Serge Ostrovidov

List of Publications by Citations

48 papers	2,745 citations	27 h-index	49 g-index
49 ext. papers	3,170 ext. citations	8.1 avg, IF	4.77 L-index

#	Paper	IF	Citations
48	Gradient biomaterials for soft-to-hard interface tissue engineering. *Acta Biomaterialia*, **2011**, 7, 1441-51	10.8	295
47	Dielectrophoretically aligned carbon nanotubes to control electrical and mechanical properties of hydrogels to fabricate contractile muscle myofibers. *Advanced Materials*, **2013**, 25, 4028-34	24	200
46	Engineered contractile skeletal muscle tissue on a microgrooved methacrylated gelatin substrate. *Tissue Engineering - Part A*, **2012**, 18, 2453-65	3.9	169
45	Hybrid hydrogels containing vertically aligned carbon nanotubes with anisotropic electrical conductivity for muscle myofiber fabrication. *Scientific Reports*, **2014**, 4, 4271	4.9	165
44	Skeletal muscle tissue engineering: methods to form skeletal myotubes and their applications. *Tissue Engineering - Part B: Reviews*, **2014**, 20, 403-36	7.9	164
43	The bioprinting roadmap. *Biofabrication*, **2020**, 12, 022002	10.5	137
42	Gelatin methacrylate as a promising hydrogel for 3D microscale organization and proliferation of dielectrophoretically patterned cells. *Lab on A Chip*, **2012**, 12, 2959-69	7.2	135
41	3D Bioprinting in Skeletal Muscle Tissue Engineering. *Small*, **2019**, 15, e1805530	11	113
40	Advances and Future Perspectives in 4D Bioprinting. *Biotechnology Journal*, **2018**, 13, e1800148	5.6	109
39	Membrane-based PDMS microbioreactor for perfused 3D primary rat hepatocyte cultures. *Biomedical Microdevices*, **2004**, 6, 279-87	3.7	107
38	Microfluidic Spinning of Cell-Responsive Grooved Microfibers. *Advanced Functional Materials*, **2015**, 25, 2250-2259	15.6	104
37	Myotube formation on gelatin nanofibers - multi-walled carbon nanotubes hybrid scaffolds. *Biomaterials*, **2014**, 35, 6268-77	15.6	93
36	Bioconjugated Hydrogels for Tissue Engineering and Regenerative Medicine. *Bioconjugate Chemistry*, **2015**, 26, 1984-2001	6.3	90
35	Interdigitated array of Pt electrodes for electrical stimulation and engineering of aligned muscle tissue. *Lab on A Chip*, **2012**, 12, 3491-503	7.2	89
34	Engineered nanomembranes for directing cellular organization toward flexible biodevices. *Nano Letters*, **2013**, 13, 3185-92	11.5	78
33	Screening of new antioxidant molecules using flow cytometry. *Journal of Medicinal Chemistry*, **2000**, 43, 1762-9	8.3	62
32	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	4.4	55

31	Electrical stimulation as a biomimicry tool for regulating muscle cell behavior. *Organogenesis*, **2013**, 9, 87-92	1.7	53
30	Gelatin-Polyaniline Composite Nanofibers Enhanced Excitation-Contraction Coupling System Maturation in Myotubes. *ACS Applied Materials & Interfaces*, **2017**, 9, 42444-42458	9.5	47
29	Stretchable and micropatterned membrane for osteogenic differentation of stem cells. *ACS Applied Materials & Interfaces*, **2014**, 6, 11915-23	9.5	44
28	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	4.4	39
27	A Patch of Detachable Hybrid Microneedle Depot for Localized Delivery of Mesenchymal Stem Cells in Regeneration Therapy. *Advanced Functional Materials*, **2020**, 30, 2000086	15.6	38
26	A microfluidic-based neurotoxin concentration gradient for the generation of an in vitro model of Parkinson's disease. *Biomicrofluidics*, **2011**, 5, 22214	3.2	38
25	Spatial coordination of cell orientation directed by nanoribbon sheets. *Biomaterials*, **2015**, 53, 86-94	15.6	32
24	Stem Cell Differentiation Toward the Myogenic Lineage for Muscle Tissue Regeneration: A Focus on Muscular Dystrophy. *Stem Cell Reviews and Reports*, **2015**, 11, 866-84	6.4	32
23	Controlled release of drugs from gradient hydrogels for high-throughput analysis of cell-drug interactions. *Analytical Chemistry*, **2012**, 84, 1302-9	7.8	32
22	A contactless electrical stimulator: application to fabricate functional skeletal muscle tissue. *Biomedical Microdevices*, **2013**, 15, 109-15	3.7	31
21	Microfluidic generation of polydopamine gradients on hydrophobic surfaces. *Langmuir*, **2014**, 30, 832-8	4	26
20	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	9.2	24
19	Integration of a pump and an electrical sensor into a membrane-based PDMS microbioreactor for cell culture and drug testing. *Biomedical Microdevices*, **2011**, 13, 847-64	3.7	18
18	Macroporous mesh of nanoporous gold in electrochemical monitoring of superoxide release from skeletal muscle cells. *Biosensors and Bioelectronics*, **2017**, 88, 41-47	11.8	15
17	Probing stem cell differentiation using atomic force microscopy. *Applied Surface Science*, **2016**, 366, 254-259	6.7	14
16	Effects of H2O2 on the growth, secretion, and metabolism of hybridoma cells in culture. *In Vitro Cellular and Developmental Biology - Animal*, **1998**, 34, 259-64	2.6	13
15	Development of Flexible Cell-Loaded Ultrathin Ribbons for Minimally Invasive Delivery of Skeletal Muscle Cells. *ACS Biomaterials Science and Engineering*, **2017**, 3, 579-589	5.5	12
14	Biomimetic microfluidic device for in vitro antihypertensive drug evaluation. *Molecular Pharmaceutics*, **2014**, 11, 2009-15	5.6	12

13	Biodegradable Implantable Sensors: Materials Design, Fabrication, and Applications. *Advanced Functional Materials*,2104149	15.6	10
12	Micro- and Nanoengineering Approaches to Developing Gradient Biomaterials Suitable for Interface Tissue Engineering **2013**, 52-79		8
11	3D Printing of Micro- and Nanoscale Bone Substitutes: A Review on Technical and Translational Perspectives. *International Journal of Nanomedicine*, **2021**, 16, 4289-4319	7.3	8
10	Normal Th1 development following long-term therapeutic blockade of CD154-CD40 in experimental autoimmune encephalomyelitis. *Journal of Clinical Investigation*, **2002**, 109, 233-41	15.9	7
9	Restoration of ethanol-compromised T(h)1 responses by sodium orthovanadate. *International Immunology*, **2002**, 14, 1239-45	4.9	6
8	Healthy and diseased models of vascular systems. *Lab on A Chip*, **2021**, 21, 641-659	7.2	5
7	Cell-laden alginate hydrogels for the treatment of diabetes. *Expert Opinion on Drug Delivery*, **2020**, 17, 1113-1118	8	4
6	Cardiac Differentiation of Mesenchymal Stem Cells: Impact of Biological and Chemical Inducers. *Stem Cell Reviews and Reports*, **2021**, 17, 1343-1361	7.3	3
5	Development of Silver-Based Bactericidal Composite Nanofibers by Airbrushing. *Journal of Nanoscience and Nanotechnology*, **2018**, 18, 2951-2955	1.3	2
4	Nanopatterning Techniques **2017**, 189-210		2
3	Biodegradable Implantable Sensors: Materials Design, Fabrication, and Applications (Adv. Funct. Mater. 49/2021). *Advanced Functional Materials*, **2021**, 31, 2170365	15.6	2
2	Dielectrophoresis, cell culture, and Electrical Impedance Spectroscopy Applied to Adherent Cells in a Single Biochip **2006**,		1
1	Abstract of Poster Presentation. *Human Cell*, **2005**, 18, 43-65	4.5	