

Volume 21, Number 2, April 2020

CONTENTS

Research Articles

- | | | |
|---|--|-----|
| Multi objective optimization of wear characteristics on Al 7075/Al₂O₃/B₄C composites - Desirability approach | <i>Pridhar. T, Ravikumar. K, Sureshbabu. B, Srinivasan. R and Sathishkumar. B</i> | 131 |
| Preparation and properties of coated silica/aluminum cermet materials via powder metallurgy method | <i>Jieguang Song, Yue Liu, Chunxiao Wu, Xueqing Yang, Huihui Luo, Chunyan He, Chengbin Li and Haizhen Yang</i> | 143 |
| Characterization of NiFe₂O₄/Ce_{0.9}Gd_{0.1}O_{1.95} composite as an oxygen carrier material for chemical looping hydrogen production | <i>Jong Ha Hwang and Ki-Tae Lee</i> | 148 |
| Optimization of process parameters in friction stir welding of aluminium matrix SiC-Al₂O₃ composites by genetic algorithm | <i>P. Gopi Krishnan, B. Suresh Babu and K. Siva</i> | 157 |
| The study on the effect of calcium chloride deicing agent and concrete compressive strength on scaling | <i>Sung Hyun Eom, Seong Soo Kim, Jeong Bae Lee and Seung Ho Park</i> | 164 |
| Carbon nanotube-biomorphic composites and filter application: A Review | <i>Jung Gyu Park, Se Young Kim, In Sub Han and Ik Jin Kim</i> | 170 |
| Studying the self-healing reaction based on zirconium silicide in the Thermal Barrier Coating system | <i>Z. I. Zaki, Q. Mohsen, S. H. Alotaibi and M. H. El-Sadek</i> | 192 |
| Mechanism of stopping crack propagation in continuous fiber reinforced self-healing ceramic | <i>Jang-Won Lee, Ki-woo Nam and Wataru Nakao</i> | 200 |
| Effect of La_{0.8}Ca_{0.2}Cr_{0.9}Co_{0.1}O_{3-δ} infiltration on the LCCC-YSZ layer as an interconnector material in solid oxide fuel cells | <i>Ho-Chang Lee, Jiwon Lee, Jung-A Lee, Young-Woo Heo, Joon-Hyung Lee and Jeong-Joo Kim</i> | 208 |
| Manufacture of rapid SiC heating element and increased durability through glass frit coating | <i>Jae Uk Hur, Jung Hun Kim, Gye Seok An and Sung-Churl Choi</i> | 213 |
| Experimental investigations of Co₃O₄, SiO₂, cotton seed oil additive blends in the diesel engine and optimization by ANN-SVM process | <i>A.P. Senthil Kumar, S. Yuvaraj and S. Janaki</i> | 217 |
| Characterization of CuIn_{1-x}Ga_xSe₂ films prepared by spin-coating and co-reduction method | <i>Jing Li, Kegao Liu, Qilei Sun, Zhigang Wang and Haiyang Wu</i> | 226 |
| Piezoelectric parameters and impedance analysis of sol gel processed Ce-doped BaTi_{0.97}Y_{0.03}O₃ ceramics | <i>Aziz Nfissi, Yahya Ababou, Salaheddine Sayouri, Lamiae Mrharab, Fouzia Saadaoui, Elmaati Ech-chamikh and Taj-dine Lamcharfi</i> | 233 |

Nano bioactive HAP-nano bioresorbable β-TCP-PEG composite scaffolds and their biochemical activity for implant applications	<i>K. Kala, M. Sundara Ganeshan, V. Balasubramani, J. Manovasuki, K. Valivittan, T.M. Sridhar and M.R. Kuppusamy</i>	240
Influence of codeposited Al_2O_3 and h/BN on tribological properties of Ni-Al_2O_3-h/BN composite coatings	<i>Jin-Hyuk Choi, Gobinda Gyawali, Dhani Ram Dhakal, Sami Bin Humam, Bhupendra Joshi and Soo Wahn Lee</i>	249
Investigation of the electrical properties of Ag/n-Si schottky diode obtained by two different methods	<i>Vagif Nevruzoglu, Melih Manir and Gizem Ozturk</i>	256
Systematic experimental study for optimized hydrogen production of Ni/CeO₂ prepared by incipient wetness impregnation technique	<i>Shian Li, Qiuwan Shen and Bengt Sundén</i>	263
Titanium dioxide nanoparticles dispersed in heteroatom-doped carbon nanofibers for ultrafast lithium storage	<i>Ki-Wook Sung and Hyo-Jin Ahn</i>	269
Citric acid stabilized iron oxide nanoparticles for battery-type supercapacitor electrode	<i>Seungil Park, C. Justin Raj, Ramu Manikandan, Byung Chul Kim and Kook Hyun Yu</i>	278