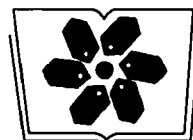


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目 次

· 封面图片 ·

新型含萘基和二乙炔基高双折射液晶分子的合成及光电性能

..... 关晓琳 张 扬 范红婷 张东海 贾天明 来守军* 雷自强

成功合成一种新型二乙炔类液晶分子,其不仅具有高的光学双折射值($\Delta n = 0.47$),且具有优异的电致发光性能,所制备器件显示了较好的电致发光稳定性和较低的启动电压(6.75 V),有望作为一种潜在的液晶显示材料和电致发光材料。

详细描述见 533 ~ 541 页

· 综合评述 ·

钙钛矿型太阳能电池研究进展 刘 娇 李仁志 董献堆* (489)

铁基阳极析氧催化剂的研究进展与展望 高国锋 李丹丹 郝根彦 李晋平 赵 强* (504)

多孔有机聚合物在水处理中的应用 赵文鹏 李爱琴* 丁三元 (513)

· 研究论文 ·

紫外光-热双固化聚苯胺防腐涂料

..... 孙 杨 张红明 吕金龙 王献红* 王佛松 (524)

新型含萘基和二乙炔基高双折射液晶分子的合成及光电性能

..... 关晓琳 张 扬 范红婷 张东海 贾天明 来守军* 雷自强 (533)

新型吡啶环液晶化合物的合成及性能

..... 莫玲超 李 建 郭兆琦 李娟利 胡明刚 安忠维* (542)

烟酰胺腺嘌呤二核苷酸(NAD⁺)类似物的合成及性质

..... 侯淑华* 曲忠国 钟克利 边延江 汤立军 (549)

新型 5-脂肪基-1,2,4-三唑曼尼希碱的合成及生物活性

..... 张成路* 程安琪 唐 杰 国 阳 孙丽杰 袁 焕 (554)

酸化蒙脱土/氯化锌催化叔丁醚和叔丁酯的合成

..... 吴剑虹 陈冬寅 李 飞* (565)

HF 改性的 Pt/ZSM-5 催化剂在苯和甲醇烷基化反应中的应用

..... 刘 司 闻振浩 杨大强 朱学栋* (571)

新型杂多酸盐光催化降解亚甲基蓝染料废水

..... 石淑云 任百祥* (577)

新型等离子光催化剂纳米金-钛酸锌复合物的制备与光解水制氢性能	史建建 刘小明* 唐星华 李帅龙 (583)
葡萄糖辅助合成碲化铅纳米棒及其表征	李尔沙 陈 斌 冯鹏元 邓瑞平 彭泽平* (591)
2-羟基萘甲醛苯甲酰肼衍生物对 Al ³⁺ 的裸眼识别和荧光传感	陈虹蓉 伍亚男 陈仕焰 马培华* 倪新龙* (599)
核黄素荧光猝灭法测定 2,4,6-三硝基苯酚	黄小梅* 邓 祥 (606)
通知·启事	(590)

* 通讯联系人.

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Vol. 33 Iss. 5

May 2016

CONTENTS

Cover Picture

Synthesis and Photoelectric Properties of Novel Liquid Crystalline Compound Bearing Diethynyl and Naphthyl Groups with High Birefringence

GUAN Xiaolin, ZHANG Yang, FAN Hongting, ZHANG Donghai, JIA Tianming, LAI Shoujun* ,
LEI Ziqiang

A novel diacetylene derivative having liquid crystalline phases was successfully synthesized. The compound not only exhibited high optical birefringence of 0.47, but also exhibited excellent electroluminescent property with high stability and low onset voltage (6.75 V). The compound is a promising materials for liquid crystal display or OLED.

For details see pp 533-541

Review

Research Progress of Perovskite Solar Cells

LIU Jiao, LI Renzhi, DONG Xiandui*

2016, 33(5):489-503

Progress and Prospect of Iron Based Anodic Oxygen Evolving Catalysts

GAO Guofeng, LI Dandan, HAO Genyan, LI Jinping, ZHAO Qiang*

2016, 33(5):504-512

Application of Porous Organic Polymers in Water Contaminants Removal

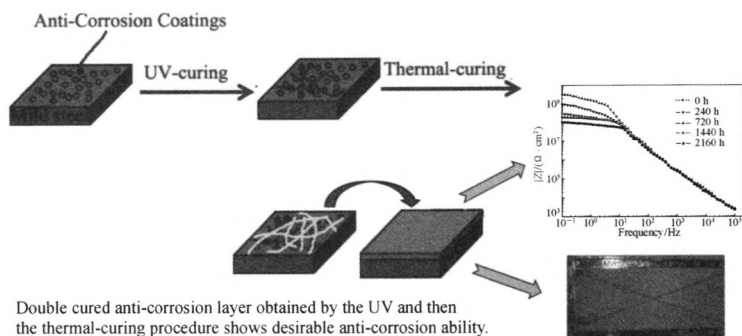
ZHAO Wenpeng, LI Aiqin* , DING Sanyuan

2016, 33(5):513-523

Full Papers

Ultraviolet-Thermal Double Cured Anti-corrosion Coating Based on Nano-dispersed Conducting Polyaniline

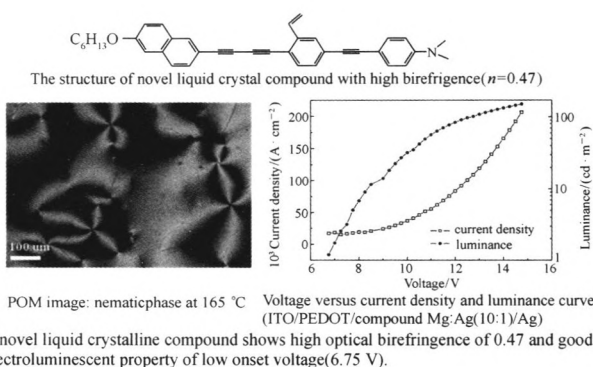
SUN Yang, ZHANG Hongming,
LYU Jinlong, WANG Xianhong*,
WANG Fosong



2016,33(5):524-532

Synthesis and Photoelectric Properties of Novel Liquid Crystalline Compound Bearing Diethynyl and Naphthyl Groups with High Birefringence

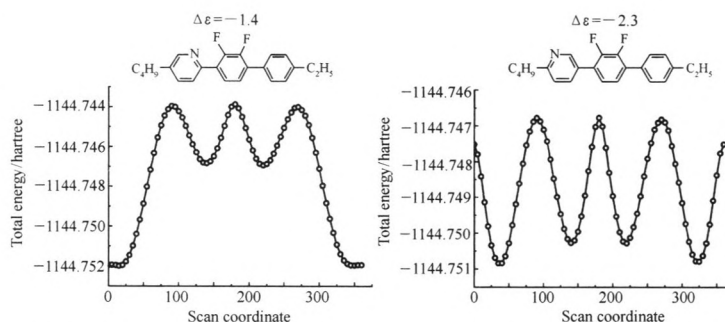
GUAN Xiaolin, ZHANG Yang, FAN Hongting,
ZHANG Donghai, JIA Tianming, LAI Shoujun*,
LEI Ziqiang



2016,33(5):533-541

Synthesis and Properties of Novel Liquid Crystal Compounds Containing Pyridine Ring

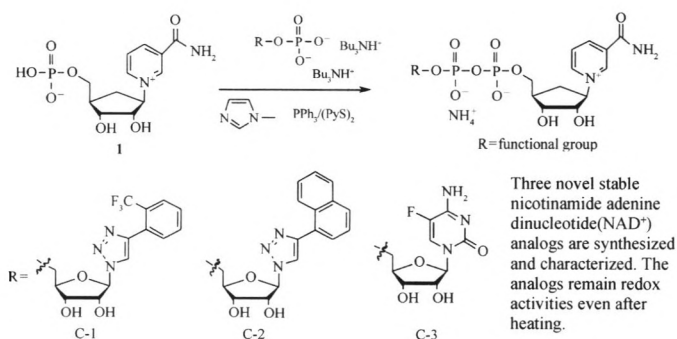
MO Lingchao, LI Jian, GUO Zhaoqi,
LI Juanli, HU Minggang, AN Zhongwei*



2016,33(5):542-548

Synthesis and Properties of Novel Nicotinamide Adenine Dinucleotide (NAD⁺) Analogs

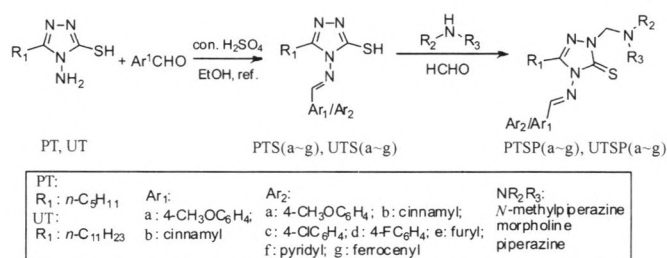
HOU Shuhua*, QU Zhongguo, ZHONG Keli,
BIAN Yanjiang, TANG Lijun



2016,33(5):549-553

Synthesis and Biological Activity of the Novel Mannich Bases of 5-Alkyl-1,2,4-triazole

ZHANG Chenglu*, CHENG Anqi,
TANG Jie, GUO Yang, XI Huan

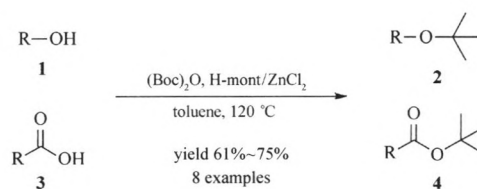


Twenty two Mannich bases(PTSD(a-g) and UTSD(a-g)) were synthesized and evaluated for the plant growth regulating activity, herbicidal activity and the inhibitory activity on CDC25B

2016,33(5):554-564

Synthesis of *tert*-Butyl Ethers and *tert*-Butyl Esters Catalyzed by Acid-treated Montmorillonite Supported Zinc Chloride

WU Jianhong, CHEN Dongyin, LI Fei*

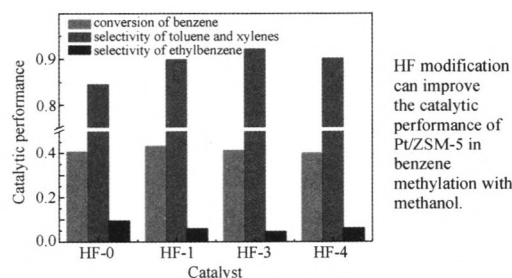


With H-mont/ZnCl₂ as the catalyst, phenols, alcohols, and carboxylic acid were reacted with di-*tert*-butyl dicarbonate to give *tert*-butyl ether and *tert*-butyl ester derivatives.

2016,33(5):565-570

Application of HF Modified Pt/ZSM-5 Catalyst in Benzene Methylation with Methanol

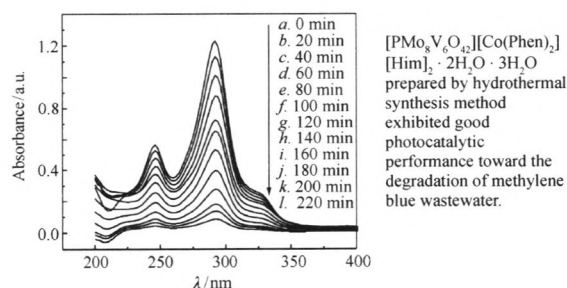
LIU Si, WEN Zhenhao, YANG Daqiang,
ZHU Xuedong*



2016,33(5):571-576

Photocatalytic Degradation of Methylene Blue Wastewater by Novel Polyoxometalates Salt

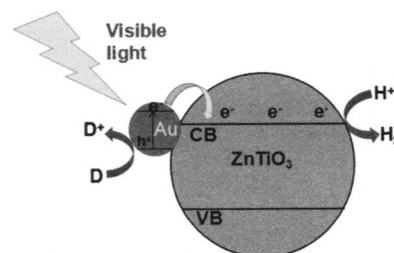
SHI Shuyun, REN Baixing*



2016,33(5):577-582

Synthesis and Properties of Nano Gold-Zinc Titanate Composite as a Novel Visible-light Plasmonic Photocatalysts for Solar Hydrogen Evolution

SHI Jianjian, LIU Xiaoming*, TANG Xinghua,
LI Shuailong



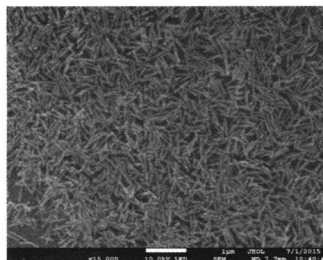
Due to the surface plasmon resonance effect of Au nanoparticles, the Nano Au-ZnTiO₃ plasmonic photocatalysts show a novel photocatalytic activity for hydrogen evolution from water response to visible light excitation.

2016,33(5):583-590

Glucose-Assisted Synthesis and Characterization
of Lead Telluride Nanorods

LI Ersha, CHEN Bin, FENG Pengyuan,
DENG Ruiping, PENG Zeping*

2016,33(5):591-598

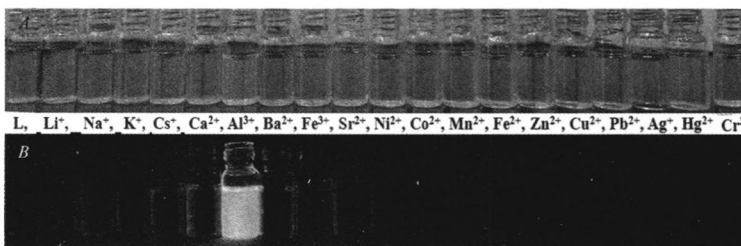


Homogeneous PbTe nanorods with an average length of 500 nm and an average diameter of 50 nm are prepared by a simple glucose-assisted solvothermal method.

“Naked-eye” and Fluorescence “Turn-on”
Recognition of Al³⁺ Based on 2-Hydroxy-
Naphthalene-Formaldehyde
Benzoyl-Hydrazone Derivatives

CHEN Hongrong, WU Ya'nan,
CHEN Shiyan, MA Peihua*, NI Xinlong*

2016,33(5):599-605

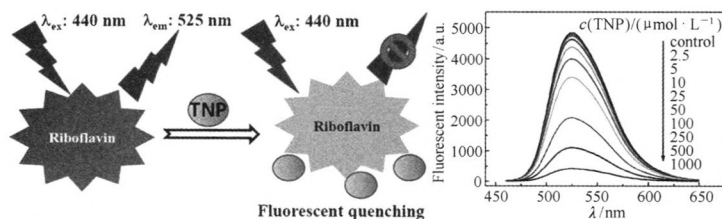


The probe 4-hydroxy-benzoyl-(2-hydroxy-naphthalene-formaldehyde)hydrazone has highly Al³⁺ selective affinity over others commonly coexistent metal ion.
A. under natural light; B. under 365 nm UV lamp.

Fluorescent Quenching Method for the
Detection of 2,4,6-Trinitrophenol
Using Riboflavin

HUANG Xiaomei*, DENG Xiang

2016,33(5):606-610



A novel fluorescent quenching method for 2,4,6-trinitrophenol detection has been developed using riboflavin as probe with response within 1 min and linear range from 2.5 to 1000 μmol/L.

* To whom correspondence should be addressed

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