

Table of Contents

Optimizing Mesh Sizes of Thin Shells Using Biomimicry for a Sustainable Solution P. Gunasekaran, S.S. Nachiar and A. Sekar	1
Electrophoretic Deposition of Nanohydroxyapatite on Homogenized Magnesium Based Alloy for Biomedical Applications T.O. Sadiq, I. Sudin, A. Alsakkaf, J. Idris and N.A. Fadil	15
Antibacterial Effect of Experimental Orthodontic Elastomeric Ligature Coated with Zinc Oxide Particles K. Khlongwanitchakul, N. Anuwongnukroh, S. Dechkunakorn, P. Naruphontjirakul, W. Wichai and R.L. Srisatjaluk	43
Functionalization of Chitosan-TiO₂ Nanotubes Scaffolds with Fibronectin for Bone Regeneration S.S. Lim, C.L. Chiang, N. Rosli and K.W. Chew	51
Scaffold of Bone Tissue Engineering Based on PVA/BCP Bioactive Composite Foam F.S. Hashim, W.A. Hussain, M.M. Ismail, A.A. Amr, A.M. Daham and L.H. Alwan	59
The Interplay of Brønsted-Lowry and Lewis Acid Sites in Bifunctional Catalyst for the Biomass Conversion to Levulinic Acid N.S.M. Azlan, C.L. Yap, Y.W. Tiong, S. Gan and M.B.A. Rahman	71
LLDPE/TiO₂-ZnO Nanocomposite Films induces Transitory Oxidative Stress Response on Human Fibroblast and Blood Cell Lines Models N.H. Harun, R.B.S.M.N. Mydin, S. Sreekantan, K.A. Saharuddin and A. Seenii	77
Investigating the Electrochemical Properties of Alkaloids Compound Derived from Catharanthus Roseus Extract M.A. Al-Azzawi and W.R. Saleh	93
Evaluation of Novel Prosthesis Implant Adapter by Finite Element Analysis M.J. Jamal, S.J. Hamandi and M.N. Arbilei	109
Design and Manufacturing a Portable Smart Sole for Measuring the Ground Reaction Force F.M. Kadhim, S.F. Hasan and R.Q. Humadi	121
Accelerated Variant of an EMD-Based-R Peaks Detection Algorithm Involving FFT-Based Time-Domain Down-Sampling and up-Sampling A. Harkat, R. Benzid and N. Athamena	131