O U R N A L O F

Ceramic Processing Research

Volume 24, Number 4, August 2023

CONTENTS

Research Articles

Performance of expanded clay aggregate based structural light weight concrete beams containing fibre reinforcement	K.K. Gaayathri, K. Suguna and N. Raghunath Pulipaka	595
The phase simulation of High-T_c superconductor compound $YBa_2Cu_{3\text{-y}}Pb_yO_{6.5\text{+}\delta}$	Emad K. Al-Shakarchi, Salwan K.J. Al-Ani and Wedad M. Faysal	603
Effect of the aging voltage on the electrical properties in a LTO battery capacitor	Won-Su Lee, Jong-Kyu Lee and Jung-Rag Yoon	611
Study of microstructural and mechanical properties of Aluminium LM14 hybridized with reinforcement of Nanoparticles of Titanium Diboride and Alumina	C. Sailaja, K.T. Thilagham, K.T. Anand, P. Ganeshan, Sathish Kannan, A.H. Seikh and A. Ghosh	617
Experimental analysis of $AA7475/ZrC/Al_2O_3$ hybrid composites by taguchi method	B. Somasundaram, K.T. Anand, D. Kirubakaran, P. Ganeshan, Sathish Kannan, A.H. Seikh and A. Ghosh	626
Influence of $ZnFe_2O_4$ substitution on the microstructural and magnetic properties of M-type $Sr_{0.1}Ca_{0.4}La_{0.5}Fe_{12}O_{19}$ hexagonal ferrites	Xiubin Zhao and Ailin Xia	634
Synthesis and luminescence properties of red lutetium based phosphors using a general precursor obtained by homogeneous precipitation	Xin Zhang, Mingyang Liu, Jiao He, Jingbao Lian and Xue Zhang	640
Structural and electrical properties of La-Sr-Mn-O ceramics with Bi ³⁺ content for thermistor devices	Do-Hui Kim, Jeong-Eun Lim, Byeong-Jun Park, Sam-Haeng Yi, Myung-Gyu Lee, Joo-Seok Park and Sung-Gap Lee	650
Comparative study among Al ₂ O ₃ , ZTA, MgO/ZTA & CuO/ZTA composites in terms of Mechanical Properties	G. Gokilakrishnan, Bipin Kumar Singh and M. Vigneshkumar	655
Safety, health and environmental (SHE) risk assessment and strategies to create a sustainable safety culture in ceramic and HVAC industries	Sunil Arjun Bhalerao, D. Senthilkumar and Narendren Nair	662
Synthesis of AlON powders through a polymerization template approach by spark plasma sintering	Zhihui Ding, Wemshi Zheng, Fei Chen, Ik Jin Kim, Wulong Liu, James F. Shackelford, Hyoung-Won Son, Tadachika Nakayama, Sukyoung Kim, Young-Hwan Han and Jooseong Kim	675

Optimization of fiber length and filler content for improving the mechanical behaviour of musa acuminate fiber-reinforced epoxy composite using response surface methodology	S. Sathiyamurthy, S. Saravanakumar, N. Ananthi and P. Devi	683
Regulation of $BaTiO_3$ ceramics' electrical properties by varying $Na_{0.5}Bi_{0.5}TiO_3$ dopants	Shuiyun Li, Mingyang Ma, Yongshang Tian, Ruobing Li, Xiongjie Hu and Peng Liu	693
Use of geopolymer-derived leucite as a reinforcement in dental bioceramic composites	Cengiz Bagci	700
Enhancing micromachining precision with novel electrolyte combinations: an investigation	Sudharsan Gunasekaran, Suresh Periyagounder and Magibalan Subramaniam	705
Experimental analysis of treated waste foundry and waste ceramics sand by replacement of fine aggregate in concrete	K.V. Boobala Krishnan, K. Nirmalkumar, V. Sampathkumar and P.C. Murugan	714
Effect of sintering atmosphere on the structure and dielectric properties of BSIT ceramics	Yue Liu, Kunzhi Luan, Jiahao Xu, Zhen Wang, Yike He and Guishan Liu	723
Effect of La_2O_3 on the microstructure and electrical properties of ZnO linear resistors	Yajun Fu, Jiajia Lu, Jin Wang and Liangfeng Li	728
Coating of Si ₃ N ₄ with HAp via atomic layer deposition	Seniz R. Kushan Akin	736
Effect of heat treatment on microstructure and tensile strength of KD-II SiC fibers in argon and oxidation atmosphere	Huan Yin, Fenghao Yang, Guangmin Hu and Maozhong Yi	742