

## TABLE OF CONTENTS 目 录

### DMF 辅助溶剂热法合成 ZnO/HF 微/纳米结构

#### DMF-Assisted Solvothermal Synthesis of ZnO/HF Micro/Nanostructures

刘科麟, 王丹琪, 熊天宇, 丁津津, 王淼..... 21

### 水系锌离子电池三维负极材料研究进展

#### Research Progress of Three-Dimensional Anode Materials for Aqueous Zinc Ion Batteries

来森, 许铭冬, 王佳帆, 唐凌枫, 叶宸硕..... 27

### ZnO/Ag 微/纳米晶的光化学合成及其光催化性质

#### Photochemical Synthesis and Photocatalytic Properties of ZnO/Ag Nanocrystals

刘科麟, 崔莹, 王丹琪, 王淼..... 37

### PEDOT:PSS 在电致变色器件中的应用研究进展

#### Research Progress of PEDOT:PSS Application in Electrochromic Devices

谢源源, 许文博, 鲁志威..... 43

### 水热法制备 CdO/HF 纳米材料及其对阳离子染料吸附性质研究

#### Hydrothermal Synthesis of CdO/HF Nanomaterials and Their Adsorption

#### Properties on Cationic Dyes

秦瑛, 王丹琪, 丁妍, 孙同明..... 52

### 锂离子动力电池模型理论综述

#### Review of Modeling Theory for Lithium-Ion Power Batteries

杨佳兴..... 59

### 木质素二聚体电化学氧化机理的密度泛函理论研究

#### Density Functional Theory Study on the Electrochemical Oxidation

#### Mechanism of Lignin Dimer

曹佳浩, 应芝..... 66

### 氮掺杂石墨烯负载铁镍双金属磷化物及其电催化水分解性能研究

#### Research of Iron-Nickel Bimetal Phosphide Embedded on Nitrogen Doped Graphene for Electrocatalytic Water Splitting

宁志超, 赵佳硕, 石晶, 李波..... 76

### 改性凹凸棒土对尾菜废水中磷的吸附性能研究

#### Study on the Adsorption Performance of Modified Attapulgite for Phosphorus in Vegetable Wastewater

周生虎, 张勤虎, 褚润, 蔡立群, 罗珠珠, 申岳, 王勇智..... 86

**柔性压力传感器及其应用研究进展****Research Progress on Flexible Pressure Sensors and Their Applications**

黄鹏举 ..... 99

**Ag/HNb<sub>3</sub>O<sub>8</sub> 纳米片的合成及其光催化性能****Synthesis of Ag/HNb<sub>3</sub>O<sub>8</sub> Nanosheets and Its Photocatalytic Performance**

李欣欣, 李鑫月, 邓磊, 杨新丽 ..... 112

**Ag QDs 对耐药沙门氏菌的细胞壁的损伤研究****The Effect of Ag Quantum Dots on Cell Wall of Drug-Resistant *Salmonella* spp.**

汪艳, 赵正轩, 张强, 熊滢, 郭少波 ..... 122

**基于 DFT 的氮参杂 TiO<sub>2</sub> (101) 检测 H<sub>2</sub>S 的气敏特性研究****Study on Gas Sensing Characteristics of Nitrogen Doped TiO<sub>2</sub> (101) for Detecting H<sub>2</sub>S Based on DFT**

廖泽伟, 李庆生, 严雯, 李成丰 ..... 130

**电化学沉积制备的纳米级高熵合金薄膜及其理化性能****A Nanoscale High-Entropy Alloy Thin Film Fabricated by Electrochemical Deposition and Its Physicochemical Properties**

周杰, 孙萍, 王雪, 谢佳珈 ..... 140

**BCN 负载 Ru 纳米颗粒的合成及 HER 性能研究****Synthesis and HER Properties of Ru Nanoparticles Loaded with BCN**

赵嘉硕, 石晶, 李姗姗, 王宇翔, 孙旭镯 ..... 147

**异亮氨酸辅助水热合成 ZnOHF 分级结构微米球及其对亚甲基蓝吸附性质研究****Isoleucine-Assisted Hydrothermal Synthesis of ZnOHF Hierarchical Microspheres with High Adsorption Properties towards Mb Dye**

李祖琨, 刘科麟, 秦瑛, 史飞凡, 朱金丽 ..... 155