

# 硅酸盐学报

JOURNAL OF THE CHINESE CERAMIC SOCIETY

中国硅酸盐学会

THE CHINESE CERAMIC SOCIETY

<http://www.gxyb.cbpt.cnki.net>



F5000

Vol.44 No.8

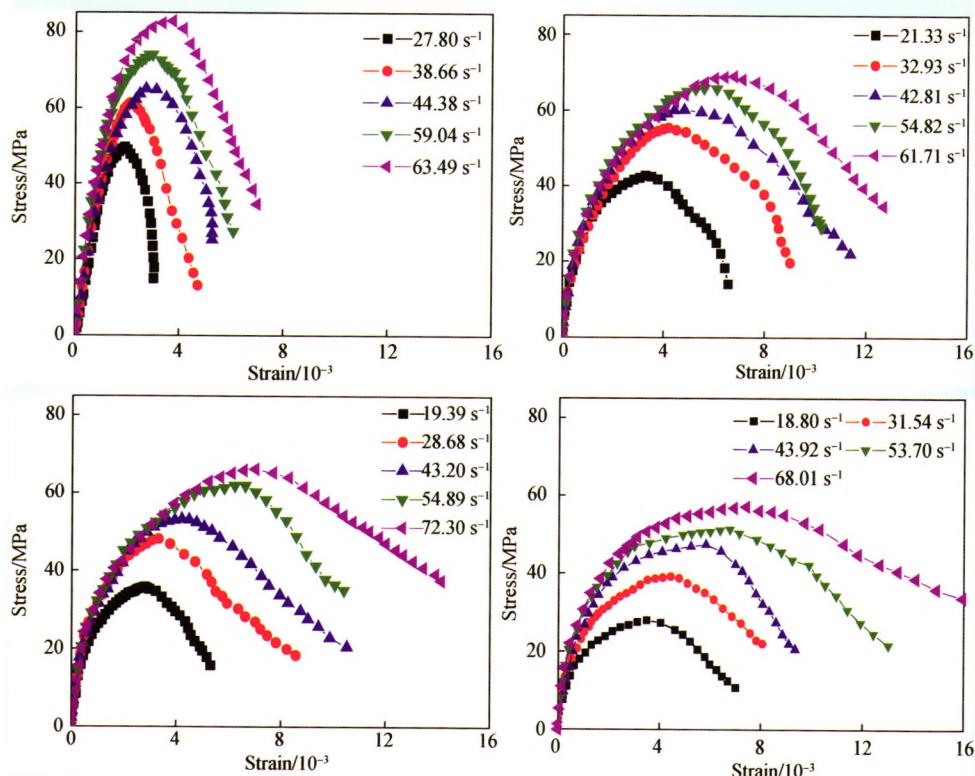
2016

冲击荷载作用下掺橡胶颗粒自密实混凝土的力学性能

龙广成, 李宁, 薛逸骅, 谢友均

Mechanical Properties of Self-Compacting Concrete Incorporating Rubber Particles under Impact Load

LONG Guangcheng, LI Ning, XUE Yihua, XIE Youjun



Ei 核心期刊, Scopus, CA, SA, PK 收录期刊



F5000

1957 年创刊

# 硅酸盐学报

## Guisuanyan Xuebao

总 329 期

(无机非金属材料)

<http://www.gxyb.cbpt.cnki.net>

第 44 卷 第 8 期 2016 年 8 月, 月刊

### 目 次

- 温度对水泥-矿渣复合胶凝材料水化的影响(英文)..... 韩方晖, 刘娟红, 阎培渝 (1071)  
冲击荷载作用下掺橡胶颗粒自密实混凝土的力学性能..... 龙广成, 李宁, 薛逸骅, 谢友均 (1081)  
高性能混凝土构件中碱硅酸反应与延迟性钙矾石形成共存破坏..... 康小朋, 卢都友, 许仲梓 (1091)  
稻壳灰对铝酸盐水泥早期水化的影响..... 徐玲琳, 吴凯, 王培铭, Horst-Michael Ludwig (1098)  
不同分散介质中新拌水泥浆体的微结构与流动性..... 张艳荣, 孔祥明, 高亮, 严熵 (1104)  
掺  $\text{CaCO}_3$  粉及后续水养护对  $\text{CO}_2$  养护混凝土强度和显微结构的影响 ..... 涂贞军, 史才军, 何平平, 潘智生 (1110)  
 $\text{C}_4\text{A}_3\text{S}-\text{CaSO}_4-\text{CaO}$  体系在硅酸盐水泥浆体中的膨胀能力 ..... 韩建国, 阎培渝, 侯维红 (1120)  
白云石和石灰石微粉对水泥砂浆强度和水化产物的影响..... 张少华, 卢都友, 徐江涛, 凌康, 许仲梓 (1126)  
钢纤维-水泥基界面过渡区纳米力学性能..... 徐礼华, 余红芸, 池寅, 邓方茜, 胡杰 (1134)  
复合活化剂对高掺量矿渣胶凝材料性能及其作用机理的影响..... 姜霉, 穆松, 刘建忠, 石亮 (1147)  
短期持压荷载与混凝土内水分传输的耦合过程..... 鲍玖文, 王立成, 程宝娟 (1154)  
氧化硼对铝酸钙水泥水化性能的影响(英文)..... 张传银, 叶国田, 尚学军, 翟鹏涛, 李红霞, 陈留刚 (1161)  
硅烷改性聚羧酸减水剂对水泥浆体流动性及水化进程的影响..... 何燕, 张雄, 顾明东, 洪万领 (1166)  
硫酸铝盐水泥与硅酸盐水泥净浆水分蒸发区硫酸盐破坏对比..... 刘赞群, 李湘宁, 邓德华, 候乐 (1173)  
相变石膏板制备及其在建筑墙体中应用的研究进展(综合评述)..... 刘凤利, 朱教群, 马保国, 周卫兵, 李元元 (1178)  
Ce 掺杂纳米  $\text{TiO}_2$ /硅藻土复合材料的光催化性能 ..... 汪滨, 张广心, 郑水林, 王娇娜, 李从举 (1192)  
羟基方钠石的形成机理..... 胡小强, 彭同江, 孙红娟, 赵二正 (1200)  
天然菱铁矿在热处理过程中的结构变化..... 邢波波, 陈天虎, 庆承松, 刘海波, 谢巧勤, 谢晶晶 (1207)

硅烷偶联剂 A171 对含亚甲基蓝的二氧化硅@磷酸八钙载药颗粒性能的影响

- ..... 李亚东, 白志杰, 王百威, 孙延标, 杨赞中, 李成峰 (1213)
- 氧化镁膨胀剂中 MgO 含量的测定 ..... 张守治, 刘加平, 田 倩, 闫战彪, 陆安群 (1220)
- 面向能源与环境应用的蛭石结构修饰及其复合材料(综合评述) ..... 曾 铃, 付宏渊, 李传常, 陈 荐, 何建军 (1226)
- 含氧酸盐水合硫铝酸钙的 Gibbs 自由能计算(英文) ..... 吴贤熙, 蒋洪石, 吴 松, 朱维东 (1235)
- 稀土改性电化学储能电极材料的研究进展(综合评述) ..... 陈昆峰, 李 宫, 梁晰童, 潘 伟, 薛冬峰 (1241)
- 纳米结构过渡金属氮化物用于电化学储能器件(综合评述) ..... 常月琪, 董杉木, 周新红, 崔光磊 (1248)

# JOURNAL OF THE CHINESE CERAMIC SOCIETY

Guisuanyan Xuebao

(Inorganic and Non-metallic Materials)

Total No. 329

<http://www.gxyb.cbpt.cnki.net>

August, 2016

**Vol. 44, No. 8, Monthly**

## CONTENTS

- Effect of Temperature on Hydration of Composite Binder Containing Slag(English)  
..... HAN Fanghui, LIU Juanhong, YAN Peiyu (1071)
- Mechanical Properties of Self-Compacting Concrete Incorporating Rubber Particles under Impact Load  
..... LONG Guangcheng, LI Ning, XUE Yihua, XIE Youjun (1081)
- Coexistence of Alkali Silica Reaction and Delayed Ettringite Formation in a Cracked High Performance Concrete Element  
..... KANG Xiaopeng, LU Duyou, XU Zhongzi (1091)
- Influence of Rice Husk Ash on Early Hydration of Calcium Aluminate Cement  
..... XU Linglin, WU Kai, WANG Peiming, Horst-Michael LUDWIG (1098)
- Microstructure and Flowability of Fresh Cement Paste in Different Dispersions Media  
..... ZHANG Yanrong, KONG Xiangming, GAO Liang, YAN Shang (1104)
- Effects of CaCO<sub>3</sub> Powder and Subsequent Water Curing on Compressive Strength and Microstructure of CO<sub>2</sub>-cured Concrete  
..... TU Zhenjun, SHI Caijun, HE Pingping, PAN Zhisheng (1110)
- Expansion Character of C<sub>4</sub>A<sub>3</sub>\$-CaSO<sub>4</sub>-CaO System in Portland Cement Paste ..... HAN Jianguo, YAN Peiyu, HOU Weihong (1120)
- Effects of Dolomite and Limestone Powders on Strength and Hydration of Cement Mortars  
..... ZHANG Shaohua, LU Duyou, XU Jiangtao, LING Kang, XU Zhongzi (1126)
- Nano-indentation Character of Interfacial Transition Zone Between Steel Fiber and Cement Paste  
..... XU Lihua, YU Hongyun, CHI Yin, DENG Fangqian, HU Jie (1134)
- Influence of Composite Activator on Performance and Hydration Mechanism of High-Volume Slag Binder Material  
..... JIANG Qian, MU Song, LIU Jianzhong, SHI Liang (1147)
- Water Transport in Concrete Coupled with Short-term Sustained Compressive Loading  
..... BAO Jiuwen, WANG Licheng, CHENG Baojuan (1154)
- Effect of B<sub>2</sub>O<sub>3</sub> on Hydration Behavior of Calcium Aluminate Cement (English)  
..... ZHANG Chuanyin, YE Guotian, SHANG Xuejun, ZHAI Pengtao, LI Hongxia, CHEN Liugang (1161)
- Effect of Organosilane-modified Polycarboxylatesuperplasticizer on Fluidity and Hydration Process of Cement Paste  
..... HE Yan, ZHANG Xiong, GU Mingdong, HONG Wanling (1166)
- Comparison of Paste Damage in Evaporation Zones of Portland Cement Paste and Calcium Sulphoaluminate Cement Paste  
..... LIU Zanqun, LI Xiangning, DENG Dehua, XIA minhua (1173)
- Research Progress on Preparation and Application of Gypsum Phase Change Wallboard in Building Wall (Review)  
..... LIU Fengli, ZHU Jaoqun, MA Baoguo, ZHOU Weibing, LI Yuanyuan (1178)

Photocatalytic Performance of Cerium Doped Nano Titanium Oxide/Diatomite Composites

..... *WANG Bin, ZHANG Guangxin, ZHENG Shuilin, WANG Jiaona, LI Congju* (1192)

Synthetic Mechanism of Hydroxy Sodalite ..... *HU Xiaoqiang, PENG Tongjiang, SUN Hongjuan, ZHAO Erzheng* (1200)

Structural Characteristic of Natural Siderite during Thermal Treatment

..... *XING Bobo, CHEN Tianhu, QING Chengsong, LIU Haibo, XIE Qiaoqin, XIE Jingjing* (1207)

Influence of Vinyltrimethoxysilane on Properties of Methylene Blue-loaded Silica@Octacalcium Phosphate as Drug Delivery

..... *LI Yadong, BAI Zhijie, WANG Baiwei, SUN Yanbiao, YANG Zhanzhong, LI Chengfeng* (1213)

Measurement and Analysis of MgO Content in Magnesia Expansive Agent

..... *ZHANG Shouzhi, LIU Jiaping, TIAN Qian, YAN Zhanbiao, LU Anqun* (1220)

Structural Modification and Composites of Vermiculite for Energy and Environmental Application(Review)

..... *ZENG Ling, FU Hongyuan, LI Chuanchang, CHEN Jian, HE Jianjun* (1226)

Gibbs Free Energies Calculation of Calcium Aluminate Sulfate Hydrates(English)

..... *WU Xianxi, JIANG Hongshi, WU Song, ZHU Weidong* (1235)

Rare Earth Element Ion Modified Electrochemical Energy Storage Electrode Materials - A Short Review (Review)

..... *CHEN Kunfeng, LI Gong, LIANG Xitong, PAN Wei, XUE Dongfeng* (1241)

Nano-Structured Transition Metal Nitrides for Electrochemical Energy Storage Devices (Review)

..... *CHANG Yueqi, DONG Shanmu, ZHOU Xinhong, CUI Guanglei* (1248)

# **Journal of the Chinese Ceramic Society (English Edition)**

## **Call for Paper**

The Journal of the Chinese Ceramic Society (English Edition) is a premier archival journal devoted to publishing top quality original research that advances the fundamental and applied science of ceramic materials. Today's ceramic science is an interdisciplinary field that has expanded beyond its traditional core to areas as diverse as electronics and energy materials, and bio- and nano-technology. Published quarterly, the journal aims to provide a continuous forum for the dissemination of peer-reviewed international research into the preparation, properties, and applications of ceramic materials, as well as systematic studies of processes, structures, properties and function of materials by experimental, computational and theoretical tools that are critical to the development of new and improved materials beyond ceramics.

### **How to submit a manuscript**

Manuscripts should be submitted by E-mail to [jccs\\_en@vip.163.com](mailto:jccs_en@vip.163.com) in PDF or doc format, but the accepted manuscripts must be doc format. Figures contained in the manuscripts should be clear, easy to read, and of the best possible quality, and could be colorful. The details of an article, including structure and specific information on figures, tables, and references, are given in <http://www.materomics.net>.

### **Academic Consultants**

Li-quan CHEN

### **Editors-in-Chief**

Ce-wen NAN, Jing-feng LI

### **Editorial Office of Journal of the Chinese Ceramic Society**

Editors: Rui-ping YU, Li-zhong ZHOU

Website <http://www.materomics.net>

E-mail: [jccs\\_en@vip.163.com](mailto:jccs_en@vip.163.com)

Tel: +86 10 57811253

Fax: +86 10 57811252

Add: No.11 Sanlihe Road, Haidian District, Beijing 100831, P.R.China

---

定价: 50 元

国外代号 BM57

2016 年 8 月出版

国内代号 2-695

ISSN 0454-5648

