

CONTENTS

ICCE-16 KEYNOTE

Plasma Polymer Films: from Nanoscale Synthesis to Macroscale Functionality Vladimir Cech	1
Elastically Restrained Composite Plates-Analysis and Applications Tai Yan Kam, S.J. Wang, T.H. Chiang	5
Laser Micro/Nano- Machining With a Bessel Beam. Masamichi Kohno, Shinji Kawauchi, Takuto Otofujii, Yoshihiko Matsuoka, Yasuyuki Takata, Mon-Tues	8
Nano-Materials and Carbon Fiber Reinforced Concrete and its Smart Properties Hui Li, Jinping Ou	11
Micro/Nanoscale-Materials for MEMS Applications- Al/Ni Exothermic Reactive Film as a Heat Source for MEMS Packaging Takahiro Namazu	14
Pilot-Scale Experimental Study on the New Technolgy of Cao-Psz by Microwave Heating Jinhui Peng, Shenghui Guo, Guo Chen, Libo Zhanga, Jinlong Mao, Shimin Zhang	18
Preparation of Carboxyl-Ended Polymer Microspheres and their Multifunctionalization Kang Sun	22
High Performance Mmc's Obtained by Powder Metallurgy Jose M. Torralba, Elisa M. Ruiz Navas, E. Gordo,Joao B. Fogagnolo	25
Super- and Ultrahard Nanocomposites Coatings: Past, Present and the Future Stan Veprek	28
Analytical Solutions for Inhomogenous Strain Fields within Si1-Xgex Alloy and Effect on its Quantum Behavior of Electronic Band Structure Xuexia Wei	31
Nano Materials for Microelectronic and Photonic Packaging C.P. WONG, W. Lin, R. Zhang, Z. Liang, J. Lu, H. Xiu, K. Moon	35
Research and Development of Self-healing Polymeric Materials– an Overview Dongyang Wu, Sam Meure	38

BIO COMPOSITES

HAP/Chitosan Composites Membrane for Encapsulation and Immunoisolation of Islet Cells Fengnian Chang, Jyh Ping Chen	41
Effect of Plastic Material in Health and Hygiene Vandana Dubey, P. Dubey, Ajay Singh, J.M. Keller	43
Finite Element Stress Analysis of Composite Pelvic Bone Under Static Loading Shaban Abdou	45
Do OI Bone Intrinsic Material Properties Covary With Clinic Types? Zaifeng Fan, Peter Smith, F. Rauch, Gerald Harris	48
A Chemical Composition Study of Doped TiO2 Sol-Gel Films Linked to Antibacterial Properties Mariuca Gartner, P. Osiceanu, C. Vacariu, G. Popescu, M. Enache, M. Anastasescu, C. Trapalis, N. Todorova, M. Zaharescu	50
The Antioxidative Activities of Duchesnea Chrysantha (Zoll.Et Morr.) Fruitextracts and Protective Effects of LPS Induced Cytotoxicity Inlipopolysaccharide-Stimulated Murine Macrophage Cells. Eun-Joo Jung, Chang-Zhe Shen, Il Kwang Kim	52
Development Novel Artificial Bone Using Hydroxyapatite/Collagen Self- Organized Bone-Li Nanocomposite Membrane Masanori Kikuchi, Yoshihisa Koyama, Kazuo Takakuda,Kazuya Edamura, Shigeo Tanaka	54