J O U R N A L O F

Ceramic Processing Research

Volume 23, Number 6, December 2022

CONTENTS

Research Articles

Microstructural evolution of chemically vapor-deposited tantalum carbide at elevated temperature	Jangwon Han, SangMin Jeong, Ji Yeon Park, Hyun-Geun Lee, Weon-Ju Kim, Chan Park and Daejong Kim	751
Coloring mechanism of celadon glazes from Yaozhou kiln	Zhen Sang, Fen Wang, Xiaojuan Yuan, Shurui Shen, Jing Wang and Xiaohong Wei	758
Effect of the mixing ratio of positive materials of an electrode on the electrical properties in a battery capacitor	Jong-Kyu Lee, Kang-Min Choi, Won-su Lee and Jung-Rag Yoon	766
Study on grain growth and conduction mechanism of spinel nickel ferrite ceramics	Baogang Liu, Min Tang, Xiang Wei and Hongjuan Li	770
Effect of Al modified $\text{Li}_4\text{Ti}_5\text{O}_{12}$ anode/activated carbon cathode for advanced hybrid supercapacitors	Ye-Wan Yoo and Seung-Hwan Lee	774
Preparation of anhydrous from red gypsum and effect of high strength gypsum on its properties	Changrong Liu, Lu Wang, Hongbin Tan, Faqin Dong, Xiaoling Ma and Feihua Yang	778
Investigation and optimization on micro and nano Al_2O_3 reinforced aluminium composites using GRA coupled PCA technique	A. Srinivasan, R. Prabu, S. Ramesh ^c and R. Viswanathan	783
Reliability characteristics of high-capacity multilayer ceramic capacitors according to highly accelerated life test	Chang Ho Lee and Jung Rag Yoon	794
The effect of molar ratio and annealing on crystal structure of gadolinium-gallium garnet nanopowders synthesized by sol-gel method	Hümeyra Örücü	799
Prediction of the strength of self-compacting cementitious mix with glass fibre using machine learning	Balasubramaniam N and Padmanaban I	806
X-ray diffraction and raman spectroscopy studies on calcium modified PZT ($Pb_{(1-x)}Ca_xZr_{0.52}Ti_{0.48}O_3$) ceramics prepared via solid state reaction method and sol-gel technique- a comparative study	Anupama Sachdeva, Aarushi, Jagneet Kaur Anand and R.P. Tandon	817

Quantitative study on erosion degree of bone china glaze by common acid reagent at different temperature	Wei Hong, Wen-jie Li, Hui-chao Huang, Xiao-wei Weng, Yi-qin Zhang, Xiao-hui Liu, Yan-hua Guo and Ya-bin Su	823
Influence of graphene oxide on the heat resistance of high strength concrete	Guangming Meng, Yuwu Sui, Shu Liu, Qingbo Tian, Xinling Cui and Yuejian Wu	831
Sintering technology and properties of sponge city per- meable bricks prepared from electrical porcelain waste	Yue Liu, Yun Xiang, Jieguang Song, Dongliang Zhang, Hongbin Wen and Yuzhen Wang	839
Study on the performance and mechanism of Cu(II) adsorption by porous ceramics prepared from tailings	Tong Zhang, Shaofeng Zhu, Guangsheng Fei and Yuanhang Ma	845
Power-to-gas systems with a focus on biological methanation	Seongcheol Kang, Anil Kuruvilla Mathew, Amith Abraham, Okkyoung Choi and Byoung-In Sang	853
Improving anti-glare properties for display glass of soda-alumino-silicate by two steps etching method	Heesu Woo and Seunggu Kang	862
Machining performance and optimization of inconel 718 using MWCNT by taguchi's method	Sriharrish Kumar, Sureshkannan Gurusamy, Vivek Sivakumar and Senthil Murugan Vaiyapuri	869
Impact of CIGS, CdS and i – ZnO film thickness, temperature on efficiency enhancement of CIGS solar cells	Deepa Lakshmi.B, Rajendran RS, Jackrit Suthakorn and Branesh M. Pillai	878
Eco-Efficient Concrete: A sustainable reutilization of Ceramic Tile Waste Powder (CTWP) as a partial replacement for cementitious material in a recycled fine aggregate concrete	S. Janani, G.S. Rampradheep, P. Kulanthaivel and P.C. Murugan	884
Spatial Analysis of Ground water and their treatment with Low-Cost Ceramic membrane	K. Santhosh Kumaar, N. Muralimohan, P. Kulanthaivel and S. Sathiskumar	892
Study on engineering strength properties of ceramic waste powder stabilized expansive soil using machine learning algorithms	D. Sivabalaselvamani, P. Kulanthaivel, J. Yogapriya and Inderjit Singh Dhanoa	902
Concrete with sisal fibered geopolymer: a behavioral study	Muthupandy Varuthaiya, Chandrasekaran Palanisamy, Vivek Sivakumar and Ganeshan Pushpanathan	912
Microwave dielectric properties of $Mg_2Ti_{1-x}(Ni_{1/3}Sb_{2/3})_xO_4$ ceramics	Yun Sik Park and Eung Soo Kim	919
Tribological and characterization studies of aluminium alloy 6061 reinforcement with aluminium oxide and copper metal matrix composites	D. Elil Raja, S. Prathap Singh, V. Rangarajan and M. Chrispin Das	926
Monitoring and removal technologies of microplastics in the environment	Gopi Kalaiyarasan, Sung Chul Yi and Byoung-In Sang	934