

Tomaso Zambelli

List of Publications by Year in descending order

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71
papers

3,398
citations

147801

31
h-index

149698

56
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73
all docs

73
docs citations

73
times ranked

3829
citing authors

#	ARTICLE	IF	CITATIONS
1	FluidFM: Combining Atomic Force Microscopy and Nanofluidics in a Universal Liquid Delivery System for Single Cell Applications and Beyond. <i>Nano Letters</i> , 2009, 9, 2501-2507.	9.1	369
2	Additive Manufacturing of Metal Structures at the Micrometer Scale. <i>Advanced Materials</i> , 2017, 29, 1604211.	21.0	279
3	Force-controlled manipulation of single cells: from AFM to FluidFM. <i>Trends in Biotechnology</i> , 2014, 32, 381-388.	9.3	190
4	Tunable Single-Cell Extraction for Molecular Analyses. <i>Cell</i> , 2016, 166, 506-516.	28.9	155
5	Approaches to self-assembly of colloidal monolayers: A guide for nanotechnologists. <i>Advances in Colloid and Interface Science</i> , 2017, 246, 217-274.	14.7	153
6	Template-Free 3D Microprinting of Metals Using a Force-Controlled Nanopipette for Layer-by-Layer Electrodeposition. <i>Advanced Materials</i> , 2016, 28, 2311-2315.	21.0	141
7	Mechanical force induces mitochondrial fission. <i>ELife</i> , 2017, 6, .	6.0	125
8	Rapid and Serial Quantification of Adhesion Forces of Yeast and Mammalian Cells. <i>PLoS ONE</i> , 2012, 7, e52712.	2.5	106
9	Single-Cell Mass Spectrometry of Metabolites Extracted from Live Cells by Fluidic Force Microscopy. <i>Analytical Chemistry</i> , 2017, 89, 5017-5023.	6.5	90
10	Force-controlled spatial manipulation of viable mammalian cells and micro-organisms by means of FluidFM technology. <i>Applied Physics Letters</i> , 2010, 97, .	3.3	80
11	Bacterial adhesion force quantification by fluidic force microscopy. <i>Nanoscale</i> , 2015, 7, 4070-4079.	5.6	72
12	Force-Controlled Fluidic Injection into Single Cell Nuclei. <i>Small</i> , 2013, 9, 1904-1907.	10.0	70
13	Self-Assembly of Single-Sized and Binary Colloidal Particles at Air/Water Interface by Surface Confinement and Water Discharge. <i>Langmuir</i> , 2016, 32, 9582-9590.	3.5	70
14	Force-Controlled Patch Clamp of Beating Cardiac Cells. <i>Nano Letters</i> , 2015, 15, 1743-1750.	9.1	62
15	Toward a Rational Design of Surface Textures Promoting Endothelialization. <i>Nano Letters</i> , 2014, 14, 1069-1079.	9.1	61
16	Swelling and Contraction of Ferrocyanide-Containing Polyelectrolyte Multilayers upon Application of an Electric Potential. <i>Langmuir</i> , 2008, 24, 13668-13676.	3.5	60
17	Cooperative Vaccinia Infection Demonstrated at the Single-Cell Level Using FluidFM. <i>Nano Letters</i> , 2012, 12, 4219-4227.	9.1	57
18	Metals by Micro-Scale Additive Manufacturing: Comparison of Microstructure and Mechanical Properties. <i>Advanced Functional Materials</i> , 2020, 30, 1910491.	14.9	52

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19	Localized detection of ions and biomolecules with a force-controlled scanning nanopore microscope. <i>Nature Nanotechnology</i> , 2019, 14, 791-798.	31.5	49
20	STM images of a large organic molecule adsorbed on a bare metal substrate or on a thin insulating layer: Visualization of HOMO and LUMO. <i>Surface Science</i> , 2009, 603, 1526-1532.	1.9	46
21	Bringing Electrochemical Three-Dimensional Printing to the Nanoscale. <i>Nano Letters</i> , 2021, 21, 9093-9101.	9.1	46
22	Isolation of single mammalian cells from adherent cultures by fluidic force microscopy. <i>Lab on A Chip</i> , 2014, 14, 402-414.	6.0	45
23	Isolation of Optically Targeted Single Bacteria by Application of Fluidic Force Microscopy to Aerobic Anoxygenic Phototrophs from the Phyllosphere. <i>Applied and Environmental Microbiology</i> , 2013, 79, 4895-4905.	3.1	44
24	Exchangeable Colloidal AFM Probes for the Quantification of Irreversible and Long-Term Interactions. <i>Biophysical Journal</i> , 2013, 105, 463-472.	0.5	43
25	Pattern detection in colloidal assembly: A mosaic of analysis techniques. <i>Advances in Colloid and Interface Science</i> , 2020, 284, 102252.	14.7	42
26	Effect of polyelectrolyte interdiffusion on electron transport in redox-active polyelectrolyte multilayers. <i>Journal of Materials Chemistry</i> , 2012, 22, 11073.	6.7	40
27	Electrochemical tuning of the stability of PLL/DNA multilayers. <i>Soft Matter</i> , 2009, 5, 2415.	2.7	39
28	A local view on hyperconjugation. <i>Chemical Physics Letters</i> , 2007, 450, 107-111.	2.6	37
29	Local surface modification via confined electrochemical deposition with FluidFM. <i>RSC Advances</i> , 2015, 5, 84517-84522.	3.6	37
30	Multiscale Additive Manufacturing of Metal Microstructures. <i>Advanced Engineering Materials</i> , 2020, 22, 1900961.	3.5	36
31	Simultaneous Scanning Ion Conductance Microscopy and Atomic Force Microscopy with Microchanneled Cantilevers. <i>Physical Review Letters</i> , 2015, 115, 238103.	7.8	33
32	FluidFM for single-cell biophysics. <i>Nano Research</i> , 2022, 15, 773-786.	10.4	33
33	A modular atomic force microscopy approach reveals a large range of hydrophobic adhesion forces among bacterial members of the leaf microbiota. <i>ISME Journal</i> , 2019, 13, 1878-1882.	9.8	32
34	Extending the limits of direct force measurements: colloidal probes from sub-micron particles. <i>Nanoscale</i> , 2017, 9, 9491-9501.	5.6	31
35	Cell Adhesion on Dynamic Supramolecular Surfaces Probed by Fluid Force Microscopy-Based Single-Cell Force Spectroscopy. <i>ACS Nano</i> , 2017, 11, 3867-3874.	14.6	31
36	Additive Manufacturing of Sub-Micron to Sub-mm Metal Structures with Hollow AFM Cantilevers. <i>Micromachines</i> , 2020, 11, 6.	2.9	31

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37	SU-8 hollow cantilevers for AFM cell adhesion studies. <i>Journal of Micromechanics and Microengineering</i> , 2016, 26, 055006.	2.6	29
38	Electrochemically Stimulated Release from Liposomes Embedded in a Polyelectrolyte Multilayer. <i>Advanced Functional Materials</i> , 2011, 21, 1666-1672.	14.9	28
39	Pattern Formation in Binary Colloidal Assemblies: Hidden Symmetries in a Kaleidoscope of Structures. <i>Langmuir</i> , 2018, 34, 7827-7843.	3.5	28
40	Mitochondria transplantation between living cells. <i>PLoS Biology</i> , 2022, 20, e3001576.	5.6	28
41	Controlled single-cell deposition and patterning by highly flexible hollow cantilevers. <i>Lab on A Chip</i> , 2016, 16, 1663-1674.	6.0	27
42	Mechanical Fingerprint of Senescence in Endothelial Cells. <i>Nano Letters</i> , 2021, 21, 4911-4920.	9.1	27
43	Global and local view on the electrochemically induced degradation of polyelectrolyte multilayers: from dissolution to delamination. <i>Soft Matter</i> , 2010, 6, 4246.	2.7	26
44	Self-assembly and nanosphere lithography for large-area plasmonic patterns on graphene. <i>Journal of Colloid and Interface Science</i> , 2015, 447, 202-210.	9.4	26
45	Quantifying the effect of electric current on cell adhesion studied by single-cell force spectroscopy. <i>Biointerphases</i> , 2016, 11, 011004.	1.6	26
46	A universal method for planar lipid bilayer formation by freeze and thaw. <i>Soft Matter</i> , 2012, 8, 5525.	2.7	21
47	Electrochemically driven delivery to cells from vesicles embedded in polyelectrolyte multilayers. <i>Soft Matter</i> , 2012, 8, 3641.	2.7	21
48	Playing with sizes and shapes of colloidal particles via dry etching methods. <i>Advances in Colloid and Interface Science</i> , 2022, 299, 102538.	14.7	20
49	A Journey Through the Landscapes of Small Particles in Binary Colloidal Assemblies: Unveiling Structural Transitions from Isolated Particles to Clusters upon Variation in Composition. <i>Nanomaterials</i> , 2019, 9, 921.	4.1	19
50	Combined Ion Conductance and Atomic Force Microscope for Fast Simultaneous Topographical and Surface Charge Imaging. <i>Analytical Chemistry</i> , 2018, 90, 11453-11460.	6.5	17
51	Spontaneous Formation of a Vesicle Multilayer on Top of an Exponentially Growing Polyelectrolyte Multilayer Mediated by Diffusing Poly-L-lysine. <i>Journal of Physical Chemistry B</i> , 2011, 115, 12386-12391.	2.6	14
52	Local Chemical Stimulation of Neurons with the Fluidic Force Microscope (FluidFM). <i>ChemPhysChem</i> , 2018, 19, 1234-1244.	2.1	14
53	Probing the interactions between air bubbles and (bio)interfaces at the nanoscale using FluidFM technology. <i>Journal of Colloid and Interface Science</i> , 2021, 604, 785-797.	9.4	14
54	Simultaneous scanning ion conductance and atomic force microscopy with a nanopore: Effect of the aperture edge on the ion current images. <i>Journal of Applied Physics</i> , 2018, 124, .	2.5	12

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55	Bioinspired, nanoscale approaches in contemporary bioanalytics (Review). <i>Biointerphases</i> , 2018, 13, 040801.	1.6	12
56	Serial weighting of micro-objects with resonant microchanneled cantilevers. <i>Nanotechnology</i> , 2016, 27, 415502.	2.6	11
57	FluidFM: Development of the Instrument as well as Its Applications for 2D and 3D Lithography. , 0, , 295-323.		11
58	Injection into and extraction from single fungal cells. <i>Communications Biology</i> , 2022, 5, 180.	4.4	11
59	Shape Deformation in Ion Beam Irradiated Colloidal Monolayers: An AFM Investigation. <i>Nanomaterials</i> , 2020, 10, 453.	4.1	10
60	Electrochemical 3D micro- and nanoprinting: Current state and future perspective. <i>Electrochemical Science Advances</i> , 2022, 2, .	2.8	10
61	Force-Controlled Formation of Dynamic Nanopores for Single-Biomolecule Sensing and Single-Cell Secretomics. <i>ACS Nano</i> , 2020, 14, 12993-13003.	14.6	9
62	FluidFM Applications in Single-Cell Biology. , 2018, , 325-354.		7
63	Force controlled SU-8 micropipettes fabricated with a sideways process. <i>Journal of Micromechanics and Microengineering</i> , 2018, 28, 095015.	2.6	6
64	Manipulating the morphology of colloidal particles via ion beam irradiation: A route to anisotropic shaping. <i>Advances in Colloid and Interface Science</i> , 2022, 304, 102642.	14.7	6
65	Electrochemical 3D printing of Ni-Mn and Ni-Co alloy with FluidFM. <i>Nanotechnology</i> , 2022, 33, 265301.	2.6	5
66	Integration of silver nanowires into SU-8 hollow cantilevers for piezoresistive-based sensing. <i>Sensors and Actuators A: Physical</i> , 2020, 301, 111748.	4.1	4
67	Surface Vacancy Generation by STM Tunneling Electrons in the Presence of Indigo Molecules on Cu(111). <i>Journal of Physical Chemistry C</i> , 2022, 126, 14103-14115.	3.1	3
68	Electrochemical 3D printing of silver and nickel microstructures with FluidFM. <i>Additive Manufacturing</i> , 2022, 53, 102718.	3.0	2
69	Microfluidics: Force-Controlled Fluidic Injection into Single Cell Nuclei (Small 11/2013). <i>Small</i> , 2013, 9, 1870-1870.	10.0	1
70	SU-8 Micropipettes for Gentle Single-cell Manipulation. <i>Chimia</i> , 2019, 73, 1033.	0.6	1
71	Force-controlled electrophysiology. <i>BIO Web of Conferences</i> , 2016, 6, 01002.	0.2	0