

Table of Contents

Evaluation of Corrosion Resistance of HA-TiO₂/Chitosan Bilayer Coated Magnesium Alloy Based Cardiovascular Stents for Drug Delivery Applications P.A. Amaravathy, J. Deepalakshmi, P. Nagapandiselvi and V.S. Simi	1
Comparative Evaluation of the Effects of Yttrium Stabilized Zirconia Nanoparticles (YSZrO₂- NP) and Porcelain Particles on Property Enhancement of Polymethylmethacrylate (PMMA) Denture Composites I.V. Diwe, H.E. Mgbemere, O.A. Adeleye and B. Akinboboye	21
Optimization of Silver Nanoparticle Synthesis Using S. Amaranthoides Leaf Extract via Response Surface Methodology for Enhanced Antibacterial Applications I. Shabbir Khan, S. Yanamadala, S. Chinnaiyan, N. Chiterasu and S. Kannan	43
Optimizing Dental Implant Viability with SLA and Anodizing Surface Treatments for Advanced Biological Adhesion, Enhanced Osseointegration, and Stress Resistance E. Anbarzadeh, B. Mohammadi and M. Azadzaeim	63
MRI Measurements of the Cartilage Contact Pattern of the Glenohumeral Joint During Rotation with Abduction under Static Conditions <i>In Vivo</i> S. Shimawaki, N.F. Masa Ad, M. Toishi and H. Mori	79
Development of a Low Cost and Locally Sourced Functional Prosthetic Hand J.W. Sojobi, A.I. Echegile, O.G. Jimoh, S.O. Oyedepo and O.S.I. Fayomi	89
Development of Personalized External Breast Prosthesis Prototype Using 3D Modeling in Unilateral Post-Mastectomy Patient M.A. Domínguez Láinez, S.A. Midence Pinto, F.E. Núñez Rodríguez and G.M. Fortin Gonzáles	109
Motion Intention Recognition Method Based on GWO-AdaBoost-GRU for Lower Extremity Exoskeleton B.Y. Cui, L. Shang, W.J. Li, W.Y. Wu and S.L. Zhang	119
Dynamic Biomechanical Consequences of Hallux Valgus: A Multimodal Investigation of Lower Limb Compensation Patterns X.Y. Qu, D.T. Xu, H.Y. Zhou, T.L. Jie, J.S. Baker, Q.E. Qiu and Y.D. Gu	133
Modular Prototype of a Canine Prosthesis through the Simulation of a Transradial Amputation Case A. Rodriguez Palma, J. Diaz Sanabria and F. Caceres Lagos	153