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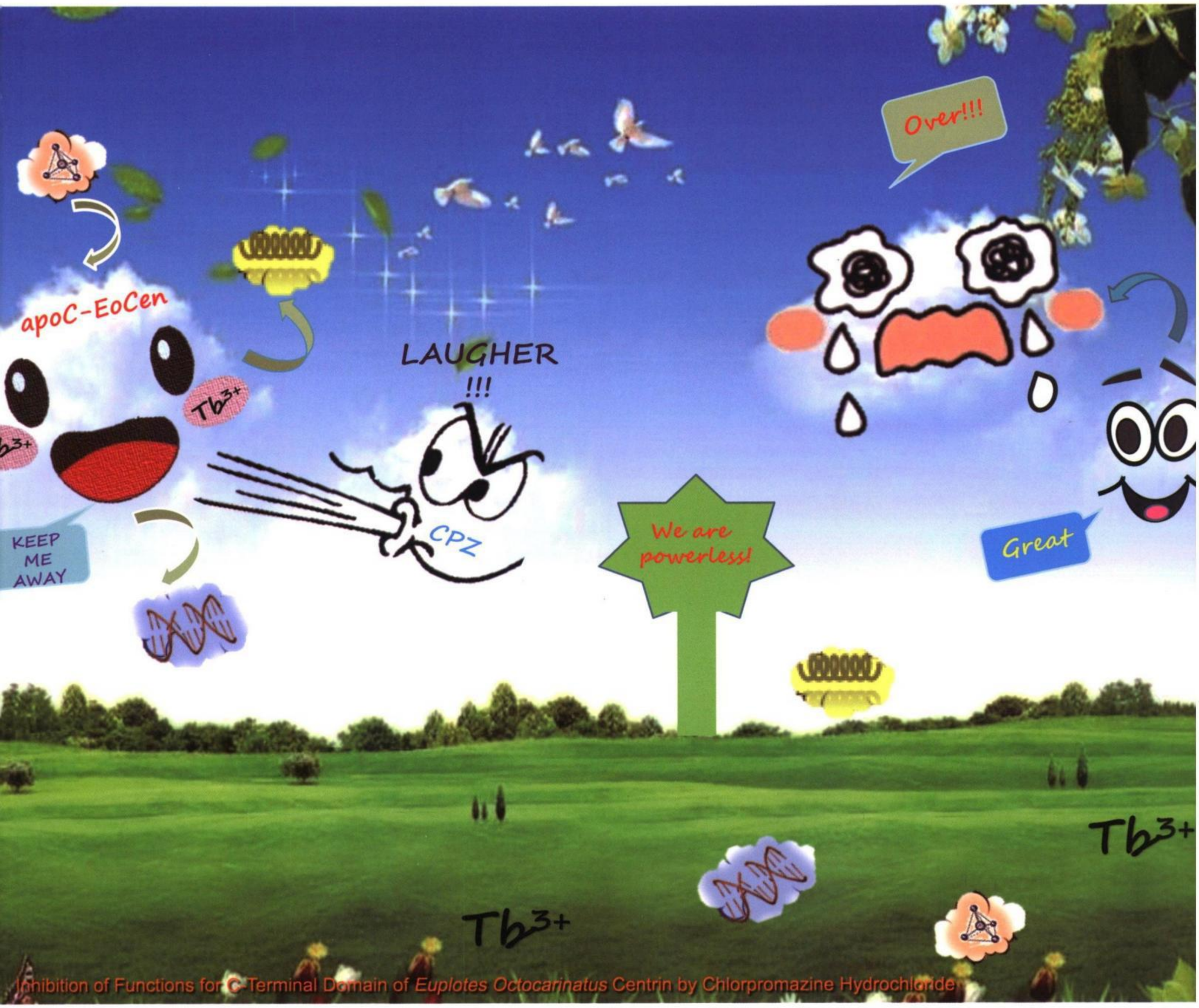

Inhibition of Functions for C-Terminal Domain of *Euplotes Octocarinatus* Centrin by Chlorpromazine Hydrochloride

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2021年　　第37卷　　第1期

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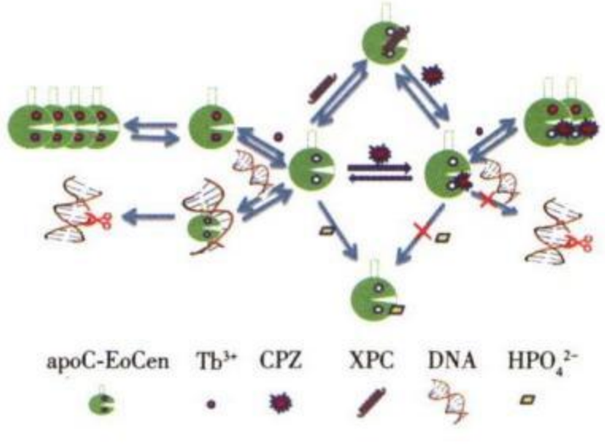
DONG Qian, YE Xu-Wen, YANG Jing, WANG Wen-Ming, ZHAO Ya-Qin, YANG Bin-Sheng

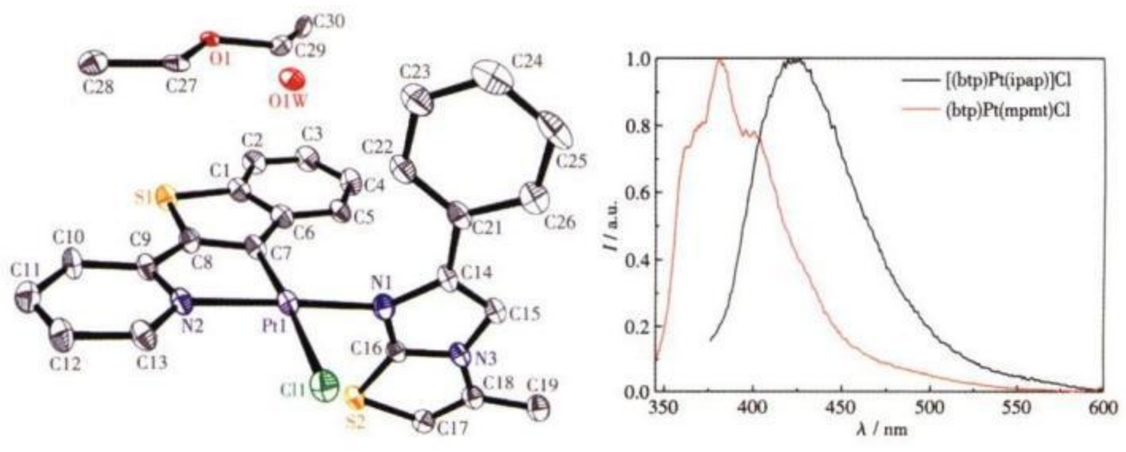


Although chlorpromazine hydrochloride is a biological function antagonist of the calmodulin, it can also inhibit the functions of the C-terminal domain of *Euplotes octocarinatus* centrin.

DOI:10.11862/CJIC.2021.019
Chinese J. Inorg. Chem., **2021**,**37**(1):23-32

Synthesis and Properties of Two Blue and Violet Light-Emitting Platinum(Ⅱ) Complexes

WANG Deng-Qiang, YU Chen, LIU Xiao-Qing, BIAN Jian-Jian, YIN Xin-Ying, TENG Ming-Yu, RONG Mei-Zhu, WANG Zheng-Liang

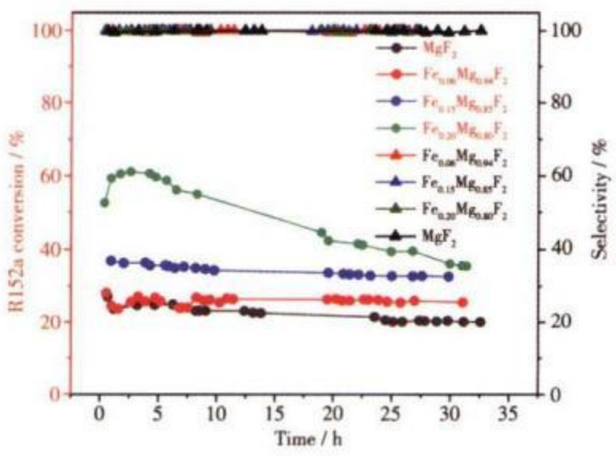


Two novel platinum(Ⅱ) complexes with blue and purple light-emitting were synthesized for organic optical functional materials. Single crystal XRD research shows that the low conjugation of these complexes results in their short wavelength emission.

DOI:10.11862/CJIC.2021.012
Chinese J. Inorg. Chem., **2021**,**37**(1):33-38

Fe-Doped MgF_2 Catalyst: Preparation by Sol-Gel Method and Performance in Dehydrogenation of 1,1-Difluoroalkane (R152a)

ZHANG Lei, LI Yu-Zhen, LI Li-Chun, HAN Wen-Feng, LI Ying, TANG Hao-Dong

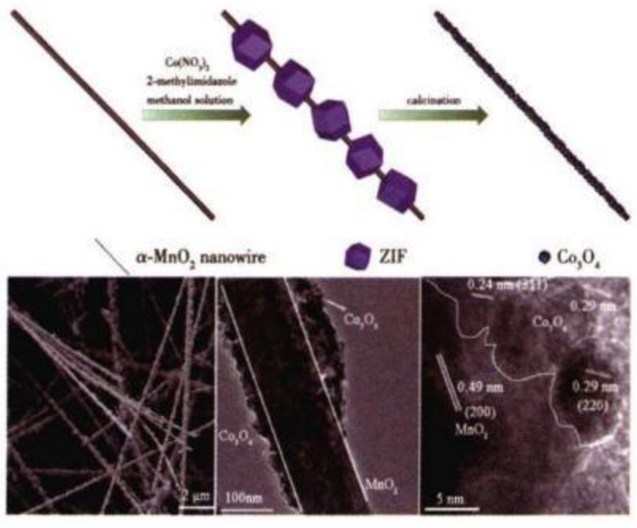


Through sol-gel method, Fe^{3+} was successfully doped into MgF_2 with high surface area, and the performance in R152a ($C_2H_4F_2$) dehydrofluorination reaction was improved.

DOI:10.11862/CJIC.2021.021
Chinese J. Inorg. Chem., **2021**,**37**(1):39-46

Preparation, Characterization and Catalytic Activity of 3D Heterogeneous α-MnO_2@Co_3O_4 Material

LIU Heng-Fa, XIE Yu, LIU Qi, CHENG Gao, SUN Ming, YU Lin



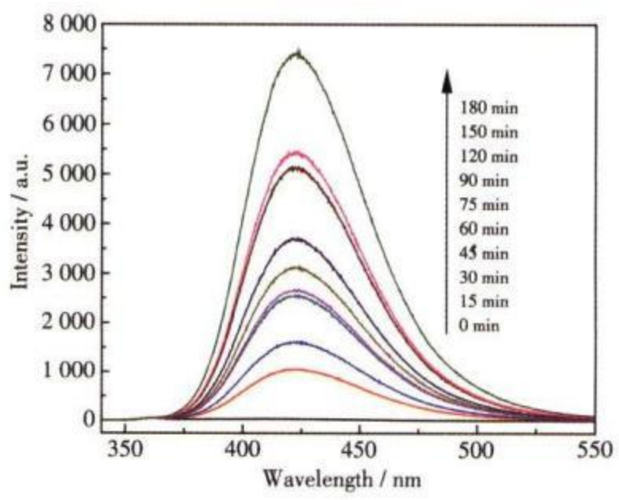
Three-dimensional heterogeneous catalyst composed by Co_3O_4 nanoparticle as active material and α-MnO_2 nanowire as substrate was prepared. The α-MnO_2@Co_3O_4 catalyst exhibits excellent toluene combustion activity with a T_{90} of 235 ℃.

DOI:10.11862/CJIC.2021.003
Chinese J. Inorg. Chem., **2021**,**37**(1):47-54

Composite Catalyst α-(Fe,Cu)OOH/RGO: Synthesis, Characterization and Removal of Ciprofloxacin Synergized with H_2O_2 under Visible Light

XU Jun-Ge, HONG Jun-Xian, HU Die

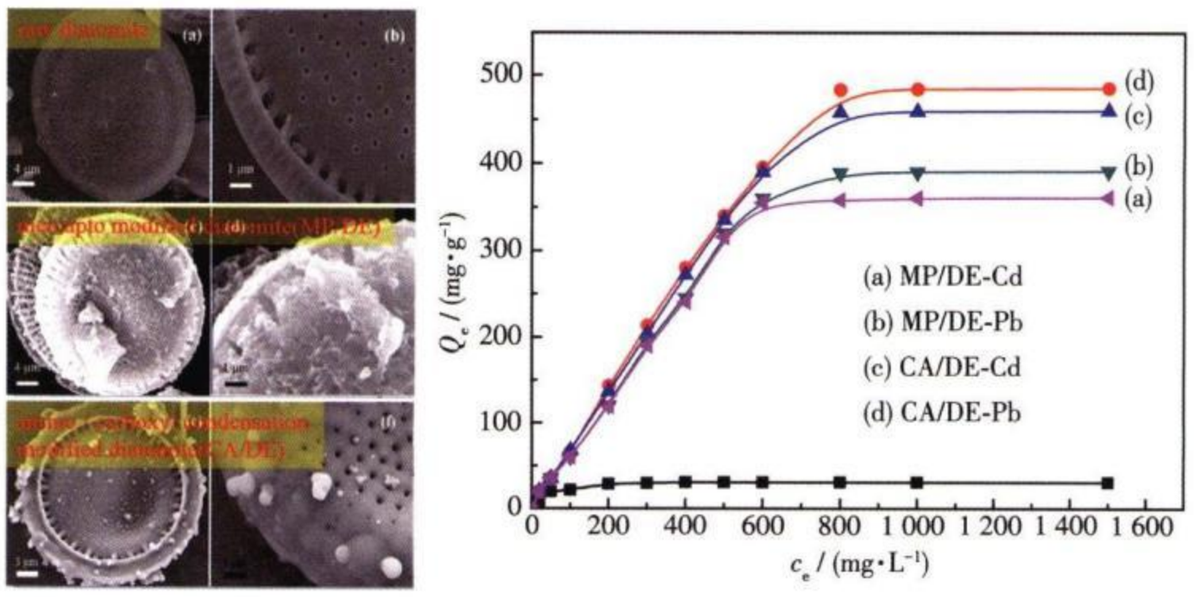
DOI:10.11862/CJIC.2021.008
Chinese J. Inorg. Chem., **2021**,**37**(1):55-64



The incorporation of graphene composite not only led to red-shift of the light absorption edge in visible light region, but also accelerated the separation and transfer rate of photogenerated electrons, as well as improved the efficiency of electron conduction in the reaction system.

Mercapto/Carboxyl Modified Diatomite: Adsorption Properties to Pb(Ⅱ) and Cd(Ⅱ)

DU Yu-Cheng, LI Sheng-Hui, GU Heng-Xue, LI Yang, WU Jun-Shu, JIN Cui-Xin

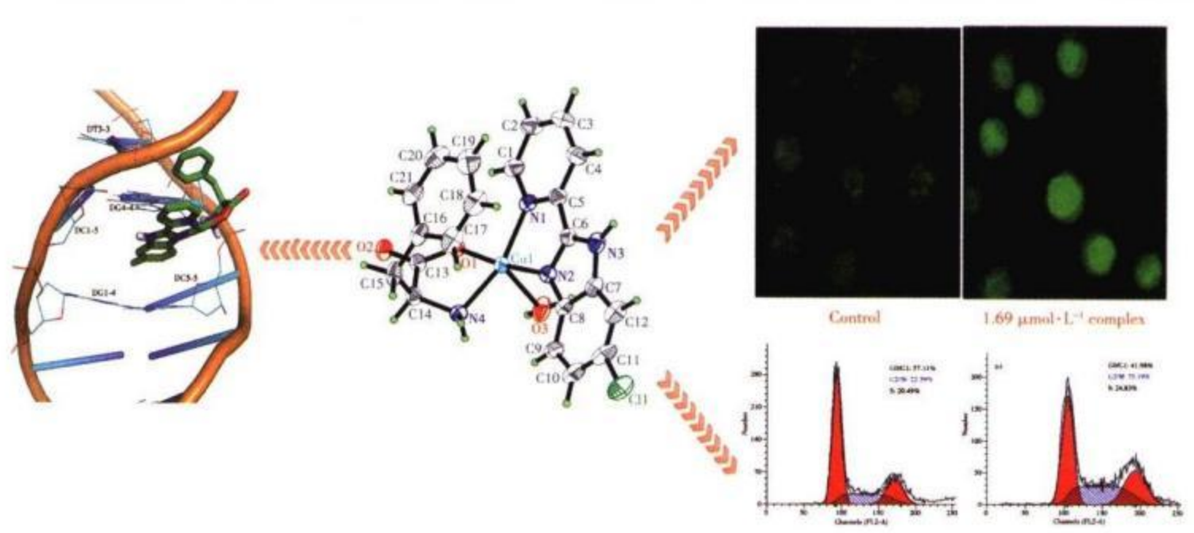


DOI:10.11862/CJIC.2021.025
Chinese J. Inorg. Chem., **2021**,**37**(1):65-73

The adsorption capacity of diatomite towards Pb^{2+} and Cd^{2+} is improved significantly by mercapto group or amino/carboxyl group modification on diatomite surface.

Crystal Structure, DNA Binding Properties and Biological Activities of a Ternary Mixed-Ligand Copper(Ⅱ) Complex

CAI Dai-Hong, MO Hui-Wen, HE Liang, LE Xue-Yi

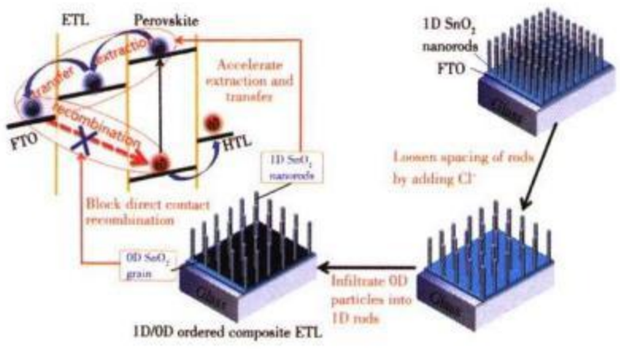


DOI:10.11862/CJIC.2021.026
Chinese J. Inorg. Chem., **2021**,**37**(1):74-84

The complex named [Cu(HPBC)(*L*-Phe)(H_2O)]ClO_4 has antibacterial activity and excellent cytotoxicity, which can arrest the cell cycle in the G2/M phase further to induce apoptosis.

Perovskite Solar Cells Based on 1D/0D Ordered Composite SnO_2 Nanocrystal

LIU De-Zheng, YANG Gao-Yuan, XIANG Wen-Hao, WANG Song, LI Wang-Nan, ZHONG Jie, HUANG Fu-Zhi, CHEN Mei-Hua, LIANG Gui-Jie



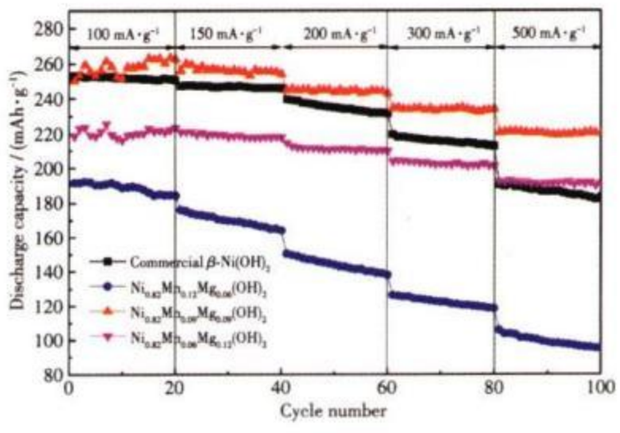
DOI:10.11862/CJIC.2021.005
Chinese J. Inorg. Chem., **2021**,**37**(1):85-94

Penetration of 0D SnO_2 deposited into 1D nanorod arrays can accelerate electron extraction and transfer as well as blocking its direct contact recombination, which will improve the photoelectric performance of the device effectively.

Electrochemical Performance of Mn and Mg Co-doped $Ni(OH)_2$

YAO Shou-Guang, DOU Fei, LIU Dun, CHENG Jie

DOI:10.11862/CJIC.2021.014
Chinese J. Inorg. Chem., **2021**,**37**(1):95-102

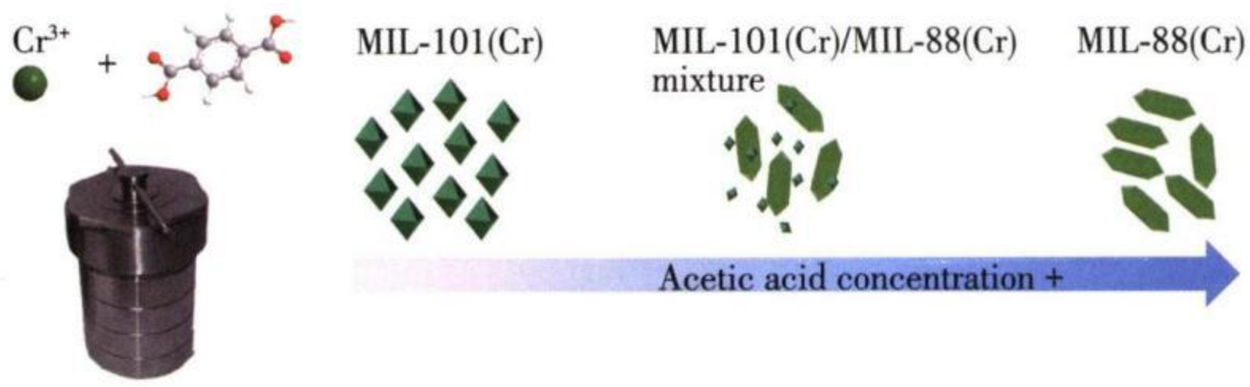


The discharge specific capacity and cycle stability of nickel electrode can be improved by proper proportion of Mn and Mg doping, and the performance of high-rate charge and discharge cycle is better.

Framework Isomerism in Chromium-Benzenedicarboxylate MOF: MIL-88B(Cr) and MIL-101(Cr)

ZHAO Tian, ZHU He-Xin, DONG Ming, ZHAO Yi

DOI:10.11862/CJIC.2021.018
Chinese J. Inorg. Chem., **2021**,**37**(1):103-109

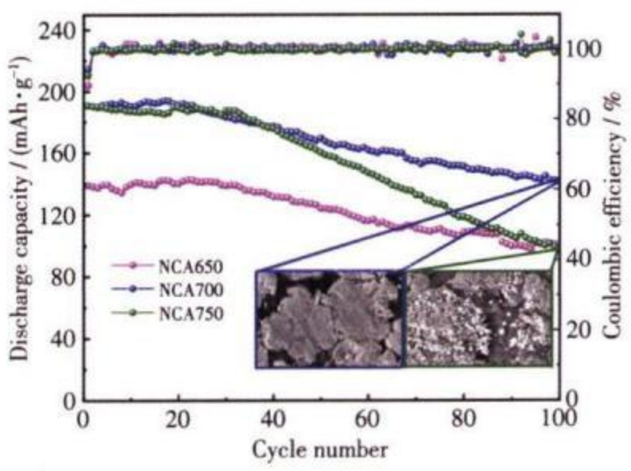


The concentration of acetic acid was found to exercise efficient control over the formation of either MIL-101(Cr) or MIL-88B(Cr) under otherwise similar hydrothermal synthetic conditions.

Preparation and Characterization of $LiNi_{0.88}Co_{0.07}Al_{0.05}O_2$ as a High Nickel Cathode Material

LUO Jing, LIU Jian-Xiong, HUANG Ling, XIAO Fang-Ming, LI Wen-Chao, TANG Ren-Heng, WANG Ying

DOI:10.11862/CJIC.2021.010
Chinese J. Inorg. Chem., **2021**,**37**(1):110-120

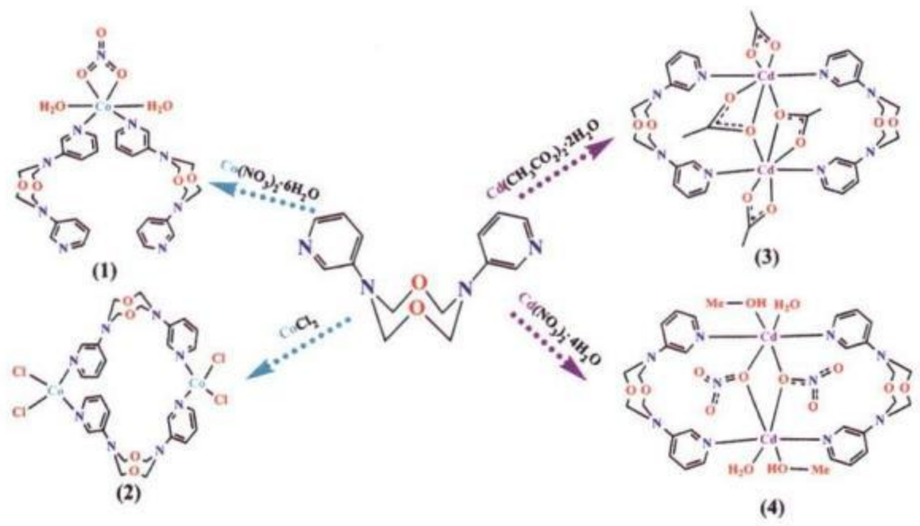


The α-$LiAlO_2$-coated and Al-doped NCA700 have been successfully synthesized by hydrolysis of aluminum isopropoxide and calcination of $LiOH \cdot H_2O$. The coating process is carried on the precursor making the coating layer uniform and continuous. Cycling performance and rate capability of NCA700 has been improved by Al-modification.

Preparation, Structures and Thermal Stabilities of Four Transition Metal Complexes Constructed by 3,7-Di(3-pyridyl)-1,5-dioxa-3,7-diazacyclooctane Bipyridine Ligand (English)

LI Li

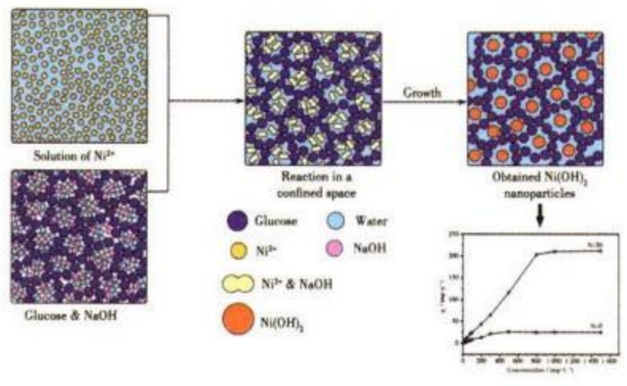
DOI:10.11862/CJIC.2021.009
Chinese J. Inorg. Chem., **2021**,**37**(1):121-130



$Ni(OH)_2$ with Super-Small Nanoscale: Synthesis and Application in Li^+ Adsorptions (English)

JING Nan, ZHOU An-Nan, WANG Guo-Hui, WANG Run-Wei, XU Qing-Hong

DOI:10.11862/CJIC.2021.015
Chinese J. Inorg. Chem., **2021**,**37**(1):131-139

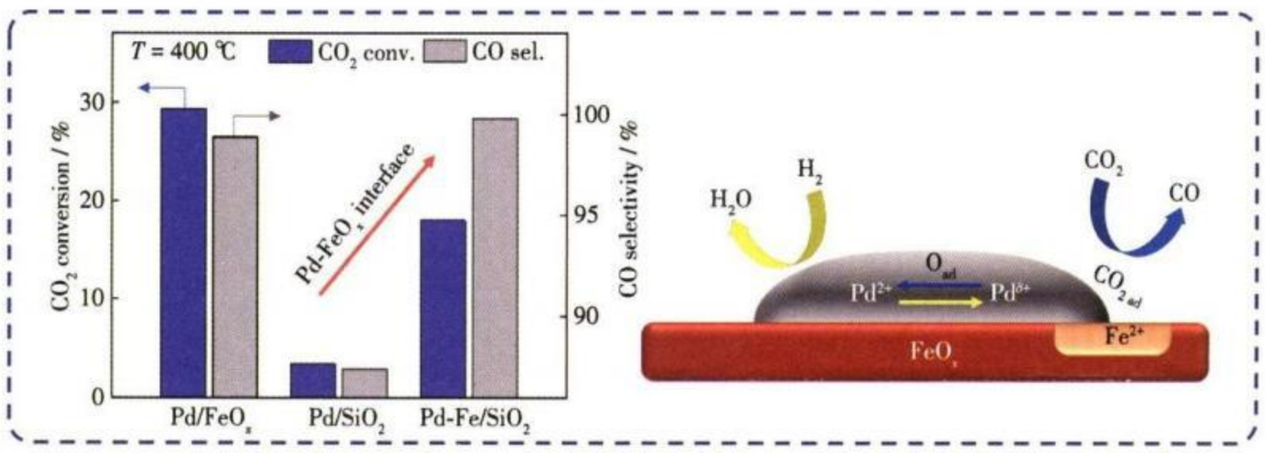


$Ni(OH)_2$ nanoparticles with an average size of 5 nm were prepared under the existence of glucose and the nanoparticles showed promising ability to Li^+ ions adsorption (214 $mg \cdot g^{-1}$) at room temperature.

Dynamic Formation of $Pd^{\delta+}$-Fe^{2+} Interface Promoting Reverse Water Gas Shift Reaction over Pd/FeO_x Catalyst (English)

ZHANG Dian-Yu, LIU Fang, DU Peng-Fei, LI Meng-Wei, WU Zhao-Xuan, FENG Yi-Bing, ZHAO Yang, XU Xiao-Yan, ZHANG Xin-Xing, LU Jun-Ling, YANG Bing

DOI:10.11862/CJIC.2021.002
Chinese J. Inorg. Chem., **2021**,**37**(1):140-150

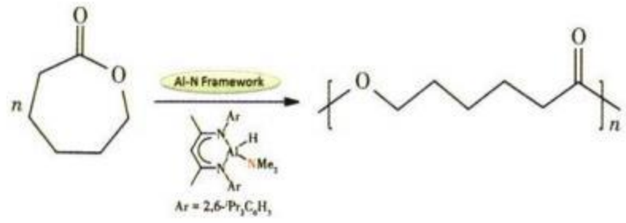


The dynamic formation of $Pd^{\delta+}$-Fe^{2+} interface was identified during the RWGS reaction, as highly active sites promoting CO_2 adsorption, dissociation and CO desorption.

Aluminum Amine Compound Protected by β-Diketiminate Ligand: Preparation and Enhanced Performance as Catalyst for Ring-Opening Polymerization of ε-Caprolactone (English)

LI Wen-Ling, YAN Ben, SUN Chen-Guang, SHEN Qiu-Miao, LIU Wen-Qing, MA Xiao-Li, YANG Zhi

DOI:10.11862/CJIC.2021.007
Chinese J. Inorg. Chem., **2021**,**37**(1):151-156

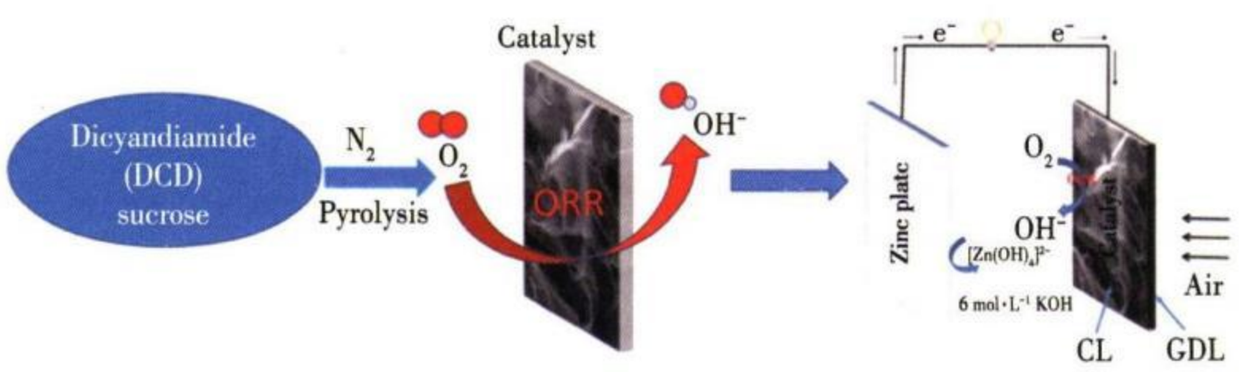


A well-designed organoaluminum compound can present high catalytic performance on the ring-opening polymerization reactions, and compound with proper substituents at the Al center is benefit for preparing poly(ε-caprolactone) polymer with high molecular weight and narrow molecular weight distribution.

Easy Preparation of N-Doped Graphene-like Nanosheets as Excellent Metal-Free Cathodic Electrocatalysts of Zn-Air Battery (English)

YANG Xiao-Kun, CHEN A-Ling, YI Qing-Feng

DOI:10.11862/CJIC.2021.001
Chinese J. Inorg. Chem., **2021**,**37**(1):157-170

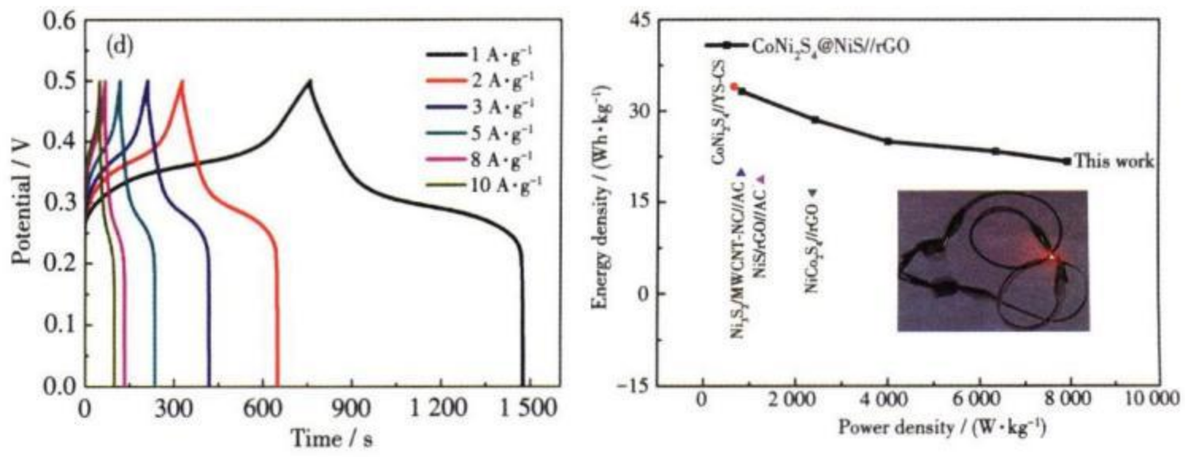


Metal-free N-doped graphene-like nanosheets synthesized by direct pyrolysis of a mixture of dicyandiamide and various carbon sources present superior performance as the cathodic catalysts of alkaline Zn-air batteries.

Electrodeposition of NiS on $CoNi_2S_4$ for Flexible Solid-State Asymmetric Supercapacitors (English)

HE Ye-Zeng, ZHAO Hou-Qiang, LIU Peng, SUI Yan-Wei, WEI Fu-Xiang, QI Ji-Qiu, MENG Qing-Kun, REN Yao-Jian, ZHUANG Dong-Dong

DOI:10.11862/CJIC.2021.011
Chinese J. Inorg. Chem., **2021**,**37**(1):171-179

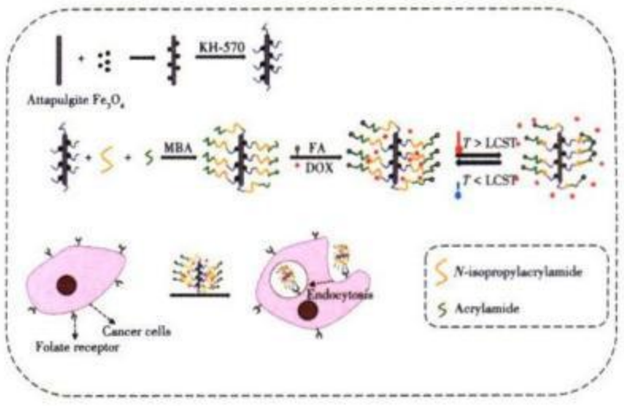


$CoNi_2S_4$@NiS nanocomposite with unique structure grown on carbon fiber cloth (CC) was applied as electrode of supercapacitor with a superior electrochemical performance and was assembled into a flexible solid-state asymmetric supercapacitors with higher energy density.

Preparation and *in Vitro* Experiment of Attapulgite-based Microgels with Magnetic/Temperature Dual Sensitivities (English)

LI Tian-Le, ZHONG Hui, LI Xiao-Rong, ZHOU Jing, LIU Yi-Xin, HU Wei-Cheng, CHENG Zhi-Peng, YAO Cheng

DOI:10.11862/CJIC.2021.017
Chinese J. Inorg. Chem., **2021**,**37**(1):180-188



Fe_3O_4/ATP was polymerized with *N*-isopropylacrylamide and acrylamide through emulsion polymerization and folic acid (FA) was bonded with Fe_3O_4/ATP-P(NIPAM-AAM). FA-Fe_3O_4/ATP-P(NIPAM-AAM) microgels can enter the cell by endocytosis and exhibit larger drug loading and targeting capacity.

Errata

Correction to "Direct Observation of Magnetic Transitions in a Nickel(Ⅱ) Complex with Large Anisotropy" (English)

Chelsea N. Widener, Alexandria N. Bone, Mykhaylo Ozerov, Rachael Richardson, LU Zheng-Guang, Komalavalli Thirunavukkuarasu, Dmitry Smirnov, CHEN Xue-Tai, XUE Zi-Ling

DOI:10.11862/CJIC.2021.040
Chinese J. Inorg. Chem., **2021**,**37**(1):189