Amrinder S Nain

List of Publications by Year
in descending order

41 papers	1,494 citations	394421 19 h-index	330143 37 g-index
49 all docs	49 docs citations	49 times ranked	1820 citing authors

#	Article	IF	Citations
1	Quantitative biophysical metrics for rapid evaluation of ovarian cancer metastatic potential. Molecular Biology of the Cell, 2022, 33, mbcE21080419.	2.1	4
2	Tunneling Nanotubes between Cells Migrating in ECM Mimicking Fibrous Environments. Cancers, 2022, 14, 1989.	3.7	9
3	Dynamic Heterochromatin States in Anisotropic Nuclei of Cells on Aligned Nanofibers. ACS Nano, 2022, 16, 10754-10767.	14.6	9
4	Single Cell Forces after Electroporation. ACS Nano, 2021, 15, 2554-2568.	14.6	20
5	Cell Fragment Formation, Migration, and Force Exertion on Extracellular Mimicking Fiber Nanonets. Advanced Biology, 2021, 5, e2000592.	2.5	5
6	Rules of contact inhibition of locomotion for cells on suspended nanofibers. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	25
7	ECM in Differentiation: A Review of Matrix Structure, Composition and Mechanical Properties. Annals of Biomedical Engineering, 2020, 48, 1071-1089.	2.5	104
8	Bioenergetics underlying single-cell migration on aligned nanofiber scaffolds. American Journal of Physiology - Cell Physiology, 2020, 318, C476-C485.	4.6	21
9	Force-exerting perpendicular lateral protrusions in fibroblastic cell contraction. Communications Biology, 2020, 3, 390.	4.4	22
10	Inositol polyphosphate multikinase is a metformin target that regulates cell migration. FASEB Journal, 2019, 33, 14137-14146.	0.5	16
11	Cancer Cells Sense Fibers by Coiling on them in a Curvature-Dependent Manner. IScience, 2019, 19, 905-915.	4.1	26
12	Integrating nanofibers with biochemical gradients to investigate physiologically-relevant fibroblast chemotaxis. Lab on A Chip, 2019, 19, 3641-3651.	6.0	6
13	Crosshatch nanofiber networks of tunable interfiber spacing induce plasticity in cell migration and cytoskeletal response. FASEB Journal, 2019, 33, 10618-10632.	0.5	40
14	Tracking the origins of size dependency in the mechanical properties of polymeric nanofibers at the atomistic scale. Polymer, 2019, 175, 118-128.	3.8	17
15	Design of Nanofiber Coatings for Mitigation of Microbial Adhesion: Modeling and Application to Medical Catheters. ACS Applied Materials & Interfaces, 2018, 10, 15477-15486.	8.0	8
16	Cell Migration in 1D and 2D Nanofiber Microenvironments. Annals of Biomedical Engineering, 2018, 46, 392-403.	2.5	42
17	Design of Fiber Networks for Studying Metastatic Invasion. Advances in Experimental Medicine and Biology, 2018, 1092, 289-318.	1.6	2
18	Effect of electrode sub-micron surface feature size on current generation of Shewanella oneidensis in microbial fuel cells. Journal of Power Sources, 2017, 347, 270-276.	7.8	17

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19	Aligned fibers direct collective cell migration to engineer closing and nonclosing wound gaps. Molecular Biology of the Cell, 2017, 28, 2579-2588.	2.1	40
20	Cancer Protrusions on a Tightrope: Nanofiber Curvature Contrast Quantitates Single Protrusion Dynamics. ACS Nano, 2017, 11, 12037-12048.	14.6	34
21	Nanonet force microscopy for measuring forces in single smooth muscle cells of the human aorta. Molecular Biology of the Cell, 2017, 28, 1894-1900.	2.1	14
22	Aligned Nanofiber Topography Directs the Tenogenic Differentiation of Mesenchymal Stem Cells. Applied Sciences (Switzerland), 2017, 7, 59.	2.5	22
23	Nanonet Force Microscopy for Measuring Cell Forces. Biophysical Journal, 2016, 111, 197-207.	0.5	36
24	Capturing relevant extracellular matrices for investigating cell migration. F1000Research, 2015, 4, 1408.	1.6	29
25	Role of Suspended Fiber Structural Stiffness and Curvature on Single-Cell Migration, Nucleus Shape, and Focal-Adhesion-Cluster Length. Biophysical Journal, 2014, 107, 2604-2611.	0.5	57
26	Aligned assembly of nano and microscale polystyrene tubes with controlled morphology. Polymer, 2014, 55, 3008-3014.	3.8	7
27	Suspended Micro/Nanofiber Hierarchical Biological Scaffolds Fabricated Using Non-Electrospinning STEP Technique. Langmuir, 2014, 30, 13641-13649.	3.5	73
28	Aligned and suspended fiber force probes for drug testing at single cell resolution. Biofabrication, 2014, 6, 045006.	7.1	7
29	Polymeric nanofibers: isodiametric design space and methodology for depositing aligned nanofiber arrays in single and multiple layers. Polymer Journal, 2013, 45, 695-700.	2.7	36
30	Shape-dependent cell migration and focal adhesion organization on suspended and aligned nanofiber scaffolds. Acta Biomaterialia, 2013, 9, 7169-7177.	8.3	95
31	MISP: The missing link between extracellular matrix and astral microtubules. Cell Cycle, 2013, 12, 1821-1821.	2.6	3
32	Cell-Fiber Interactions on Aligned and Suspended Nanofiber Scaffolds. Journal of Biomaterials and Tissue Engineering, 2013, 3, 355-368.	0.1	21
33	Controlling bacterial adhesion to surfaces using topographical cues: a study of the interaction of Pseudomonas aeruginosa with nanofiber-textured surfaces. Soft Matter, 2012, 8, 10254.	2.7	60
34	Direct and cell signaling-based, geometry-induced neuronal differentiation of neural stem cells. Integrative Biology (United Kingdom), 2011, 3, 1207.	1.3	27
35	Bioprinting of growth factors onto aligned sub-micron fibrous scaffolds for simultaneous control of cell differentiation and alignment. Biomaterials, 2011, 32, 8097-8107.	11.4	179
36	Note: Aligned deposition and modal characterization of micron and submicron poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 62 Td	1.3	1

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37	Dry Spinning Based Spinneret Based Tunable Engineered Parameters (STEP) Technique for Controlled and Aligned Deposition of Polymeric Nanofibers. Macromolecular Rapid Communications, 2009, 30, 1406-1412.	3.9	81
38	Control of Cell Behavior by Aligned Micro/Nanofibrous Biomaterial Scaffolds Fabricated by Spinneretâ€Based Tunable Engineered Parameters (STEP) Technique. Small, 2008, 4, 1153-1159.	10.0	67
39	Dry spinning polymeric nano/microfiber arrays using glass micropipettes with controlled porosities and fiber diameters. , 2007, , .		0
40	Drawing suspended polymer micro-/nanofibers using glass micropipettes. Applied Physics Letters, 2006, 89, 183105.	3.3	149
41	Development of a System for In Vitro Neck Muscle Force Replication in Whole Cervical Spine Experiments. Spine, 2001, 26, 2214-2219.	2.0	55