

Table of Contents

Preface

Chapter 1: Current Strategies and Advanced Biomaterials for Bone Repair and Regeneration

Advanced Microstructural Characterizations of Some Biomaterials and Scaffolds for Regenerative Orthopaedics	
F. Fiori, E. Girardin, V.S. Komlev, A. Manescu and F. Rustichelli	3
Magnetic Nanoparticles Inclusion into Scaffolds Based on Calcium Phosphates and Biopolymers for Bone Regeneration	
F.D. Ivan, V. Balan, M. Butnaru, I.M. Popa and L. Verestiu	16
Current Strategies and Advances Materials for the Treatment of Injured Meniscus	
I.B. Codorean, S. Tanase, E. Cernat, F. Diaconu, D. Popescu, A. Cirlan and S. Mitulescu	26
Acrylic Bone Cements: New Insight and Future Perspective	
S. Cavalu	39
Results of <i>In Vivo</i> Biological Tests Performed on a Mg-0.8Ca Alloy	
R. Adam, H. Orban, E. Plooreanu, D. Voinescu and A. Barbilian	50
Fractographic Evaluation of the Metallic Materials for Medical Applications	
B. Ghiban, F.C. Varlan, M. Niculescu and D. Voinescu	62

Chapter 2: Evaluation of the Clinical Performance of Different Options and Methods of Orthopedic Treatment and Implantation

Metallosis - Literature Review and Particular Cases Presentation	
R. Marinescu, C. Socoliu, I. Botezatu, D. Laptoiu and D. Voinescu	77
Use of Collagen Scaffolds in Conjunction with NPWT for the Care of Complex Wounds: Clinical Report	
I. Cristescu, D. Vilcioiu, F. Safta, M. Istodorescu, C. Milea, F. Fiori, I.M. Mates and I. Lascăr	91
Bioabsorbable Anchors for Medial Patellofemoral Ligament Reconstruction	
R. Ene, Z. Panti, M. Nica, M. Pleniceanu, P. Ene, M. Cîrstoiu and C. Cîrstoiu	101
The Use of the Ligament Augmentation and Reconstruction System (LARS) in Clinical Practice	
I.B. Codorean, S. Tanase, E. Cernat, F. Diaconu and D. Popescu	111
Functional Outcomes after Surgical Treatment of Hand Fractures - ORIF vs. CRIF Analysis	
I. Cristescu, D. Vilcioiu, L. Mirea, C. Milea, I.M. Mates and A. Mohan	124
Short Term Behaviour of Fixed-Loop Cortical Suspension System Used for Surgical Treatment of <i>Hallux valgus</i>	
R. Ene, M. Nica, Z. Panti, M. Pleniceanu, P. Ene, M. Cîrstoiu and C. Cîrstoiu	134
Advantages of Modular Radial Head Prosthesis Use in Highly Comminuted Fractures	
M. Stănescu, A.B. Popescu and Z. Radu	145