## Ceramic Processing Research

0 F

O U R N

## Volume 24, Number 3, June 2023

## CONTENTS

## **Research Articles**

Experimental investigations on mechanical and tribological behavior of AA7075 reinforced with ceramic particles

Design and optimization of turbonator using blade element theory

Effect of hybrid ceramic addition on Al7075 for prompt utilization

Analysis of friction stir welding of AZ91D magnesium alloy with boron application using TOPSIS Taguchi method

Studies of structural and electrical properties of La-Mg-Mn-Ti-O ceramic

Experimental investigation and machinability behavior on synthesized titanium composite

Analyze the various effects of cutting tools in the machining of titanium alloy

Characterization of some natural materials with different morphologies and their mullitization in ceramic preparation

Relaxor characteristics of PSLZT-BMT-based ferroelectric material ceramics

Response surface methodology optimization of pulse electrodeposited Ni- nano SiC coatings on Al 7075 sub-strate

Development of Ni - Nano Al<sub>2</sub>O<sub>3</sub> coated AISI1018 mild steel composites via pulse electro deposition and investigation of its wear and corrosion behavior

Application of porous ceramic decorative plate materials in industrial design

B. Thamaraikannan, A. Sagai Francis Britto, S. Senthilraja and R. Rajkumar	415
K. Selvarasu and R. Mohan	422
P. Sathiamurthi, K.S. Karthi Vinith, A. Sivakumar and N. Bagath Singh	429
K. Rajesh Kumar, Kiran Kumar Dama and Vaddi Venkata Satyanarayana	439
Siti Hashimah bt Mohamad Hanif, Walter Charles Primus, Khamirul Amin Matori, Josephine Liew Ying Chyi and Aaliyawani Ezzerin Sinin	446
R. Vinothkumar, J. Maniraj and V.S. Thangarasu	453
D. Ananda Kumar, A. Murugarajan and E. Mohan	461
Nguyen Thi Thanh Thao and Bui Hoang Bac	471
Nguyen Van Thinh, Le Dai Vuong, Do Viet On, Truong Van Chuong, Le Vu Truong Son, Trinh Ngoc Dat, Le Van Thanh Son and Vo Thanh Tung	478
S. Sankar Ganesh and A. Jegan	486
S. Shanmugam, S. Mahalingam and A. Ranjithkumar	495
Shanghong Yu	503

Application of VR interactive technology in graphic design of ceramic materials	Shiqiu Gu and Xiaogang Xing	507
Migration pattern and crystallization characteristics of $CeO_2$ in tailing glass-ceramics under microwave irradiation	Wence Xu, Zhao Cao, Rui Ma, Nannan Wu and Shunli Ouyang	512
Characterization of green ceramic-aluminum compos- ites developed from waste recycling	Ravi Kumar Singh, Ali Algahtani, Tawfiq Al-Mughanam, Intezar Mahdi and Vineet Tirth	525
Effects of metakaolin and PVA fiber on the compressive strength of shotcrete under different curing conditions	Yang Guoqiang, Guo Gang, Wang Lihui, Wang Changchang and Sun Tao	535
Study of dry friction characteristics of silicon nitride full ceramic ball bearing with PEEK-based cage	Jian Sun, Zhe Zhang, Zhongxian Xia, Xin Fang, Renyun Guan, Guangxiang Zhang and Jinmei Yao	541
Influence of quartz in self-compaction concrete at ele- vated temperature	V. Thamilpriya and G. Elangovan	554
Experimental and numerical analysis of tensile and flex- ure tests on a hybrid Aramid/E glass composites	Kalyani Gurram and Pannirselvam N.	560
Mechanical behavior of LM26/SiC/TiO <sub>2</sub> /Ni-Gr rein- forced hybrid metal matrix composites – An experimen- tal investigation	P. Kumaravel, K. Venkatesh Raja and P. Suresh	569
Exploring the factors of ceramic pattern design: A com- prehensive review	Ying Liu	578
Low-temperature dielectric and impedance properties of $SrSn_{0.2}Ti_{0.8}O_3$ ceramics	Depeng Wang, Ruifeng Niu, Liqi Cui and Weitian Wang	583
Stable temperature dependence of dielectric properties in BaTiO <sub>3</sub> -Nb <sub>2</sub> O <sub>5</sub> -Co <sub>3</sub> O <sub>4</sub> + BaO-V <sub>2</sub> O <sub>5</sub> system	Chang Ho Lee and Jung Rag Yoon	588