

Federica Caselli

List of Publications by Year in descending order

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Version: 2024-02-01

46
papers

1,153
citations

394421

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docs citations

46
times ranked

794
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.	4.2	18
2	Single-cell electrical characterization. , 2022, , 71-99.		1
3	Modified Red Blood Cells as Multimodal Standards for Benchmarking Single-Cell Cytometry and Separation Based on Electrical Physiology. Analytical Chemistry, 2022, 94, 2865-2872.	6.5	24
4	Deciphering impedance cytometry signals with neural networks. Lab on A Chip, 2022, 22, 1714-1722.	6.0	32
5	A Bayesian Approach for Coincidence Resolution in Microfluidic Impedance Cytometry. IEEE Transactions on Biomedical Engineering, 2021, 68, 340-349.	4.2	20
6	Single-cell microfluidic impedance cytometry: from raw signals to cell phenotypes using data analytics. Lab on A Chip, 2021, 21, 22-54.	6.0	109
7	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.	10.1	51
8	A neural network approach for real-time particle/cell characterization in microfluidic impedance cytometry. Analytical and Bioanalytical Chemistry, 2020, 412, 3835-3845.	3.7	62
9	Bioanalytics and higher order electrokinetics. Analytical and Bioanalytical Chemistry, 2020, 412, 3799-3800.	3.7	1
10	A simple electrical approach to monitor dielectrophoretic focusing of particles flowing in a microchannel. Electrophoresis, 2019, 40, 1400-1407.	2.4	10
11	Oil-in-Water fL Droplets by Interfacial Spontaneous Fragmentation and Their Electrical Characterization. Langmuir, 2019, 35, 4936-4945.	3.5	7
12	High-throughput electrical position detection of single flowing particles/cells with non-spherical shape. Lab on A Chip, 2019, 19, 1818-1827.	6.0	31
13	An isogeometric analysis formulation for red blood cell electro-deformation modeling. Computer Methods in Applied Mechanics and Engineering, 2018, 338, 392-411.	6.6	8
14	Electrical measurement of cross-sectional position of particles flowing through a microchannel. Microfluidics and Nanofluidics, 2018, 22, 1.	2.2	22
15	A novel wiring scheme for standard chips enabling high-accuracy impedance cytometry. Sensors and Actuators B: Chemical, 2018, 256, 580-589.	7.8	48
16	Length measurement and spatial orientation reconstruction of single nanowires. Nanotechnology, 2018, 29, 375704.	2.6	1
17	Effective computational modeling of erythrocyte electro-deformation. Meccanica, 2017, 52, 613-631.	2.0	8
18	Coplanar electrode microfluidic chip enabling accurate sheathless impedance cytometry. Lab on A Chip, 2017, 17, 1158-1166.	6.0	65

#	ARTICLE	IF	CITATIONS
19	Simulation and performance analysis of a novel high-accuracy sheathless microfluidic impedance cytometer with coplanar electrode layout. <i>Medical Engineering and Physics</i> , 2017, 48, 81-89.	1.7	18
20	Mitigating positional dependence in coplanar electrode Coulter-type microfluidic devices. <i>Sensors and Actuators B: Chemical</i> , 2017, 247, 580-586.	7.8	50
21	A corotational triangular facet shell element for geometrically nonlinear analysis of thin piezoactuated structures. <i>Composite Structures</i> , 2017, 172, 267-281.	5.8	8
22	Collisions of Rigid Solids: Three Balls in a Box. Springer Series in Solid and Structural Mechanics, 2017, , 67-77.	0.2	0
23	Numerical Investigation of a Novel Wiring Scheme Enabling Simple and Accurate Impedance Cytometry. <i>Micromachines</i> , 2017, 8, 283.	2.9	12
24	Collisions of Rigid Solids: Three Disks in a Plane. Springer Series in Solid and Structural Mechanics, 2017, , 57-66.	0.2	0
25	A mixed tetrahedral element with nodal rotations for large-displacement analysis of inelastic structures. <i>International Journal for Numerical Methods in Engineering</i> , 2016, 108, 722-749.	2.8	16
26	High accuracy particle analysis using sheathless microfluidic impedance cytometry. <i>Lab on A Chip</i> , 2016, 16, 2467-2473.	6.0	67
27	A Simple and Robust Event-Detection Algorithm for Single-Cell Impedance Cytometry. <i>IEEE Transactions on Biomedical Engineering</i> , 2016, 63, 415-422.	4.2	27
28	Corotational flat triangular elements for the nonlinear analysis of thin shell structures. <i>Proceedings in Applied Mathematics and Mechanics</i> , 2015, 15, 177-178.	0.2	1
29	State update algorithm for associative elastic-plastic pressure-insensitive materials by incremental energy minimization. <i>Frattura Ed Integrita Strutturale</i> , 2014, 8, 111-127.	0.9	7
30	A new SMA shell element based on the corotational formulation. <i>Computational Mechanics</i> , 2014, 54, 1315-1329.	4.0	17
31	A corotational flat triangular element for large strain analysis of thin shells with application to soft biological tissues. <i>Computational Mechanics</i> , 2014, 54, 847-864.	4.0	11
32	Modeling, Simulation, and Performance Evaluation of a Novel Microfluidic Impedance Cytometer for Morphology-Based Cell Discrimination. <i>Journal of Microelectromechanical Systems</i> , 2014, 23, 785-794.	2.5	20
33	An impedance-based flow microcytometer for single cell morphology discrimination. <i>Lab on A Chip</i> , 2014, 14, 2548.	6.0	68
34	Polar decomposition based corotational framework for triangular shell elements with distributed loads. <i>International Journal for Numerical Methods in Engineering</i> , 2013, 95, 499-528.	2.8	24
35	An innovative iterative thresholding algorithm for tumour segmentation and volumetric quantification on SPECT images: Monte Carlo-based methodology and validation. <i>Medical Physics</i> , 2011, 38, 3050-3061.	3.0	15
36	Performance evaluation of a region growing procedure for mammographic breast lesion identification. <i>Computer Standards and Interfaces</i> , 2011, 33, 128-135.	5.4	22

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37	Quasi-potentials of the entropy functionals for scalar conservation laws. Journal of Functional Analysis, 2010, 258, 534-558.	1.4	3
38	EIT-Inspired Microfluidic Cytometer for Single-Cell Dielectric Spectroscopy. Journal of Microelectromechanical Systems, 2010, 19, 1029-1040.	2.5	33
39	Collision of three balls on a plane. Computational Mechanics, 2009, 43, 743-754.	4.0	11
40	Mammographic Images Enhancement and Denoising for Breast Cancer Detection Using Dyadic Wavelet Processing. IEEE Transactions on Instrumentation and Measurement, 2008, 57, 1422-1430.	4.7	163
41	Adaptive Interference Rejection Filtering in On-Board Direct-Sequence / Spread-Spectrum Transponder for TT&C Applications: Analysis, Simulation & Breadboard Test Results. , 2008, , .		2
42	Wavelet packet transform processing for interference excision in TT&C Spread-Spectrum Transponder. , 2008, , .		3
43	A simple formula for the effective complex conductivity of periodic fibrous composites with interfacial impedance and applications to biological tissues. Journal Physics D: Applied Physics, 2008, 41, 115506.	2.8	16
44	SUBBAND VARIANCE COMPUTATION OF HOMOSCEDASTIC ADDITIVE NOISE IN DISCRETE DYADIC WAVELET TRANSFORM. International Journal of Wavelets, Multiresolution and Information Processing, 2008, 06, 895-906.	1.3	14
45	Mammographic Images Enhancement and Denoising for Microcalcification Detection Using Dyadic Wavelet Processing. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2006, , .	0.0	0
46	Wavelet based adaptive algorithm for mammographic images enhancement and denoising. , 2005, , .		7