Philippe Renaud

List of Publications by Year
in descending order

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289 papers	16,416 citations	19636 61 h-index	20343 116 g-index

294 all docs	294 docs citations	294 times ranked	15359 citing authors

#	Article	IF	Citations
1	Transport phenomena in nanofluidics. Reviews of Modern Physics, 2008, 80, 839-883.	16.4	1,587
2	SU-8: a low-cost negative resist for MEMS. Journal of Micromechanics and Microengineering, 1997, 7, 121-124.	1.5	965
3	Micromachined impedance spectroscopy flow cytometer for cell analysis and particle sizing. Lab on A Chip, 2001, 1, 76.	3.1	595
4	High-aspect-ratio, ultrathick, negative-tone near-UV photoresist and its applications for MEMS. Sensors and Actuators A: Physical, 1998, 64, 33-39.	2.0	501
5	Impedance spectroscopy flow cytometry: On-chip label-free cell differentiation. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2005, 65A, 124-132.	1.1	348
6	Ionic Transport Phenomena in Nanofluidics:â€‰ Experimental and Theoretical Study of the Exclusion-Enrichment Effect on a Chip. Nano Letters, 2005, 5, 1147-1155.	4.5	341
7	Dielectric spectroscopy in a micromachined flow cytometer: theoretical and practical considerations. Lab on A Chip, 2004, 4, 241.	3.1	284
8	Wireless contact lens sensor for intraocular pressure monitoring: assessment on enucleated pig eyes. Acta Ophthalmologica, 2009, 87, 433-437.	0.6	257
9	A three-dimensional multi-electrode array for multi-site stimulation and recording in acute brain slices. Journal of Neuroscience Methods, 2002, 114, 135-148.	1.3	252
10	Microdrop Printing of Hydrogel Bioinks into 3D Tissueâ€Like Geometries. Advanced Materials, 2012, 24, 391-396.	11.1	231
11	Observation of spin-polarized-electron tunneling from a ferromagnet into GaAs. Physical Review Letters, 1992, 68, 1387-1390.	2.9	228
12	Ion transport through nanoslits dominated by the effective surface charge. Applied Physics Letters, 2005, 86, 253111.	1.5	226
13	First Steps toward Noninvasive Intraocular Pressure Monitoring with a Sensing Contact Lens. , 2004, 45, 3113.		209
14	Flexible polyimide microelectrode array for in vivo recordings and current source density analysis. Biosensors and Bioelectronics, 2007, 22, 1783-1790.	5.3	199
15	Fabrication of photoplastic high-aspect ratio microparts and micromolds using SU-8 UV resist. Microsystem Technologies, 1998, 4, 143-146.	1.2	192
16	Static micromixers based on large-scale industrial mixer geometry. Lab on A Chip, 2001, 1, 56.	3.1	185
17	Optimization of microfluidic single cell trapping for long-term on-chip culture. Lab on A Chip, 2010, 10, 857.	3.1	184
18	Polyimide-based microfluidic devices. Lab on A Chip, 2001, 1, 29.	3.1	180

#	Article	IF	Citations
19	Mechanical characterization of a new high-aspect-ratio near UV-photoresist. Microelectronic Engineering, 1998, 41-42, 371-374.	1.1	164
20	Migration dynamics of breast cancer cells in a tunable 3D interstitial flow chamber. Integrative Biology (United Kingdom), 2012, 4, 401-409.	0.6	158
21	Rapid prototyping of small size objects. Rapid Prototyping Journal, 2000, 6, 259-266.	1.6	153
22	Flexible polyimide probes with microelectrodes and embedded microfluidic channels for simultaneous drug delivery and multi-channel monitoring of bioelectric activity. Biosensors and Bioelectronics, 2004, 19, 1309-1318.	5.3	153
23	3D microfabrication by combining microstereolithography and thick resist UV lithography. Sensors and Actuators A: Physical, 1999, 73, 14-23.	2.0	145
24	Micropatterning neural cell cultures in 3D with a multi-layered scaffold. Biomaterials, 2011, 32, 2088-2098.	5.7	143
25	Microfabrication of ceramic components by microstereolithography. Journal of Micromechanics and Microengineering, 2004, 14, 197-203.	1.5	140
26	Separation of platelets from other blood cells in continuous-flow by dielectrophoresis field-flow-fractionation. Biomicrofluidics, 2011, 5, 34122-341228.	1.2	138
27	A unified approach to dielectric single cell analysis: Impedance and dielectrophoretic force spectroscopy. Lab on A Chip, 2010, 10, 2216.	3.1	137
28	Demonstration of cortical recording using novel flexible polymer neural probes. Sensors and Actuators A: Physical, 2008, 143, 90-96.	2.0	134
29	Effect of the surface charge on ion transport through nanoslits. Physics of Fluids, 2005, 17, 100604.	1.6	133
30	Characterization and optimization of liquid electrodes for lateral dielectrophoresis. Lab on A Chip, 2007, 7, 355-365.	3.1	133
31	Microfluidic assisted self-assembly of chitosan based nanoparticles as drug delivery agents. Lab on A Chip, 2013, 13, 204-207.	3.1	121
32	Continuous separation of cells by balanced dielectrophoretic forces at multiple frequencies. Lab on A Chip, 2008, 8, 280-286.	3.1	119
33	Polyimide and SU-8 microfluidic devices manufactured by heat-depolymerizable sacrificial material technique. Lab on A Chip, 2004, 4, 114.	3.1	114
34	Focusing and continuous separation of cells in a microfluidic device using lateral dielectrophoresis. Sensors and Actuators B: Chemical, 2008, 132, 388-396.	4.0	111
35	In Vivo Electrical Impedance Spectroscopy of Tissue Reaction to Microelectrode Arrays. IEEE Transactions on Biomedical Engineering, 2009, 56, 1909-1918.	2.5	111
36	Onâ€Chip Fabrication of Paclitaxelâ€Loaded Chitosan Nanoparticles for Cancer Therapeutics. Advanced Functional Materials, 2014, 24, 432-441.	7.8	103

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37	The generation of rhythmic activity in dissociated cultures of rat spinal cord. European Journal of Neuroscience, 2001, 14, 191-202.	1.2	102
38	Conductive SU8 Photoresist for Microfabrication. Advanced Functional Materials, 2005, 15, 1511-1516.	7.8	102
39	Spatiotemporal characterization of rhythmic activity in rat spinal cord slice cultures. European Journal of Neuroscience, 2001, 14, 179-190.	1.2	99
40	Buried microchannels in photopolymer for delivering of solutions to neurons in a network. Sensors and Actuators B: Chemical, 1998, 48, 356-361.	4.0	98
41	A novel approach to dielectrophoresis using carbon electrodes. Electrophoresis, 2011, 32, 2385-2392.	1.3	97
42	Advances in the design of macroporous polymer scaffolds for potential applications in dentistry. Journal of Periodontal and Implant Science, 2013, 43, 251.	0.9	96
43	CMOS compatible fully integrated Mach-Zehnder interferometer in SOI technology. IEEE Photonics Technology Letters, 2000, 12, 660-662.	1.3	89
44	Gentle cell trapping and release on a microfluidic chip by in situ alginate hydrogel formation. Lab on A Chip, 2005, 5, 553.	3.1	84
45	Conducting polymer microactuators operating in air. Journal of Micromechanics and Microengineering, 2009, 19, 025017.	1.5	84
46	Cell immersion and cell dipping in microfluidic devicesElectronic supplementary information (ESI) available: cell dipping video sequence from which Fig. 7 was extracted and cell dipping video sequence with close-ups. See http://www.rsc.org/suppdata/lc/b3/b311210a/. Lab on A Chip, 2004, 4, 148.	3.1	81
47	pH-Controlled Diffusion of Proteins with Different pI Values Across a Nanochannel on a Chip. Nano Letters, 2006, 6, 543-547.	4.5	78
48	Controlled release nanoparticle-embedded coatings reduce the tissue reaction to neuroprostheses. Journal of Controlled Release, 2010, 145, 196-202.	4.8	75
49	Development of a microfluidics biosensor for agarose-bead immobilized Escherichia coli bioreporter cells for arsenite detection in aqueous samples. Lab on A Chip, 2011, 11, 2369.	3.1	75
50	Microfluidic Manipulation of Core/Shell Nanoparticles for Oral Delivery of Chemotherapeutics: A New Treatment Approach for Colorectal Cancer. Advanced Materials, 2016, 28, 4134-4141.	11.1	74
51	Intracellular Recording of Cardiomyocyte Action Potentials with Nanopatterned Volcano-Shaped Microelectrode Arrays. Nano Letters, 2019, 19, 6173-6181.	4.5	74
52	Mapping quantum-well energy profiles of III-V heterostructures by scanning-tunneling-microscope-excited luminescence. Physical Review B, 1991, 44, 6340-6343.	1.1	72
53	A miniaturized continuous dielectrophoretic cell sorter and its applications. Biomicrofluidics, 2010, 4, .	1.2	72
54	Microfluidic synthesis of chitosan-based nanoparticles for fuel cell applications. Chemical Communications, 2012, 48, 7744.	2.2	71

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55	Tunable optical filter of porous silicon as key component for a MEMS spectrometer. Journal of Microelectromechanical Systems, 2002, 11, 815-828.	1.7	70
56	Facile fabrication of nanofluidic diode membranes using anodic aluminium oxide. Nanoscale, 2012, 4, 5718.	2.8	70
57	A Compressible Scaffold for Minimally Invasive Delivery of Large Intact Neuronal Networks. Advanced Healthcare Materials, 2015, 4, 301-312.	3.9	69
58	SU8-Silver Photosensitive Nanocomposite. Advanced Engineering Materials, 2004, 6, 719-724.	1.6	68
59	An impedance-based flow microcytometer for single cell morphology discrimination. Lab on A Chip, 2014, 14, 2548.	3.1	68
60	Label-free detection of hypoxia-induced extracellular vesicle secretion from MCF-7 cells. Scientific Reports, 2018, 8, 9402.	1.6	68
61	High-aspect-ratio, ultrathick, negative-tone near-uv photoresist for MEMS applications. , 0, , .		66
62	Positional dependence of particles and cells in microfluidic electrical impedance flow cytometry: origin, challenges and opportunities. Lab on A Chip, 2020, 20, 3665-3689.	3.1	65
63	Continuous-flow electrical lysis device with integrated control by dielectrophoretic cell sorting. Lab on A Chip, 2010, 10, 2077.	3.1	64
64	Cell Culture Imaging Using Microimpedance Tomography. IEEE Transactions on Biomedical Engineering, 2008, 55, 138-146.	2.5	63
65	Dielectrophoresis of lambdaâ€ÐNA using 3D carbon electrodes. Electrophoresis, 2013, 34, 1113-1122.	1.3	62
66	On-chip extrusion of lipid vesicles and tubes through microsized apertures. Lab on A Chip, 2006, 6, 488.	3.1	61
67	SU-8 nanocomposite photoresist with low stress properties for microfabrication applications. Microelectronic Engineering, 2006, 83, 1966-1970.	1.1	61
68	Bioreporters and biosensors for arsenic detection. Biotechnological solutions for a world-wide pollution problem. Current Opinion in Biotechnology, 2013, 24, 534-541.	3.3	61
69	Dielectrophoresis-based purification of antibiotic-treated bacterial subpopulations. Lab on A Chip, 2014, 14, 1850-1857.	3.1	61
70	Organs-on-chip monitoring: sensors and other strategies. Microphysiological Systems, 0, 1, 1-1.	2.0	61
71	Coâ€pathological connected primary neurons in a microfluidic device for alzheimer studies. Biotechnology and Bioengineering, 2011, 108, 2241-2245.	1.7	59
72	Label-free detection of Babesia bovis infected red blood cells using impedance spectroscopy on a microfabricated flow cytometer. Acta Tropica, 2007, 102, 63-68.	0.9	58

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73	Dielectrophoresis-based particle exchanger for the manipulation and surface functionalization of particles. Lab on A Chip, 2008, 8, 267-273.	3.1	58
74	A simple mechanism for reliable particle sorting in a microdevice with combined electroosmotic and pressure-driven flow. Electrophoresis, 2004, 25, 3720-3729.	1.3	57
75	Two-dimensional impedance imaging of cell migration and epithelial stratification. Lab on A Chip, 2006, 6, 1155.	3.1	57
76	MyDEP: A New Computational Tool for Dielectric Modeling of Particles and Cells. Biophysical Journal, 2019, 116, 12-18.	0.2	57
77	Power-Law Behavior of Beat-Rate Variability in Monolayer Cultures of Neonatal Rat Ventricular Myocytes. Circulation Research, 2000, 86, 1140-1145.	2.0	56
78	Substrate arrays of Iridium Oxide microelectrodes for in vitro neuronal interfacing. Frontiers in Neuroengineering, 2009, 3, 1.	4.8	56
79	Temperature measurements in microfluidic systems: Heat dissipation of negative dielectrophoresis barriers. Electrophoresis, 2005, 26, 2239-2246.	1.3	55
80	Partial release and detachment of microfabricated metal and polymer structures by anodic metal dissolution. Journal of Microelectromechanical Systems, 2005, 14, 383-391.	1.7	55
81	Morphological Tuning of Polymeric Nanoparticles via Microfluidic Platform for Fuel Cell Applications. Journal of the American Chemical Society, 2012, 134, 18904-18907.	6.6	55
82	Fabrication process of high aspect ratio elastic and SU-8 structures for piezoelectric motor applications. Sensors and Actuators A: Physical, 1998, 70, 42-47.	2.0	54
83	Bubble-free electrokinetic pumping. Journal of Microelectromechanical Systems, 2002, 11, 448-453.	1.7	54
84	Astrocyteâ€“neuron co-culture on microchips based on the model of SOD mutation to mimic ALS. Integrative Biology (United Kingdom), 2013, 5, 964-975.	0.6	54
85	On-chip light sheet illumination enables diagnostic size and concentration measurements of membrane vesicles in biofluids. Nanoscale, 2014, 6, 1741-1747.	2.8	53
86	Nafion/chitosan-wrapped CNT nanocomposite membrane for high-performance direct methanol fuel cells. RSC Advances, 2013, 3, 7337.	1.7	52
87	Compact portable biosensor for arsenic detection in aqueous samples with Escherichia coli bioreporter cells. Review of Scientific Instruments, 2014, 85, 015120.	0.6	51
88	Effect of filler behavior on nanocomposite SU8 photoresist for moving micro-parts. Microelectronic Engineering, 2006, 83, 1273-1276.	1.1	50
89	Integration of 2D and 3D Thin Film Glassy Carbon Electrode Arrays for Electrochemical Dopamine Sensing in Flexible Neuroelectronic Implants. Advanced Functional Materials, 2015, 25, 78-84.	7.8	50
90	MicrofluidicâEAssisted SelfâEAssembly of Complex Dendritic Polyethylene Drug Delivery Nanocapsules. Advanced Materials, 2014, 26, 3118-3123.	11.1	49

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91	Microfluidics: A New Layer of Control for Extrusion-Based 3D Printing. Micromachines, 2018, 9, 86.	1.4	49
92	Simulation of epiretinal prostheses - Evaluation of geometrical factors affecting stimulation thresholds. Journal of NeuroEngineering and Rehabilitation, 2011, 8, 44.	2.4	48
93	Superacid-doped polybenzimidazole-decorated carbon nanotubes: a novel high-performance proton exchange nanocomposite membrane. Nanoscale, 2013, 5, 11710.	2.8	48
94	A soft contact lens with a MEMS strain gage embedded for intraocular pressure monitoring. , 0, , .		47
95	Polyimide/SU-8 catheter-tip MEMS gauge pressure sensor. Biomedical Microdevices, 2012, 14, 819-828.	1.4	47
96	Link between Alginate Reaction Front Propagation and General Reaction Diffusion Theory. Analytical Chemistry, 2011, 83, 2234-2242.	3.2	45
97	Cellulose nanowhiskers to regulate the microstructure of perfluorosulfonate ionomers for high-performance fuel cells. Journal of Materials Chemistry A, 2014, 2, 11334.	5.2	45
98	On-chip synthesis of fine-tuned bone-seeking hybrid nanoparticles. Nanomedicine, 2015, 10, 3431-3449.	1.7	43
99	Low-cost technology for multilayer electroplated parts using laminated dry film resist. Sensors and Actuators A: Physical, 1996, 53, 364-368.	2.0	42
100	Heart-on-a-Chip: An Investigation of the Influence of Static and Perfusion Conditions on Cardiac (H9C2) Cell Proliferation, Morphology, and Alignment. SLAS Technology, 2017, 22, 536-546.	1.0	41
101	Modeling and design of a low-voltage SOI suspended-gate MOSFET (SG-MOSFET) with a metal-over-gate architecture. , 0, , .		40
102	SU-8 nanocomposite coatings with improved tribological performance for MEMS. Surface and Coatings Technology, 2006, 201, 2289-2295.	2.2	40
103	Dielectrophoretic sorting on a microfabricated flow cytometer: Label free separation of Babesia bovis infected erythrocytes. Bioelectrochemistry, 2008, 73, 123-128.	2.4	40
104	A Telemetric Pressure Sensor System for Biomedical Applications. IEEE Transactions on Biomedical Engineering, 2008, 55, 1374-1381.	2.5	40
105	Label-free determination of proteinâ€“surface interaction kinetics by ionic conductance inside a nanochannel. Lab on A Chip, 2009, 9, 319-324.	3.1	40
106	A Simple and Reliable PDMS and SU-8 Irreversible Bonding Method and Its Application on a Microfluidic-MEA Device for Neuroscience Research. Micromachines, 2015, 6, 1923-1934.	1.4	39
107	Additive manufacturing of hierarchical injectable scaffolds for tissue engineering. Acta Biomaterialia, 2018, 76, 71-79.	4.1	39
108	Characterization of a novel impedance cytometer design and its integration with lateral focusing by dielectrophoresis. Lab on A Chip, 2012, 12, 4344.	3.1	38

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109	Field effect modulated nanofluidic diode membrane based on Al2O3/W heterogeneous nanopore arrays. Applied Physics Letters, 2013, 102, 213108.	1.5	37
110	Microstereolithography: a new process to build complex 3D objects. , 1999, , .		36
111	Impedance-based real-time position sensor for lab-on-a-chip devices. Lab on A Chip, 2018, 18, 818-831.	3.1	36
112	Ion beam etching redeposition for 3D multimaterial nanostructure manufacturing. Microsystems and Nanoengineering, 2019, 5, 11.	3.4	36
113	Fabrication process of high aspect ratio elastic structures for piezoelectric motor applications. , 0, , .		35
114	Combining microstereolithography and thick resist UV lithography for 3D microfabrication. , 0, , .		35
115	A high-performance silicon micropump for disposable drug delivery systems. , 0, , .		35
116	Rapid, Sensitive and Real-Time Multiplexing Platform for the Analysis of Protein and Nucleic-Acid Biomarkers. Analytical Chemistry, 2015, 87, 1582-1589.	3.2	35
117	An improved model for predicting electrical conductance in nanochannels. Physical Chemistry Chemical Physics, 2015, 17, 4160-4167.	1.3	35
118	Distinguishing drug-induced minor morphological changes from major cellular damage via label-free impedimetric toxicity screening. Lab on A Chip, 2011, 11, 2352.	3.1	34
119	Label-Free Recognition of Drug Resistance via Impedimetric Screening of Breast Cancer Cells. PLoS ONE, 2013, 8, e57423.	1.1	34
120	Biâ€directional ACET micropump for onâ€chip biological applications. Electrophoresis, 2016, 37, 719-726.	1.3	34
121	High aspect ratio, 3D structuring of photoresist materials by ion beam LIGA. Microelectronic Engineering, 2003, 67-68, 96-103.	1.1	33
122	Cell viability assessment by flow cytometry using yeast as cell model. Sensors and Actuators B: Chemical, 2011, 154, 160-163.	4.0	33
123	Multiple-frequency impedance measurements in continuous flow for automated evaluation of yeast cell lysis. Sensors and Actuators B: Chemical, 2012, 170, 2-6.	4.0	33
124	Very High Throughput Electrical Cell Lysis and Extraction of Intracellular Compounds Using 3D Carbon Electrodes in Lab-on-a-Chip Devices. Micromachines, 2012, 3, 574-581.	1.4	33
125	Temperature Sensitivity of Nanochannel Electrical Conductance. ACS Nano, 2015, 9, 4563-4571.	7.3	33
126	A simple pneumatic setup for driving microfluidics. Lab on A Chip, 2007, 7, 420-422.	3.1	32

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127	Bipolar resistivity profiling of 3D tissue culture. Biosensors and Bioelectronics, 2007, 22, 789-796.	5.3	32
128	Tracking and synchronization of the yeast cell cycle using dielectrophoretic opacity. Lab on A Chip, 2011, 11, 1754.	3.1	32
129	Multimodal stimulus coding by a gustatory sensory neuron in Drosophila larvae. Nature Communications, 2016, 7, 10687.	5.8	32
130	Ionic nanopeapods: Next-generation proton conducting membranes based on phosphotungstic acid filled carbon nanotube. Nano Energy, 2016, 23, 114-121.	8.2	32
131	How to improve the sensitivity of coplanar electrodes and micro channel design in electrical impedance flow cytometry: a study. Microfluidics and Nanofluidics, 2019, 23, 1.	1.0	32
132	BioMEMS for medicine: On-chip cell characterization and implantable microelectrodes. Solid-State Electronics, 2006, 50, 551-557.	0.8	31
133	Subretinal electrode implantation in the P23H rat for chronic stimulations. British Journal of Ophthalmology, 2006, 90, 1183-1187.	2.1	31
134	Direct measurement of effective diffusion coefficients in nanochannels using steady-state dispersion effects. Applied Physics Letters, 2007, 91, .	1.5	30
135	Magnetically Aligned Nanodomains: Application in High-Performance Ion Conductive Membranes. ACS Applied Materials & Interfaces, 2014, 6, 7099-7107.	4.0	30
136	Two steps micromoulding and photopolymer high-aspect ratio structuring for applications in piezoelectric motor components. Microsystem Technologies, 1998, 4, 147-150.	1.2	29
137	Materials for neural interfaces. MRS Bulletin, 2012, 37, 557-561.	1.7	29
138	Direct Observation of Transitions between Surface-Dominated and Bulk Diffusion Regimes in Nanochannels. Analytical Chemistry, 2009, 81, 5407-5412.	3.2	28
139	Synergistic NGF/B27 Gradients Position Synapses Heterogeneously in 3D Micropatterned Neural Cultures. PLoS ONE, 2011, 6, e26187.	1.1	28
140	Microfluidic patterning of alginate hydrogels. Biointerphases, 2007, 2, 73-79.	0.6	27
141	Instrumented Knee Prosthesis for Force and Kinematics Measurements. IEEE Transactions on Automation Science and Engineering, 2013, 10, 615-624.	3.4	27
142	Optimizing Parylene C Adhesion for MEMS Processes: Potassium Hydroxide Wet Etching. Journal of Microelectromechanical Systems, 2013, 22, 855-864.	1.7	26
143	In vivo neurochemical measurements in cerebral tissues using a droplet-based monitoring system. Nature Communications, 2017, 8, 1239.	5.8	26
144	Pore Size Manipulation in 3D Printed Cryogels Enables Selective Cell Seeding. Advanced Materials Technologies, 2018, 3, 1700340.	3.0	26

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145	Modification of PDMS to fabricate PLGA microparticles by a double emulsion method in a single microfluidic device. Lab on A Chip, 2016, 16, 2596-2600.	3.1	25
146	Biotechnologies to tackle the challenge of neoantigen identification. Current Opinion in Biotechnology, 2020, 65, 52-59.	3.3	25
147	Biochip with E. coli bacteria for detection of arsenic in drinking water. Procedia Chemistry, 2009, 1, 1003-1006.	0.7	24
148	Optical Microscanners and Microspectrometers using Thermal Bimorph Actuators. Microsystems, 2002, , .	0.3	24
149	Microstereolithography: concepts and applications. , 0, , .		23
150	Resistivity probing of multi-layered tissue phantoms using microelectrodes. Physiological Measurement, 2004, 25, 645-658.	1.2	23
151	Neural probe combining microelectrodes and a droplet-based microdialysis collection system for high temporal resolution sampling. Lab on A Chip, 2016, 16, 917-924.	3.1	23
152	Direct localised measurement of electrical resistivity profile in rat and embryonic chick retinas using a microprobe. Journal of Electrical Bioimpedance, 2010, 1, 84-92.	0.5	23
153	Ultrathin Alumina Membranes as Scaffold for Epithelial Cell Culture from the Intestine of Rainbow Trout. ACS Applied Materials & Interfaces, 2017, 9, 9496-9505.	4.0	22
154	Separation of blood microsamples by exploiting sedimentation at the microscale. Scientific Reports, 2018, 8, 14101.	1.6	22
155	3D micromixers-downscaling large scale industrial static mixers. , 0, , .		21
156	Study of micro-glow discharges as ion sources for ion mobility spectrometry. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 1570.	1.6	21
157	Continuous sampling and analysis by on-chip liquid/solid chromatography. Sensors and Actuators B: Chemical, 2007, 123, 1133-1141.	4.0	21
158	Fluorineâ€Based Plasma Treatment of Biocompatible Silicone Elastomer: The Effect of Temperature on Etch Rate and Surface Properties. Plasma Processes and Polymers, 2008, 5, 246-255.	1.6	21
159	Increasing PCR sensitivity by removal of polymerase inhibitors in environmental samples by using dielectrophoresis. Biosensors and Bioelectronics, 2013, 43, 297-303.	5.3	21
160	Dielectrophoresis as a single cell characterization method for bacteria. Biomedical Physics and Engineering Express, 2017, 3, 015005.	0.6	21
161	An active microphotodiode array of oscillating pixels for retinal stimulation. Sensors and Actuators A: Physical, 2004, 110, 11-17.	2.0	20
162	Modeling, Simulation, and Performance Evaluation of a Novel Microfluidic Impedance Cytometer for Morphology-Based Cell Discrimination. Journal of Microelectromechanical Systems, 2014, 23, 785-794.	1.7	20

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163	Fabrication of thermo-responsive nano-valve by grafting-to in melt of poly(N-isopropylacrylamide) onto nanoporous silicon nitride membranes. Journal of Membrane Science, 2014, 468, 118-125.	4.1	20
164	Fish-gut-on-chip: development of a microfluidic bioreactor to study the role of the fish intestinein vitro. Lab on A Chip, 2019, 19, 3268-3276.	3.1	19
165	Dielectrophoresisâ€assisted creation of cell aggregates under flow conditions using planar electrodes. Electrophoresis, 2019, 40, 1498-1509.	1.3	19
166	Fabrication of vertical digital silicon optical micromirrors on suspended electrode for guided-wave optical switching applications. Sensors and Actuators A: Physical, 2005, 123-124, 570-583.	2.0	18
167	Comment on â€œAC frequency characteristics of coplanar impedance sensors as design parametersâ€•by Jongin Hong, Dae Sung Yoon, Sung Kwan Kim, Tae Song Kim, Sanghyo Kim, Eugene Y. Pak and Kwangsoo No, Lab Chip, 2005, 5, 270. Lab on A Chip, 2005, 5, 1416.	3.1	18
168	Micropatterned surfaces of PDMS as growth templates for HEK 293 cells. Biomedical Microdevices, 2007, 9, 475-485.	1.4	18
169	Nafion/benzotriazole functionalized montmorillonite nanocomposites: novel high-performance proton exchange membranes. RSC Advances, 2013, 3, 19357.	1.7	18
170	Toward Microfluidic Labelâ€Free Isolation and Enumeration of Circulating Tumor Cells from Blood Samples. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2019, 95, 1085-1095.	1.1	18
171	Effect of input voltage frequency on the distribution of electrical stresses on the cell surface based on single-cell dielectrophoresis analysis. Scientific Reports, 2020, 10, 68.	1.6	18
172	Microstereolithography: a Review. Materials Research Society Symposia Proceedings, 2002, 758, 111.	0.1	17
173	Silicon sacrificial layer dry etching (SSLDE) for free-standing RF MEMS architectures. , 0, , .		17
174	Microfluidic hydrogel layers with multiple gradients to stimulate and perfuse three-dimensional neuronal cell cultures. Procedia Chemistry, 2009, 1, 369-372.	0.7	17
175	Simulations to study spatial extent of stimulation and effect of electrodeâ€“tissue gap in subretinal implants. Medical Engineering and Physics, 2011, 33, 755-763.	0.8	17
176	A microfluidic approach to synthesizing high-performance microfibers with tunable anhydrous proton conductivity. Lab on A Chip, 2013, 13, 4549.	3.1	17
177	CMOS pixels for subretinal implantable prothesis. IEEE Sensors Journal, 2005, 5, 32-37.	2.4	16
178	Polybenzimidazoleâ€decorated carbon nanotube: A highâ€performance proton conductor. Physica Status Solidi - Rapid Research Letters, 2012, 6, 318-320.	1.2	16
179	Nanovolcano microelectrode arrays: toward long-term on-demand registration of transmembrane action potentials by controlled electroporation. Microsystems and Nanoengineering, 2020, 6, 67.	3.4	16
180	Photo-Polymer Microchannel Technologies and Applications. , 1998, , 17-22.		16

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181	Enclosed Electronic System for Force Measurements in Knee Implants. Sensors, 2014, 14, 15009-15021.	2.1	15
182	Composite hydrogel-loaded alumina membranes for nanofluidic molecular filtration. Journal of Membrane Science, 2015, 477, 151-156.	4.1	15
183	A reproducible method for Î¼m precision alignment of PDMS microchannels with on-chip electrodes using a mask aligner. Biomicrofluidics, 2017, 11, 064111.	1.2	15
184	Microfluidic-assisted bioprinting of tissues and organoids at high cell concentrations. Biofabrication, 2021, 13, 025006.	3.7	15
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