Amir K Miri

List of Publications by Year
in descending order

59 papers	2,701 citations	257450 24 h-index	182427 51 g-index
60 all docs	60 docs citations	60 times ranked	3620 citing authors

#	Article	IF	Citations
1	Multi-material digital light processing bioprinting of hydrogel-based microfluidic chips. Biofabrication, 2022, 14, 014103.	7.1	42
2	Bioink Rheology Regulates Stability of Bioprinted Strands. Journal of Biomechanical Engineering, 2022, , .	1.3	0
3	Selection of natural biomaterials for <scp>microâ€tissue</scp> and <scp>organâ€onâ€chip</scp> models. Journal of Biomedical Materials Research - Part A, 2022, 110, 1147-1165.	4.0	11
4	Digital Light Processing Bioprinting Advances for Microtissue Models. ACS Biomaterials Science and Engineering, 2022, 8, 1381-1395.	5.2	33
5	Design and application of ion concentration polarization for preconcentrating charged analytes. Physics of Fluids, 2021, 33, .	4.0	14
6	Survival and Proliferation under Severely Hypoxic Microenvironments Using Cell-Laden Oxygenating Hydrogels. Journal of Functional Biomaterials, 2021, 12, 30.	4.4	7
7	Cancer Stem Cells in Tumor Modeling: Challenges and Future Directions. Advanced NanoBiomed Research, 2021, 1, 2100017.	3.6	13
8	Comprehensive in vitro studies of novel sol gel-derived Zr4+/Zn2+ co-substituted bioactive glass with enhanced biological properties for bone healing. Journal of Non-Crystalline Solids, 2021, 566, 120887.	3.1	13
9	Structural and in vitro biological evaluation of sol-gel derived multifunctional Ti+4/Sr+2 co-doped bioactive glass with enhanced properties for bone healing. Ceramics International, 2021, 47, 29451-29462.	4.8	13
10	Layered double hydroxide-based nanocomposite scaffolds in tissue engineering applications. RSC Advances, 2021, 11, 30237-30252.	3.6	17
11	Multi-Organs-on-Chips for Testing Small-Molecule Drugs: Challenges and Perspectives. Pharmaceutics, 2021, 13, 1657.	4.5	14
12	Cell encapsulation in gelatin bioink impairs 3D bioprinting resolution. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 103, 103524.	3.1	44
13	3D Printing metamaterials towards tissue engineering. Applied Materials Today, 2020, 20, 100752.	4.3	62
14	Multifactorial analysis of ion concentration polarization for microfluidic preconcentrating applications using response surface method. Physics of Fluids, 2020, 32, 072012.	4.0	7
15	Multiscale bioprinting of vascularized models. Biomaterials, 2019, 198, 204-216.	11.4	191
16	Bioprinters for organs-on-chips. Biofabrication, 2019, 11, 042002.	7.1	71
17	Effective bioprinting resolution in tissue model fabrication. Lab on A Chip, 2019, 19, 2019-2037.	6.0	148
18	Cardiac Fibrotic Remodeling on a Chip with Dynamic Mechanical Stimulation. Advanced Healthcare Materials, 2019, 8, e1801146.	7.6	54

#	Article	IF	Citations
19	Coaxial extrusion bioprinting of 3D microfibrous constructs with cell-favorable gelatin methacryloyl microenvironments. Biofabrication, 2018, 10, 024102.	7.1	219
20	Dissolvable Stents: 3D-Printed Sugar-Based Stents Facilitating Vascular Anastomosis (Adv. Healthcare) Tj ETQq0 0 0 rgBT /Overlock 10 T	7.6	0
21	Bioprinting: Aqueous Twoâ€Phase Emulsion Bioinkâ€Enabled 3D Bioprinting of Porous Hydrogels (Adv.) Tj ETQq1 1 0.784314 rgBT /Ove	21.0	5
22	Pathologyâ€onâ€aâ€Chip: Mimicking Human Pathophysiology in Organâ€onâ€Chip Devices (Adv. Biosys. 10/2018). Advanced Biology, 2018, 2, 1870092.	3.0	1
23	3Dâ€Printed Sugarâ€Based Stents Facilitating Vascular Anastomosis. Advanced Healthcare Materials, 2018, 7, e1800702.	7.6	30
24	Aqueous Twoâ€Phase Emulsion Bioinkâ€Enabled 3D Bioprinting of Porous Hydrogels. Advanced Materials, 2018, 30, e1805460.	21.0	217
25	Bioprinting: Microfluidicsâ€Enabled Multimaterial Maskless Stereolithographic Bioprinting (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /Ove	21.0	4
26	Permeability mapping of gelatin methacryloyl hydrogels. Acta Biomaterialia, 2018, 77, 38-47.	8.3	65
27	Microfluidicsâ€Enabled Multimaterial Maskless Stereolithographic Bioprinting. Advanced Materials, 2018, 30, e1800242.	21.0	277
28	Mimicking Human Pathophysiology in Organâ€onâ€Chip Devices. Advanced Biology, 2018, 2, 1800109.	3.0	48
29	Bioprinting: Rapid Continuous Multimaterial Extrusion Bioprinting (Adv. Mater. 3/2017). Advanced Materials, 2017, 29, .	21.0	9
30	Rapid Continuous Multimaterial Extrusion Bioprinting. Advanced Materials, 2017, 29, 1604630.	21.0	275
31	Development and characterization of a bioglass/chitosan composite as an injectable bone substitute. Carbohydrate Polymers, 2017, 157, 1261-1271.	10.2	50
32	A Note on the Role of Spatial Scale in Imaging Collagen Hydrogels. Journal of Nanoscience and Nanotechnology, 2017, 17, 5124-5129.	0.9	1
33	Mechanical characterization of nanoclay-filled PDMS thin films. Polymer Testing, 2016, 52, 85-88.	4.8	19
34	A gel aspiration-ejection system for the controlled production and delivery of injectable dense collagen scaffolds. Biofabrication, 2016, 8, 015018.	7.1	28
35	Bioprinted thrombosis-on-a-chip. Lab on A Chip, 2016, 16, 4097-4105.	6.0	183
36	Ectopic bone formation in rapidly fabricated acellular injectable dense collagen-Bioglass hybrid scaffolds via gel aspiration-ejection. Biomaterials, 2016, 85, 128-141.	11.4	68

#	Article	IF	Citations
37	Fracture Toughness of Vocal Fold Tissue: A Preliminary Study. Journal of Voice, 2016, 30, 251-254.	1.5	6
38	Fabrication and characterization of zeinâ€“bioactive glass scaffolds. Bioinspired, Biomimetic and Nanobiomaterials, 2015, 4, 73-78.	0.9	10
39	Microstructural and mechanical characterization of scarred vocal folds. Journal of Biomechanics, 2015, 48, 708-711.	2.1	17
40	Study of extracellular matrix in vocal fold biomechanics using a two-phase model. Biomechanics and Modeling in Mechanobiology, 2015, 14, 49-57.	2.8	11
41	Nanoscale viscoelasticity of extracellular matrix proteins in soft tissues: A multiscale approach. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 30, 196-204.	3.1	26
42	Mechanical Characterization of Vocal Fold Tissue: A Review Study. Journal of Voice, 2014, 28, 657-667.	1.5	77
43	Determination of the elastic properties of rabbit vocal fold tissue using uniaxial tensile testing and a tailored finite element model. Journal of the Mechanical Behavior of Biomedical Materials, 2014, 39, 366-374.	3.1	6
44	Determination of Strain Field on the Superior Surface of Excised Larynx Vocal Folds Using DIC. Journal of Voice, 2013, 27, 659-667.	1.5	20
45	Microstructural characterization of vocal folds toward a strain-energy model of collagen remodeling. Acta Biomaterialia, 2013, 9, 7957-7967.	8.3	35
46	Indentation of poroviscoelastic vocal fold tissue using an atomic force microscope. Journal of the Mechanical Behavior of Biomedical Materials, 2013, 28, 383-392.	3.1	26
47	Imaging the bipolarity of myosin filaments with Interferometric Second Harmonic Generation microscopy. Biomedical Optics Express, 2013, 4, 2078.	2.9	23
48	Determination of the stresses and strain on the superior surface of excised porcine larynges during phonation using digital image correlation. Proceedings of Meetings on Acoustics, 2013, , .	0.3	3
49	Quantitative assessment of the anisotropy of vocal fold tissue using shear rheometry and traction testing. Journal of Biomechanics, 2012, 45, 2943-2946.	2.1	21
50	Effects of Dehydration on the Viscoelastic Properties of Vocal Folds in Large Deformations. Journal of Voice, 2012, 26, 688-697.	1.5	34
51	Nonlinear laser scanning microscopy of human vocal folds. Laryngoscope, 2012, 122, 356-363.	2.0	32
52	Out-of-plane stresses in composite shell panels: layerwise and elasticity solutions. Acta Mechanica, 2011, 220, 15-32.	2.1	9
53	Interlaminar stresses in antisymmetric angle-ply cylindrical shell panels. Composite Structures, 2011, 93, 419-429.	5.8	11
54	Acoustic Radiation Force on a Spherical Contrast Agent Shell Near a Vessel Porous Wall â€“ Theory. Ultrasound in Medicine and Biology, 2011, 37, 301-311.	1.5	32

#	Article	IF	Citations
55	Boundary-layer hygrothermal stresses in laminated, composite, circular, cylindrical shell panels. Archive of Applied Mechanics, 2010, 80, 413-440.	2.2	19
56	Seismic isolation effect of lined circular tunnels with damping treatments. Earthquake Engineering and Engineering Vibration, 2008, 7, 305-319.	2.3	23
57	Ultrasonic Energy Transfer and Stress Concentrations in a Single-Fiber Composite with Absorbing Interface Layer. Journal of Thermoplastic Composite Materials, 2008, 21, 473-509.	4.2	1
58	Dynamic interaction of an eccentric multipole cylindrical radiator suspended in a fluid-filled borehole within a poroelastic formation. Acta Mechanica Sinica/Lixue Xuebao, 2007, 23, 399-408.	3.4	2
59	Effect of Inter-Fibre Distance on Energy Transfer in Unidirectional Composites Containing Ultrasonic Waves. Advanced Composites Letters, 2006, 15, 096369350601500.	1.3	1