Philippe Renaud

List of Publications by Year in Descending Order

275 papers	13,392 citations	57 h-index	107 g-index
294 ext. papers	15,003 ext. citations	5.9 avg, IF	6.46 L-index

#	Paper	IF	Citations
275	Impinging planar jets: hysteretic behaviour and origin of the self-sustained oscillations. *Journal of Fluid Mechanics*, **2021**, 913,	3.7	3
274	Introduction to microfluidics **2021**, 3-17		0
273	An integrated microfluidic device for stem cell differentiation based on cell-imprinted substrate designed for cartilage regeneration in a rabbit model. *Materials Science and Engineering C*, **2021**, 121, 111794	8.3	3
272	Planar hydrodynamic traps and buried channels for bead and cell trapping and releasing. *Lab on A Chip*, **2021**, 21, 3686-3694	7.2	1
271	In-flow electrochemical detection of chemicals in droplets with pyrolysed photoresist electrodes: application as a module for quantification of microsampled dopamine. *Lab on A Chip*, **2021**, 21, 3328-3337	7.2	0
270	Volcano-Shaped Scanning Probe Microscopy Probe for Combined Force-Electrogram Recordings from Excitable Cells. *Nano Letters*, **2020**, 20, 4520-4529	11.5	4
269	Impedance-Based Single-Cell Pipetting. *SLAS Technology*, **2020**, 25, 222-233	3	
268	Traceable Impedance-Based Dispensing and Cloning of Living Single Cells. *SLAS Technology*, **2020**, 25, 215-221	3	1
267	Biotechnologies to tackle the challenge of neoantigen identification. *Current Opinion in Biotechnology*, **2020**, 65, 52-59	11.4	18
266	Feedback-free microfluidic oscillator with impinging jets. *Physical Review Fluids*, **2020**, 5,	2.8	7
265	Swinging jets. *Physical Review Fluids*, **2020**, 5,	2.8	1
264	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	4.9	8
263	Microstereolithography **2020**, 25-56		1
262	Fabrication of clamped-clamped beam resonators with embedded fluidic nanochannel. *Microelectronic Engineering*, **2020**, 231, 111395	2.5	1
261	Positional dependence of particles and cells in microfluidic electrical impedance flow cytometry: origin, challenges and opportunities. *Lab on A Chip*, **2020**, 20, 3665-3689	7.2	27
260	Nanovolcano microelectrode arrays: toward long-term on-demand registration of transmembrane action potentials by controlled electroporation. *Microsystems and Nanoengineering*, **2020**, 6, 67	7.7	5
259	Microfluidic-assisted bioprinting of tissues and organoids at high cell concentrations. *Biofabrication*, **2020**,	10.5	6

258	Fish-gut-on-chip: development of a microfluidic bioreactor to study the role of the fish intestine in vitro. *Lab on A Chip*, **2019**, 19, 3268-3276	7.2	16
257	Ion beam etching redeposition for 3D multimaterial nanostructure manufacturing. *Microsystems and Nanoengineering*, **2019**, 5, 11	7.7	17
256	Micropipette calibration by differential pressure measurements. *Measurement Science and Technology*, **2019**, 30, 105003	2	1
255	Efficacy of pulsed electromagnetic fields and electromagnetic fields tuned to the ion cyclotron resonance frequency of Ca on chondrogenic differentiation. *Journal of Tissue Engineering and Regenerative Medicine*, **2019**, 13, 799-811	4.4	5
254	Dielectrophoresis-assisted creation of cell aggregates under flow conditions using planar electrodes. *Electrophoresis*, **2019**, 40, 1498-1509	3.6	13
253	Intracellular Recording of Cardiomyocyte Action Potentials with Nanopatterned Volcano-Shaped Microelectrode Arrays. *Nano Letters*, **2019**, 19, 6173-6181	11.5	39
252	Improving a fish intestinal barrier model by combining two rainbow trout cell lines: epithelial RTgutGC and fibroblastic RTgutF. *Cytotechnology*, **2019**, 71, 835-848	2.2	7
251	Toward Microfluidic Label-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	4.6	10
250	Microfluidic device performing on flow study of serial cell-cell interactions of two cell populations.. *RSC Advances*, **2019**, 9, 41066-41073	3.7	3
249	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	2.8	20
248	MyDEP: A New Computational Tool for Dielectric Modeling of Particles and Cells. *Biophysical Journal*, **2019**, 116, 12-18	2.9	28
247	Impedance-based real-time position sensor for lab-on-a-chip devices. *Lab on A Chip*, **2018**, 18, 818-831	7.2	25
246	Pore Size Manipulation in 3D Printed Cryogels Enables Selective Cell Seeding. *Advanced Materials Technologies*, **2018**, 3, 1700340	6.8	19
245	Microfluidics: A New Layer of Control for Extrusion-Based 3D Printing. *Micromachines*, **2018**, 9,	3.3	39
244	Additive manufacturing of hierarchical injectable scaffolds for tissue engineering. *Acta Biomaterialia*, **2018**, 76, 71-79	10.8	28
243	Label-free detection of hypoxia-induced extracellular vesicle secretion from MCF-7 cells. *Scientific Reports*, **2018**, 8, 9402	4.9	45
242	Organs-on-chip monitoring: sensors and other strategies. *Microphysiological Systems*, **2018**, 1, 1-1	1.3	38
241	Separation of blood microsamples by exploiting sedimentation at the microscale. *Scientific Reports*, **2018**, 8, 14101	4.9	13

240	Dielectrophoresis as a single cell characterization method for bacteria. *Biomedical Physics and Engineering Express*, **2017**, 3, 015005	1.5	15
239	Ultrathin Alumina Membranes as Scaffold for Epithelial Cell Culture from the Intestine of Rainbow Trout. *ACS Applied Materials & Interfaces*, **2017**, 9, 9496-9505	9.5	14
238	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	3	33
237	Multimaterial Nanoporous Membranes Shaped through High Aspect-Ratio Sacrificial Silicon Nanostructures. *ACS Omega*, **2017**, 2, 2387-2394	3.9	1
236	In vivo neurochemical measurements in cerebral tissues using a droplet-based monitoring system. *Nature Communications*, **2017**, 8, 1239	17.4	14
235	A reproducible method for m precision alignment of PDMS microchannels with on-chip electrodes using a mask aligner. *Biomicrofluidics*, **2017**, 11, 064111	3.2	7
234	Microstereolithography **2016**, 20-44		5
233	Biomimetic surface patterning for long-term transmembrane access. *Scientific Reports*, **2016**, 6, 32485	4.9	9
232	Microfluidic Manipulation of Core/Shell Nanoparticles for Oral Delivery of Chemotherapeutics: A New Treatment Approach for Colorectal Cancer. *Advanced Materials*, **2016**, 28, 4134-41	24	56
231	Modification of PDMS to fabricate PLGA microparticles by a double emulsion method in a single microfluidic device. *Lab on A Chip*, **2016**, 16, 2596-600	7.2	20
230	Bi-directional ACET micropump for on-chip biological applications. *Electrophoresis*, **2016**, 37, 719-26	3.6	28
229	Ionic nanopeapods: Next-generation proton conducting membranes based on phosphotungstic acid filled carbon nanotube. *Nano Energy*, **2016**, 23, 114-121	17.1	24
228	Neural probe combining microelectrodes and a droplet-based microdialysis collection system for high temporal resolution sampling. *Lab on A Chip*, **2016**, 16, 917-24	7.2	18
227	An automated microreactor for semi-continuous biosensor measurements. *Lab on A Chip*, **2016**, 16, 1383-92	7.2	11
226	Multimodal stimulus coding by a gustatory sensory neuron in Drosophila larvae. *Nature Communications*, **2016**, 7, 10687	17.4	20
225	Rapid, sensitive and real-time multiplexing platform for the analysis of protein and nucleic-acid biomarkers. *Analytical Chemistry*, **2015**, 87, 1582-9	7.8	25
224	Detection of Alzheimer's disease amyloid-beta plaque deposition by deep brain impedance profiling. *Journal of Neural Engineering*, **2015**, 12, 024001	5	7
223	Temperature sensitivity of nanochannel electrical conductance. *ACS Nano*, **2015**, 9, 4563-71	16.7	26

222	Thermal control of ionic transport and fluid flow in nanofluidic channels. *Nanoscale*, **2015**, 7, 18799-804	7.7	11
221	On-chip synthesis of fine-tuned bone-seeking hybrid nanoparticles. *Nanomedicine*, **2015**, 10, 3431-49	5.6	34
220	An improved model for predicting electrical conductance in nanochannels. *Physical Chemistry Chemical Physics*, **2015**, 17, 4160-7	3.6	29
219	A compressible scaffold for minimally invasive delivery of large intact neuronal networks. *Advanced Healthcare Materials*, **2015**, 4, 301-12	10.1	52
218	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	15.6	41
217	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	3.3	29
216	Molecular Dynamics and Monte Carlo simulations resolve apparent diffusion rate differences for proteins confined in nanochannels. *Chemical Physics*, **2015**, 457, 19-27	2.3	4
215	Composite hydrogel-loaded alumina membranes for nanofluidic molecular filtration. *Journal of Membrane Science*, **2015**, 477, 151-156	9.6	12
214	Compartmentalized Microfluidics for In Vitro Alzheimer□ Disease Studies. *Neuromethods*, **2015**, 197-215	0.4	5
213	Compact portable biosensor for arsenic detection in aqueous samples with Escherichia coli bioreporter cells. *Review of Scientific Instruments*, **2014**, 85, 015120	1.7	38
212	On-chip light sheet illumination enables diagnostic size and concentration measurements of membrane vesicles in biofluids. *Nanoscale*, **2014**, 6, 1741-7	7.7	39
211	. *Journal of Microelectromechanical Systems*, **2014**, 23, 785-794	2.5	16
210	Cellulose nanowhiskers to regulate the microstructure of perfluorosulfonate ionomers for high-performance fuel cells. *Journal of Materials Chemistry A*, **2014**, 2, 11334	13	38
209	Magnetically aligned nanodomains: application in high-performance ion conductive membranes. *ACS Applied Materials & Interfaces*, **2014**, 6, 7099-107	9.5	22
208	An impedance-based flow microcytometer for single cell morphology discrimination. *Lab on A Chip*, **2014**, 14, 2548-55	7.2	57
207	Microfluidic-assisted self-assembly of complex dendritic polyethylene drug delivery nanocapsules. *Advanced Materials*, **2014**, 26, 3118-23	24	41
206	Dielectrophoresis-based purification of antibiotic-treated bacterial subpopulations. *Lab on A Chip*, **2014**, 14, 1850-7	7.2	50
205	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	9.6	20

204	Biomimetic Pieris rapae Nanostructure and Its Use as a Simple Sucrose Sensor. *Micromachines*, **2014**, 5, 216-227	3.3	1
203	SU-8 as a Material for Microfabricated Particle Physics Detectors. *Micromachines*, **2014**, 5, 594-606	3.3	1
202	Enclosed electronic system for force measurements in knee implants. *Sensors*, **2014**, 14, 15009-21	3.8	12
201	Implantable and wearable measurement system for smart knee prosthesis **2014**,		2
200	Scintillation detectors based on silicon microfluidic channels. *Journal of Instrumentation*, **2014**, 9, C01019-C01019	1	3
199	Accurate resistivity mouse brain mapping using microelectrode arrays. *Biosensors and Bioelectronics* , **2014**, 60, 143-53	11.8	6
198	Smart instrumentation for determination of ligament stiffness and ligament balance in total knee arthroplasty. *Medical Engineering and Physics*, **2014**, 36, 721-5	2.4	1
197	On-Chip Fabrication of Paclitaxel-Loaded Chitosan Nanoparticles for Cancer Therapeutics. *Advanced Functional Materials*, **2014**, 24, 432-441	15.6	82
196	Superacid-doped polybenzimidazole-decorated carbon nanotubes: a novel high-performance proton exchange nanocomposite membrane. *Nanoscale*, **2013**, 5, 11710-7	7.7	39
195	Dielectrophoresis of lambda-DNA using 3D carbon electrodes. *Electrophoresis*, **2013**, 34, 1113-22	3.6	51
194	A microfluidic approach to synthesizing high-performance microfibers with tunable anhydrous proton conductivity. *Lab on A Chip*, **2013**, 13, 4549-53	7.2	14
193	Design and test of a MEMS strain-sensing device for monitoring artificial knee implants. *Biomedical Microdevices*, **2013**, 15, 831-9	3.7	11
192	Bioreporters and biosensors for arsenic detection. Biotechnological solutions for a world-wide pollution problem. *Current Opinion in Biotechnology*, **2013**, 24, 534-41	11.4	52
191	Instrumented Knee Prosthesis for Force and Kinematics Measurements. *IEEE Transactions on Automation Science and Engineering*, **2013**, 10, 615-624	4.9	20
190	Microfluidic assisted self-assembly of chitosan based nanoparticles as drug delivery agents. *Lab on A Chip*, **2013**, 13, 204-7	7.2	106
189	Increasing PCR sensitivity by removal of polymerase inhibitors in environmental samples by using dielectrophoresis. *Biosensors and Bioelectronics*, **2013**, 43, 297-303	11.8	16
188	Optimizing Parylene C Adhesion for MEMS Processes: Potassium Hydroxide Wet Etching. *Journal of Microelectromechanical Systems*, **2013**, 22, 855-864	2.5	23
187	Astrocyte-neuron co-culture on microchips based on the model of SOD mutation to mimic ALS. *Integrative Biology (United Kingdom)*, **2013**, 5, 964-75	3.7	43

186	Nafion/chitosan-wrapped CNT nanocomposite membrane for high-performance direct methanol fuel cells. *RSC Advances*, **2013**, 3, 7337	3.7	42
185	Field effect modulated nanofluidic diode membrane based on Al2O3/W heterogeneous nanopore arrays. *Applied Physics Letters*, **2013**, 102, 213108	3.4	30
184	Nafion/benzotriazole functionalized montmorillonite nanocomposites: novel high-performance proton exchange membranes. *RSC Advances*, **2013**, 3, 19357	3.7	13
183	Long-term in vivo impedance changes of subretinal microelectrodes implanted in dystrophic P23H rats. *International Journal of Artificial Organs*, **2013**, 36, 612-9	1.9	4
182	Label-free recognition of drug resistance via impedimetric screening of breast cancer cells. *PLoS ONE*, **2013**, 8, e57423	3.7	27
181	Advances in the design of macroporous polymer scaffolds for potential applications in dentistry. *Journal of Periodontal and Implant Science*, **2013**, 43, 251-61	2	78
180	Microelectrode-based dielectric spectroscopy of glucose effect on erythrocytes. *Bioelectrochemistry*, **2012**, 85, 14-20	5.6	8
179	In situ evaluation of single-cell lysis by cytosol extraction observation through fluorescence decay and dielectrophoretic trapping time. *Sensors and Actuators B: Chemical*, **2012**, 166-167, 907-912	8.5	4
178	Microdrop printing of hydrogel bioinks into 3D tissue-like geometries. *Advanced Materials*, **2012**, 24, 391-6	24	197
177	Morphological tuning of polymeric nanoparticles via microfluidic platform for fuel cell applications. *Journal of the American Chemical Society*, **2012**, 134, 18904-7	16.4	49
176	Facile fabrication of nanofluidic diode membranes using anodic aluminium oxide. *Nanoscale*, **2012**, 4, 5718-23	7.7	62
175	A calcium ion-selective electrode array for monitoring the activity of HepG2/C3As in a microchannel. *Sensors and Actuators B: Chemical*, **2012**, 174, 473-477	8.5	4
174	A microfluidic-based frequency-multiplexing impedance sensor (FMIS). *Lab on A Chip*, **2012**, 12, 2712-8	7.2	10
173	Migration dynamics of breast cancer cells in a tunable 3D interstitial flow chamber. *Integrative Biology (United Kingdom)*, **2012**, 4, 401-9	3.7	132
172	Materials for neural interfaces. *MRS Bulletin*, **2012**, 37, 557-561	3.2	27
171	Microfluidic synthesis of chitosan-based nanoparticles for fuel cell applications. *Chemical Communications*, **2012**, 48, 7744-6	5.8	61
170	Polyimide/SU-8 catheter-tip MEMS gauge pressure sensor. *Biomedical Microdevices*, **2012**, 14, 819-28	3.7	30
169	Multiple-frequency impedance measurements in continuous flow for automated evaluation of yeast cell lysis. *Sensors and Actuators B: Chemical*, **2012**, 170, 2-6	8.5	31

168	Characterization of a novel impedance cytometer design and its integration with lateral focusing by dielectrophoresis. *Lab on A Chip*, **2012**, 12, 4344-9	7.2	31
167	High-Throughput Micro-Debubblers for Bubble Removal with Sub-Microliter Dead Volume. *Micromachines*, **2012**, 3, 218-224	3.3	5
166	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	3.3	27
165	Polybenzimidazole-decorated carbon nanotube: A high-performance proton conductor. *Physica Status Solidi - Rapid Research Letters*, **2012**, 6, 318-320	2.5	16
164	Microstereolithography **2011**, 81-112		11
163	Tracking and synchronization of the yeast cell cycle using dielectrophoretic opacity. *Lab on A Chip*, **2011**, 11, 1754-60	7.2	27
162	Distinguishing drug-induced minor morphological changes from major cellular damage via label-free impedimetric toxicity screening. *Lab on A Chip*, **2011**, 11, 2352-61	7.2	29
161	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, 2369-77	7.2	63
160	Development and Studies of Novel Microfabricated Radiation Hard Scintillation Detectors With High Spatial Resolution. *IEEE Transactions on Nuclear Science*, **2011**, 58, 1177-1180	1.7	1
159	Synergistic NGF/B27 gradients position synapses heterogeneously in 3D micropatterned neural cultures. *PLoS ONE*, **2011**, 6, e26187	3.7	28
158	Simulation of epiretinal prostheses - evaluation of geometrical factors affecting stimulation thresholds. *Journal of NeuroEngineering and Rehabilitation*, **2011**, 8, 44	5.3	37
157	A novel approach to dielectrophoresis using carbon electrodes. *Electrophoresis*, **2011**, 32, 2385-92	3.6	80
156	Co-pathological connected primary neurons in a microfluidic device for Alzheimer studies. *Biotechnology and Bioengineering*, **2011**, 108, 2241-5	4.9	52
155	Instrumented prosthesis for knee implants monitoring **2011**,		12
154	Link between alginate reaction front propagation and general reaction diffusion theory. *Analytical Chemistry*, **2011**, 83, 2234-42	7.8	38
153	Micropatterning neural cell cultures in 3D with a multi-layered scaffold. *Biomaterials*, **2011**, 32, 2088-98	15.6	120
152	Simulations to study spatial extent of stimulation and effect of electrode-tissue gap in subretinal implants. *Medical Engineering and Physics*, **2011**, 33, 755-63	2.4	13
151	Low material budget microfabricated cooling devices for particle detectors and front-end electronics. *Nuclear Physics, Section B, Proceedings Supplements*, **2011**, 215, 349-352		10

150	Cell viability assessment by flow cytometry using yeast as cell model. *Sensors and Actuators B: Chemical*, **2011**, 154, 160-163	8.5	28
149	Separation of platelets from other blood cells in continuous-flow by dielectrophoresis field-flow-fractionation. *Biomicrofluidics*, **2011**, 5, 34122-341228	3.2	98
148	Miniaturized bacterial biosensor system for arsenic detection holds great promise for making integrated measurement device. *Bioengineered Bugs*, **2011**, 2, 296-8		9
147	Polyimide foam-like microstructures: technology and mechanical properties. *Journal of Micromechanics and Microengineering*, **2011**, 21, 105016	2	2
146	A miniaturized continuous dielectrophoretic cell sorter and its applications. *Biomicrofluidics*, **2010**, 4,	3.2	64
145	A unified approach to dielectric single cell analysis: impedance and dielectrophoretic force spectroscopy. *Lab on A Chip*, **2010**, 10, 2216-25	7.2	105
144	Continuous-flow electrical lysis device with integrated control by dielectrophoretic cell sorting. *Lab on A Chip*, **2010**, 10, 2077-82	7.2	47
143	Fluidic microstructuring of alginate hydrogels for the single cell niche. *Lab on A Chip*, **2010**, 10, 2771-7	7.2	11
142	Optimization of microfluidic single cell trapping for long-term on-chip culture. *Lab on A Chip*, **2010**, 10, 857-63	7.2	146
141	Impedance spectroscopy and optical analysis of single biological cells and organisms in microsystems. *Methods in Molecular Biology*, **2010**, 583, 149-82	1.4	7
140	Scintillation particle detection based on microfluidics. *Sensors and Actuators A: Physical*, **2010**, 162, 272-275	3.9	9
139	Controlled release nanoparticle-embedded coatings reduce the tissue reaction to neuroprostheses. *Journal of Controlled Release*, **2010**, 145, 196-202	11.7	71
138	Multiple-frequency impedance measurements in continuous flow for the evaluation of electrical lysis of yeast cells. *Procedia Engineering*, **2010**, 5, 37-40		7
137	Novel radiation hard microfabricated scintillation detectors with high spatial resolution. *Nuclear Instruments and Methods in Physics Research, Section A: Accelerators, Spectrometers, Detectors and Associated Equipment*, **2010**, 617, 400-401	1.2	0
136	Direct localised measurement of electrical resistivity profile in rat and embryonic chick retinas using a microprobe. *Journal of Electrical Bioimpedance*, **2010**, 1, 84-92	1.5	18
135	Microfluidic System Based on Thermoexpandable Polymer for on Chip Blood Coagulation Testing. *Micro and Nanosystems*, **2009**, 1, 41-45	0.6	6
134	Substrate arrays of iridium oxide microelectrodes for in vitro neuronal interfacing. *Frontiers in Neuroengineering*, **2009**, 2, 1		49
133	In vivo electrical impedance spectroscopy of tissue reaction to microelectrode arrays. *IEEE Transactions on Biomedical Engineering*, **2009**, 56, 1909-18	5	93

132	On-chip thermopneumatic actuation system for coagulation time measurement. *Procedia Chemistry* , **2009**, 1, 521-524		1
131	Biochip with E. coli bacteria for detection of arsenic in drinking water. *Procedia Chemistry*, **2009**, 1, 1003-1006		20
130	SU-8 microfluidic device for scintillating particle detection. *Procedia Chemistry*, **2009**, 1, 1347-1350		2
129	Detecting proteins complex formation using steady-state diffusion in a nanochannel. *Analytical and Bioanalytical Chemistry*, **2009**, 394, 421-5	4.4	7
128	Development and studies of a novel microfabricated radiation hard scintillation particle detector with high spatial resolution. *Nuclear Physics, Section B, Proceedings Supplements*, **2009**, 197, 43-47		2
127	Microfluidic hydrogel layers with multiple gradients to stimulate and perfuse three-dimensional neuronal cell cultures. *Procedia Chemistry*, **2009**, 1, 369-372		17
126	Label-free Sorting and Counting of Yeast Cells for Viability Studies. *Procedia Chemistry*, **2009**, 1, 385-388		9
125	Direct measurement of diffusing proteins in nanochannels using fluorescence correlation spectroscopy. *Procedia Chemistry*, **2009**, 1, 1343-1346		
124	Micromachined chip-scale plasma light source. *Sensors and Actuators A: Physical*, **2009**, 154, 275-280	3.9	9
123	Direct observation of transitions between surface-dominated and bulk diffusion regimes in nanochannels. *Analytical Chemistry*, **2009**, 81, 5407-12	7.8	21
122	Conducting polymer microactuators operating in air. *Journal of Micromechanics and Microengineering*, **2009**, 19, 025017	2	71
121	Label-free determination of protein-surface interaction kinetics by ionic conductance inside a nanochannel. *Lab on A Chip*, **2009**, 9, 319-24	7.2	38
120	Wide channel dielectrophoresis-based particle exchanger with electrophoretic diffusion compensation. *Lab on A Chip*, **2009**, 9, 657-60	7.2	10
119	Wireless contact lens sensor for intraocular pressure monitoring: assessment on enucleated pig eyes. *Acta Ophthalmologica*, **2009**, 87, 433-7	3.7	217
118	Cell culture imaging using microimpedance tomography. *IEEE Transactions on Biomedical Engineering*, **2008**, 55, 138-46	5	49
117	A telemetric pressure sensor system for biomedical applications. *IEEE Transactions on Biomedical Engineering*, **2008**, 55, 1374-81	5	34
116	Dielectrophoresis-based particle exchanger for the manipulation and surface functionalization of particles. *Lab on A Chip*, **2008**, 8, 267-73	7.2	53
115	Continuous separation of cells by balanced dielectrophoretic forces at multiple frequencies. *Lab on A Chip*, **2008**, 8, 280-6	7.2	110

114	Demonstration of cortical recording using novel flexible polymer neural probes. *Sensors and Actuators A: Physical*, **2008**, 143, 90-96	3.9	112
113	Fluorine-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	3.4	21
112	Focusing and continuous separation of cells in a microfluidic device using lateral dielectrophoresis. *Sensors and Actuators B: Chemical*, **2008**, 132, 388-396	8.5	98
111	Dielectrophoretic sorting on a microfabricated flow cytometer: label free separation of Babesia bovis infected erythrocytes. *Bioelectrochemistry*, **2008**, 73, 123-8	5.6	31
110	Transport phenomena in nanofluidics. *Reviews of Modern Physics*, **2008**, 80, 839-883	40.5	1343
109	A simple pneumatic setup for driving microfluidics. *Lab on A Chip*, **2007**, 7, 420-2	7.2	30
108	Characterization and optimization of liquid electrodes for lateral dielectrophoresis. *Lab on A Chip*, **2007**, 7, 355-65	7.2	117
107	A virtual valve for smooth contamination-free flow switching. *Lab on A Chip*, **2007**, 7, 1111-3	7.2	8
106	Microfluidic patterning of alginate hydrogels. *Biointerphases*, **2007**, 2, 73-9	1.8	25
105	Bipolar resistivity profiling of 3D tissue culture. *Biosensors and Bioelectronics*, **2007**, 22, 789-96	11.8	29
104	Continuous sampling and analysis by on-chip liquid/solid chromatography. *Sensors and Actuators B: Chemical*, **2007**, 123, 1133-1141	8.5	20
103	Micropatterned surfaces of PDMS as growth templates for HEK 293 cells. *Biomedical Microdevices*, **2007**, 9, 475-85	3.7	17
102	Flexible polyimide microelectrode array for in vivo recordings and current source density analysis. *Biosensors and Bioelectronics*, **2007**, 22, 1783-90	11.8	172
101	Focusing and Continuous Separation of Cells in a Microfluidic Device using Lateral Dielectrophoresis **2007**,		3
100	Demonstration of cortical recording and reduced inflammatory response using flexible polymer neural probes **2007**,		5
99	Combining multiple optical trapping with microflow manipulation for the rapid bioanalytics on microparticles in a chip. *Review of Scientific Instruments*, **2007**, 78, 116101	1.7	11
98	Electrical Detection and Ejection of Beads in a One-Cell-Per-Drop Microdispenser **2007**,		5
97	Controlled release drug coatings on flexible neural probes. *Annual International Conference of the IEEE Engineering in Medicine and Biology Society*, **2007**, 2007, 6613-6		2

96	Label-free detection of Babesia bovis infected red blood cells using impedance spectroscopy on a microfabricated flow cytometer. *Acta Tropica*, **2007**, 102, 63-8	3.2	50
95	Direct measurement of effective diffusion coefficients in nanochannels using steady-state dispersion effects. *Applied Physics Letters*, **2007**, 91, 203106	3.4	27
94	Single Cell Study in a Hydrogel **2007**, 291-295		
93	Analytical expression for electric field between two facing strip electrodes in microchannel. *Electronics Letters*, **2006**, 42, 145	1.1	11
92	Subretinal electrode implantation in the P23H rat for chronic stimulations. *British Journal of Ophthalmology*, **2006**, 90, 1183-7	5.5	22
91	On-chip extrusion of lipid vesicles and tubes through microsized apertures. *Lab on A Chip*, **2006**, 6, 488-93	7.2	54
90	Two-dimensional impedance imaging of cell migration and epithelial stratification. *Lab on A Chip*, **2006**, 6, 1155-62	7.2	49
89	pH-controlled diffusion of proteins with different pI values across a nanochannel on a chip. *Nano Letters*, **2006**, 6, 543-7	11.5	67
88	Fast 10-/spl mu/s microelectromechanical optical switch inside a planar hollow waveguide (PHW). *Journal of Lightwave Technology*, **2006**, 24, 1486-1498	4	7
87	Effect of filler behavior on nanocomposite SU8 photoresist for moving micro-parts. *Microelectronic Engineering*, **2006**, 83, 1273-1276	2.5	47
86	SU-8 nanocomposite photoresist with low stress properties for microfabrication applications. *Microelectronic Engineering*, **2006**, 83, 1966-1970	2.5	58
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21	Modeling and simulation of electromechanical transducers in microsystems using an analog hardware description language		3
20	Miniature one-shot valve		9
19	Conductive SU8-silver composite photopolymer		3
18	Profile angle control in SiO/sub 2/ deep anisotropic dry etching for MEMS fabrication		2
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11	The suspended-gate MOSFET (SG-MOSFET): a modeling outlook for the design of RF MEMS switches and tunable capacitors		2
10	MEMS infrared gas spectrometer based on a porous silicon tunable filter		7
9	Flexible microchannels with integrated nanoporous membranes for filtration and separation of molecules and particles		4
8	Modeling and design of a low-voltage SOI suspended-gate MOSFET (SG-MOSFET) with a metal-over-gate architecture		25
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