

Zuzana Koci

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

160
papers

6,774
citations

47
h-index

77
g-index

167
ext. papers

8,019
ext. citations

7.7
avg, IF

6.3
L-index

#	Paper	IF	Citations
160	A highly porous type II collagen containing scaffold for the treatment of cartilage defects enhances MSC chondrogenesis and early cartilaginous matrix deposition.. <i>Biomaterials Science</i> , 2022 ,	7.4	1
159	Multi-Factorial Nerve Guidance Conduit Engineering Improves Outcomes in Inflammation, Angiogenesis and Large Defect Nerve Repair.. <i>Matrix Biology</i> , 2022 , 106, 34-34	11.4	2
158	Development of a Gene-Activated Scaffold Incorporating Multifunctional Cell-Penetrating Peptides for pSDF-1 Delivery for Enhanced Angiogenesis in Tissue Engineering Applications.. <i>International Journal of Molecular Sciences</i> , 2022 , 23,	6.3	1
157	Biomaterial and Therapeutic Approaches for the Manipulation of Macrophage Phenotype in Peripheral and Central Nerve Repair.. <i>Pharmaceutics</i> , 2021 , 13,	6.4	2
156	Substrate Stiffness Modulates the Crosstalk Between Mesenchymal Stem Cells and Macrophages. <i>Journal of Biomechanical Engineering</i> , 2021 , 143,	2.1	5
155	Development and clinical translation of tubular constructs for tracheal tissue engineering: a review. <i>European Respiratory Review</i> , 2021 , 30,	9.8	5
154	Layer-specific stem cell differentiation in tri-layered tissue engineering biomaterials: Towards development of a single-stage cell-based approach for osteochondral defect repair.. <i>Materials Today Bio</i> , 2021 , 12, 100173	9.9	2
153	Biomimetic Scaffolds for Spinal Cord Applications Exhibit Stiffness-Dependent Immunomodulatory and Neurotrophic Characteristics. <i>Advanced Healthcare Materials</i> , 2021 , e2101663	10.1	2
152	Anti-Aging Klotho Gene-Activated Scaffold Promotes Rejuvenative Wound Healing Response in Human Adipose-Derived Stem Cells. <i>Pharmaceutics</i> , 2021 , 14,	5.2	1
151	SDF-1 Gene-activated collagen scaffold enhances provasculogenic response in a coculture of human endothelial cells with human adipose-derived stromal cells. <i>Journal of Materials Science: Materials in Medicine</i> , 2021 , 32, 26	4.5	1
150	Patient and Public Involvement (PPI) in preclinical research: A scoping review protocol. <i>HRB Open Research</i> , 2021 , 4, 61	1.2	0
149	Contemporary trends for urological training and management of stress urinary incontinence in Ireland. <i>International Urogynecology Journal</i> , 2021 , 32, 2841-2846	2	1
148	The role of synovial fluid constituents in the lubrication of collagen-glycosaminoglycan scaffolds for cartilage repair. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021 , 118, 104445	4.1	1
147	A Tissue-Engineered Tracheobronchial In Vitro Co-Culture Model for Determining Epithelial Toxicological and Inflammatory Responses. <i>Biomedicines</i> , 2021 , 9,	4.8	1
146	Mechanobiology-informed regenerative medicine: Dose-controlled release of placental growth factor from a functionalized collagen-based scaffold promotes angiogenesis and accelerates bone defect healing. <i>Journal of Controlled Release</i> , 2021 , 334, 96-105	11.7	8
145	Three-dimensional In Vitro Biomimetic Model of Neuroblastoma using Collagen-based Scaffolds. <i>Journal of Visualized Experiments</i> , 2021 ,	1.6	2
144	3D-Printed Gelatin Methacrylate Scaffolds with Controlled Architecture and Stiffness Modulate the Fibroblast Phenotype towards Dermal Regeneration. <i>Polymers</i> , 2021 , 13,	4.5	8

143	Development of collagen-poly(caprolactone)-based core-shell scaffolds supplemented with proteoglycans and glycosaminoglycans for ligament repair. <i>Materials Science and Engineering C</i> , 2021 , 120, 111657	8.3	5
142	SDF-1 α gene-activated collagen scaffold drives functional differentiation of human Schwann cells for wound healing applications. <i>Biotechnology and Bioengineering</i> , 2021 , 118, 725-736	4.9	8
141	The lubricating effect of iPS-reprogrammed fibroblasts on collagen-GAG scaffolds for cartilage repair applications. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2021 , 114, 104174	4.1	3
140	Comparison of synthetic mesh erosion and chronic pain rates after surgery for pelvic organ prolapse and stress urinary incontinence: a systematic review. <i>International Urogynecology Journal</i> , 2021 , 32, 573-580	2	9
139	Mechanical characterization of a biodegradable mesh for the treatment of stress urinary incontinence. <i>International Journal of Urology</i> , 2021 , 28, 243-245	2.3	1
138	Accelerating bone healing in vivo by harnessing the age-altered activation of c-Jun N-terminal kinase 3. <i>Biomaterials</i> , 2021 , 268, 120540	15.6	3
137	A step closer to elastogenesis on demand; Inducing mature elastic fibre deposition in a natural biomaterial scaffold. <i>Materials Science and Engineering C</i> , 2021 , 120, 111788	8.3	0
136	The Development of Tissue Engineering Scaffolds Using Matrix from iPS-Reprogrammed Fibroblasts. <i>Methods in Molecular Biology</i> , 2021 , 1	1.4	2
135	Gene activated scaffolds incorporating star-shaped polypeptide-pDNA nanomedicines accelerate bone tissue regeneration. <i>Biomaterials Science</i> , 2021 , 9, 4984-4999	7.4	5
134	Mechanical, compositional and morphological characterisation of the human male urethra for the development of a biomimetic tissue engineered urethral scaffold. <i>Biomaterials</i> , 2021 , 269, 120651	15.6	4
133	SDF-1 α Gene-Activated Collagen Scaffold Restores Pro-Angiogenic Wound Healing Features in Human Diabetic Adipose-Derived Stem Cells. <i>Biomedicines</i> , 2021 , 9,	4.8	10
132	The use of nanovibration to discover specific and potent bioactive metabolites that stimulate osteogenic differentiation in mesenchymal stem cells. <i>Science Advances</i> , 2021 , 7,	14.3	10
131	Inclusivity and diversity: Integrating international perspectives on stem cell challenges and potential. <i>Stem Cell Reports</i> , 2021 , 16, 1847-1852	8	1
130	Systematic Comparison of Biomaterials-Based Strategies for Osteochondral and Chondral Repair in Large Animal Models. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2100878	10.1	0
129	Influences of the 3D microenvironment on cancer cell behaviour and treatment responsiveness: A recent update on lung, breast and prostate cancer models. <i>Acta Biomaterialia</i> , 2021 , 132, 360-378	10.8	11
128	Antimicrobial and degradable triazolinedione (TAD) crosslinked polypeptide hydrogels. <i>Journal of Materials Chemistry B</i> , 2021 , 9, 5456-5464	7.3	5
127	Mechanosignalling in cartilage: an emerging target for the treatment of osteoarthritis.. <i>Nature Reviews Rheumatology</i> , 2021 ,	8.1	9
126	Non-viral Gene Delivery of Interleukin-1 Receptor Antagonist Using Collagen-Hydroxyapatite Scaffold Protects Rat BM-MSCs From IL-1 β Mediated Inhibition of Osteogenesis. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 582012	5.8	5

125	Collagen/GAG scaffolds activated by RALA-siMMP-9 complexes with potential for improved diabetic foot ulcer healing. <i>Materials Science and Engineering C</i> , 2020 , 114, 111022	8.3	7
124	Effect of cross-linking and hydration on microscale flat punch indentation contact to collagen-hyaluronic acid films in the viscoelastic limit. <i>Acta Biomaterialia</i> , 2020 , 111, 279-289	10.8	5
123	Hierarchical biofabrication of biomimetic collagen-elastin vascular grafts with controllable properties via lyophilisation. <i>Acta Biomaterialia</i> , 2020 , 112, 52-61	10.8	6
122	Pre-culture of mesenchymal stem cells within RGD-modified hyaluronic acid hydrogel improves their resilience to ischaemic conditions. <i>Acta Biomaterialia</i> , 2020 , 107, 78-90	10.8	12
121	Stress Urinary Incontinence and Pelvic Organ Prolapse: Biologic Graft Materials Revisited. <i>Tissue Engineering - Part B: Reviews</i> , 2020 , 26, 475-483	7.9	4
120	Scaffolds Functionalized with Matrix from Induced Pluripotent Stem Cell Fibroblasts for Diabetic Wound Healing. <i>Advanced Healthcare Materials</i> , 2020 , 9, e2000307	10.1	10
119	The Use of Genipin as an Effective, Biocompatible, Anti-Inflammatory Cross-Linking Method for Nerve Guidance Conduits. <i>Advanced Biology</i> , 2020 , 4, e1900212	3.5	9
118	Activation of the SOX-5, SOX-6, and SOX-9 Trio of Transcription Factors Using a Gene-Activated Scaffold Stimulates Mesenchymal Stromal Cell Chondrogenesis and Inhibits Endochondral Ossification. <i>Advanced Healthcare Materials</i> , 2020 , 9, e1901827	10.1	18
117	Rapid bone repair with the recruitment of CD206M2-like macrophages using non-viral scaffold-mediated miR-133a inhibition of host cells. <i>Acta Biomaterialia</i> , 2020 , 109, 267-279	10.8	16
116	The Incorporation of Marine Coral Microparticles into Collagen-Based Scaffolds Promotes Osteogenesis of Human Mesenchymal Stromal Cells via Calcium Ion Signalling. <i>Marine Drugs</i> , 2020 , 18,	6	7
115	Extracellular Vesicles Enhance the Remodeling of Cell-Free Silk Vascular Scaffolds in Rat Aortae. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 26955-26965	9.5	14
114	The development of natural polymer scaffold-based therapeutics for osteochondral repair. <i>Biochemical Society Transactions</i> , 2020 , 48, 1433-1445	5.1	4
113	Hydroxyapatite Particle Shape and Size Influence MSC Osteogenesis by Directing the Macrophage Phenotype in Collagen-Hydroxyapatite Scaffolds.. <i>ACS Applied Bio Materials</i> , 2020 , 3, 7562-7574	4.1	4
112	Layered Double Hydroxide as a Potent Non-viral Vector for Nucleic Acid Delivery Using Gene-Activated Scaffolds for Tissue Regeneration Applications. <i>Pharmaceutics</i> , 2020 , 12,	6.4	9
111	The Fabrication and Evaluation of Retinoic Acid-Loaded Electrospun Composite Biomaterials for Tracheal Tissue Regeneration. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020 , 8, 190	5.8	9
110	Collagen scaffolds functionalised with copper-eluting bioactive glass reduce infection and enhance osteogenesis and angiogenesis both in vitro and in vivo. <i>Biomaterials</i> , 2019 , 197, 405-416	15.6	87
109	Highly versatile cell-penetrating peptide loaded scaffold for efficient and localised gene delivery to multiple cell types: From development to application in tissue engineering. <i>Biomaterials</i> , 2019 , 216, 119277	15.6	31
108	Transfection of autologous host cells in vivo using gene activated collagen scaffolds incorporating star-polypeptides. <i>Journal of Controlled Release</i> , 2019 , 304, 191-203	11.7	21

107	Controlling the dose-dependent, synergistic and temporal effects of NGF and GDNF by encapsulation in PLGA microparticles for use in nerve guidance conduits for the repair of large peripheral nerve defects. <i>Journal of Controlled Release</i> , 2019 , 304, 51-64	11.7	25
106	Scaffold-Based Delivery of Nucleic Acid Therapeutics for Enhanced Bone and Cartilage Repair. <i>Journal of Orthopaedic Research</i> , 2019 , 37, 1671-1680	3.8	22
105	Genipin and EDC crosslinking of extracellular matrix hydrogel derived from human umbilical cord for neural tissue repair. <i>Scientific Reports</i> , 2019 , 9, 10674	4.9	45
104	Material stiffness influences the polarization state, function and migration mode of macrophages. <i>Acta Biomaterialia</i> , 2019 , 89, 47-59	10.8	120
103	Functionalising Collagen-Based Scaffolds With Platelet-Rich Plasma for Enhanced Skin Wound Healing Potential. <i>Frontiers in Bioengineering and Biotechnology</i> , 2019 , 7, 371	5.8	34
102	Macrophage Polarization in Response to Collagen Scaffold Stiffness Is Dependent on Cross-Linking Agent Used To Modulate the Stiffness. <i>ACS Biomaterials Science and Engineering</i> , 2019 , 5, 544-552	5.5	40
101	Tissue-specific extracellular matrix scaffolds for the regeneration of spatially complex musculoskeletal tissues. <i>Biomaterials</i> , 2019 , 188, 63-73	15.6	62
100	Harnessing an Inhibitory Role of miR-16 in Osteogenesis by Human Mesenchymal Stem Cells for Advanced Scaffold-Based Bone Tissue Engineering. <i>Tissue Engineering - Part A</i> , 2019 , 25, 24-33	3.9	29
99	Electroconductive Biohybrid Collagen/Pristine Graphene Composite Biomaterials with Enhanced Biological Activity. <i>Advanced Materials</i> , 2018 , 30, e1706442	24	60
98	Investigating the interplay between substrate stiffness and ligand chemistry in directing mesenchymal stem cell differentiation within 3D macro-porous substrates. <i>Biomaterials</i> , 2018 , 171, 23-33	15.6	46
97	Staphylococcal Osteomyelitis: Disease Progression, Treatment Challenges, and Future Directions. <i>Clinical Microbiology Reviews</i> , 2018 , 31,	34	127
96	An endochondral ossification approach to early stage bone repair: Use of tissue-engineered hypertrophic cartilage constructs as primordial templates for weight-bearing bone repair. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018 , 12, e2147-e2150	4.4	14
95	Bioinspired Star-Shaped Poly(L-lysine) Polypeptides: Efficient Polymeric Nanocarriers for the Delivery of DNA to Mesenchymal Stem Cells. <i>Molecular Pharmaceutics</i> , 2018 , 15, 1878-1891	5.6	31
94	Pro-angiogenic impact of SDF-1 α gene-activated collagen-based scaffolds in stem cell driven angiogenesis. <i>International Journal of Pharmaceutics</i> , 2018 , 544, 372-379	6.5	29
93	A collagen cardiac patch incorporating alginate microparticles permits the controlled release of hepatocyte growth factor and insulin-like growth factor-1 to enhance cardiac stem cell migration and proliferation. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018 , 12, e384-e394	4.4	37
92	Innovations in gene and growth factor delivery systems for diabetic wound healing. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018 , 12, e296-e312	4.4	50
91	Scaffold-Based microRNA Therapies in Regenerative Medicine and Cancer. <i>Advanced Healthcare Materials</i> , 2018 , 7, 1700695	10.1	40
90	Raman spectroscopy predicts the link between claw keratin and bone collagen structure in a rodent model of oestrogen deficiency. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2018 , 1864, 398-406	6.9	15

89	Future Perspectives on the Role of Stem Cells and Extracellular Vesicles in Vascular Tissue Regeneration. <i>Frontiers in Cardiovascular Medicine</i> , 2018 , 5, 86	5.4	28
88	Staphylococcus aureus protein A causes osteoblasts to hyper-mineralise in a 3D extra-cellular matrix environment. <i>PLoS ONE</i> , 2018 , 13, e0198837	3.7	10
87	The Effect of Human Mesenchymal Stem Cells Derived from Wharton's Jelly in Spinal Cord Injury Treatment Is Dose-Dependent and Can Be Facilitated by Repeated Application. <i>International Journal of Molecular Sciences</i> , 2018 , 19,	6.3	33
86	Controlled Non-Viral Gene Delivery in Cartilage and Bone Repair: Current Strategies and Future Directions. <i>Advanced Therapeutics</i> , 2018 , 1, 1800038	4.9	11
85	The Transplantation of hBM-MSCs Increases Bone Neo-Formation and Preserves Hearing Function in the Treatment of Temporal Bone Defects - on the Experience of Two Month Follow Up. <i>Stem Cell Reviews and Reports</i> , 2018 , 14, 860-870	6.4	7
84	The Current State of Advanced Therapy Medicinal Products in the Czech Republic. <i>Human Gene Therapy Clinical Development</i> , 2018 , 29, 132-147	3.2	2
83	In vitro efficacy of a gene-activated nerve guidance conduit incorporating non-viral PEI-pDNA nanoparticles carrying genes encoding for NGF, GDNF and c-Jun. <i>Acta Biomaterialia</i> , 2018 , 75, 115-128	10.8	29
82	Comparative Study on the Application of Mesenchymal Stromal Cells Combined with Tricalcium Phosphate Scaffold into Femoral Bone Defects. <i>Cell Transplantation</i> , 2018 , 27, 1459-1468	4	12
81	Delivery of the improved BMP-2-Advanced plasmid DNA within a gene-activated scaffold accelerates mesenchymal stem cell osteogenesis and critical size defect repair. <i>Journal of Controlled Release</i> , 2018 , 283, 20-31	11.7	40
80	Controlled release of vascular endothelial growth factor from spray-dried alginate microparticles in collagen-hydroxyapatite scaffolds for promoting vascularization and bone repair. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017 , 11, 1097-1109	4.4	66
79	Repair of large osteochondritis dissecans lesions using a novel multilayered tissue engineered construct in an equine athlete. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017 , 11, 2785-2795	4.4	13
78	Identification of the mechanisms by which age alters the mechanosensitivity of mesenchymal stromal cells on substrates of differing stiffness: Implications for osteogenesis and angiogenesis. <i>Acta Biomaterialia</i> , 2017 , 53, 59-69	10.8	28
77	Retinoic Acid-Loaded Collagen-Hyaluronate Scaffolds: A Bioactive Material for Respiratory Tissue Regeneration. <i>ACS Biomaterials Science and Engineering</i> , 2017 , 3, 1381-1393	5.5	12
76	Extracellular Matrix Hydrogel Derived from Human Umbilical Cord as a Scaffold for Neural Tissue Repair and Its Comparison with Extracellular Matrix from Porcine Tissues. <i>Tissue Engineering - Part C: Methods</i> , 2017 , 23, 333-345	2.9	48
75	Porous Scaffolds Derived from Devitalized Tissue Engineered Cartilaginous Matrix Support Chondrogenesis of Adult Stem Cells. <i>ACS Biomaterials Science and Engineering</i> , 2017 , 3, 1075-1082	5.5	6
74	Advances in Nerve Guidance Conduit-Based Therapeutics for Peripheral Nerve Repair. <i>ACS Biomaterials Science and Engineering</i> , 2017 , 3, 1221-1235	5.5	58
73	Olfactory Derived Stem Cells Delivered in a Biphasic Conduit Promote Peripheral Nerve Repair In Vivo. <i>Stem Cells Translational Medicine</i> , 2017 , 6, 1894-1904	6.9	14
72	A Physicochemically Optimized and Neuroconductive Biphasic Nerve Guidance Conduit for Peripheral Nerve Repair. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1700954	10.1	35

71	Translating the role of osteogenic-angiogenic coupling in bone formation: Highly efficient chitosan-pDNA activated scaffolds can accelerate bone regeneration in critical-sized bone defects. <i>Biomaterials</i> , 2017 , 149, 116-127	15.6	82
70	Identification of stiffness-induced signalling mechanisms in cells from patent and fused sutures associated with craniosynostosis. <i>Scientific Reports</i> , 2017 , 7, 11494	4.9	15
69	Advances in polymeric islet cell encapsulation technologies to limit the foreign body response and provide immunoisolation. <i>Current Opinion in Pharmacology</i> , 2017 , 36, 66-71	5.1	21
68	Freeze-Drying as a Novel Biofabrication Method for Achieving a Controlled Microarchitecture within Large, Complex Natural Biomaterial Scaffolds. <i>Advanced Healthcare Materials</i> , 2017 , 6, 1700598	10.1	55
67	The shape and size of hydroxyapatite particles dictate inflammatory responses following implantation. <i>Scientific Reports</i> , 2017 , 7, 2922	4.9	90
66	A Natural, Calcium-Rich Marine Multi-mineral Complex Preserves Bone Structure, Composition and Strength in an Ovariectomised Rat Model of Osteoporosis. <i>Calcified Tissue International</i> , 2017 , 101, 445-455	2.9	10
65	Formulation and Evaluation of Anisamide-Targeted Amphiphilic Cyclodextrin Nanoparticles To Promote Therapeutic Gene Silencing in a 3D Prostate Cancer Bone Metastases Model. <i>Molecular Pharmaceutics</i> , 2017 , 14, 42-52	5.6	34
64	A stimuli responsive liposome loaded hydrogel provides flexible on-demand release of therapeutic agents. <i>Acta Biomaterialia</i> , 2017 , 48, 110-119	10.8	43
63	Anisotropic Shape-Memory Alginate Scaffolds Functionalized with Either Type I or Type II Collagen for Cartilage Tissue Engineering. <i>Tissue Engineering - Part A</i> , 2017 , 23, 55-68	3.9	45
62	Stem cells display a donor dependent response to escalating levels of growth factor release from extracellular matrix-derived scaffolds. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2017 , 11, 2979-2987	4.4	14
61	Infrapatellar Fat Pad Stem Cells: From Developmental Biology to Cell Therapy. <i>Stem Cells International</i> , 2017 , 2017, 6843727	5	26
60	The Osteogenic Potential of Human Nondifferentiated and Pre-differentiated Mesenchymal Stem Cells Combined with an Osteoconductive Scaffold - Early Stage Healing. <i>Acta Medica (Hradec Kralove)</i> , 2017 , 60, 12-18	0.8	5
59	Content-Dependent Osteogenic Response of Nanohydroxyapatite: An in Vitro and in Vivo Assessment within Collagen-Based Scaffolds. <i>ACS Applied Materials & Interfaces</i> , 2016 , 8, 23477-88	9.5	55
58	Human Multipotent Mesenchymal Stromal Cells in the Treatment of Postoperative Temporal Bone Defect: An Animal Model. <i>Cell Transplantation</i> , 2016 , 25, 1405-14	4	5
57	Next generation bone tissue engineering: non-viral miR-133a inhibition using collagen-nanohydroxyapatite scaffolds rapidly enhances osteogenesis. <i>Scientific Reports</i> , 2016 , 6, 27941	4.9	57
56	Biomaterial-Enhanced Cell and Drug Delivery: Lessons Learned in the Cardiac Field and Future Perspectives. <i>Advanced Materials</i> , 2016 , 28, 5648-61	24	51
55	Delivering Nucleic-Acid Based Nanomedicines on Biomaterial Scaffolds for Orthopedic Tissue Repair: Challenges, Progress and Future Perspectives. <i>Advanced Materials</i> , 2016 , 28, 5447-69	24	75
54	Towards 3D in vitro models for the study of cardiovascular tissues and disease. <i>Drug Discovery Today</i> , 2016 , 21, 1437-1445	8.8	22

53	Differentiation of Vascular Stem Cells Contributes to Ectopic Calcification of Atherosclerotic Plaque. <i>Stem Cells</i> , 2016 , 34, 913-23	5.8	28
52	Multi-layered collagen-based scaffolds for osteochondral defect repair in rabbits. <i>Acta Biomaterialia</i> , 2016 , 32, 149-160	10.8	144
51	An Endochondral Ossification-Based Approach to Bone Repair: Chondrogenically Primed Mesenchymal Stem Cell-Laden Scaffolds Support Greater Repair of Critical-Sized Cranial Defects Than Osteogenically Stimulated Constructs In Vivo. <i>Tissue Engineering - Part A</i> , 2016 , 22, 556-67	3.9	53
50	Cell-free multi-layered collagen-based scaffolds demonstrate layer specific regeneration of functional osteochondral tissue in caprine joints. <i>Biomaterials</i> , 2016 , 87, 69-81	15.6	106
49	The development of a tissue-engineered tracheobronchial epithelial model using a bilayered collagen-hyaluronate scaffold. <i>Biomaterials</i> , 2016 , 85, 111-27	15.6	44
48	The benefits and limitations of animal models for translational research in cartilage repair. <i>Journal of Experimental Orthopaedics</i> , 2016 , 3, 1	2.3	102
47	Injectable Extracellular Matrix Hydrogels as Scaffolds for Spinal Cord Injury Repair. <i>Tissue Engineering - Part A</i> , 2016 , 22, 306-17	3.9	100
46	Utilizing Autologous Multipotent Mesenchymal Stromal Cells and Tricalcium Phosphate Scaffold in Human Bone Defects: A Prospective, Controlled Feasibility Trial. <i>BioMed Research International</i> , 2016 , 2016, 2076061	3	20
45	Multifunctional biomaterials from the sea: Assessing the effects of chitosan incorporation into collagen scaffolds on mechanical and biological functionality. <i>Acta Biomaterialia</i> , 2016 , 43, 160-169	10.8	101
44	DNA Origami: Folded DNA-Nanodevices That Can Direct and Interpret Cell Behavior. <i>Advanced Materials</i> , 2016 , 28, 5509-24	24	42
43	Gene Delivery of TGF- β and BMP2 in an MSC-Laden Alginate Hydrogel for Articular Cartilage and Endochondral Bone Tissue Engineering. <i>Tissue Engineering - Part A</i> , 2016 , 22, 776-87	3.9	84
42	Effect of collagen-glycosaminoglycan scaffold pore size on matrix mineralization and cellular behavior in different cell types. <i>Journal of Biomedical Materials Research - Part A</i> , 2016 , 104, 291-304	5.4	56
41	Respiratory Tissue Engineering: Current Status and Opportunities for the Future. <i>Tissue Engineering - Part B: Reviews</i> , 2015 , 21, 323-44	7.9	19
40	The use of collagen-based scaffolds to simulate prostate cancer bone metastases with potential for evaluating delivery of nanoparticulate gene therapeutics. <i>Biomaterials</i> , 2015 , 66, 53-66	15.6	67
39	Porous decellularized tissue engineered hypertrophic cartilage as a scaffold for large bone defect healing. <i>Acta Biomaterialia</i> , 2015 , 23, 82-90	10.8	47
38	Long-term controlled delivery of rhBMP-2 from collagen-hydroxyapatite scaffolds for superior bone tissue regeneration. <i>Journal of Controlled Release</i> , 2015 , 207, 112-9	11.7	88
37	Development of a gene-activated scaffold platform for tissue engineering applications using chitosan-pDNA nanoparticles on collagen-based scaffolds. <i>Journal of Controlled Release</i> , 2015 , 210, 84-94	11.7	79
36	Mechanically stimulated bone cells secrete paracrine factors that regulate osteoprogenitor recruitment, proliferation, and differentiation. <i>Biochemical and Biophysical Research Communications</i> , 2015 , 459, 118-23	3.4	43

35	Hypoxia-mimicking bioactive glass/collagen glycosaminoglycan composite scaffolds to enhance angiogenesis and bone repair. <i>Biomaterials</i> , 2015 , 52, 358-66	15.6	158
34	Incorporation of TGF-beta 3 within collagen-hyaluronic acid scaffolds improves their chondrogenic potential. <i>Advanced Healthcare Materials</i> , 2015 , 4, 1175-9	10.1	30
33	Insoluble elastin reduces collagen scaffold stiffness, improves viscoelastic properties, and induces a contractile phenotype in smooth muscle cells. <i>Biomaterials</i> , 2015 , 73, 296-307	15.6	86
32	Incorporation of fibrin into a collagen-glycosaminoglycan matrix results in a scaffold with improved mechanical properties and enhanced capacity to resist cell-mediated contraction. <i>Acta Biomaterialia</i> , 2015 , 26, 205-14	10.8	38
31	The pre-vascularisation of a collagen-chondroitin sulphate scaffold using human amniotic fluid-derived stem cells to enhance and stabilise endothelial cell-mediated vessel formation. <i>Acta Biomaterialia</i> , 2015 , 26, 263-73	10.8	23
30	Development of collagen-hydroxyapatite scaffolds incorporating PLGA and alginate microparticles for the controlled delivery of rhBMP-2 for bone tissue engineering. <i>Journal of Controlled Release</i> , 2015 , 198, 71-9	11.7	152
29	Effect of different hydroxyapatite incorporation methods on the structural and biological properties of porous collagen scaffolds for bone repair. <i>Journal of Anatomy</i> , 2015 , 227, 732-45	2.9	30
28	Recapitulating endochondral ossification: a promising route to in vivo bone regeneration. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015 , 9, 889-902	4.4	87
27	Combinatorial gene therapy accelerates bone regeneration: non-viral dual delivery of VEGF and BMP2 in a collagen-nanohydroxyapatite scaffold. <i>Advanced Healthcare Materials</i> , 2015 , 4, 223-7	10.1	123
26	Functionalization of a Collagen-Hydroxyapatite Scaffold with Osteostatin to Facilitate Enhanced Bone Regeneration. <i>Advanced Healthcare Materials</i> , 2015 , 4, 2649-56	10.1	16
25	Platelet-rich plasma releasate differently stimulates cellular commitment toward the chondrogenic lineage according to concentration. <i>Journal of Tissue Engineering</i> , 2015 , 6, 2041731415594127	7.5	20
24	Coupling Freshly Isolated CD44(+) Infrapatellar Fat Pad-Derived Stromal Cells with a TGF- β Eluting Cartilage ECM-Derived Scaffold as a Single-Stage Strategy for Promoting Chondrogenesis. <i>Advanced Healthcare Materials</i> , 2015 , 4, 1043-53	10.1	61
23	Investigating the effect of hypoxic culture on the endothelial differentiation of human amniotic fluid-derived stem cells. <i>Journal of Anatomy</i> , 2015 , 227, 767-80	2.9	6
22	Enhanced bone healing using collagen-hydroxyapatite scaffold implantation in the treatment of a large multiloculated mandibular aneurysmal bone cyst in a thoroughbred filly. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2015 , 9, 1193-9	4.4	33
21	A novel collagen-nanohydroxyapatite microRNA-activated scaffold for tissue engineering applications capable of efficient delivery of both miR-mimics and antagomiRs to human mesenchymal stem cells. <i>Journal of Controlled Release</i> , 2015 , 200, 42-51	11.7	69
20	A biomimetic multi-layered collagen-based scaffold for osteochondral repair. <i>Acta Biomaterialia</i> , 2014 , 10, 1996-2004	10.8	187
19	Multipotent mesenchymal stromal cells in otorhinolaryngology. <i>Medical Hypotheses</i> , 2014 , 82, 769-73	3.8	4
18	A collagen-hydroxyapatite scaffold allows for binding and co-delivery of recombinant bone morphogenetic proteins and bisphosphonates. <i>Acta Biomaterialia</i> , 2014 , 10, 2250-8	10.8	97

17	Comparison of biomaterial delivery vehicles for improving acute retention of stem cells in the infarcted heart. <i>Biomaterials</i> , 2014 , 35, 6850-6858	15.6	119
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1	3D Printed Scaffolds Incorporated with Platelet-Rich Plasma Show Enhanced Angiogenic Potential while not Inducing Fibrosis. <i>Advanced Functional Materials</i> , 2109915	15.6	1