Serge Ostrovidov

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/4401733/publications.pdf

Version: 2024-02-01

46 papers	3,640 citations	172207 29 h-index	233125 45 g-index
49 all docs	49 docs citations	49 times ranked	5552 citing authors

#	Article	IF	Citations
1	Gradient biomaterials for soft-to-hard interface tissue engineering. Acta Biomaterialia, 2011, 7, 1441-1451.	4.1	338
2	The bioprinting roadmap. Biofabrication, 2020, 12, 022002.	3.7	291
3	Dielectrophoretically Aligned Carbon Nanotubes to Control Electrical and Mechanical Properties of Hydrogels to Fabricate Contractile Muscle Myofibers. Advanced Materials, 2013, 25, 4028-4034.	11.1	236
4	Skeletal Muscle Tissue Engineering: Methods to Form Skeletal Myotubes and Their Applications. Tissue Engineering - Part B: Reviews, 2014, 20, 403-436.	2.5	218
5	Hybrid hydrogels containing vertically aligned carbon nanotubes with anisotropic electrical conductivity for muscle myofiber fabrication. Scientific Reports, 2014, 4, 4271.	1.6	213
6	Engineered Contractile Skeletal Muscle Tissue on a Microgrooved Methacrylated Gelatin Substrate. Tissue Engineering - Part A, 2012, 18, 2453-2465.	1.6	206
7	3D Bioprinting in Skeletal Muscle Tissue Engineering. Small, 2019, 15, e1805530.	5.2	192
8	Advances and Future Perspectives in 4D Bioprinting. Biotechnology Journal, 2018, 13, e1800148.	1.8	168
9	Gelatin methacrylate as a promising hydrogel for 3D microscale organization and proliferation of dielectrophoretically patterned cells. Lab on A Chip, 2012, 12, 2959.	3.1	148
10	Microfluidic Spinning of Cellâ€Responsive Grooved Microfibers. Advanced Functional Materials, 2015, 25, 2250-2259.	7.8	130
11	Membrane-Based PDMS Microbioreactor for Perfused 3D Primary Rat Hepatocyte Cultures. Biomedical Microdevices, 2004, 6, 279-287.	1.4	115
12	Bioconjugated Hydrogels for Tissue Engineering and Regenerative Medicine. Bioconjugate Chemistry, 2015, 26, 1984-2001.	1.8	111
13	Myotube formation on gelatin nanofibers â€“ Multi-walled carbon nanotubes hybrid scaffolds. Biomaterials, 2014, 35, 6268-6277.	5.7	109
14	Interdigitated array of Pt electrodes for electrical stimulation and engineering of aligned muscle tissue. Lab on A Chip, 2012, 12, 3491.	3.1	96
15	A Patch of Detachable Hybrid Microneedle Depot for Localized Delivery of Mesenchymal Stem Cells in Regeneration Therapy. Advanced Functional Materials, 2020, 30, 2000086.	7.8	91
16	Engineered Nanomembranes for Directing Cellular Organization Toward Flexible Biodevices. Nano Letters, 2013, 13, 3185-3192.	4.5	85
17	Screening of New Antioxidant Molecules Using Flow Cytometry. Journal of Medicinal Chemistry, 2000, 43, 1762-1769.	2.9	70
18	Three-dimensional co-culture of C2C12/PC12 cells improves skeletal muscle tissue formation and function. Journal of Tissue Engineering and Regenerative Medicine, 2017, 11, 582-595.	1.3	70

#	Article	IF	Citations
19	Electrical stimulation as a biomimicry tool for regulating muscle cell behavior. Organogenesis, 2013, 9, 87-92.	0.4	65
20	Gelatinâ€“Polyaniline Composite Nanofibers Enhanced Excitationâ€“Contraction Coupling System Maturation in Myotubes. ACS Applied Materials & Interfaces, 2017, 9, 42444-42458.	4.0	62
21	Enhanced skeletal muscle formation on microfluidic spun gelatin methacryloyl (GelMA) fibres using surface patterning and agrin treatment. Journal of Tissue Engineering and Regenerative Medicine, 2018, 12, 2151-2163.	1.3	53
22	Biodegradable Implantable Sensors: Materials Design, Fabrication, and Applications. Advanced Functional Materials, 2021, 31, 2104149.	7.8	53
23	Stretchable and Micropatterned Membrane for Osteogenic Differentation of Stem Cells. ACS Applied Materials & Interfaces, 2014, 6, 11915-11923.	4.0	48
24	3D Printing of Micro- and Nanoscale Bone Substitutes: A Review on Technical and Translational Perspectives. International Journal of Nanomedicine, 2021, Volume 16, 4289-4319.	3.3	44
25	A microfluidic-based neurotoxin concentration gradient for the generation of an in vitro model of Parkinsonâ€™s disease. Biomicrofluidics, 2011, 5, 22214.	1.2	43
26	Spatial coordination of cell orientation directed by nanoribbon sheets. Biomaterials, 2015, 53, 86-94.	5.7	39
27	Controlled Release of Drugs from Gradient Hydrogels for High-Throughput Analysis of Cellâ€“Drug Interactions. Analytical Chemistry, 2012, 84, 1302-1309.	3.2	36
28	A contactless electrical stimulator: application to fabricate functional skeletal muscle tissue. Biomedical Microdevices, 2013, 15, 109-115.	1.4	35
29	Stem Cell Differentiation Toward the Myogenic Lineage for Muscle Tissue Regeneration: A Focus on Muscular Dystrophy. Stem Cell Reviews and Reports, 2015, 11, 866-884.	5.6	35
30	Microfluidic Generation of Polydopamine Gradients on Hydrophobic Surfaces. Langmuir, 2014, 30, 832-838.	1.6	27
31	Online Monitoring of Superoxide Anions Released from Skeletal Muscle Cells Using an Electrochemical Biosensor Based on Thick-Film Nanoporous Gold. ACS Sensors, 2016, 1, 921-928.	4.0	27
32	Macroporous mesh of nanoporous gold in electrochemical monitoring of superoxide release from skeletal muscle cells. Biosensors and Bioelectronics, 2017, 88, 41-47.	5.3	27
33	Integration of a pump and an electrical sensor into a membrane-based PDMS microbioreactor for cell culture and drug testing. Biomedical Microdevices, 2011, 13, 847-864.	1.4	18
34	Probing stem cell differentiation using atomic force microscopy. Applied Surface Science, 2016, 366, 254-259.	3.1	18
35	Healthy and diseased in vitro models of vascular systems. Lab on A Chip, 2021, 21, 641-659.	3.1	18
36	Effects of H2O2 on the growth, secretion, and metabolism of hybridoma cells in culture. In Vitro Cellular and Developmental Biology - Animal, 1998, 34, 259-264.	0.7	15

#	Article	IF	Citations
37	Biomimetic Microfluidic Device for in Vitro Antihypertensive Drug Evaluation. Molecular Pharmaceutics, 2014, 11, 2009-2015.	2.3	15
38	Development of Flexible Cell-Loaded Ultrathin Ribbons for Minimally Invasive Delivery of Skeletal Muscle Cells. ACS Biomaterials Science and Engineering, 2017, 3, 579-589.	2.6	15
39	Normal Th1 development following long-term therapeutic blockade of CD154-CD40 in experimental autoimmune encephalomyelitis. Journal of Clinical Investigation, 2002, 109, 233-241.	3.9	10
40	Cell-laden alginate hydrogels for the treatment of diabetes. Expert Opinion on Drug Delivery, 2020, 17, 1113-1118.	2.4	9
41	Cardiac Differentiation of Mesenchymal Stem Cells: Impact of Biological and Chemical Inducers. Stem Cell Reviews and Reports, 2021, 17, 1343-1361.	1.7	9
42	Restoration of ethanol-compromised Th1 responses by sodium orthovanadate. International Immunology, 2002, 14, 1239-1245.	1.8	6
43	Development of Silver-Based Bactericidal Composite Nanofibers by Airbrushing. Journal of Nanoscience and Nanotechnology, 2018, 18, 2951-2955.	0.9	6
44	Biodegradable Implantable Sensors: Materials Design, Fabrication, and Applications (Adv. Funct. Mater.) Tj ETQq0 0 0 rgBT /Overlock 10	7.8	3
45	Dielectrophoresis, cell culture, and Electrical Impedance Spectroscopy Applied to Adherent Cells in a Single Biochip. , 2006, , .		1
46	Abstract of Poster Presentation. Human Cell, 2005, 18, 43-65.	1.2	0