

Volume 25, Number 1, February 2024

CONTENTS**Research Articles**

Study of mechanical properties of self-adhesive mortars with sugar cane bambasse ash and silica activator	<i>P. Sudha, S. Ramesh, R. Jagadeesan and K. Yuvaraj</i>	1
Resin modified calcium silicate cements - novel formulations in clinical dental practice	<i>I. Dimitrova</i>	16
The influence of firing temperatures on the phase formation, microstructure and mechanical properties of alumina zirconia composite ceramics	<i>Aurawan Rittidech and Aekkakit Suthapintu</i>	22
Interior hardcover material and processing technology based on art beauty principle	<i>Lijuan Zhang</i>	28
Effects of deposition of an ultra-thin Al₂O₃ layer via atomic layer deposition on electrochromic property, self-discharge, and discharge capacity of photo-electrochromic devices	<i>Woon-Yong Park, Yoon-Tae Park, Byung Guk Ahn and Ki-Tae Lee</i>	34
Influence of ceramic waste powder (CWP) in strength and durability performance of coir fiber reinforced concrete	<i>S. Anandaraj, A.R. Krishnaraja, P. Kulanthaivel and P.C. Murugan</i>	41
Electrocaloric effect of K(Ta,Nb)O₃/BaTiO₃ multilayer thin films prepared by sol-gel method	<i>Byeong-Jun Park, Jeong-Eun Lim, Ji-Su Yuk, Sam-Haeng Lee, Myung-Gyu Lee, Joo-Seok Park and Sung-Gap Lee</i>	48
Effect of sintering temperature and calcium oxide content on microstructure and properties of geopolymer porous ceramics	<i>Zhenfan Chen, Shaofeng Zhu, Qingqing Wang and Xianbiao Wang</i>	56
Influence of SiO₂ and Al₂O₃ compositional variations on glaze structure and properties	<i>Ji-Soo Kim, Ung-Soo Kim, Jung-Hoon Choi, Jin-Ho Kim and Kyu-Sung Han</i>	65
Cytotoxicity evaluation of Mg-2Al-1Nd alloy-coated MgF₂ for biomedical applications	<i>Baraa H. Al Khaqani and Nawal Mohammed Dawood</i>	72
Comparative study between hot isostatic pressing and pressure less sintering for self-lubricating CuO/ZTA composites	<i>K. Raja, M. Dhanabal, Bipin Kumar Singh and P. Ganeshan</i>	79

Hydroxyapatite production and characterization from four pufferfish species teeth	<i>Servet Ahmet Dođdu, Cemal Turan, Tolga Depci, Ersin Bahçeci, Kemal Sangün and Deniz Ayas</i>	85
Technological confluence in ceramic artistry: a quantitative examination of digital and traditional methods	<i>Zhou Li</i>	92
Characterization of electroless Ni(ZrO₂) coated Ti alloy fabricated by sintering for biomedical materials	<i>Asli Betül Yönetken and Ahmet Yönetken</i>	97
Analysis of electrical behavior in LDPE/BaTiO₃ ceramic filler nanocomposites for electrical cable insulation applications	<i>N. Rajasekaran, C. Muniraj, T. Venkatesan and A. Kumaravel</i>	104
Finite Element Modeling of Beam with Piezoelectric/ Piezomagnetic Sensors under Uniform Temperature	<i>Dhanasekaran Rajagopal, A. Kumaravel, S. Arunprasath, M. Dinesh Babu and S. Elayaraja</i>	119
The behavior of NiO/GO nanoelectroceramics in different solvents: Synthesis, structural, thermal and electro-optical properties	<i>Cihat Aydin and Oktay Emre Yildiz</i>	131
Effect of kaolin pretreatment on the structure and properties of metakaolin phosphate-based geopolymers	<i>Xin Yu, Chengxin Ren, Wenlong Xu, Lina Xu and Qingbo Tian</i>	138
Effects of calcination temperature on properties of sulfuric acid-assisted Y₂O₃ nano-powder for highly transparent ceramics	<i>Jiao He, Xin Zhang, Jingbao Lian and Xue Zhang</i>	144