

Manus J Biggs

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/9430918/manus-j-biggs-publications-by-year.pdf>

Version: 2024-04-27

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

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

48
papers

2,648
citations

25
h-index

51
g-index

55
ext. papers

2,971
ext. citations

8.7
avg, IF

5
L-index

#	Paper	IF	Citations
48	Understanding the Mechanobiology of Gliosis May Be the Key to Unlocking Sustained Chronic Performance of Bioelectronic Neural Interfaces. <i>Advanced NanoBiomed Research</i> , 2022 , 2, 2100098	0	0
47	A Self-Powered Piezo-Bioelectric Device Regulates Tendon Repair-Associated Signaling Pathways through Modulation of Mechanosensitive Ion Channels (Adv. Mater. 40/2021). <i>Advanced Materials</i> , 2021 , 33, 2170315	24	
46	Ultrasound-Powered Implants: A Critical Review of Piezoelectric Material Selection and Applications. <i>Advanced Healthcare Materials</i> , 2021 , 10, e2100986	10.1	4
45	A Self-Powered Piezo-Bioelectric Device Regulates Tendon Repair-Associated Signaling Pathways through Modulation of Mechanosensitive Ion Channels. <i>Advanced Materials</i> , 2021 , 33, e2008788	24	7
44	Resident Macrophages and Their Potential in Cardiac Tissue Engineering. <i>Tissue Engineering - Part B: Reviews</i> , 2021 ,	7.9	2
43	Laser-Induced Periodic Surface Structure Enhances Neuroelectrode Charge Transfer Capabilities and Modulates Astrocyte Function. <i>ACS Biomaterials Science and Engineering</i> , 2020 , 6, 1449-1461	5.5	2
42	Benefits of Polydopamine as Particle/Matrix Interface in Polylactide/PD-BaSO Scaffolds. <i>International Journal of Molecular Sciences</i> , 2020 , 21,	6.3	5
41	PEDOT:PSS interfaces stabilised using a PEGylated crosslinker yield improved conductivity and biocompatibility. <i>Journal of Materials Chemistry B</i> , 2019 , 7, 4811-4820	7.3	28
40	Enhanced osteoconductivity on electrically charged titanium implants treated by physicochemical surface modifications methods. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2019 , 18, 1-10	6	7
39	Fractal form PEDOT/Au assemblies as thin-film neural interface materials. <i>Biomedical Materials (Bristol)</i> , 2018 , 13, 054102	3.5	17
38	Preparation of Cytocompatible ITO Neuroelectrodes with Enhanced Electrochemical Characteristics Using a Facile Anodic Oxidation Process. <i>Advanced Functional Materials</i> , 2018 , 28, 1605035	15.6	12
37	Stable tissue-mimicking materials and an anatomically realistic, adjustable head phantom for electrical impedance tomography. <i>Biomedical Physics and Engineering Express</i> , 2018 , 4, 015003	1.5	8
36	Attenuated Glial Reactivity on Topographically Functionalized Poly(3,4-Ethylenedioxythiophene):P-Toluene Sulfonate (PEDOT:PTS) Neuroelectrodes Fabricated by Microimprint Lithography. <i>Small</i> , 2018 , 14, e1800863	11	18
35	Nanocellulose reinforced gellan-gum hydrogels as potential biological substitutes for annulus fibrosus tissue regeneration. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2018 , 14, 897-908	6	40
34	Chirality-sorted carbon nanotube films as high capacity electrode materials.. <i>RSC Advances</i> , 2018 , 8, 30600-30609	3.9	24
33	In Vitro Enzymatic Degradation of Tissue Grafts and Collagen Biomaterials by Matrix Metalloproteinases: Improving the Collagenase Assay. <i>ACS Biomaterials Science and Engineering</i> , 2017 , 3, 1922-1932	5.5	32
32	Effect of different stages of deformation on the microstructure evolution of Ti-rich NiTi shape memory alloy. <i>Materials Characterization</i> , 2017 , 125, 51-66	3.9	24

31	The Functional Response of Mesenchymal Stem Cells to Electron-Beam Patterned Elastomeric Surfaces Presenting Micrometer to Nanoscale Heterogeneous Rigidity. <i>Advanced Materials</i> , 2017 , 29, 1702119	24	18
30	Stimulation of 3D osteogenesis by mesenchymal stem cells using a nanovibrational bioreactor. <i>Nature Biomedical Engineering</i> , 2017 , 1, 758-770	19	58
29	Biological Activity on Piezoelectric PVDF 2016 , 167-176		1
28	Effects of isothermal crystallization on the mechanical properties of a elastomeric medium chain length polyhydroxyalkanoate. <i>European Polymer Journal</i> , 2016 , 85, 401-410	5.2	6
27	Study of the microstructure evolution of heat treated Ti-rich NiTi shape memory alloy. <i>Materials Characterization</i> , 2016 , 112, 11-19	3.9	13
26	The effect of annealing on the mechanical properties and microstructural evolution of Ti-rich NiTi shape memory alloy. <i>Materials Science & Engineering A: Structural Materials: Properties, Microstructure and Processing</i> , 2016 , 662, 564-577	5.3	28
25	An insight into morphometric descriptors of cell shape that pertain to regenerative medicine. <i>Journal of Tissue Engineering and Regenerative Medicine</i> , 2016 , 10, 539-53	4.4	14
24	Responsive Biomaterials: Advances in Materials Based on Shape-Memory Polymers. <i>Advanced Materials</i> , 2016 , 28, 5717-24	24	117
23	2D imprinted substrates and 3D electrospun scaffolds revolutionize biomedicine. <i>Nanomedicine</i> , 2016 , 11, 989-92	5.6	11
22	An academic, clinical and industrial update on electrospun, additive manufactured and imprinted medical devices. <i>Expert Review of Medical Devices</i> , 2015 , 12, 601-12	3.5	24
21	The influence of anisotropic nano- to micro-topography on in vitro and in vivo osteogenesis. <i>Nanomedicine</i> , 2015 , 10, 693-711	5.6	37
20	Substrate topography: A valuable in vitro tool, but a clinical red herring for in vivo tenogenesis. <i>Acta Biomaterialia</i> , 2015 , 27, 3-12	10.8	52
19	Effects of Polydopamine Functionalization on Boron Nitride Nanotube Dispersion and Cytocompatibility. <i>Bioconjugate Chemistry</i> , 2015 , 26, 2025-37	6.3	32
18	The past, present and future in scaffold-based tendon treatments. <i>Advanced Drug Delivery Reviews</i> , 2015 , 84, 257-77	18.5	120
17	Biomimetic approaches in bone tissue engineering: Integrating biological and physicommechanical strategies. <i>Advanced Drug Delivery Reviews</i> , 2015 , 84, 1-29	18.5	286
16	Data on in vitro and in vivo cell orientation on substrates with different topographies. <i>Data in Brief</i> , 2015 , 5, 379-82	1.2	2
15	Advances in Functional Assemblies for Regenerative Medicine. <i>Advanced Healthcare Materials</i> , 2015 , 4, 2500-19	10.1	4
14	Harnessing Hierarchical Nano- and Micro-Fabrication Technologies for Musculoskeletal Tissue Engineering. <i>Advanced Healthcare Materials</i> , 2015 , 4, 2488-99	10.1	46

13	Engineering Anisotropic 2D and 3D Structures for Tendon Repair and Regeneration 2015 , 225-242		3
12	Biofunctionalisation of electrically conducting polymers. <i>Drug Discovery Today</i> , 2014 , 19, 88-94	8.8	48
11	Osteogenic lineage restriction by osteoprogenitors cultured on nanometric grooved surfaces: the role of focal adhesion maturation. <i>Acta Biomaterialia</i> , 2014 , 10, 651-60	10.8	51
10	The role of microtopography in cellular mechanotransduction. <i>Biomaterials</i> , 2012 , 33, 2835-47	15.6	123
9	High-resolution imaging of the immunological synapse and T-cell receptor microclustering through microfabricated substrates. <i>Journal of the Royal Society Interface</i> , 2011 , 8, 1462-71	4.1	28
8	Nanotopographical modification: a regulator of cellular function through focal adhesions. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , 2010 , 6, 619-33	6	391
7	Interactions with nanoscale topography: adhesion quantification and signal transduction in cells of osteogenic and multipotent lineage. <i>Journal of Biomedical Materials Research - Part A</i> , 2009 , 91, 195-208	5.4	142
6	The use of nanoscale topography to modulate the dynamics of adhesion formation in primary osteoblasts and ERK/MAPK signalling in STRO-1+ enriched skeletal stem cells. <i>Biomaterials</i> , 2009 , 30, 5094-103	15.6	222
5	Focal adhesion interactions with topographical structures: a novel method for immuno-SEM labelling of focal adhesions in S-phase cells. <i>Journal of Microscopy</i> , 2008 , 231, 28-37	1.9	25
4	Adhesion formation of primary human osteoblasts and the functional response of mesenchymal stem cells to 330nm deep microgrooves. <i>Journal of the Royal Society Interface</i> , 2008 , 5, 1231-42	4.1	138
3	Nanotopographical stimulation of mechanotransduction and changes in interphase centromere positioning. <i>Journal of Cellular Biochemistry</i> , 2007 , 100, 326-38	4.7	122
2	Regulation of implant surface cell adhesion: characterization and quantification of S-phase primary osteoblast adhesions on biomimetic nanoscale substrates. <i>Journal of Orthopaedic Research</i> , 2007 , 25, 273-82	3.8	103
1	The effects of nanoscale pits on primary human osteoblast adhesion formation and cellular spreading. <i>Journal of Materials Science: Materials in Medicine</i> , 2007 , 18, 399-404	4.5	121