Aldo Ferrari

List of Publications by Year
in descending order

53 papers	2,487 citations	218677 26 h-index	206112 48 g-index
58 all docs	58 docs citations	58 times ranked	3965 citing authors

#	Article	IF	Citations
1	Phosphorylation of VE-cadherin is modulated by haemodynamic forces and contributes to the regulation of vascular permeability in vivo. Nature Communications, 2012, 3, 1208.	12.8	387
2	Endocytic reawakening of motility in jammed epithelia. Nature Materials, 2017, 16, 587-596.	27.5	207
3	Ultrasound-mediated piezoelectric differentiation of neuron-like PC12 cells on PVDF membranes. Scientific Reports, 2017, 7, 4028.	3.3	131
4	Nanotopographic Control of Neuronal Polarity. Nano Letters, 2011, 11, 505-511.	9.1	125
5	Surface-Structured Bacterial Cellulose with Guided Assembly-Based Biolithography (GAB). ACS Nano, 2015, 9, 206-219.	14.6	110
6	Confocal reference free traction force microscopy. Nature Communications, 2016, 7, 12814.	12.8	109
7	Neuronal polarity selection by topography-induced focal adhesion control. Biomaterials, 2010, 31, 4682-4694.	11.4	107
8	ROCK-mediated contractility, tight junctions and channels contribute to the conversion of a preapical patch into apical surface during isochoric lumen initiation. Journal of Cell Science, 2008, 121, 3649-3663.	2.0	105
9	Control of initial endothelial spreading by topographic activation of focal adhesion kinase. Soft Matter, 2011, 7, 7313.	2.7	85
10	A micron-scale surface topography design reducing cell adhesion to implanted materials. Scientific Reports, 2018, 8, 10887.	3.3	85
11	Optically Stable Biocompatible Flame-Made SiO₂-Coated Y₂O₃:Tb³⁺ Nanophosphors for Cell Imaging. ACS Nano, 2012, 6, 3888-3897.	14.6	71
12	Accelerated endothelial wound healing on microstructured substrates under flow. Biomaterials, 2013, 34, 1488-1497.	11.4	71
13	The effect of alternative neuronal differentiation pathways on PC12 cell adhesion and neurite alignment to nanogratings. Biomaterials, 2010, 31, 2565-2573.	11.4	64
14	Toward a Rational Design of Surface Textures Promoting Endothelialization. Nano Letters, 2014, 14, 1069-1079.	9.1	61
15	Toward Contactless Biology: Acoustophoretic DNA Transfection. Scientific Reports, 2016, 6, 20023.	3.3	58
16	Antibacterial, Cytocompatible, Sustainably Sourced: Cellulose Membranes with Bifunctional Peptides for Advanced Wound Dressings. Advanced Healthcare Materials, 2020, 9, e1901850.	7.6	49
17	Microengineered biosynthesized cellulose as anti-fibrotic in vivo protection for cardiac implantable electronic devices. Biomaterials, 2020, 229, 119583.	11.4	45
18	Left Ventricular Assist Devices: Challenges Toward Sustaining Long-Term Patient Care. Annals of Biomedical Engineering, 2017, 45, 1836-1851.	2.5	42

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19	The influence of surface micro-structure on endothelialization under supraphysiological wall shear stress. Biomaterials, 2014, 35, 8479-8486.	11.4	40
20	Cell Image Velocimetry (CIV): boosting the automated quantification of cell migration in wound healing assays. Integrative Biology (United Kingdom), 2012, 4, 1437-1447.	1.3	38
21	A Nanoprinted Model of Interstitial Cancer Migration Reveals a Link between Cell Deformability and Proliferation. ACS Nano, 2016, 10, 6437-6448.	14.6	34
22	Three-Dimensional Modeling of Mechanical Forces in the Extracellular Matrix during Epithelial Lumen Formation. Biophysical Journal, 2006, 90, 4380-4391.	0.5	32
23	Topography-mediated apical guidance in epidermal wound healing. Soft Matter, 2012, 8, 6922.	2.7	30
24	Directional PC12 Cell Migration Along Plastic Nanotracks. IEEE Transactions on Biomedical Engineering, 2009, 56, 2692-2696.	4.2	29
25	Compound Ex Vivo and In Silico Method for Hemodynamic Analysis of Stented Arteries. PLoS ONE, 2013, 8, e58147.	2.5	27
26	Cell cycleâ€“dependent force transmission in cancer cells. Molecular Biology of the Cell, 2018, 29, 2528-2539.	2.1	27
27	Mechanical Fingerprint of Senescence in Endothelial Cells. Nano Letters, 2021, 21, 4911-4920.	9.1	27
28	A Novel 3<scp>D</scp> Integrated Platform for the Highâ€<scp>R</scp>esolution Study of Cell Migration Plasticity. Macromolecular Bioscience, 2013, 13, 973-983.	4.1	25
29	A RAB35-p85/PI3K axis controls oscillatory apical protrusions required for efficient chemotactic migration. Nature Communications, 2018, 9, 1475.	12.8	23
30	A Novel Bioreactor System for the Assessment of Endothelialization on Deformable Surfaces. Scientific Reports, 2016, 6, 38861.	3.3	21
31	Cellogram: On-the-Fly Traction Force Microscopy. Nano Letters, 2019, 19, 6742-6750.	9.1	20
32	Role of the nuclear membrane protein Emerin in front-rear polarity of the nucleus. Nature Communications, 2020, 11, 2122.	12.8	20
33	A Robust Algorithm for Segmenting and Tracking Clustered Cells in Time-Lapse Fluorescent Microscopy. IEEE Journal of Biomedical and Health Informatics, 2013, 17, 862-869.	6.3	18
34	Facile endothelium protection from TNF-Î± inflammatory insult with surface topography. Biomaterials, 2017, 138, 131-141.	11.4	17
35	Pore Shape Defines Paths of Metastatic Cell Migration. Nano Letters, 2018, 18, 2140-2147.	9.1	16
36	Endothelialization of Rationally Microtextured Surfaces with Minimal Cell Seeding Under Flow. Small, 2016, 12, 4113-4126.	10.0	15

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37	Recent technological advancements in traction force microscopy. Biophysical Reviews, 2019, 11, 679-681.	3.2	15
38	A free-form patterning method enabling endothelialization under dynamic flow. Biomaterials, 2021, 273, 120816.	11.4	12
39	Honeycomb-structured metasurfaces for the adaptive nesting of endothelial cells under hemodynamic loads. Biomaterials Science, 2018, 6, 2726-2737.	5.4	10
40	A Novel Hybrid Membrane VAD as First Step Toward Hemocompatible Blood Propulsion. Annals of Biomedical Engineering, 2021, 49, 716-731.	2.5	9
41	On cell separation with topographically engineered surfaces. Biointerphases, 2013, 8, 34.	1.6	8
42	A <i>Tph2</i>^{<i>GFP</i>} Reporter Stem Cell Line To Model <i>in Vitro</i> and <i>in Vivo</i> Serotonergic Neuron Development and Function. ACS Chemical Neuroscience, 2017, 8, 1043-1052.	3.5	8
43	Adaptive reorientation of endothelial collectives in response to strain. Integrative Biology (United) Tj ETQq1 1 0.784314 rgBT /Overlock	1.3	8
44	Optimized Topological and Topographical Expansion of Epithelia. ACS Biomaterials Science and Engineering, 2019, 5, 3922-3934.	5.2	8
45	Assessing effectiveness of Komagataeibacter strains for producing surface-microstructured cellulose via guided assembly-based biolithography. Scientific Reports, 2021, 11, 19311.	3.3	8
46	Science by the sea: how nanoengineering met mechanobiology in Camogli. Biophysical Reviews, 2019, 11, 659-661.	3.2	5
47	The Role of Tricellulin in Epithelial Jamming and Unjamming via Segmentation of Tricellular Junctions. Advanced Science, 2020, 7, 2001213.	11.2	5
48	Systems of conductive skin for power transfer in clinical applications. European Biophysics Journal, 2021, , 1.	2.2	3
49	Bistability of Dielectrically Anisotropic Nematic Crystals and the Adaptation of Endothelial Collectives to Stress Fields. Advanced Science, 2022, , 2102148.	11.2	3
50	Lipoconstruct surface topography grating size influences vascularization onset in the dorsal skinfold chamber model. Acta Biomaterialia, 2020, 106, 136-144.	8.3	2
51	Nanoengineering for Mechanobiology â€œN4M-20â€• European Biophysics Journal, 2022, 51, 97-98.	2.2	2
52	Force and Collective Epithelial Activities. Advances in Experimental Medicine and Biology, 2019, 1146, 31-44.	1.6	1
53	Evaluation of Chemoâ€•and Photoâ€ toxicity of a Live Fluorescent Dye for Cell Analysis. Photochemistry and Photobiology, 2021, 97, 448-452.	2.5	0