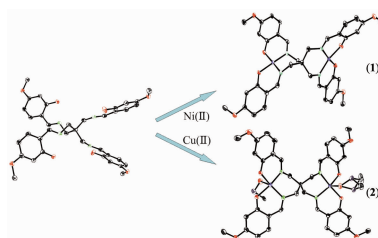


Syntheses, Crystal Structures and Bacteriostatic Activities of Ni(II) and Cu(II) Complexes Based on Pentaerythrityltetramine Schiff Base

ZHANG Qi-Long, WANG Huan-Yu, JIANG Feng, FENG Guang-Wei, XU Hong, HUANG Ya-Li

DOI:10.11862/CJIC.2016.056

Chinese J. Inorg. Chem., 2016,32:464-468



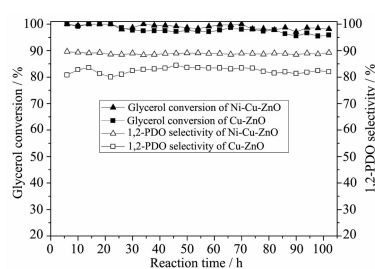
Two binuclear complexes $[\text{Ni}_2(\text{L})]\cdot\text{DMF}$ (1) and $[\text{Cu}_4(\text{L})_2(\text{DMSO})_3]\cdot 2\text{DMSO}$ (2) were synthesized. Simultaneously, the ligand and complexes possess different inhibiting bacteriostatic activities to *S. aureus*.

Ni Doped Cu-ZnO Catalyst for Glycerol Hydrogenolysis

GAO Qiang, Xu Bo-Lian, TONG Qing, FAN Yi-Ning

DOI:10.11862/CJIC.2016.071

Chinese J. Inorg. Chem., 2016,32:469-474



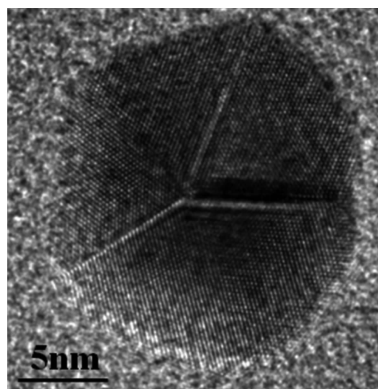
Ni doped Cu-ZnO catalyst enhanced the glycerol hydrogenolysis conversion and the selectivity to 1,2-PDO, and also showed a good stability.

Palladium Multiply Twinned Particles: a Facile Visible-Light-Assisted Synthesis and Electrooxidation of Ethanol (English)

TAN De-Xin, WANG Yan-Li, GAN Ying, HU Wei

DOI:10.11862/CJIC.2016.055

Chinese J. Inorg. Chem., 2016,32:475-482



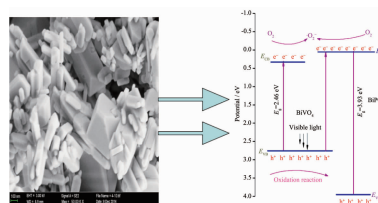
A simple, mild visible-light-assisted synthesis method to synthesize high-yield and uniform multiply twinned palladium nanoparticles has been presented. These palladium nanoparticles exhibit remarkable electrocatalytic activity and anti-poisoning faculty for the ethanol oxidation.

Preparation of $\text{BiVO}_4/\text{BiPO}_4$ Composites With Enhanced Visible-Light-Driven Photocatalytic Properties (English)

YIN Yan-Feng, ZHOU Feng, ZHAN Su, YANG Yi-Fan, LIU Yu-Jun

DOI:10.11862/CJIC.2016.065

Chinese J. Inorg. Chem., 2016,32:483-490



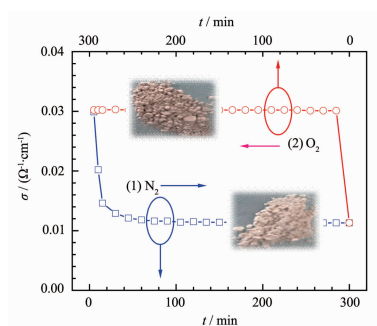
The enhancement of photocatalytic activity of $\text{BiVO}_4/\text{BiPO}_4$ composites was due to the higher separation efficiency of photogenerated carriers.

Correlation Between the Body Color of YAlO_3 and Its Defect Equilibrium

LIU Yong, LIU Tian-Hui, BI Shu-Xian,
An Wei, LI Guo-Bao, TIAN Guang-Shan,
JIAO Huan, JING Xi-Ping

DOI:10.11862/CJIC.2016.051

Chinese J. Inorg. Chem., **2016**,**32**:491-498



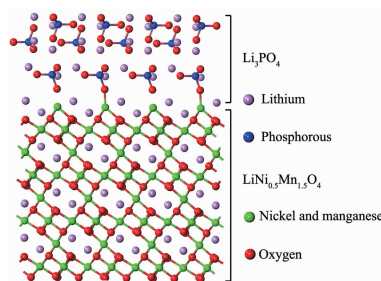
The main defect in YAlO_3 is $\text{V}_{\text{Al}}^{\times}$, causing light-brown body-color and p-type conduction. Annealing in a reductive atmosphere reduces the defect content and body-color, and this method may be used to improve the quality of YAlO_3 crystal.

Li_3PO_4 Surface Modification to Improve Performance of $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$ Cathode Material (English)

REN Ning, LU Shi-Gang

DOI:10.11862/CJIC.2016.068

Chinese J. Inorg. Chem., **2016**,**32**:499-507



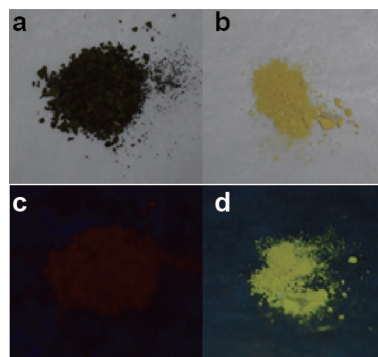
The combination of *in situ* coated Li_3PO_4 can improve the Li diffusion coefficient and reduce the charge transfer resistance, then improve the electrochemical performance of $\text{LiNi}_{0.5}\text{Mn}_{1.5}\text{O}_4$.

A π -Conjugated Organic Molecule: BDOBC16 Assembly in Silylated SBA-15 and Luminescent Properties (English)

LI Tian-Tian, YUAN Yuan, ZHOU An-Nan,
XU Qing-Hong

DOI:10.11862/CJIC.2016.067

Chinese J. Inorg. Chem., **2016**,**32**:508-516



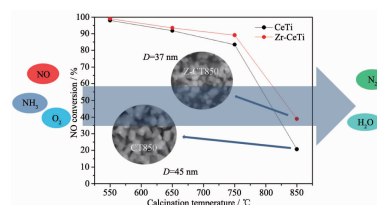
A tremendous photoelectric change was found in BDOBC16 after the π -conjugated organic molecule was assembled into the silylated SBA-15. The assembly emits green light while BDOBC16 itself emits red light, and the luminescent intensity increases 75 times.

Promotional Effect of Zr on Thermal Stability of CeTiO_x Monolith Catalyst for Selective Catalytic Reduction of NO_x with Ammonia (English)

XU Bao-Qiang, XU Hai-Di, CAO Yi, LAN Li,
YANG Yi, ZHANG Yan-Hua, LI Yuan-Shan,
GONG Mao-Chu, CHEN Yao-Qiang

DOI:10.11862/CJIC.2016.039

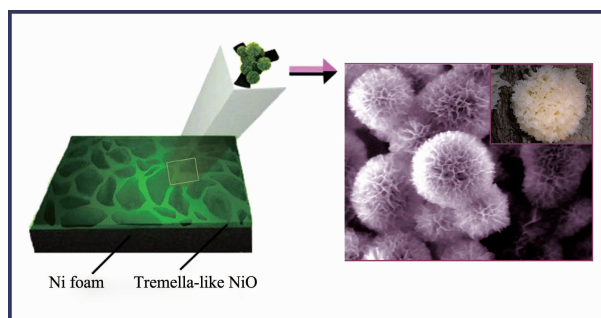
Chinese J. Inorg. Chem., **2016**,**32**:517-526



Zr promoted CeTiO_x catalyst used for NH_3 -SCR showed better catalytic activity and N_2 selectivity after high temperature aging. Structural properties, redox properties and surface acidic properties were stabilized by Zr addition.

Porous Tremella-like NiO on Conductive Substrates with High Electrochemical Performance

HAN Dan-Dan, XU Peng-Cheng, TAN Ao,
YU Jiang-Wei, ZHANG Li-Ping, ZHANG Tao



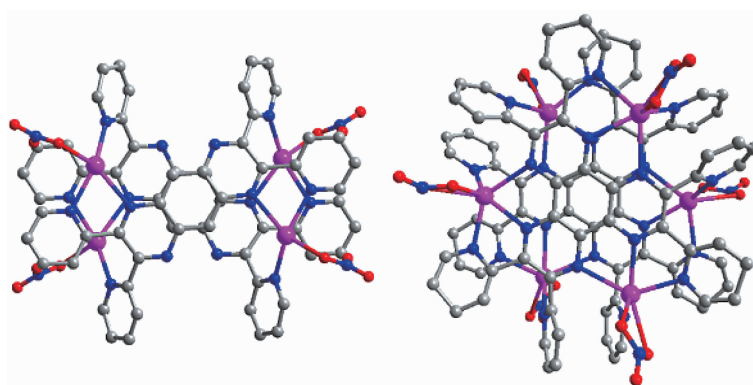
Tremella-like NiO with porous nanoflakes on conductive substrates were prepared by facile chemical bath deposition approach, the binder-free electrode with excellent permeated structure enhanced the discharge capacity and electrochemical stability.

DOI:10.11862/CJIC.2016.052

Chinese J. Inorg. Chem., **2016**,**32**:527-536

Polypyridyl Ligands-Based Double-Decker Triggered by Silver(I) Coordination: Crystal Structures and Spectroscopic Analysis (English)

ZHAO Qiang, LIU Xiu-Ming, FENG Rui,
ZHANG Ying-Hui, KONG Man-Man,
LIU Yang

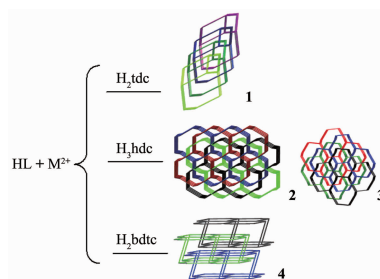


DOI:10.11862/CJIC.2016.060

Chinese J. Inorg. Chem., **2016**,**32**:537-544

Four- and Three-Fold Interpenetrated (3,4)-Connected d^{10} Metal Coordination Polymers Constructed by 3,5-Bis(pyridin-4-ylmethoxy)benzoic Acid and Aromatic Dicarboxylic Acid Ligands (English)

WANG Gui-Xian, CHEN Fei-Yan,
WANG Xiao-Juan, FENG Yun-Long



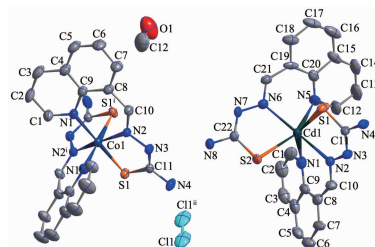
Complexes **1**~**3** exhibit (3,4)-connected 4-fold-interpenetrating 3D networks. Complex **4** displays a (3,4)-connected 3-fold-interpenetrating 2D network. Luminescent properties of **1**, **3** and **4** were also investigated.

DOI:10.11862/CJIC.2016.062

Chinese J. Inorg. Chem., **2016**,**32**:545-554

Syntheses, Crystal Structures and DNA-Binding Properties of Co(III)/Cd(II) Complexes with Quinoline Thiosemicarbazone Ligand (English)

MAO Pan-Dong, YAN Ling-Ling,
WANG Wen-Jing, YANG Qian-Qian,
CUI Meng-Qiang, WANG Yuan, WU Wei-Na



Two complexes $[\text{CoL}_2]\text{Cl} \cdot 2\text{CH}_3\text{OH}$ and $[\text{CdL}_2]$ with a thiosemicarbazone ligand bearing quinoline unit have been synthesized and characterized. Both complexes can bind to DNA and have potential pharmaceutical activity.

DOI:10.11862/CJIC.2016.064

Chinese J. Inorg. Chem., **2016**,**32**:555-560