

Luca Businaro

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4909584/publications.pdf>

Version: 2024-02-01

113
papers

3,731
citations

159525

30
h-index

138417

58
g-index

114
all docs

114
docs citations

114
times ranked

5967
citing authors

#	ARTICLE	IF	CITATIONS
1	Electro-Optical Classification of Pollen Grains via Microfluidics and Machine Learning. IEEE Transactions on Biomedical Engineering, 2022, 69, 921-931.	2.5	18
2	A Bayesian Approach for Coincidence Resolution in Microfluidic Impedance Cytometry. IEEE Transactions on Biomedical Engineering, 2021, 68, 340-349.	2.5	20
3	Oncoimmunology Meets Organs-on-Chip. Frontiers in Molecular Biosciences, 2021, 8, 627454.	1.6	21
4	High-throughput analysis of cell-cell crosstalk in ad hoc designed microfluidic chips for oncoimmunology applications. Methods in Enzymology, 2020, 632, 479-502.	0.4	7
5	High-throughput label-free characterization of viable, necrotic and apoptotic human lymphoma cells in a coplanar-electrode microfluidic impedance chip. Biosensors and Bioelectronics, 2020, 150, 111887.	5.3	51
6	Organ-on-chip model shows that ATP release through connexin hemichannels drives spontaneous Ca ²⁺ signaling in non-sensory cells of the greater epithelial ridge in the developing cochlea. Lab on A Chip, 2020, 20, 3011-3023.	3.1	19
7	Investigation of Bacterial Interactions Using Lab on Chips. , 2020, , .		0
8	Broadband enhancement of light-matter interaction in photonic crystal cavities integrating site-controlled quantum dots. Physical Review B, 2020, 101, .	1.1	14
9	Collective behavior of evaporating droplets on superhydrophobic surfaces. AIChE Journal, 2020, 66, e16284.	1.8	9
10	IL-33 Promotes CD11b/CD18-Mediated Adhesion of Eosinophils to Cancer Cells and Synapse-Polarized Degranulation Leading to Tumor Cell Killing. Cancers, 2019, 11, 1664.	1.7	45
11	A simple electrical approach to monitor dielectrophoretic focusing of particles flowing in a microchannel. Electrophoresis, 2019, 40, 1400-1407.	1.3	10
12	CaMKK2 in myeloid cells is a key regulator of the immune-suppressive microenvironment in breast cancer. Nature Communications, 2019, 10, 2450.	5.8	72
13	From Petri Dishes to Organ on Chip Platform: The Increasing Importance of Machine Learning and Image Analysis. Frontiers in Pharmacology, 2019, 10, 100.	1.6	26
14	High-throughput electrical position detection of single flowing particles/cells with non-spherical shape. Lab on A Chip, 2019, 19, 1818-1827.	3.1	31
15	The ENEA discharge produced plasma extreme ultraviolet source and its patterning applications. , 2019, , .		2
16	Site-Controlled Single-Photon Emitters Fabricated by Near-Field Illumination. Advanced Materials, 2018, 30, e1705450.	11.1	23
17	Aryl Sulfonates as Initiators for Extreme Ultraviolet Lithography: Applications in Epoxy-Based Hybrid Materials. ChemPhotoChem, 2018, 2, 425-432.	1.5	9
18	Electrical measurement of cross-sectional position of particles flowing through a microchannel. Microfluidics and Nanofluidics, 2018, 22, 1.	1.0	22

#	ARTICLE	IF	CITATIONS
19	A novel wiring scheme for standard chips enabling high-accuracy impedance cytometry. <i>Sensors and Actuators B: Chemical</i> , 2018, 256, 580-589.	4.0	48
20	Dissecting Effects of Anti-cancer Drugs and Cancer-Associated Fibroblasts by On-Chip Reconstitution of Immunocompetent Tumor Microenvironments. <i>Cell Reports</i> , 2018, 25, 3884-3893.e3.	2.9	118
21	Quantum Dots: Site-Controlled Single-Photon Emitters Fabricated by Near-Field Illumination (Adv.) <i>Tj ETQq1 1 0.784314 rgBT₀/Overlo</i>	11.1	0
22	Silicon single mode waveguide modulator based upon switchable Bragg reflector. , 2018, , .		0
23	A lithographic approach for quantum dot-photonic crystal nanocavity coupling in dilute nitrides. <i>Microelectronic Engineering</i> , 2017, 174, 16-19.	1.1	10
24	Coplanar electrode microfluidic chip enabling accurate sheathless impedance cytometry. <i>Lab on A Chip</i> , 2017, 17, 1158-1166.	3.1	65
25	3D Microfluidic model for evaluating immunotherapy efficacy by tracking dendritic cell behaviour toward tumor cells. <i>Scientific Reports</i> , 2017, 7, 1093.	1.6	130
26	Mitigating positional dependence in coplanar electrode Coulter-type microfluidic devices. <i>Sensors and Actuators B: Chemical</i> , 2017, 247, 580-586.	4.0	50
27	Organs on chip approach: a tool to evaluate cancer-immune cells interactions. <i>Scientific Reports</i> , 2017, 7, 12737.	1.6	69
28	Classification of M1/M2-polarized human macrophages by label-free hyperspectral reflectance confocal microscopy and multivariate analysis. <i>Scientific Reports</i> , 2017, 7, 8965.	1.6	158
29	Computationally Informed Design of a Multi-Axial Actuated Microfluidic Chip Device. <i>Scientific Reports</i> , 2017, 7, 5489.	1.6	8
30	Combining Type I Interferons and 5-Aza-2-Deoxycytidine to Improve Anti-Tumor Response against Melanoma. <i>Journal of Investigative Dermatology</i> , 2017, 137, 159-169.	0.3	60
31	Acetylated tubulin is essential for touch sensation in mice. <i>ELife</i> , 2016, 5, .	2.8	78
32	Recent advances in superhydrophobic surfaces and their relevance to biology and medicine. <i>Bioinspiration and Biomimetics</i> , 2016, 11, 011001.	1.5	44
33	Investigating Nonalcoholic Fatty Liver Disease in a Liver-on-a-Chip Microfluidic Device. <i>PLoS ONE</i> , 2016, 11, e0159729.	1.1	131
34	Single photon emitters in dilute nitrides: Towards a determinist approach of quantum dot-photonic crystal nanocavity coupling. , 2015, , .		0
35	Controlling DNA Bundle Size and Spatial Arrangement in Self-assembled Arrays on Superhydrophobic Surface. <i>Nano-Micro Letters</i> , 2015, 7, 146-151.	14.4	9
36	An integrated superhydrophobic-plasmonic biosensor for mid-infrared protein detection at the femtomole level. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 21337-21342.	1.3	27

#	ARTICLE	IF	CITATIONS
37	Chemotherapy-induced antitumor immunity requires formyl peptide receptor 1. <i>Science</i> , 2015, 350, 972-978.	6.0	367
38	A multidisciplinary study using <i>in vivo</i> tumor models and microfluidic cell-on-chip approach to explore the cross-talk between cancer and immune cells. <i>Journal of Immunotoxicology</i> , 2014, 11, 337-346.	0.9	48
39	The Gas Sensing Properties of Porphyrins-coated Laterally Grown ZnO Nanorods. <i>Procedia Engineering</i> , 2014, 87, 1039-1042.	1.2	3
40	Surface decoration of electrospun scaffolds by microcontact printing. <i>Asia-Pacific Journal of Chemical Engineering</i> , 2014, 9, 401-406.	0.8	6
41	Controlling the Cassie-to-Wenzel Transition: an Easy Route towards the Realization of Tridimensional Arrays of Biological Objects. <i>Nano-Micro Letters</i> , 2014, 6, 280-286.	14.4	14
42	Cancer-driven dynamics of immune cells in a microfluidic environment. <i>Scientific Reports</i> , 2014, 4, 6639.	1.6	68
43	Controlling the Cassie-to-Wenzel Transition: an Easy Route towards the Realization of Tridimensional Arrays of Biological Objects. <i>Nano-Micro Letters</i> , 2014, 6, 280.	14.4	1
44	Wet sample confinement by superhydrophobic patterned surfaces for combined X-ray fluorescence and X-ray phase contrast imaging. <i>Microelectronic Engineering</i> , 2013, 111, 304-309.	1.1	17
45	Optically reconfigurable structures based on surface enhanced Raman scattering in nanorods. <i>Microelectronic Engineering</i> , 2013, 111, 251-255.	1.1	5
46	Plasticity of primary microglia on micropatterned geometries and spontaneous long-distance migration in microfluidic channels. <i>BMC Neuroscience</i> , 2013, 14, 121.	0.8	21
47	Self-assembling of large ordered DNA arrays using superhydrophobic patterned surfaces. <i>Nanotechnology</i> , 2013, 24, 495302.	1.3	30
48	Fabrication of an electro-optical Bragg modulator based on plasma dispersion effect in silicon. <i>Microelectronic Engineering</i> , 2013, 105, 107-112.	1.1	5
49	Cross talk between cancer and immune cells: exploring complex dynamics in a microfluidic environment. <i>Lab on A Chip</i> , 2013, 13, 229-239.	3.1	126
50	Synchrotron radiation infrared microspectroscopy of single living cells in microfluidic devices: advantages, disadvantages and future perspectives. <i>Journal of Physics: Conference Series</i> , 2012, 359, 012007.	0.3	25
51	Nanoscale chemical mapping through plasmonic tips on AFM-based cantilevers. , 2012, , .		1
52	Mid-infrared nanoantenna arrays on silicon and CaF ₂ substrates for sensing applications. <i>Microelectronic Engineering</i> , 2012, 97, 197-200.	1.1	21
53	Optimization of microfluidic systems for IRMS long term measurement of living cells. <i>Microelectronic Engineering</i> , 2012, 98, 698-702.	1.1	23
54	Infrared Microspectroscopy of Live Cells in Microfluidic Devices (MD-IRMS): Toward a Powerful Label-Free Cell-Based Assay. <i>Analytical Chemistry</i> , 2012, 84, 4768-4775.	3.2	71

#	ARTICLE	IF	CITATIONS
55	Integrated Photonic Micro Logic Gate. Lecture Notes in Computer Science, 2011, , 1-9.	1.0	0
56	All-optical integrated micro logic gate. Microelectronics Journal, 2011, 42, 472-476.	1.1	5
57	Fabrication of a microfluidic platform for investigating dynamic biochemical processes in living samples by FTIR microspectroscopy. Microelectronic Engineering, 2010, 87, 806-809.	1.1	41
58	Experimental set-up for time resolved small angle X-ray scattering studies of nanoparticles formation using a free-jet micromixer. Nuclear Instruments & Methods in Physics Research B, 2010, 268, 329-333.	0.6	16
59	Infrared microspectroscopy of biochemical response of living cells in microfabricated devices. Vibrational Spectroscopy, 2010, 53, 6-11.	1.2	54
60	New perspectives in the generation of entangled quantum states. Journal of Modern Optics, 2009, 56, 190-195.	0.6	0
61	Miniaturized Bragg modulator on a silicon chip. Journal of Nanophotonics, 2009, 3, 031760.	0.4	3
62	Fabrication of electro optical nano modulator on silicon chip. Microelectronic Engineering, 2009, 86, 1099-1102.	1.1	12
63	Design and fabrication of large area nano-structured substrates for use in pancreatic beta-cell engineering. Microelectronic Engineering, 2009, 86, 1468-1472.	1.1	4
64	Design, fabrication and evaluation of nanoscale surface topography as a tool in directing differentiation and organisation of embryonic stem-cell-derived neural precursors. Microelectronic Engineering, 2009, 86, 1435-1438.	1.1	28
65	Free jet micromixer to study fast chemical reactions by small angle X-ray scattering. Lab on A Chip, 2009, 9, 2063.	3.1	56
66	A Hybrid Plasmonic~Photonic Nanodevice for Label-Free Detection of a Few Molecules. Nano Letters, 2008, 8, 2321-2327.	4.5	215
67	Interfacing Neurons with Carbon Nanotubes: Electrical Signal Transfer and Synaptic Stimulation in Cultured Brain Circuits. Journal of Neuroscience, 2007, 27, 6931-6936.	1.7	329
68	Metal-oxide semiconductor, field effect transistor-based microscale electro-optical multimode interference modulator on a silicon chip. Journal of Nanophotonics, 2007, 1, 011660.	0.4	3
69	Fabrication And Characterization Of Mn-catalyzed GaAs Nanowires. AIP Conference Proceedings, 2007, , .	0.3	0
70	All-optical nano modulator on a silicon chip. Optics Express, 2007, 15, 9029.	1.7	17
71	Growth by molecular beam epitaxy and electrical characterization of GaAs nanowires. Physica E: Low-Dimensional Systems and Nanostructures, 2007, 37, 134-137.	1.3	66
72	Manganese-Induced Growth of GaAs Nanowires. Nano Letters, 2006, 6, 2130-2134.	4.5	61

#	ARTICLE	IF	CITATIONS
73	<title>Wave front engineering by means of diffractive optical elements for applications in microscopy</title>. , 2006, , .		1
74	Fabrication of 3D micro and nanostructures for MEMS and MOEMS: an approach based on combined lithographies.. Journal of Physics: Conference Series, 2006, 34, 904-911.	0.3	10
75	X-ray vortices with high topological charge. Microelectronic Engineering, 2006, 83, 1360-1363.	1.1	27
76	Focused ion beam fabrication of one-dimensional photonic crystals on Si3N4/SiO2 channel waveguides. Journal of Optics, 2006, 8, S550-S553.	1.5	7
77	Progress towards tubes with regular nanopatterned inner surfaces. Journal of Vacuum Science & Technology B, 2006, 24, 3258.	1.3	5
78	Light confinement in thin film organic photovoltaic cells. , 2006, , .		7
79	Focused ion beam lithography for two dimensional array structures for photonic applications. Microelectronic Engineering, 2005, 78-79, 11-15.	1.1	62
80	Laser trapping and micro-manipulation using optical vortices. Microelectronic Engineering, 2005, 78-79, 125-131.	1.1	80
81	Cross beam lithography (FIB+EBL) and dip pen nanolithography for nanoparticle conductivity measurements. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 2806.	1.6	13
82	Three-dimensional digital scanner based on micromachined micromirror for the metrological measurement of the human ear canal. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2005, 23, 2990.	1.6	2
83	Wide-band transmittance of one-dimensional photonic crystals carved in Si3N4/SiO2 channel waveguides. Applied Physics Letters, 2005, 87, 211116.	1.5	9
84	Electromagnetically Actuated Surface Micromachined Free Standing Torsion Beam Micromirror Made by Electroplated Nickel. Japanese Journal of Applied Physics, 2004, 43, 418-423.	0.8	3
85	Three-dimensional micro- and nanostructuring by combination of nanoimprint and x-ray lithography. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 766.	1.6	12
86	X-ray lithography for micro- and nano-fabrication at ELETTRA for interdisciplinary applications. Journal of Physics Condensed Matter, 2004, 16, S3517-S3535.	0.7	22
87	<title>Design and implementation of optical tweezer arrays using diffractive optical elements</title>. , 2004, , .		0
88	X-ray lithography for 3D microfluidic applications. Microelectronic Engineering, 2004, 73-74, 870-875.	1.1	6
89	Shaping X-rays by diffractive coded nano-optics. Microelectronic Engineering, 2003, 67-68, 87-95.	1.1	8
90	Design and fabrication of on-fiber diffractive elements for fiber-waveguide coupling by means of e-beam lithography. Microelectronic Engineering, 2003, 67-68, 169-174.	1.1	30

#	ARTICLE	IF	CITATIONS
91	Fabrication of 3D metallic photonic crystals by X-ray lithography. <i>Microelectronic Engineering</i> , 2003, 67-68, 479-486.	1.1	38
92	Nanofabrication of high refractive index contrast two-dimensional photonic crystal waveguides. <i>Microelectronic Engineering</i> , 2003, 67-68, 670-675.	1.1	11
93	a-Si:H based two-dimensional photonic crystals. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003, 16, 539-543.	1.3	4
94	Second-harmonic generation measured on a GaAs photonic crystal planar waveguide. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003, 17, 402-405.	1.3	3
95	Linear optical properties and photonic mode dispersion in GaAs/AlGaAs photonic crystal slabs. <i>Physica E: Low-Dimensional Systems and Nanostructures</i> , 2003, 17, 418-419.	1.3	2
96	Resonant second-harmonic generation and mode dispersion in photonic crystal waveguides. <i>Physica Status Solidi (B): Basic Research</i> , 2003, 238, 428-431.	0.7	2
97	Nano-optical elements fabricated by e-beam and x-ray lithography. , 2003, , .		4
98	Resonant second-harmonic generation in a GaAs photonic crystal waveguide. <i>Physical Review B</i> , 2003, 68, .	1.1	44
99	Spin-wave frequency discretization in submicron rectangular prisms. <i>Journal of Applied Physics</i> , 2003, 93, 7595-7597.	1.1	15
100	X-Ray Lithography Patterning of Magnetic Materials and Their Characterization. <i>Japanese Journal of Applied Physics</i> , 2003, 42, 3802-3806.	0.8	4
101	Fabrication of Diffractive Optical Elements On-Fiber for Photonic Applications by Nanolithography. <i>Japanese Journal of Applied Physics</i> , 2003, 42, 4177-4180.	0.8	9
102	High-resolution complex structures for two-dimensional photonic crystals realized by x-ray diffraction lithography. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2003, 21, 748.	1.6	5
103	Fabrication by means of x-ray lithography of two-dimensional GaAs/AlGaAs photonic crystals with an unconventional unit cell. <i>Nanotechnology</i> , 2002, 13, 644-652.	1.3	16
104	Second-harmonic generation in reflection and diffraction by a GaAs photonic-crystal waveguide. <i>Journal of the Optical Society of America B: Optical Physics</i> , 2002, 19, 2122.	0.9	30
105	Design and fabrication of diffractive optical elements for optical tweezer arrays by means of e-beam lithography. <i>Microelectronic Engineering</i> , 2002, 61-62, 963-969.	1.1	20
106	X-ray lithography fabrication of a zone plate for X-rays in the range from 15 to 30 keV. <i>Microelectronic Engineering</i> , 2002, 61-62, 173-177.	1.1	14
107	Optical properties and photonic bands of GaAs photonic crystal waveguides with tilted square lattice. <i>European Physical Journal B</i> , 2002, 27, 79-87.	0.6	12
108	Gaussian to rectangular light beam redistribution using computer-generated phase elements. , 2001, , .		0

#	ARTICLE	IF	CITATIONS
109	LILIT beamline for soft and deep X-ray lithography at Elettra. <i>Microelectronic Engineering</i> , 2001, 57-58, 101-107.	1.1	25
110	<title>Laser diagnostics developed for conservation and restoration of cultural inheritance</title>. , 2000, 4070, 2.		3
111	Coherent laser sensor for robotic applications. , 1998, , .		0
112	Nonlinear optical response in patterned planar waveguides. , 0, , .		0
113	Dissecting Effects of Anti-cancer Drugs and of Cancer-associated Fibroblasts by On-chip Reconstitution of Immunocompetent Tumor Microenvironments. <i>SSRN Electronic Journal</i> , 0, , .	0.4	0