

# Riccardo Gottardi

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/1456626/publications.pdf>

Version: 2024-02-01

52  
papers

1,936  
citations

304743

22  
h-index

254184

43  
g-index

60  
all docs

60  
docs citations

60  
times ranked

2958  
citing authors

#	ARTICLE	IF	CITATIONS
1	Early detection of aging cartilage and osteoarthritis in mice and patient samples using atomic force microscopy. <i>Nature Nanotechnology</i> , 2009, 4, 186-192.	31.5	391
2	Enhancement of tenogenic differentiation of human adipose stem cells by tendon-derived extracellular matrix. <i>Biomaterials</i> , 2013, 34, 9295-9306.	11.4	155
3	Stem Cell-Based Microphysiological Osteochondral System to Model Tissue Response to Interleukin-1 $\beta$ . <i>Molecular Pharmaceutics</i> , 2014, 11, 2203-2212.	4.6	114
4	Endothelial cells support osteogenesis in an in vitro vascularized bone model developed by 3D bioprinting. <i>Biofabrication</i> , 2020, 12, 025013.	7.1	78
5	From single fiber to macro-level mechanics: A structural finite-element model for elastomeric fibrous biomaterials. <i>Journal of the Mechanical Behavior of Biomedical Materials</i> , 2014, 39, 146-161.	3.1	69
6	The scope and sequence of growth factor delivery for vascularized bone tissue regeneration. <i>Journal of Controlled Release</i> , 2015, 219, 129-140.	9.9	65
7	Supramolecular Organization of Collagen Fibrils in Healthy and Osteoarthritic Human Knee and Hip Joint Cartilage. <i>PLoS ONE</i> , 2016, 11, e0163552.	2.5	65
8	Three-dimensional osteochondral microtissue to model pathogenesis of osteoarthritis. <i>Stem Cell Research and Therapy</i> , 2013, 4, S6.	5.5	62
9	Engineering in-vitro stem cell-based vascularized bone models for drug screening and predictive toxicology. <i>Stem Cell Research and Therapy</i> , 2018, 9, 112.	5.5	62
10	Three-dimensional osteogenic and chondrogenic systems to model osteochondral physiology and degenerative joint diseases. <i>Experimental Biology and Medicine</i> , 2014, 239, 1080-1095.	2.4	60
11	Anatomical region-dependent enhancement of 3-dimensional chondrogenic differentiation of human mesenchymal stem cells by soluble meniscus extracellular matrix. <i>Acta Biomaterialia</i> , 2017, 49, 140-151.	8.3	60
12	Cyclodextrins in drug delivery: applications in gene and combination therapy. <i>Drug Delivery and Translational Research</i> , 2020, 10, 661-677.	5.8	57
13	In Vitro Repair of Meniscal Radial Tear With Hydrogels Seeded With Adipose Stem Cells and TGF- $\beta$ 3. <i>American Journal of Sports Medicine</i> , 2018, 46, 2402-2413.	4.2	53
14	Pectin-GPTMS-Based Biomaterial: toward a Sustainable Bioprinting of 3D scaffolds for Tissue Engineering Application. <i>Biomacromolecules</i> , 2020, 21, 319-327.	5.4	51
15	Efficacy of thermoresponsive, photocrosslinkable hydrogels derived from decellularized tendon and cartilage extracellular matrix for cartilage tissue engineering. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2018, 12, e159-e170.	2.7	50
16	Use of hydrodynamic forces to engineer cartilaginous tissues resembling the non-uniform structure and function of meniscus. <i>Biomaterials</i> , 2006, 27, 5927-5934.	11.4	49
17	Carbon nanotubes as a novel tool for vaccination against infectious diseases and cancer. <i>Journal of Nanobiotechnology</i> , 2013, 11, 30.	9.1	49
18	<sup />Programmed Platelet-Derived Growth Factor-BB and Bone Morphogenetic Protein-2 Delivery from a Hybrid Calcium Phosphate/Alginate Scaffold. <i>Tissue Engineering - Part A</i> , 2017, 23, 1382-1393.	3.1	41

#	ARTICLE	IF	CITATIONS
19	Strategies to Direct the Enrichment, Expansion, and Recruitment of Regulatory Cells for the Treatment of Disease. <i>Annals of Biomedical Engineering</i> , 2015, 43, 593-602.	2.5	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. <i>American Journal of Sports Medicine</i> , 2019, 47, 2188-2199.	4.2	31
21	3D printing for tissue engineering in otolaryngology. <i>Connective Tissue Research</i> , 2020, 61, 117-136.	2.3	28
22	An in vitro chondro-osteo-vascular triphasic model of the osteochondral complex. <i>Biomaterials</i> , 2021, 272, 120773.	11.4	27
23	Poroelastic response of articular cartilage by nanoindentation creep tests at different characteristic lengths. <i>Medical Engineering and Physics</i> , 2014, 36, 850-858.	1.7	22
24	Anisotropy in the Viscoelastic Response of Knee Meniscus Cartilage. <i>Journal of Applied Biomaterials and Functional Materials</i> , 2017, 15, 77-83.	1.6	22
25	Design and validation of an osteochondral bioreactor for the screening of treatments for osteoarthritis. <i>Biomedical Microdevices</i> , 2018, 20, 18.	2.8	20
26	Point-of-Care Procedure for Enhancement of Meniscal Healing in a Goat Model Utilizing Infrapatellar Fat Pad-Derived Stromal Vascular Fraction Cells Seeded in Photocrosslinkable Hydrogel. <i>American Journal of Sports Medicine</i> , 2019, 47, 3396-3405.	4.2	18
27	Synthesis and characterization of CaSr-Metal Organic Frameworks for biodegradable orthopedic applications. <i>Scientific Reports</i> , 2019, 9, 13024.	3.3	18
28	Distributed and Lumped Parameter Models for the Characterization of High Throughput Bioreactors. <i>PLoS ONE</i> , 2016, 11, e0162774.	2.5	16
29	Porous Poly(vinyl alcohol)-Based Hydrogel for Knee Meniscus Functional Repair. <i>ACS Biomaterials Science and Engineering</i> , 2018, 4, 1518-1527.	5.2	16
30	Clinical Applications of Bone Tissue Engineering in Orthopedic Trauma. <i>Current Pathobiology Reports</i> , 2018, 6, 99-108.	3.4	14
31	Zero-Dimensional Single-Walled Carbon Nanotubes. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 11308-11312.	13.8	13
32	Modern Therapeutic Approaches for Noninfectious Ocular Diseases Involving Inflammation. <i>Advanced Healthcare Materials</i> , 2017, 6, 1700733.	7.6	12
33	A Quantitative Interpretation of the Response of Articular Cartilage to Atomic Force Microscopy-Based Dynamic Nanoindentation Tests. <i>Journal of Biomechanical Engineering</i> , 2015, 137, .	1.3	11
34	Engineering Metabolism of Chimeric Antigen Receptor (CAR) Cells for Developing Efficient Immunotherapies. <i>Cancers</i> , 2021, 13, 1123.	3.7	11
35	Load-induced osteoarthritis on a chip. <i>Nature Biomedical Engineering</i> , 2019, 3, 502-503.	22.5	10
36	Application of a Hyperelastic 3D Printed Scaffold for Mesenchymal Stem Cell-Based Fabrication of a Bizonal Tendon Enthesis-like Construct. <i>Frontiers in Materials</i> , 2021, 8, .	2.4	10

#	ARTICLE	IF	CITATIONS
37	Rapidly dissociated autologous meniscus tissue enhances meniscus healing: An <i>in vitro</i> study. <i>Connective Tissue Research</i> , 2017, 58, 355-365.	2.3	9
38	Cell and Biomimetic Scaffold-Based Approaches for Cartilage Regeneration. <i>Operative Techniques in Orthopaedics</i> , 2016, 26, 135-146.	0.1	8
39	Drug-Eluting Endotracheal Tubes for Preventing Bacterial Inflammation in Subglottic Stenosis. <i>Laryngoscope</i> , 2022, 132, 1356-1363.	2.0	8
40	Regenerative Rehabilitation of the Musculoskeletal System. <i>Journal of the American Academy of Orthopaedic Surgeons</i> , The, 2018, 26, e321-e323.	2.5	7
41	A High-Throughput Mechanical Activator for Cartilage Engineering Enables Rapid Screening of <i>in vitro</i> Response of Tissue Models to Physiological and Supra-Physiological Loads. <i>Cells Tissues Organs</i> , 2022, 211, 670-688.	2.3	6
42	Electrospun Scaffolds in Tendons Regeneration: a review. <i>Muscles, Ligaments and Tendons Journal</i> , 2019, 09, 478.	0.3	6
43	Cranberry extract-based formulations for preventing bacterial biofilms. <i>Drug Delivery and Translational Research</i> , 2021, 11, 1144-1155.	5.8	4
44	Towards a minimally invasive sampling tool for high resolution tissue analytical mapping. <i>Nanotechnology</i> , 2015, 26, 372501.	2.6	2
45	One-step synthesis of fluorescently labelled, single-walled carbon nanotubes. <i>Chemical Communications</i> , 2015, 51, 17233-17236.	4.1	2
46	Drug delivery to the pediatric upper airway. <i>Advanced Drug Delivery Reviews</i> , 2021, 174, 168-189.	13.7	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. <i>Methods in Molecular Biology</i> , 2022, 2373, 267-281.	0.9	1
50	Scanning probe microscopy. <i>Comprehensive Series in Photochemical and Photobiological Sciences</i> , 0, , 375-428.	0.3	0
51	ASSESSMENT OF EARLY OSTEOARTHRITIS IN HUMAN KNEE CARTILAGE BY SCANNING FORCE MICROSCOPY. <i>Journal of Biomechanics</i> , 2008, 41, S169.	2.1	0
52	Advances in bioprinting: a toolbox for tissue engineering. <i>Connective Tissue Research</i> , 2020, 61, 115-116.	2.3	0