Riccardo Gottardi

List of Publications by Year
in descending order

52	1,936	304368	253896
papers	citations	22 h-index	43 g-index

60	60	60	2958
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Early detection of aging cartilage and osteoarthritis in mice and patient samples using atomic force microscopy. Nature Nanotechnology, 2009, 4, 186-192.	15.6	391
2	Enhancement of tenogenic differentiation of human adipose stem cells by tendon-derived extracellular matrix. Biomaterials, 2013, 34, 9295-9306.	5.7	155
3	Stem Cell-Based Microphysiological Osteochondral System to Model Tissue Response to Interleukin-1Î². Molecular Pharmaceutics, 2014, 11, 2203-2212.	2.3	114
4	Endothelial cells support osteogenesis in an in vitro vascularized bone model developed by 3D bioprinting. Biofabrication, 2020, 12, 025013.	3.7	78
5	From single fiber to macro-level mechanics: A structural finite-element model for elastomeric fibrous biomaterials. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 146-161.	1.5	69
6	The scope and sequence of growth factor delivery for vascularized bone tissue regeneration. Journal of Controlled Release, 2015, 219, 129-140.	4.8	65
7	Supramolecular Organization of Collagen Fibrils in Healthy and Osteoarthritic Human Knee and Hip Joint Cartilage. PLoS ONE, 2016, 11, e0163552.	1.1	65
8	Three-dimensional osteochondral microtissue to model pathogenesis of osteoarthritis. Stem Cell Research and Therapy, 2013, 4, S6.	2.4	62
9	Engineering in-vitro stem cell-based vascularized bone models for drug screening and predictive toxicology. Stem Cell Research and Therapy, 2018, 9, 112.	2.4	62
10	Three-dimensional osteogenic and chondrogenic systems to model osteochondral physiology and degenerative joint diseases. Experimental Biology and Medicine, 2014, 239, 1080-1095.	1.1	60
11	Anatomical region-dependent enhancement of 3-dimensional chondrogenic differentiation of human mesenchymal stem cells by soluble meniscus extracellular matrix. Acta Biomaterialia, 2017, 49, 140-151.	4.1	60
12	Cyclodextrins in drug delivery: applications in gene and combination therapy. Drug Delivery and Translational Research, 2020, 10, 661-677.	3.0	57
13	In Vitro Repair of Meniscal Radial Tear With Hydrogels Seeded With Adipose Stem Cells and TGF-Î²3. American Journal of Sports Medicine, 2018, 46, 2402-2413.	1.9	53
14	Pectin-GPTMS-Based Biomaterial: toward a Sustainable Bioprinting of 3D scaffolds for Tissue Engineering Application. Biomacromolecules, 2020, 21, 319-327.	2.6	51
15	Efficacy of thermoresponsive, photocrosslinkable hydrogels derived from decellularized tendon and cartilage extracellular matrix for cartilage tissue engineering. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, e159-e170.	1.3	50
16	Use of hydrodynamic forces to engineer cartilaginous tissues resembling the non-uniform structure and function of meniscus. Biomaterials, 2006, 27, 5927-5934.	5.7	49
17	Carbon nanotubes as a novel tool for vaccination against infectious diseases and cancer. Journal of Nanobiotechnology, 2013, 11, 30.	4.2	49
18	<sup />Programmed Platelet-Derived Growth Factor-BB and Bone Morphogenetic Protein-2 Delivery from a Hybrid Calcium Phosphate/Alginate Scaffold. Tissue Engineering - Part A, 2017, 23, 1382-1393.	1.6	41

#	Article	IF	Citations
19	Strategies to Direct the Enrichment, Expansion, and Recruitment of Regulatory Cells for the Treatment of Disease. Annals of Biomedical Engineering, 2015, 43, 593-602.	1.3	31
20	Dynamic Compressive Loading Improves Cartilage Repair in an In Vitro Model of Microfracture: Comparison of 2 Mechanical Loading Regimens on Simulated Microfracture Based on Fibrin Gel Scaffolds Encapsulating Connective Tissue Progenitor Cells. American Journal of Sports Medicine, 2019, 47, 2188-2199.	1.9	31
21	3D printing for tissue engineering in otolaryngology. Connective Tissue Research, 2020, 61, 117-136.	1.1	28
22	An in vitro chondro-osteo-vascular triphasic model of the osteochondral complex. Biomaterials, 2021, 272, 120773.	5.7	27
23	Poroelastic response of articular cartilage by nanoindentation creep tests at different characteristic lengths. Medical Engineering and Physics, 2014, 36, 850-858.	0.8	22
24	Anisotropy in the Viscoelastic Response of Knee Meniscus Cartilage. Journal of Applied Biomaterials and Functional Materials, 2017, 15, 77-83.	0.7	22
25	Design and validation of an osteochondral bioreactor for the screening of treatments for osteoarthritis. Biomedical Microdevices, 2018, 20, 18.	1.4	20
26	Point-of-Care Procedure for Enhancement of Meniscal Healing in a Goat Model Utilizing Infrapatellar Fat Padâ€"Derived Stromal Vascular Fraction Cells Seeded in Photocrosslinkable Hydrogel. American Journal of Sports Medicine, 2019, 47, 3396-3405.	1.9	18
27	Synthesis and characterization of CaSr-Metal Organic Frameworks for biodegradable orthopedic applications. Scientific Reports, 2019, 9, 13024.	1.6	18
28	Distributed and Lumped Parameter Models for the Characterization of High Throughput Bioreactors. PLoS ONE, 2016, 11, e0162774.	1.1	16
29	Porous Poly(vinyl alcohol)-Based Hydrogel for Knee Meniscus Functional Repair. ACS Biomaterials Science and Engineering, 2018, 4, 1518-1527.	2.6	16
30	Clinical Applications of Bone Tissue Engineering in Orthopedic Trauma. Current Pathobiology Reports, 2018, 6, 99-108.	1.6	14
31	â€œZeroâ€Dimensionalâ€•Singleâ€Walled Carbon Nanotubes. Angewandte Chemie - International Edition, 2013, 52, 11308-11312.	7.2	13
32	Modern Therapeutic Approaches for Noninfectious Ocular Diseases Involving Inflammation. Advanced Healthcare Materials, 2017, 6, 1700733.	3.9	12
33	A Quantitative Interpretation of the Response of Articular Cartilage to Atomic Force Microscopy-Based Dynamic Nanoindentation Tests. Journal of Biomechanical Engineering, 2015, 137, .	0.6	11
34	Engineering Metabolism of Chimeric Antigen Receptor (CAR) Cells for Developing Efficient Immunotherapies. Cancers, 2021, 13, 1123.	1.7	11
35	Load-induced osteoarthritis on a chip. Nature Biomedical Engineering, 2019, 3, 502-503.	11.6	10
36	Application of a Hyperelastic 3D Printed Scaffold for Mesenchymal Stem Cell-Based Fabrication of a Bizonal Tendon Enthesis-like Construct. Frontiers in Materials, 2021, 8, .	1.2	10

#	Article	IF	Citations
37	Rapidly dissociated autologous meniscus tissue enhances meniscus healing: Anin vitrostudy. Connective Tissue Research, 2017, 58, 355-365.	1.1	9
38	Cell and Biomimetic Scaffold-Based Approaches for Cartilage Regeneration. Operative Techniques in Orthopaedics, 2016, 26, 135-146.	0.2	8
39	Drugâ€Eluting Endotracheal Tubes for Preventing Bacterial Inflammation in Subglottic Stenosis. Laryngoscope, 2022, 132, 1356-1363.	1.1	8
40	Regenerative Rehabilitation of the Musculoskeletal System. Journal of the American Academy of Orthopaedic Surgeons, The, 2018, 26, e321-e323.	1.1	7
41	A High-Throughput Mechanical Activator for Cartilage Engineering Enables Rapid Screening of in vitro Response of Tissue Models to Physiological and Supra-Physiological Loads. Cells Tissues Organs, 2022, 211, 670-688.	1.3	6
42	Electrospun Scaffolds in Tendons Regeneration: a review. Muscles, Ligaments and Tendons Journal, 2019, 09, 478.	0.1	6
43	Cranberry extract-based formulations for preventing bacterial biofilms. Drug Delivery and Translational Research, 2021, 11, 1144-1155.	3.0	4
44	Towards a minimally invasive sampling tool for high resolution tissue analytical mapping. Nanotechnology, 2015, 26, 372501.	1.3	2
45	One-step synthesis of fluorescently labelled, single-walled carbon nanotubes. Chemical Communications, 2015, 51, 17233-17236.	2.2	2
46	Drug delivery to the pediatric upper airway. Advanced Drug Delivery Reviews, 2021, 174, 168-189.	6.6	2
47	Biologics in Cartilage, Bone Repair, and Regeneration. , 2014, , 1-24.		2
48	Injury and Repair of Tendon, Ligament, and Meniscus. , 2016, , 75-88.		1
49	A Mesoscale 3D Culture System for Native and Engineered Biphasic Tissues: Application to the Osteochondral Unit. Methods in Molecular Biology, 2022, 2373, 267-281.	0.4	1
50	Scanning probe microscopy. Comprehensive Series in Photochemical and Photobiological Sciences, 0, , 375-428.	0.3	0
51	ASSESSMENT OF EARLY OSTEOARTHRITIS IN HUMAN KNEE CARTILAGE BY SCANNING FORCE MICROSCOPY. Journal of Biomechanics, 2008, 41, S169.	0.9	0
52	Advances in bioprinting: a toolbox for tissue engineering. Connective Tissue Research, 2020, 61, 115-116.	1.1	0