

# Han J G E Gardeniers

## List of Publications by Citations

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344  
ext. papers

11,343  
ext. citations

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6.06  
L-index

#	Paper	IF	Citations
315	Plasma-liquid interactions: a review and roadmap. <i>Plasma Sources Science and Technology</i> , <b>2016</b> , 25, 053002	3.2	831
314	A survey on the reactive ion etching of silicon in microtechnology. <i>Journal of Micromechanics and Microengineering</i> , <b>1996</b> , 6, 14-28	2	317
313	Silicon micromachined hollow microneedles for transdermal liquid transport. <i>Journal of Microelectromechanical Systems</i> , <b>2003</b> , 12, 855-862	2.5	272
312	Characteristics of high quality ZnO thin films deposited by pulsed laser deposition. <i>Applied Physics Letters</i> , <b>1994</b> , 65, 2963-2965	3.4	234
311	Guidelines for etching silicon MEMS structures using fluorine high-density plasmas at cryogenic temperatures. <i>Journal of Microelectromechanical Systems</i> , <b>2002</b> , 11, 385-401	2.5	196
310	The influence of nanoscale grooved substrates on osteoblast behavior and extracellular matrix deposition. <i>Biomaterials</i> , <b>2010</b> , 31, 3307-16	15.6	174
309	Preferred orientation and piezoelectricity in sputtered ZnO films. <i>Journal of Applied Physics</i> , <b>1998</b> , 83, 7844-7854	2.5	168
308	Droplet impact on superheated micro-structured surfaces. <i>Soft Matter</i> , <b>2013</b> , 9, 3272	3.6	166
307	Pathways to electrochemical solar-hydrogen technologies. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2768-2783	35.4	165
306	Micromachining of buried micro channels in silicon. <i>Journal of Microelectromechanical Systems</i> , <b>2000</b> , 9, 94-103	2.5	140
305	Measuring reaction kinetics in a lab-on-a-chip by microcoil NMR. <i>Lab on A Chip</i> , <b>2005</b> , 5, 280-4	7.2	134
304	Influence of Bubbles on the Energy Conversion Efficiency of Electrochemical Reactors. <i>Joule</i> , <b>2020</b> , 4, 555-579	27.8	130
303	Pressure-driven reverse-phase liquid chromatography separations in ordered nonporous pillar array columns. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 5915-26	7.8	129
302	A microfluidic high-resolution NMR flow probe. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 5014-4	16.4	123
301	High-resolution liquid- and solid-state nuclear magnetic resonance of nanoliter sample volumes using microcoil detectors. <i>Journal of Chemical Physics</i> , <b>2008</b> , 128, 052202	3.9	115
300	Stability of thin platinum films implemented in high-temperature microdevices. <i>Sensors and Actuators A: Physical</i> , <b>2009</b> , 152, 39-47	3.9	112
299	Humin based by-products from biomass processing as a potential carbonaceous source for synthesis gas production. <i>Green Chemistry</i> , <b>2015</b> , 17, 959-972	10	111

298	A chip system for size separation of macromolecules and particles by hydrodynamic chromatography. <i>Analytical Chemistry</i> , <b>2002</b> , 74, 3470-5	7.8	110
297	LPCVD silicon-rich silicon nitride films for applications in micromechanics, studied with statistical experimental design*. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>1996</b> , 14, 2879-2892	2.9	108
296	Fabrication, mechanical testing and application of high-pressure glass microreactor chips. <i>Chemical Engineering Journal</i> , <b>2007</b> , 131, 163-170	14.7	104
295	Lab-on-a-chip systems for biomedical and environmental monitoring. <i>Analytical and Bioanalytical Chemistry</i> , <b>2004</b> , 378, 1700-3	4.4	102
294	The effect of surface roughness on direct wafer bonding. <i>Journal of Applied Physics</i> , <b>1999</b> , 85, 7448-7454	2.5	101
293	Building microscopic soccer balls with evaporating colloidal fakir drops. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2012</b> , 109, 16455-8	11.5	91
292	Spatial decoupling of light absorption and catalytic activity of NiMo-loaded high-aspect-ratio silicon microwire photocathodes. <i>Nature Energy</i> , <b>2018</b> , 3, 185-192	62.3	88
291	Stripline probes for nuclear magnetic resonance. <i>Journal of Magnetic Resonance</i> , <b>2007</b> , 189, 104-13	3	88
290	Merging microfluidics and sonochemistry: towards greener and more efficient micro-sono-reactors. <i>Chemical Communications</i> , <b>2012</b> , 48, 10935-47	5.8	87
289	. <i>Journal of Microelectromechanical Systems</i> , <b>1996</b> , 5, 2-9	2.5	85
288	Pulsed-laser deposited ZnO for device applications. <i>Applied Surface Science</i> , <b>1996</b> , 96-98, 811-818	6.7	85
287	Characterization of a planar microcoil for implantable microsystems. <i>Sensors and Actuators A: Physical</i> , <b>1997</b> , 62, 599-611	3.9	84
286	Growth of ZnO thin films on GaAs by pulsed laser deposition. <i>Thin Solid Films</i> , <b>1995</b> , 259, 1-4	2.2	78
285	Surface Morphology of p-Type (100) Silicon Etched in Aqueous Alkaline Solution. <i>Journal of the Electrochemical Society</i> , <b>1996</b> , 143, 1744-1750	3.9	77
284	Microfluidic Devices for Forensic DNA Analysis: A Review. <i>Biosensors</i> , <b>2016</b> , 6,	5.9	76
283	Microfluidics with ultrasound-driven bubbles. <i>Journal of Fluid Mechanics</i> , <b>2006</b> , 568, 109	3.7	74
282	Massively parallel sequencing techniques for forensics: A review. <i>Electrophoresis</i> , <b>2018</b> , 39, 2642-2654	3.6	70
281	A brush-gel/metal-nanoparticle hybrid film as an efficient supported catalyst in glass microreactors. <i>Chemistry - A European Journal</i> , <b>2010</b> , 16, 12406-11	4.8	69

280	Realization of 1 0(6) theoretical plates in liquid chromatography using very long pillar array columns. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 1214-9	7.8	67
279	Design of a stable steam reforming catalystA promising route to sustainable hydrogen from biomass oxygenates. <i>Applied Catalysis B: Environmental</i> , <b>2009</b> , 90, 38-44	21.8	67
278	Effects of laser wavelength and fluence on the growth of ZnO thin films by pulsed laser deposition. <i>Applied Surface Science</i> , <b>1995</b> , 86, 99-106	6.7	67
277	Applications of fluorocarbon polymers in micromechanics and micromachining. <i>Sensors and Actuators A: Physical</i> , <b>1994</b> , 41, 136-140	3.9	66
276	A digital microfluidic system for the investigation of pre-steady-state enzyme kinetics using rapid quenching with MALDI-TOF mass spectrometry. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 8699-704	7.8	64
275	A single step methane conversion into synthetic fuels using microplasma reactor. <i>Chemical Engineering Journal</i> , <b>2011</b> , 166, 288-293	14.7	63
274	Experimental study of porous silicon shell pillars under retentive conditions. <i>Analytical Chemistry</i> , <b>2008</b> , 80, 5391-400	7.8	63
273	Optimization of stripline-based microfluidic chips for high-resolution NMR. <i>Journal of Magnetic Resonance</i> , <b>2009</b> , 201, 175-85	3	59
272	Efficient sonochemistry through microbubbles generated with micromachined surfaces. <i>Angewandte Chemie - International Edition</i> , <b>2010</b> , 49, 9699-701	16.4	59
271	Nanostructure based on polymer brushes for efficient heterogeneous catalysis in microreactors. <i>Journal of the American Chemical Society</i> , <b>2009</b> , 131, 1650-1	16.4	58
270	Optical fiber-based on-line UV/Vis spectroscopic monitoring of chemical reaction kinetics under high pressure in a capillary microreactor. <i>Chemical Communications</i> , <b>2005</b> , 2857-9	5.8	56
269	Fabrication of a high-temperature microreactor with integrated heater and sensor patterns on an ultrathin silicon membrane. <i>Sensors and Actuators A: Physical</i> , <b>2005</b> , 119, 196-205	3.9	56
268	The electrolysis of water: an actuation principle for MEMS with a big opportunity. <i>Mechatronics</i> , <b>2000</b> , 10, 571-581	3	56
267	Formation and stabilization of pyramidal etch hillocks on silicon {100} in anisotropic etchants: Experiments and Monte Carlo simulation. <i>Journal of Applied Physics</i> , <b>2001</b> , 89, 4113-4123	2.5	56
266	High quality ZnO layers with adjustable refractive indices for integrated optics applications. <i>Optical Materials</i> , <b>1995</b> , 4, 741-755	3.3	56
265	Experimental study on band dispersion in channels structured with micropillars. <i>Analytical Chemistry</i> , <b>2006</b> , 78, 6519-25	7.8	54
264	Porous silicon bulk micromachining for thermally isolated membrane formation. <i>Sensors and Actuators A: Physical</i> , <b>1997</b> , 60, 235-239	3.9	53
263	Room-temperature intermediate layer bonding for microfluidic devices. <i>Lab on A Chip</i> , <b>2009</b> , 9, 3481-8	7.2	51

262	Substantial rate enhancements of the esterification reaction of phthalic anhydride with methanol at high pressure and using supercritical CO <sub>2</sub> as a co-solvent in a glass microreactor. <i>Lab on A Chip</i> , <b>2007</b> , 7, 1345-51	7.2	51
261	The potential for microfluidics in electrochemical energy systems. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 3381-3391	35.4	50
260	Integration of porous layers in ordered pillar arrays for liquid chromatography. <i>Lab on A Chip</i> , <b>2007</b> , 7, 1705-11	7.2	50
259	Fabrication and Doping Methods for Silicon Nano- and Micropillar Arrays for Solar-Cell Applications: A Review. <i>Advanced Materials</i> , <b>2015</b> , 27, 6781-96	24	47
258	Ultrasound artificially nucleated bubbles and their sonochemical radical production. <i>Ultrasonics Sonochemistry</i> , <b>2013</b> , 20, 510-24	8.9	47
257	Lab-scale fermentation tests of microchip with integrated electrochemical sensors for pH, temperature, dissolved oxygen and viable biomass concentration. <i>Biotechnology and Bioengineering</i> , <b>2008</b> , 99, 884-92	4.9	46
256	Dynamic cell adhesion and migration on nanoscale grooved substrates. <i>European Cells and Materials</i> , <b>2012</b> , 23, 182-93; discussion 193-4	4.3	45
255	A MALDI-chip integrated system with a monitoring window. <i>Lab on A Chip</i> , <b>2005</b> , 5, 378-81	7.2	44
254	Field-effect control of electro-osmotic flow in microfluidic networks. <i>Colloids and Surfaces A: Physicochemical and Engineering Aspects</i> , <b>2005</b> , 267, 110-116	5.1	44
253	Absence of an evaporation-driven wetting transition on omniphobic surfaces. <i>Soft Matter</i> , <b>2012</b> , 8, 9765-6	3.6	43
252	Multi-walled microchannels: free-standing porous silicon membranes for use in $\mu$ TAS. <i>Journal of Microelectromechanical Systems</i> , <b>2000</b> , 9, 495-501	2.5	43
251	The Extraction and Recovery Efficiency of Pure DNA for Different Types of Swabs. <i>Journal of Forensic Sciences</i> , <b>2018</b> , 63, 1492-1499	1.8	42
250	Sonoluminescence and sonochemiluminescence from a microreactor. <i>Ultrasonics Sonochemistry</i> , <b>2012</b> , 19, 1252-9	8.9	42
249	Integrated electrochemical sensor array for on-line monitoring of yeast fermentations. <i>Analytical Chemistry</i> , <b>2007</b> , 79, 5567-73	7.8	41
248	Gas-to-liquids process using multi-phase flow, non-thermal plasma microreactor. <i>Chemical Engineering Journal</i> , <b>2011</b> , 167, 560-566	14.7	39
247	Fabrication and chromatographic performance of porous-shell pillar-array columns. <i>Analytical Chemistry</i> , <b>2010</b> , 82, 7208-17	7.8	39
246	Ruthenium catalyst on carbon nanofiber support layers for use in silicon-based structured microreactors. Part II: Catalytic reduction of bromate contaminants in aqueous phase. <i>Applied Catalysis B: Environmental</i> , <b>2011</b> , 102, 243-250	21.8	39
245	Directional flow induced by synchronized longitudinal and zeta-potential controlling AC-electrical fields. <i>Lab on A Chip</i> , <b>2006</b> , 6, 1300-5	7.2	39

244	An electrochemical active valve. <i>Electrochimica Acta</i> , <b>1997</b> , 42, 3367-3373	6.7	38
243	A light detection cell to be used in a micro analysis system for ammonia. <i>Talanta</i> , <b>2002</b> , 56, 331-9	6.2	38
242	Design and evaluation of flow distributors for microfabricated pillar array columns. <i>Lab on A Chip</i> , <b>2010</b> , 10, 349-56	7.2	37
241	Micro- and nanofluidic devices for environmental and biomedical applications. <i>International Journal of Environmental Analytical Chemistry</i> , <b>2004</b> , 84, 809-819	1.8	37
240	Sonochemical and high-speed optical characterization of cavitation generated by an ultrasonically oscillating dental file in root canal models. <i>Ultrasonics Sonochemistry</i> , <b>2014</b> , 21, 324-35	8.9	36
239	Localized removal of layers of metal, polymer, or biomaterial by ultrasound cavitation bubbles. <i>Biomicrofluidics</i> , <b>2012</b> , 6, 34114	3.2	36
238	Influence of temperature on the crystal habit of silicon in the Si <sub>2</sub> H <sub>2</sub> Cl CVD system I. Experimental results. <i>Journal of Crystal Growth</i> , <b>1989</b> , 96, 821-831	1.6	36
237	Chemistry in nanochannel confinement. <i>Analytical and Bioanalytical Chemistry</i> , <b>2009</b> , 394, 385-97	4.4	35
236	Monitoring of yeast cell concentration using a micromachined impedance sensor. <i>Sensors and Actuators B: Chemical</i> , <b>2006</b> , 115, 384-389	8.5	35
235	Design and fabrication of a hydrodynamic chromatography chip. <i>Sensors and Actuators B: Chemical</i> , <b>2002</b> , 82, 111-116	8.5	35
234	In vitro and in vivo evaluation of the inflammatory response to nanoscale grooved substrates. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2012</b> , 8, 308-17	6	34
233	Microfluidic device for DNA amplification of single cancer cells isolated from whole blood by self-seeding microwells. <i>Lab on A Chip</i> , <b>2015</b> , 15, 4331-7	7.2	33
232	Microfabricated PalladiumSilver Alloy Membranes and Their Application in Hydrogen Separation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2004</b> , 43, 4182-4187	3.9	33
231	Microfabrication of palladium-silver alloy membranes for hydrogen separation. <i>Journal of Microelectromechanical Systems</i> , <b>2003</b> , 12, 622-629	2.5	33
230	Fabrication and characterization of high-temperature microreactors with thin film heater and sensor patterns in silicon nitride tubes. <i>Lab on A Chip</i> , <b>2005</b> , 5, 326-36	7.2	32
229	Use of Selective Anodic Bonding to Create Micropump Chambers with Virtually No Dead Volume. <i>Journal of the Electrochemical Society</i> , <b>2001</b> , 148, G68	3.9	32
228	Enhancing acoustic cavitation using artificial crevice bubbles. <i>Ultrasonics</i> , <b>2015</b> , 56, 512-23	3.5	31
227	An array of ordered pillars with retentive properties for pressure-driven liquid chromatography fabricated directly from an unmodified cyclo olefin polymer. <i>Lab on A Chip</i> , <b>2009</b> , 9, 1511-6	7.2	31

226	Etching technology for chromatography microchannels. <i>Electrochimica Acta</i> , <b>1997</b> , 42, 3399-3406	6.7	31
225	Enzyme kinetics by directly imaging a porous silicon microfluidic reactor using desorption/ionization on silicon mass spectrometry. <i>Analytical Chemistry</i> , <b>2008</b> , 80, 8314-9	7.8	31
224	Comparison of capillary zone electrophoresis performance of powder-blasted and hydrogen fluoride-etched microchannels in glass. <i>Electrophoresis</i> , <b>2003</b> , 24, 162-71	3.6	31
223	Disposable attenuated total reflection-infrared crystals from silicon wafer: a versatile approach to surface infrared spectroscopy. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 33-8	7.8	30
222	Preparation of palladium-silver alloy films by a dual-sputtering technique and its application in hydrogen separation membrane. <i>Thin Solid Films</i> , <b>2005</b> , 479, 89-94	2.2	30
221	Continuous Flow H and C NMR Spectroscopy in Microfluidic Stripline NMR Chips. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 2296-2303	7.8	28
220	Integration of uniform porous shell layers in very long pillar array columns using electrochemical anodization for liquid chromatography. <i>Analyst, The</i> , <b>2014</b> , 139, 618-25	5	28
219	Growth of carbon nanofiber coatings on nickel thin films on fused silica by catalytic thermal chemical vapor deposition: On the use of titanium, titanium-tungsten and tantalum as adhesion layers. <i>Surface and Coatings Technology</i> , <b>2009</b> , 203, 3435-3441	4.4	28
218	Ultra-rapid separation of an angiotensin mixture in nanochannels using shear-driven chromatography. <i>Journal of Chromatography A</i> , <b>2006</b> , 1102, 96-103	4.5	28
217	Thermal and mechanical analysis of a microreactor for high temperature catalytic gas phase reactions. <i>Sensors and Actuators A: Physical</i> , <b>2004</b> , 112, 267-277	3.9	28
216	Gas bubble evolution on microstructured silicon substrates. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 3452-3462	35.4	28
215	Bacterial viability on chemically modified silicon nanowire arrays. <i>Journal of Materials Chemistry B</i> , <b>2016</b> , 4, 3104-3112	7.3	27
214	Effect of the presence of an ordered micro-pillar array on the formation of silica monoliths. <i>Journal of Chromatography A</i> , <b>2009</b> , 1216, 7360-7	4.5	27
213	Silicon micromachined hollow microneedles for transdermal liquid transfer		27
212	Potassium hydrogen phthalate: Relation between crystal structure and crystal morphology. <i>Journal of Crystal Growth</i> , <b>1988</b> , 92, 171-188	1.6	27
211	A supramolecular approach to enzyme immobilization in micro-channels. <i>Small</i> , <b>2012</b> , 8, 3531-7	11	26
210	Synthesis and Atmospheric Pressure Field Emission Operation of W18O49 Nanorods. <i>Journal of Physical Chemistry C</i> , <b>2008</b> , 112, 15183-15189	3.8	26
209	Microsieve supporting palladium-silver alloy membrane and application to hydrogen separation. <i>Journal of Microelectromechanical Systems</i> , <b>2005</b> , 14, 113-124	2.5	26

208	Efficient and Stable Silicon Microwire Photocathodes with a Nickel Silicide Interlayer for Operation in Strongly Alkaline Solutions. <i>ACS Energy Letters</i> , <b>2018</b> , 3, 1086-1092	20.1	25
207	Capillary liquid chromatography separations using non-porous pillar array columns. <i>Journal of Chromatography A</i> , <b>2012</b> , 1230, 41-7	4.5	25
206	On the advantages of radially elongated structures in microchip-based liquid chromatography. <i>Analytical Chemistry</i> , <b>2013</b> , 85, 5207-12	7.8	25
205	Glucose level determination with a multi-enzymatic cascade reaction in a functionalized glass chip. <i>Analyst, The</i> , <b>2013</b> , 138, 5019-24	5	25
204	Characterization of porous silicon integrated in liquid chromatography chips. <i>Lab on A Chip</i> , <b>2009</b> , 9, 456-63	7.3	25
203	Fusion bonding of rough surfaces with polishing technique for silicon micromachining. <i>Microsystem Technologies</i> , <b>1997</b> , 3, 122-128	1.7	25
202	Improving mixing in microbioreactors. <i>Chemical Engineering Science</i> , <b>2008</b> , 63, 3036-3046	4.4	25
201	Multichannel quench-flow microreactor chip for parallel reaction monitoring. <i>Lab on A Chip</i> , <b>2007</b> , 7, 1717-22	7.2	25
200	Nanochannels in SU-8 with floor and ceiling metal electrodes and integrated microchannels. <i>Lab on A Chip</i> , <b>2008</b> , 8, 173-5	7.2	24
199	Fabrication and mechanical testing of glass chips for high-pressure synthetic or analytical chemistry. <i>Microsystem Technologies</i> , <b>2006</b> , 12, 450-454	1.7	24
198	Influence of temperature on the crystal habit of silicon in the Si <sub>2</sub> H <sub>2</sub> Cl CVD system II. Surface tension of faces in the <110> zones. <i>Journal of Crystal Growth</i> , <b>1989</b> , 96, 832-842	1.6	24
197	Submicron-patterning of bulk titanium by nanoimprint lithography and reactive ion etching. <i>Nanotechnology</i> , <b>2012</b> , 23, 065306	3.4	23
196	Experimental investigation of the band broadening originating from the top and bottom walls in micromachined nonporous pillar array columns. <i>Journal of Separation Science</i> , <b>2007</b> , 30, 2605-13	3.4	23
195	Low power micro-calorimetric sensors for analysis of gaseous samples. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 206, 772-787	8.5	22
194	Hydrodynamic cavitation in micro channels with channel sizes of 100 and 750 micrometers. <i>Microfluidics and Nanofluidics</i> , <b>2012</b> , 12, 499-508	2.8	22
193	Attenuated total reflection-infrared nanofluidic chip with 71 nL detection volume for in situ spectroscopic analysis of chemical reaction intermediates. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 3132-7	7.8	22
192	Propane Conversion at Ambient Temperatures C-C and C-H Bond Activation Using Cold Plasma in a Microreactor. <i>Chemical Engineering and Technology</i> , <b>2008</b> , 31, 1116-1123	2	22
191	Multivalent binding of small guest molecules and proteins to molecular printboards inside microchannels. <i>Chemistry - A European Journal</i> , <b>2008</b> , 14, 136-42	4.8	22



190	Local anodic bonding of Kovar to Pyrex aimed at high-pressure, solvent-resistant microfluidic connections. <i>Journal of Micromechanics and Microengineering</i> , <b>2001</b> , 11, 382-385	2	22
189	New applications of r.f.-sputtered glass films as protection and bonding layers in silicon micromachining. <i>Sensors and Actuators A: Physical</i> , <b>1994</b> , 41, 338-343	3.9	22
188	Programmable v-type valve for cell and particle manipulation in microfluidic devices. <i>Lab on A Chip</i> , <b>2016</b> , 16, 305-11	7.2	21
187	Ruthenium catalyst on carbon nanofiber support layers for use in silicon-based structured microreactors, Part I: Preparation and characterization. <i>Applied Catalysis B: Environmental</i> , <b>2011</b> , 102, 232-242	21.8	21
186	Porous silicon as a stationary phase for shear-driven chromatography. <i>Journal of Chromatography A</i> , <b>2004</b> , 1032, 185-91	4.5	21
185	A pressure driven injection system for an ultra-flat chromatographic microchannel. <i>Lab on A Chip</i> , <b>2002</b> , 2, 235-41	7.2	21
184	Controlled Doping Methods for Radial p/n Junctions in Silicon. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1401745	7.45	20
183	Applicability of X-ray fluorescence spectroscopy as method to determine thickness and composition of stacks of metal thin films: A comparison with imaging and profilometry. <i>Thin Solid Films</i> , <b>2012</b> , 520, 1740-1744	2.2	20
182	A supramolecular sensing platform for phosphate anions and an anthrax biomarker in a microfluidic device. <i>International Journal of Molecular Sciences</i> , <b>2011</b> , 12, 7335-51	6.3	20
181	Carbon nanofiber based catalyst supports to be used in microreactors: Synthesis and characterization. <i>Chemical Engineering Journal</i> , <b>2010</b> , 160, 899-908	14.7	20
180	Fluorescent sensor array in a microfluidic chip. <i>Analytical and Bioanalytical Chemistry</i> , <b>2008</b> , 390, 307-15	4.4	20
179	Erosion evolution in mono-crystalline silicon surfaces caused by acoustic cavitation bubbles. <i>Journal of Applied Physics</i> , <b>2013</b> , 113, 064902	2.5	19
178	Cryo DualBeam Focused Ion Beam-Scanning Electron Microscopy to Evaluate the Interface Between Cells and Nanopatterned Scaffolds. <i>Tissue Engineering - Part C: Methods</i> , <b>2011</b> , 17, 1-7	2.9	19
177	Etching technology for microchannels		19
176	Simulation of anisotropic wet chemical etching using a physical model. <i>Sensors and Actuators A: Physical</i> , <b>2000</b> , 84, 324-329	3.9	19
175	Pattern Formation by Staphylococcus epidermidis via Droplet Evaporation on Micropillars Arrays at a Surface. <i>Langmuir</i> , <b>2016</b> , 32, 7159-69	4	18
174	Experimental investigation of the band broadening arising from short-range interchannel heterogeneities in chromatographic beds under the condition of identical external porosity. <i>Analytical Chemistry</i> , <b>2009</b> , 81, 705-15	7.8	18
173	Analysis systems for the detection of ammonia based on micromachined components modular hybrid versus monolithic integrated approach. <i>Sensors and Actuators B: Chemical</i> , <b>2003</b> , 92, 25-36	8.5	18

172	Effects of Pillar Height and Junction Depth on the Performance of Radially Doped Silicon Pillar Arrays for Solar Energy Applications. <i>Advanced Energy Materials</i> , <b>2016</b> , 6, 1501728	21.8	18
171	Electrolysis-Driven and Pressure-Controlled Diffusive Growth of Successive Bubbles on Microstructured Surfaces. <i>Langmuir</i> , <b>2017</b> , 33, 12873-12886	4	17
170	Experimental optimization of flow distributors for pressure-driven separations and reactions in flat-rectangular microchannels. <i>Analytical Chemistry</i> , <b>2011</b> , 83, 467-77	7.8	17
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14	Effects of Fluid Aging and Reservoir Temperature on Waterflooding in 2.5D Glass Micromodels. <i>Energy &amp; Fuels</i> , <b>2022</b> , 36, 1388-1401	4.1	0
13	Al <sub>2</sub> O <sub>3</sub> nanofibers prepared from aluminum Di(sec-butoxide)acetoacetic ester chelate exhibits high surface area and acidity. <i>Journal of Catalysis</i> , <b>2021</b> , 405, 520-520	7.3	0
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