

Marco Lazzarino

List of Publications by Year in descending order

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130
papers

2,322
citations

236612

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docs citations

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times ranked

3724
citing authors

#	ARTICLE	IF	CITATIONS
1	The Role of Cytoskeleton Revealed by Quartz Crystal Microbalance and Digital Holographic Microscopy. <i>International Journal of Molecular Sciences</i> , 2022, 23, 4108.	1.8	3
2	Microfabrication of sealable microcell array with ultrathin metal-graphene membrane. <i>Micro and Nano Engineering</i> , 2022, 15, 100120.	1.4	0
3	AFM macro-probes to investigate whole 3D cardiac spheroids. <i>Micro and Nano Engineering</i> , 2022, 15, 100134.	1.4	2
4	Heart failure impairs the mechanotransduction properties of human cardiac pericytes. <i>Journal of Molecular and Cellular Cardiology</i> , 2021, 151, 15-30.	0.9	17
5	Soft x-ray spectroscopies in liquids and at solid-liquid interface at BACH beamline at Elettra. <i>Review of Scientific Instruments</i> , 2021, 92, 015115.	0.6	3
6	Changes in Biomechanical Properties of A375 Cells Due to the Silencing of TMSB4X Expression Are Not Directly Correlated with Alterations in Their Stemness Features. <i>Cells</i> , 2021, 10, 769.	1.8	8
7	Scanning Probe Microscopies: Imaging and Biomechanics in Reproductive Medicine Research. <i>International Journal of Molecular Sciences</i> , 2021, 22, 3823.	1.8	3
8	Perspectives of Microscopy Methods for Morphology Characterisation of Extracellular Vesicles from Human Biofluids. <i>Biomedicines</i> , 2021, 9, 603.	1.4	43
9	Experimental Study of Few-Layer Graphene: Optical Anisotropy and Pseudo-Brewster Angle Shift in Vacuum Ultraviolet Spectral Range. <i>Advanced Photonics Research</i> , 2021, 2, 2000207.	1.7	2
10	Microfabricated cantilevers for parallelized cell-cell adhesion measurements. <i>European Biophysics Journal</i> , 2021, , 1.	1.2	3
11	Ultra-structural analysis of human spermatozoa by aperture scanning near-field optical microscopy. <i>Journal of Biophotonics</i> , 2020, 13, e2418.	1.1	3
12	Nanofabricated free-standing wire scanners for beam diagnostics with submicrometer resolution. <i>Physical Review Accelerators and Beams</i> , 2020, 23, .	0.6	2
13	A DNA origami plasmonic sensor with environment-independent read-out. <i>Nano Research</i> , 2019, 12, 2900-2907.	5.8	2
14	Study of the mechanical properties of fresh and cryopreserved individual human oocytes. <i>European Biophysics Journal</i> , 2019, 48, 585-592.	1.2	8
15	Planar AFM macro-probes to study the biomechanical properties of large cells and 3D cell spheroids. <i>Acta Biomaterialia</i> , 2019, 94, 505-513.	4.1	30
16	Chemical composition and interaction strength of two-dimensional boron-nitrogen-carbon heterostructures driven by polycrystalline metallic surfaces. <i>Applied Surface Science</i> , 2019, 479, 903-913.	3.1	4
17	P752Pericyte/mural cells of ischemic human hearts show impairment of mechanotransduction, attenuating YAP signaling. <i>European Heart Journal</i> , 2019, 40, .	1.0	0
18	Knock Down of Plakophilin 2 Dysregulates Adhesion Pathway through Upregulation of miR200b and Alters the Mechanical Properties in Cardiac Cells. <i>Cells</i> , 2019, 8, 1639.	1.8	18

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19	Frequency Modulated Raman Spectroscopy. ACS Photonics, 2018, 5, 312-317.	3.2	4
20	Cortex-Like Networks: A Fully 3D Interconnected Graphene-Carbon Nanotube Web Allows the Study of Glioma Infiltration in Bioengineered 3D Cortex-Like Networks (Adv. Mater. 52/2018). Advanced Materials, 2018, 30, 1870397.	11.1	2
21	A Fully 3D Interconnected Graphene-Carbon Nanotube Web Allows the Study of Glioma Infiltration in Bioengineered 3D Cortex-Like Networks. Advanced Materials, 2018, 30, e1806132.	11.1	28
22	Tuning Gold Nanoparticles Plasmonic Properties by DNA Nanotechnology. Methods in Molecular Biology, 2018, 1811, 279-297.	0.4	2
23	Microfabricated wire scanner for photon beam characterization. Journal of Instrumentation, 2018, 13, C03037-C03037.	0.5	1
24	A nanofabricated wirescanner with free standing wires: Design, fabrication and experimental results. Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment, 2018, 891, 32-36.	0.7	2
25	Graphene nanobubbles on TiO ₂ for in-operando electron spectroscopy of liquid-phase chemistry. Nanoscale, 2017, 9, 4456-4466.	2.8	32
26	High aspect ratio silicon nanowires control fibroblast adhesion and cytoskeleton organization. Nanotechnology, 2017, 28, 155102.	1.3	9
27	Combined use of AFM and soft X-ray microscopy to reveal fibres' internalization in mesothelial cells. Analyst, The, 2017, 142, 1982-1992.	1.7	6
28	Graphene Nanoreactors: Photoreduction of Prussian Blue in Aqueous Solution. Journal of Physical Chemistry C, 2017, 121, 22225-22233.	1.5	12
29	Generation of coherent magnons in NiO stimulated by EUV pulses from a seeded free-electron laser. Physical Review Materials, 2017, 1, .	0.9	6
30	Acetylated tubulin is essential for touch sensation in mice. ELife, 2016, 5, .	2.8	78
31	Toward an integrated device for spatiotemporal superposition of free-electron lasers and laser pulses. Optics Letters, 2016, 41, 5090.	1.7	3
32	Fluorescence excitation by enhanced plasmon upconversion under continuous wave illumination. Photonics and Nanostructures - Fundamentals and Applications, 2016, 21, 32-43.	1.0	4
33	A micromechanical switchable hot spot for SERS applications. Applied Physics Letters, 2016, 109, 131108.	1.5	2
34	Contamination-free suspended graphene structures by a Ti-based transfer method. Carbon, 2016, 103, 305-310.	5.4	15
35	Investigating the mechanical properties of zona pellucida of whole human oocytes by atomic force spectroscopy. Integrative Biology (United Kingdom), 2016, 8, 886-893.	0.6	36
36	Design of broadband SERS substrates by the laser-induced aggregation of gold nanoparticles. Journal of Materials Chemistry C, 2016, 4, 6152-6159.	2.7	13

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37	A novel approach in the free-electron laser diagnosis based on a pixelated phosphor detector. Journal of Synchrotron Radiation, 2016, 23, 29-34.	1.0	4
38	Soft X-Ray Microscopy Radiation Damage On Fixed Cells Investigated With Synchrotron Radiation FTIR Microscopy. Scientific Reports, 2015, 5, 10250.	1.6	53
39	Plasmon resonance tuning using DNA origami actuation. Chemical Communications, 2015, 51, 4789-4792.	2.2	22
40	Parallel optical read-out of micromechanical pillars applied to prostate specific membrane antigen detection. Biosensors and Bioelectronics, 2015, 72, 393-399.	5.3	16
41	Nanobiomechanics and Mechanotransduction of Sensory Neurons. Biophysical Journal, 2015, 108, 560a.	0.2	0
42	Conformational rearrangements in the transmembrane domain of CNGA1 channels revealed by single-molecule force spectroscopy. Nature Communications, 2015, 6, 7093.	5.8	24
43	The phototransduction machinery in the rod outer segment has a strong efficacy gradient. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E2715-24.	3.3	25
44	Membrane stiffening by STOML3 facilitates mechanosensation in sensory neurons. Nature Communications, 2015, 6, 8512.	5.8	127
45	Photo-induced surface encoding of gold nanoparticles. Chemical Communications, 2015, 51, 3363-3366.	2.2	13
46	Investigation of Adhesion and Mechanical Properties of Human Glioma Cells by Single Cell Force Spectroscopy and Atomic Force Microscopy. PLoS ONE, 2014, 9, e112582.	1.1	47
47	Tip-Assisted Optical Nanoscopy for Single-Molecule Activation and Detection. Advances in Atom and Single Molecule Machines, 2014, , 61-83.	0.0	1
48	Enhanced plasmonic properties of gold-catalysed semiconductor nanowires. Nanoscale, 2014, 6, 13651-13659.	2.8	7
49	Highly efficient gold nanoparticle dimer formation via DNA hybridization. RSC Advances, 2014, 4, 15281.	1.7	15
50	A DNA Origami Nanorobot Controlled by Nucleic Acid Hybridization. Small, 2014, 10, 2918-2926.	5.2	47
51	Single Molecule Force Spectroscopy of CNGA1 Channels in Situ Reveals Major Conformational Changes upon Gating. Biophysical Journal, 2014, 106, 392a.	0.2	0
52	Cell Adhesion on Silicon Nanowires. Biophysical Journal, 2014, 106, 389a.	0.2	0
53	How to engineer superhydrophobic micromechanical sensors preserving mass resolution. Sensors and Actuators B: Chemical, 2014, 199, 62-69.	4.0	7
54	Confined Illumination through Apertureless and Nano-Structured Tapered Optical Fibres. Biophysical Journal, 2014, 106, 621a.	0.2	0

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55	Restricted Spots of Light Reveal an Efficacy Gradient of the Phototransduction Cascade Along the Rod Outer Segment. <i>Biophysical Journal</i> , 2014, 106, 20a.	0.2	0
56	Investigating Adhesion Proteins by Single Cell Force Spectroscopy. <i>Advances in Atom and Single Molecule Machines</i> , 2014, , 149-168.	0.0	0
57	Actuation of silicon pillar micro-mechanical resonators by Kelvin polarization force. <i>Microelectronic Engineering</i> , 2013, 111, 1-6.	1.1	2
58	Nanomechanics controls neuronal precursors adhesion and differentiation. <i>Biotechnology and Bioengineering</i> , 2013, 110, 2301-2310.	1.7	24
59	Heater-Integrated Cantilevers for Nano-Samples Thermogravimetric Analysis. <i>Sensors</i> , 2013, 13, 16657-16671.	2.1	7
60	Nanoscale chemical mapping through plasmonic tips on AFM-based cantilevers. , 2012, , .		1
61	Triple coupled cantilever systems for mass detection and localization. <i>Sensors and Actuators A: Physical</i> , 2012, 175, 127-131.	2.0	22
62	Cycloaddition Functionalization of Cleaved Microstructures. <i>ChemPhysChem</i> , 2012, 13, 459-462.	1.0	1
63	Fast Detection of Biomolecules in Diffusion-Limited Regime Using Micromechanical Pillars. <i>ACS Nano</i> , 2011, 5, 7928-7935.	7.3	42
64	Effect of PDMS Nanopatterned Substrates on Embryonic Stem Cells Differentiation into Neuronal Lineage. <i>Biophysical Journal</i> , 2011, 100, 622a.	0.2	1
65	A Reversible, Autonomous, Self-Assembled DNA-Origami Nanoactuator. <i>Nano Letters</i> , 2011, 11, 5449-5454.	4.5	49
66	A completely transparent MEMS for mechanical properties evaluation of a single living cell. <i>Proceedings of SPIE</i> , 2011, , .	0.8	1
67	Atomic force microscopy investigation of morphological changes in living keratinocytes treated with HgCl ₂ at not cytotoxic doses. <i>Journal of Microscopy</i> , 2011, 243, 40-46.	0.8	6
68	A new transparent Bio-MEMS for uni-axial single cell stretching. <i>Microsystem Technologies</i> , 2011, 17, 1581-1587.	1.2	11
69	Acceleration of neuronal precursors differentiation induced by substrate nanotopography. <i>Biotechnology and Bioengineering</i> , 2011, 108, 2736-2746.	1.7	58
70	Tip enhanced Raman scattering with adiabatic plasmon focusing tips. <i>Micron</i> , 2011, 42, 313-317.	1.1	15
71	Fragmentation as a Mechanism for Growth Cone Pruning and Degeneration. <i>Stem Cells and Development</i> , 2011, 20, 1031-1041.	1.1	6
72	A study on the cellular structure during stress solicitation induced by BioMEMS. , 2011, 2011, 2455-8.		1

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73	Inverted tapered pillars for mass sensing. <i>Microelectronic Engineering</i> , 2010, 87, 730-733.	1.1	10
74	Nanoscale chemical mapping using three-dimensional adiabatic compression of surface plasmon polaritons. <i>Nature Nanotechnology</i> , 2010, 5, 67-72.	15.6	352
75	Modulation of Alpha-Synuclein Aggregation by Dopamine Analogs. <i>PLoS ONE</i> , 2010, 5, e9234.	1.1	52
76	Chemical functionalization of atomically flat cantilever surfaces. <i>Microelectronic Engineering</i> , 2009, 86, 1200-1203.	1.1	1
77	Integration of confocal and atomic force microscopy images. <i>Journal of Neuroscience Methods</i> , 2009, 177, 94-107.	1.3	32
78	A morphological analysis of growth cones of DRG neurons combining Atomic Force and Confocal Microscopy. <i>Journal of Structural Biology</i> , 2009, 168, 366-377.	1.3	19
79	Structural Insights into Alternate Aggregated Prion Protein Forms. <i>Journal of Molecular Biology</i> , 2009, 393, 1033-1042.	2.0	17
80	Intrinsically aligned chemo-mechanical functionalization of twin cantilever structures. <i>Nanotechnology</i> , 2008, 19, 445502.	1.3	3
81	Asymmetrical twin cantilevers for single molecule detection. <i>Applied Physics Letters</i> , 2007, 90, 173118.	1.5	21
82	Probing Pauli blocking with shot noise in resonant tunneling diodes: Experiment and theory. <i>Physical Review B</i> , 2007, 75, .	1.1	9
83	Fabrication And Characterization Of Mn-catalyzed GaAs Nanowires. <i>AIP Conference Proceedings</i> , 2007, , .	0.3	0
84	Growth by molecular beam epitaxy and electrical characterization of GaAs nanowires. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2007, 37, 134-137.	1.3	66
85	Manganese-Induced Growth of GaAs Nanowires. <i>Nano Letters</i> , 2006, 6, 2130-2134.	4.5	61
86	X-ray induced variation of the chemistry of GaAs/AlAs oxide nanostructures. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2006, 246, 39-44.	0.6	6
87	Twin cantilevers with a nanogap for single molecule experimentation. <i>Microelectronic Engineering</i> , 2006, 83, 1309-1311.	1.1	15
88	Chemistry and formation process of Ga(Al)As oxide during local anodic oxidation nanolithography. <i>Surface Science</i> , 2006, 600, 3739-3743.	0.8	9
89	In-Plane Bandgap Engineering by Modulated Hydrogenation of Dilute Nitride Semiconductors. <i>Advanced Materials</i> , 2006, 18, 1993-1997.	11.1	51
90	Controlling interface reactivity and Schottky barrier height in Au ⁺ /ZnSe(001) junctions. <i>Journal of Vacuum Science & Technology B</i> , 2006, 24, 1259.	1.3	3

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91	Chemical composition of GaAs oxides grown by local anodic oxidation: a spatially resolved Auger study. <i>Chemical Physics Letters</i> , 2005, 402, 155-159.	1.2	17
92	GaAs Oxide Desorption under Extreme Ultraviolet Photon Flux. <i>Advanced Functional Materials</i> , 2005, 15, 587-592.	7.8	12
93	Evidence of material mixing during local anodic oxidation nanolithography. <i>Journal of Applied Physics</i> , 2005, 98, 114303.	1.1	9
94	Desorption dynamics of oxide nanostructures fabricated by local anodic oxidation nanolithography. <i>Journal of Applied Physics</i> , 2005, 97, 114324.	1.1	18
95	Magnetic field and temperature dependence of an atomic force microscope-defined quantum point contact. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2004, 22, 570.	1.6	8
96	AFM anodization studied by spectromicroscopy. <i>Nuclear Instruments & Methods in Physics Research B</i> , 2003, 200, 46-51.	0.6	2
97	High-performance planar light-emitting diodes. <i>Applied Physics Letters</i> , 2003, 82, 636-638.	1.5	23
98	Atomic force microscope anodic oxidation studied by spectroscopic microscopy. <i>Applied Physics Letters</i> , 2002, 81, 2842-2844.	1.5	37
99	MORPHOLOGY AND CHEMISTRY OF S-TREATED GaAs(001) SURFACES. <i>Surface Review and Letters</i> , 2002, 09, 413-423.	0.5	1
100	PTFE nanoemulsions as ultralow- k dielectric materials. <i>Macromolecular Symposia</i> , 2002, 179, 347-358.	0.4	6
101	PTFE nanoemulsions as ultralow- k dielectric materials. <i>Materials Science in Semiconductor Processing</i> , 2002, 5, 285-290.	1.9	11
102	Ideal unreactive metal/semiconductor interfaces: The case of Zn/ZnSe(001). <i>Physical Review B</i> , 2001, 63, .	1.1	8
103	Metal/III-V diodes engineered by means of Si interlayers: Interface reactions versus local interface dipoles. <i>Applied Physics Letters</i> , 2001, 79, 1462-1464.	1.5	0
104	Reflectionless tunneling in planar Nb/GaAs hybrid junctions. <i>Applied Physics Letters</i> , 2001, 78, 1772-1774.	1.5	9
105	Resonant Transport in Nb/GaAs/AlGaAs Heterostructures: Realization of the de Gennes-Saint-James Model. <i>Physical Review Letters</i> , 2001, 87, 216808.	2.9	29
106	Andreev reflection in engineered Al/Si/In _x Ga _{1-x} As(001) junctions. <i>The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties</i> , 2000, 80, 817-823.	0.6	0
107	Evidence of two-electron tunneling interference in Nb/InAs junctions. <i>Physical Review B</i> , 2000, 62, 9831-9834.	1.1	6
108	Tunable Schottky barrier contacts to In _x Ga _{1-x} As. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2000, 18, 2119.	1.6	6

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109	Zn _{0.85} Cd _{0.15} Se active layers on graded-composition In _x Ga _{1-x} As buffer layers. Journal of Applied Physics, 1999, 85, 8160-8169.	1.1	8
110	Ohmic versus rectifying contacts through interfacial dipoles: Al/In _x Ga _{1-x} As. Journal of Crystal Growth, 1999, 201-202, 769-772.	0.7	4
111	Lattice-matched Zn _{1-y} Cd _y Se/In _x Ga _{1-x} As(0 0 1) heterostructures. Journal of Crystal Growth, 1998, 184-185, 21-25.	0.7	1
112	Schottky barrier tunability in Al/ZnSe interfaces. Journal of Crystal Growth, 1998, 184-185, 193-198.	0.7	0
113	Truly ohmic contacts in engineered Al/Si/InGaAs(001) diodes. Applied Physics Letters, 1998, 72, 1996-1998.	1.5	11
114	Hole-assisted Zener magnetotunneling in heterostructures. Applied Physics Letters, 1998, 73, 3553-3555.	1.5	2
115	Strain and surface morphology in lattice-matched ZnSe/In _x Ga _{1-x} As heterostructures. Journal of Applied Physics, 1998, 83, 2504-2510.	1.1	10
116	Andreev reflection in Si-engineered Al/InGaAs hybrid junctions. Applied Physics Letters, 1998, 73, 3890-3892.	1.5	28
117	Al/ZnSe(100) Schottky-barrier height versus initial ZnSe surface reconstruction. Physical Review B, 1998, 57, R9431-R9434.	1.1	10
118	Oxygen diffusion in GdBa ₂ Cu ₃ O(6+y) thin films. Nuovo Cimento Della Societa Italiana Di Fisica D - Condensed Matter, Atomic, Molecular and Chemical Physics, Biophysics, 1997, 19, 1047-1052.	0.4	0
119	High-field transport in superlattices: observation of the Stark-cyclotron resonance. Superlattices and Microstructures, 1997, 22, 155-159.	1.4	7
120	Electrical characterization of engineered ZnSe _{1-x} GaAs heterojunction diodes. Journal of Crystal Growth, 1997, 175-176, 603-607.	0.7	3
121	Band offsets in Zn _{1-x} Cd _x Se/ZnSe multiple quantum wells. Journal of Applied Physics, 1996, 79, 929.	1.1	16
122	Band-offset determination in multiple quantum wells. Journal of Crystal Growth, 1996, 159, 498-501.	0.7	7
123	Thermal stability of engineered Schottky barriers in Al/Si/GaAs(001) diodes. Applied Physics Letters, 1996, 69, 1927-1929.	1.5	13
124	Low resistance graded contacts to n-type ZnSe. Applied Physics Letters, 1996, 68, 370-372.	1.5	8
125	Hot-electron multiquantum well microwave detector operating at room temperature. Applied Physics Letters, 1995, 67, 250-252.	1.5	9
126	Noise measurements in resonant tunnelling structures as a function of current and temperature. Electronics Letters, 1995, 31, 503-505.	0.5	15

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127	Deposition of $\text{MgBa}_2\text{Cu}_3\text{O}_{7-x}$ thin films by channel-spark method. Superconductor Science and Technology, 1995, 8, 160-164.	1.8	39
128	Surface plasmon on Ag(110): Observation of linear and positive dispersion and strong azimuthal anisotropy. Physical Review Letters, 1992, 69, 2122-2125.	2.9	75
129	Plasmon damping and surface interband transitions on Ag(001) and (011). Surface Science, 1992, 269-270, 560-562.	0.8	13
130	Comment on "Surface-plasmon energy and dispersion on Ag single crystals". Physical Review Letters, 1991, 67, 3197-3197.	2.9	53