









1957 年创刊

硅 酸 盐 学 报

总 348 期

Guisuanyan Xuebao

(无机非金属材料) http://www.gxyb.cbpt.cnki.net

第46卷 第3期 2018年3月,月刊

目 次

工程陶瓷材料专题

MXene (Ti ₃ C ₂)的制备及其吸波性能 ····································	欣,	温广武,	杨思宇,	黄小	、萧,	闫	旭,	吴 梦	軣(315)
TiO ₂ 修饰 BDD 复合电极材料的制备及性能 ······		席耀辉,	王海龙,	闫	宁,	赵延	军,	张钅	兑(322)
Al ₂ O ₃ 包覆 ZrO ₂ 粉体制备的热障涂层材料的结构与性能·············		易中周,	单 科,	翟凤	风瑞,	李	楠,	谢志服	鸠(328)
NiO 催化氮化制备 Si₃N₄/SiC 复合材料及其高温性能 ···············张	俊,	刘江昊,	赵万国,	韩	磊,	古亚	军,	张海军	戻(333)
水热碳化制备碳微球及其在 Al ₂ O ₃ -SiC-C 浇注料中的应用 ·······		李赛赛,	王军凯,	段红	Ľ娟,	李发	亮,	张海军	戻(341)
研究论文									
转印法制备薄膜太阳能电池用银纳米线-聚合物复合透明导电薄膜			·白盛池,	汪海	爭风,	杨	辉,	郭兴思	忠(347)
燃烧法制备不同钆含量的 GDC 纳米粉体及其电导性		程 亮,	罗凌虹,	徐	序,	石纪	军,	吴也凡	1 (354)
烧结助剂 CuO 掺杂对 0.97(K _{0.5} Na _{0.5})NbO ₃ -0.03Bi(Zn _{2/3} Nb _{1/3})O ₃ 陶瓷	组结核	句、微观 开	形貌及电	性能的	的影响	向			
程	花蕾,	肖 健,	高 鹏,	μŹ	芸云,	高拴	平,	赵立き	劳(361)
PAN 基碳毡碳化过程中的结构演变及电化学特性 ·····			张 欢,	谭	毅,	罗旭	东,	陈频	彫(369)
La _{0.65} Sr _{0.2} Gd _{0.15} MnO ₃ 纳米颗粒的制备及其磁热效应······						·孔祥	宇,	邹正为	と(377)
Mo-Si-B对 ZrB2超高温陶瓷烧结工艺和性能的影响									
赵笑统,赵新阳,李	智强,	卢绪高,	邵刚,	马世	过晨,	王海	龙,	张钅	兑(382)
YAG 对 TiCN 陶瓷刀具材料力学性能及烧结工艺的影响 ··········				…任有	 持,	何福	坡,	伍尚华	⊭ (388)
钛合金表面电泳沉积氟羟基磷灰石涂层				…朱戌	 長霞,	韩	丹,	齐荟作	千(394)
超声波辅助溶胶-凝胶法合成纳米铁酸镧及其光催化性能沈	宏芳,	李清明,	王燕民,	陆有	7军,	严祥	辉,	张 笋	(402)

ZnO 包裹 γ -Ce ₂ S ₃ 大红色料的制备及其温度	E稳定性陈镇华,	李月明,	王竹梅,	沈宗洋,	谢志翔,	高轶群,	马振国 (413))
高温氮气气氛下硅-氮化硅-氧氮化硅体系	的稳定性	··姚桂生,	李 勇,	金秀明,	龙梦龙,	秦海霞,	马晨红(420))
硅溶胶对铝酸盐水泥结合刚玉质浇注料微	见结构和性能的影响			·王 峰,	陈平安,	朱伯铨,	李享成(427))
模拟煤气化炉气氛下酸性渣对 Si ₃ N ₄ SiC 材	材料的侵蚀及其机理							
	间,李红霞,赵世贤,	孙红刚,	李鹏涛,	闫双志,	万龙刚,	王 刚,	曹战民(434))
钢包渣对轻质方镁石-镁铝尖晶石耐火材料	的侵蚀机理	…马三宝,	鄢 文,	林小丽,	吴贵圆,	陈 哲,	李 楠 (443))
基于灰色系统理论的多孔镁橄榄石材料孔	结构与导热性能的相	关性						
	宋云飞,	邓承继,	祝洪喜,	丁 军,	余 超,	樊国栋,	冷光辉(449))

JOURNAL OF THE CHINESE CERAMIC SOCIETY

Guisuanyan Xuebao

(Inorganic and Non-metallic Materials) http://www.gxyb.cbpt.cnki.net

March, 2018

Vol. 46, No. 3, Monthly

CONTENTS

Special topic-Engineering Ceramic Materials

Fabrication of MXene (Ti ₃ C ₂) and its Microwave Absorbing Properties
Preparation and Properties of TiO ₂ Modified BDD Composite Electrode
XI Yaohui, WANG Hailong, YAN Ning, ZHAO Yanjun, ZHANG Rui(322
Structure and Properties of Thermal Barrier Coating Prepared by Alumina Coated Zirconia Composite Powder
······YI Zhongzhou, SHAN Ke, ZHAI Fengrui, LI Nan, XIE Zhipeng(328
Preparation and High Temperature Properties of Si ₃ N ₄ /SiC Composites by Catalytic Nitridation Method Using NiO as Catalyst
ZHANG Jun, LIU Jianghao, ZHAO Wanguo, HAN Lei, GU Yajun, ZHANG Haijun (333
Preparation of Carbon Spheres by Hydrothermal Carbonization and its Application in Al ₂ O ₃ -SiC-C Castable
LI Saisai, WANG Junkai, DUAN Hongjuan, LI Faliang, ZHANG Haijun (341
Research Paper
Preparation of Silver Nanowire-Polymer Composite Transparent Conductive Films by Transfer Method for Thin Film Solar Cells
BAI Shengchi, WANG Haifeng, YANG Hui, GUO Xingzhong(347
Preparation of GDC Nanopowder with Different Gadolinium Contents by Combustion Method and Its Electrical Conductivity
Effects of CuO Doping on Phase Structure, Microstructure Morphology and Electrical Properties of 0.97(K _{0.5} Na _{0.5})NbO ₃ -
0.03Bi(Zn _{2/3} Nb _{1/3})O ₃ Ceramics········ CHENG Hualei, XIAO Jian, GAO Peng, YAN Yunyun, GAO Shuanping, ZHAO Lifang (361
Structural Evolution and Electrochemical Properties of PAN Based Carbon Felt During Carbonization
ZHANG Huan, TAN Yi, LUO Xudong, CHEN Na(369
$Synthesis \ and \ Magnetocaloric \ in \ La_{0.65}Sr_{0.2}Gd_{0.15}MnO_3 \ Nanoparticles \\$
Effect of Mo-Si-B on Sintering Process and Properties of ZrB2 Ultra-high-Temperature Ceramics
ZHAO Xiaotong, ZHAO Xinyang, LI Zhiqiang, LU Xugao, SHAO Gang, MA Shichen, WANG Hailong, ZHANG Rui (382
Effect of YAG on Mechanical Properties and Sintering Process of TiCN Ceramic Tool
REN Weiwei, HE Fupo, WU Shanghua(388
Fluorohydroxyapatite Coating on Titanium Alloy Surface by Electrophoretic Deposition
······································

Total No. 348

Preparation of Lanthanum Ferrite via Ultrasound-assisted Sol-gel Method and Its Photocatalytic Activity
······SHEN Hongfang, LI Qingming, WANG Yanmin, LU Youjun, YAN Xianghui, ZHANG Xiao(402
Preparation and Temperature Stability of ZnO Coated γ-Ce ₂ S ₃ Red Pigment
CHENG Zhenhua, LI Yueming, WANG Zhumei, SHENG Zongyang, XIE Zhixiang, GAO Yiqun, MA Zhenguo (413
Stability of Si-Si ₃ N ₄ -Si ₂ N ₂ O Complex at High-temperature with N ₂ -blowing
······YAO Guisheng, LI Yong, JIN Xiuming, LONG Menglong, QIN Haixia, MA Chenhong(420
Effect of Silica Sol on Microstructure and Properties of Corundum Castables Bonded with Aluminate Cement
WANG Feng, CHEN Pingan, ZHU Boquan, LI Xiangcheng (427
Erosion Mechanism of Si ₃ N ₄ Bonded SiC Materials by Acid Coal Slag in Simulated Atmosphere of Coal Gasifier
CAI Binli, LI Hongxia, ZHAO Shixian, SUN Honggang, LI Pengtao, YAN Shuangzhi, WAN Longgang
Corrosion Mechanism of Ladle Slag to Lightweight Periclase–MA Spinel Refractories
MA Sanbao, YAN Wen, LIN Xiaoli, WU Guiyuan, CHEN Zhe, LI Nan(443
Correlation Between Porosity Characteristics and Thermal Conductivity of Forsterite Porous Materials Based on Grey
System TheorySONG Yunfei, DENG Chengji, ZHU Hongxi, DING Jun, YU Chao, FAN Guodong, LENG Guanghui (449