

# Han J G E Gardeniers

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

315  
papers

10,097  
citations

52  
h-index

86  
g-index

344  
ext. papers

11,343  
ext. citations

6.1  
avg, IF

6.06  
L-index

#	Paper	IF	Citations
315	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
314	Filtering efficiency model that includes the statistical randomness of non-woven fiber layers in facemasks. <i>Separation and Purification Technology</i> , <b>2022</b> , 282, 120049	8.3	1
313	Vacuum-driven assembly of electrostatically levitated microspheres on perforated surfaces. <i>Materials and Design</i> , <b>2022</b> , 216, 110573	8.1	1
312	Chlorine in NiO promotes electroreduction of CO <sub>2</sub> to formate. <i>Applied Materials Today</i> , <b>2022</b> , 28, 101528	8.6	0
311	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
310	On the Improvement of Alveolar-Like Microfluidic Devices for Efficient Blood Oxygenation. <i>Advanced Materials Technologies</i> , <b>2021</b> , 6, 2001027	6.8	0
309	A detailed study of the interaction between levitated microspheres and the target electrode in a strong electric field. <i>Powder Technology</i> , <b>2021</b> , 383, 292-301	5.2	3
308	Influence of the Distribution of the Properties of Permanent Magnets on the Field Homogeneity of Magnet Assemblies for Mobile NMR. <i>IEEE Transactions on Magnetics</i> , <b>2021</b> , 57, 1-7	2	0
307	A 3D polydimethylsiloxane microhourglass-shaped channel array made by reflowing photoresist structures for engineering a blood capillary network. <i>Methods</i> , <b>2021</b> , 190, 63-71	4.6	1
306	A wafer-scale fabrication method for three-dimensional plasmonic hollow nanopillars. <i>Nanoscale Advances</i> , <b>2021</b> , 3, 4926-4939	5.1	1
305	Color Tuning of Electrochromic TiO Nanofibrous Layers Loaded with Metal and Metal Oxide Nanoparticles for Smart Colored Windows. <i>ACS Applied Nano Materials</i> , <b>2021</b> , 4, 8600-8610	5.6	3
304	Rapid vacuum-driven monolayer assembly of microparticles on the surface of perforated microfluidic devices. <i>Powder Technology</i> , <b>2021</b> , 390, 330-338	5.2	3
303	Towards controlled bubble nucleation in microreactors for enhanced mass transport. <i>Reaction Chemistry and Engineering</i> , <b>2021</b> , 6, 1869-1877	4.9	0
302	Fabrication of millimeter-long structures in sapphire using femtosecond infrared laser pulses and selective etching. <i>Optics and Lasers in Engineering</i> , <b>2020</b> , 133, 106114	4.6	9
301	Spatial Segregation of Microspheres by Rubbing-Induced Triboelectrification on Patterned Surfaces. <i>Langmuir</i> , <b>2020</b> , 36, 6793-6800	4	3
300	Systematic Investigation of Insulin Fibrillation on a Chip. <i>Molecules</i> , <b>2020</b> , 25,	4.8	4
299	Optical measurements of oil release from calcite packed beds in microfluidic channels. <i>Microfluidics and Nanofluidics</i> , <b>2020</b> , 24, 1	2.8	2

298	Microfluidic Droplet-Storage Array. <i>Micromachines</i> , <b>2020</b> , 11,	3.3	3
297	Influence of Bubbles on the Energy Conversion Efficiency of Electrochemical Reactors. <i>Joule</i> , <b>2020</b> , 4, 555-579	27.8	130
296	Coupling of CH <sub>4</sub> to C <sub>2</sub> Hydrocarbons in a Packed Bed DBD Plasma Reactor: The Effect of Dielectric Constant and Porosity of the Packing. <i>Energies</i> , <b>2020</b> , 13, 468	3.1	9
295	From Geometry to Activity: A Quantitative Analysis of WO <sub>3</sub> /Si Micropillar Arrays for Photoelectrochemical Water Splitting. <i>Advanced Functional Materials</i> , <b>2020</b> , 30, 1909157	15.6	12
294	Wafer-scale 3D shaping of high aspect ratio structures by multistep plasma etching and corner lithography. <i>Microsystems and Nanoengineering</i> , <b>2020</b> , 6, 25	7.7	4
293	A Microfluidic Approach for Biosensing DNA within Forensics. <i>Applied Sciences (Switzerland)</i> , <b>2020</b> , 10, 7067	2.6	2
292	Programmable droplet-based microfluidic serial dilutor. <i>Journal of Industrial and Engineering Chemistry</i> , <b>2020</b> , 91, 231-239	6.3	4
291	Plasma Catalytic Conversion of CH <sub>4</sub> to Alkanes, Olefins and H <sub>2</sub> in a Packed Bed DBD Reactor. <i>Processes</i> , <b>2020</b> , 8, 774	2.9	3
290	On-chip real-time monitoring of multiple displacement amplification of DNA. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 293, 16-22	8.5	10
289	High-Resolution SEM and EDX Characterization of Deposits Formed by CH <sub>4</sub> /Ar DBD Plasma Processing in a Packed Bed Reactor. <i>Nanomaterials</i> , <b>2019</b> , 9,	5.4	6
288	A Stand-Alone Si-Based Porous Photoelectrochemical Cell. <i>Advanced Energy Materials</i> , <b>2019</b> , 9, 1803548	21.8	10
287	Inline Reaction Monitoring of Amine-Catalyzed Acetylation of Benzyl Alcohol Using a Microfluidic Stripline Nuclear Magnetic Resonance Setup. <i>Journal of the American Chemical Society</i> , <b>2019</b> , 141, 5369-5380	16.4	16
286	Aqueous-Phase Reforming in a Microreactor: The Role of Surface Bubbles. <i>Chemical Engineering and Technology</i> , <b>2019</b> , 42, 2179-2186	2	2
285	Cyclic Olefin Copolymer Microfluidic Devices for Forensic Applications. <i>Biosensors</i> , <b>2019</b> , 9,	5.9	14
284	Decoupling Gas Evolution from Water-Splitting Electrodes. <i>Journal of the Electrochemical Society</i> , <b>2019</b> , 166, H769-H776	3.9	9
283	Understanding blood oxygenation in a microfluidic meander double side membrane contactor. <i>Sensors and Actuators B: Chemical</i> , <b>2019</b> , 288, 414-424	8.5	9
282	Monitoring phase transition of aqueous biomass model substrates by high-pressure and high-temperature microfluidics. <i>Electrophoresis</i> , <b>2019</b> , 40, 563-570	3.6	2
281	A factorial design approach to fracture pressure tests of microfluidic BF33 and D263T glass chips with side-port capillary connections. <i>Journal of Micromechanics and Microengineering</i> , <b>2019</b> , 29, 035011	2	1

280	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
279	3D-fabrication of tunable and high-density arrays of crystalline silicon nanostructures. <i>Journal of Micromechanics and Microengineering</i> , <b>2018</b> , 28, 044003	2	7
278	A microfluidic chip with a staircase pH gradient generator, a packed column and a fraction collector for chromatofocusing of proteins. <i>Electrophoresis</i> , <b>2018</b> , 39, 1031-1039	3.6	5
277	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
276	Microfluidic devices as gas ionic liquid membrane contactors for CO <sub>2</sub> removal from anaesthesia gases. <i>Journal of Membrane Science</i> , <b>2018</b> , 545, 107-115	9.6	12
275	Three-Dimensional Fractal Geometry for Gas Permeation in Microchannels. <i>Micromachines</i> , <b>2018</b> , 9,	3.3	5
274	Nanoscale membrane actuator for in vitro mechano-stimuli responsive studies of neuronal cell networks on chip. <i>Journal of Micromechanics and Microengineering</i> , <b>2018</b> , 28, 085011	2	5
273	Massively parallel sequencing techniques for forensics: A review. <i>Electrophoresis</i> , <b>2018</b> , 39, 2642-2654	3.6	70
272	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
271	Pathways to electrochemical solar-hydrogen technologies. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 2768-2783	35.4	165
270	Morphology of single picosecond pulse subsurface laser-induced modifications of sapphire and subsequent selective etching. <i>Optics Express</i> , <b>2018</b> , 26, 29283-29295	3.3	11
269	Sidewall patterning – new wafer-scale method for accurate patterning of vertical silicon structures. <i>Journal of Micromechanics and Microengineering</i> , <b>2018</b> , 28, 015008	2	5
268	Partial reduction of anthracene by cold field emission in liquid in a microreactor with an integrated planar microstructured electrode. <i>Chemical Engineering and Processing: Process Intensification</i> , <b>2018</b> , 124, 29-36	3.7	1
267	Gas bubble evolution on microstructured silicon substrates. <i>Energy and Environmental Science</i> , <b>2018</b> , 11, 3452-3462	35.4	28
266	Scalable 3D Nanoparticle Trap for Electron Microscopy Analysis. <i>Small</i> , <b>2018</b> , 14, e1803283	11	
265	Bacterial Footprints in Elastic Pillared Microstructures.. <i>ACS Applied Bio Materials</i> , <b>2018</b> , 1, 1294-1300	4.1	6
264	Dataset of the absorption, emission and excitation spectra and fluorescence intensity graphs of fluorescent cyanine dyes for the quantification of low amounts of dsDNA. <i>Data in Brief</i> , <b>2017</b> , 10, 132-143	1.2	2
263	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

262	Fabrication and characterization of microsieve electrode array ( $\mu$ SEA) enabling cell positioning on 3D electrodes. <i>Journal of Micromechanics and Microengineering</i> , <b>2017</b> , 27, 015017	2	6
261	Highly integrated polymeric microliquid flow controller for droplet microfluidics. <i>Microfluidics and Nanofluidics</i> , <b>2017</b> , 21, 1	2.8	3
260	Photo-Electrical Characterization of Silicon Micropillar Arrays with Radial p/n Junctions Containing Passivation and Anti-Reflection Coatings. <i>Advanced Energy Materials</i> , <b>2017</b> , 7, 1601497	21.8	7
259	Molecular Monolayers for Electrical Passivation and Functionalization of Silicon-Based Solar Energy Devices. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2017</b> , 9, 413-421	9.5	11
258	Chip-Based Multicapillary Column with Maximal Interconnectivity to Combine Maximum Efficiency and Maximum Loadability. <i>Analytical Chemistry</i> , <b>2017</b> , 89, 11605-11613	7.8	9
257	Electrolysis-Driven and Pressure-Controlled Diffusive Growth of Successive Bubbles on Microstructured Surfaces. <i>Langmuir</i> , <b>2017</b> , 33, 12873-12886	4	17
256	Wafer-scale nanostructure formation inside vertical nano-pores <b>2017</b> ,		1
255	An All-Glass Microfluidic Network with Integrated Amorphous Silicon Photosensors for on-Chip Monitoring of Enzymatic Biochemical Assay. <i>Biosensors</i> , <b>2017</b> , 7,	5.9	7
254	A microfluidic device for the batch adsorption of a protein on adsorbent particles. <i>Analyst, The</i> , <b>2017</b> , 142, 3656-3665	5	12
253	Influence of the Water Phase State on the Thermodynamics of Aqueous-Phase Reforming for Hydrogen Production. <i>ChemSusChem</i> , <b>2017</b> , 10, 4909-4913	8.3	9
252	Characterization of opto-electrical enhancement of tandem photoelectrochemical cells by using photoconductive-AFM. <i>Nanotechnology</i> , <b>2017</b> , 28, 295401	3.4	2
251	Fluorescent cyanine dyes for the quantification of low amounts of dsDNA. <i>Analytical Biochemistry</i> , <b>2016</b> , 511, 74-9	3.1	13
250	The potential for microfluidics in electrochemical energy systems. <i>Energy and Environmental Science</i> , <b>2016</b> , 9, 3381-3391	35.4	50
249	Nanometer-grooved topography stimulates trabecular bone regeneration around a concave implant in a rat femoral medulla model. <i>Nanomedicine: Nanotechnology, Biology, and Medicine</i> , <b>2016</b> , 12, 2283-2290	6	7
248	3D-fractal engineering based on oxide-only corner lithography <b>2016</b> ,		2
247	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
246	Bacterial viability on chemically modified silicon nanowire arrays. <i>Journal of Materials Chemistry B</i> , <b>2016</b> , 4, 3104-3112	7.3	27
245	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

244	Microfluidic Devices for Forensic DNA Analysis: A Review. <i>Biosensors</i> , <b>2016</b> , 6,	5.9	76
243	Mapping of Enzyme Kinetics on a Microfluidic Device. <i>PLoS ONE</i> , <b>2016</b> , 11, e0153437	3.7	17
242	In-line sample concentration by evaporation through porous hollow fibers and micromachined membranes embedded in microfluidic devices. <i>Electrophoresis</i> , <b>2016</b> , 37, 463-71	3.6	4
241	Spatioselective Electrochemical and Photoelectrochemical Functionalization of Silicon Microwires with Axial p/n Junctions. <i>Advanced Materials</i> , <b>2016</b> , 28, 1400-5	24	11
240	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
239	Displacement Talbot lithography nanopatterned microsieve array for directional neuronal network formation in brain-on-chip. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , <b>2016</b> , 34, 06K102	1.3	6
238	Vertically aligned carbon nanotube field emitter arrays with Ohmic base contact to silicon by Fe-catalyzed chemical vapor deposition. <i>Materials Today Communications</i> , <b>2016</b> , 7, 89-100	2.5	6
237	Plasma-liquid interactions: a review and roadmap. <i>Plasma Sources Science and Technology</i> , <b>2016</b> , 25, 053002	9.5	831
236	Biosynthetic infochemical communication. <i>Bioinspiration and Biomimetics</i> , <b>2015</b> , 10, 043001	2.6	5
235	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
234	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
233	Controlled Doping Methods for Radial p/n Junctions in Silicon. <i>Advanced Energy Materials</i> , <b>2015</b> , 5, 1401745	24.5	20
232	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
231	Enhancing acoustic cavitation using artificial crevice bubbles. <i>Ultrasonics</i> , <b>2015</b> , 56, 512-23	3.5	31
230	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
229	A new ATR-IR microreactor to study electric field-driven processes. <i>Sensors and Actuators B: Chemical</i> , <b>2015</b> , 220, 13-21	8.5	11
228	CO Adsorption on Pt Nanoparticles in Low E-Fields Studied by ATR-IR Spectroscopy in a Microreactor. <i>Journal of Physical Chemistry C</i> , <b>2015</b> , 119, 24887-24894	3.8	6
227	Suppression of the sidewall effect in pillar array columns with radially elongated pillars. <i>Journal of Chromatography A</i> , <b>2014</b> , 1367, 118-22	4.5	14

226	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
225	In situ measurement of the transversal dispersion in ordered and disordered two-dimensional pillar beds for liquid chromatography. <i>Analytical Chemistry</i> , <b>2014</b> , 86, 2947-54	7.8	10
224	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
223	Design and Implementation of a Modular Biomimetic Infochemical Communication System. <i>International Journal of Circuit Theory and Applications</i> , <b>2013</b> , 41, 653-667	2	7
222	One-step sculpting of silicon microstructures from pillars to needles for water and oil repelling surfaces. <i>Journal of Micromechanics and Microengineering</i> , <b>2013</b> , 23, 025004	2	15
221	Influence of thin film nickel pretreatment on catalytic thermal chemical vapor deposition of carbon nanofibers. <i>Thin Solid Films</i> , <b>2013</b> , 534, 341-347	2.2	5
220	Temperature Dependence of the 1727 cm <sup>-1</sup> Interstitial Oxygen Absorption Band Studied by Attenuated Total Internal Reflection Infrared Spectroscopy in a Newly Developed Microreactor. <i>Journal of Physical Chemistry C</i> , <b>2013</b> , 117, 21936-21942	3.8	8
219	Exploring the speed limits of liquid chromatography using shear-driven flows through 45 and 85 nm deep nano-channels. <i>Analyst, The</i> , <b>2013</b> , 138, 6127-33	5	11
218	Silicon based microreactors for catalytic reduction in aqueous phase: Use of carbon nanofiber supported palladium catalyst. <i>Chemical Engineering Journal</i> , <b>2013</b> , 227, 128-136	14.7	10
217	Ultrasound artificially nucleated bubbles and their sonochemical radical production. <i>Ultrasonics Sonochemistry</i> , <b>2013</b> , 20, 510-24	8.9	47
216	On-Line Monitoring of Reaction Kinetics in Microreactors Using Mass Spectrometry and Micro-NMR Spectroscopy <b>2013</b> , 135-158		
215	Design and implementation of injector/distributor structures for microfabricated non-porous pillar columns for capillary electrochromatography. <i>Journal of Chromatography A</i> , <b>2013</b> , 1289, 80-7	4.5	7
214	Evidence of wettability variation on carbon nanofiber layers grown on oxidized silicon substrates. <i>Chemical Engineering Journal</i> , <b>2013</b> , 227, 56-65	14.7	4
213	Droplet impact on superheated micro-structured surfaces. <i>Soft Matter</i> , <b>2013</b> , 9, 3272	3.6	166
212	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
211	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
210	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
209	Fabrication of integrated porous glass for microfluidic applications. <i>Lab on A Chip</i> , <b>2013</b> , 13, 3061-9	7.2	7

208	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
207	Silicon and Glass Microreactors <b>2013</b> , 1-24		1
206	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
205	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
204	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
203	Performance evaluation of different design alternatives for microfabricated nonporous fused silica pillar columns for capillary electrochromatography. <i>Analytical Chemistry</i> , <b>2012</b> , 84, 9996-10004	7.8	10
202	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
201	Sonoluminescence and sonochemiluminescence from a microreactor. <i>Ultrasonics Sonochemistry</i> , <b>2012</b> , 19, 1252-9	8.9	42
200	Micro- and nano-link ultra-low power heaters for sensors <b>2012</b> ,		1
199	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
198	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
197	Absence of an evaporation-driven wetting transition on omniphobic surfaces. <i>Soft Matter</i> , <b>2012</b> , 8, 9765	3.6	43
196	A supramolecular approach to enzyme immobilization in micro-channels. <i>Small</i> , <b>2012</b> , 8, 3531-7	11	26
195	On the pathway of photoexcited electrons: probing photon-to-electron and photon-to-phonon conversions in silicon by ATR-IR. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 10882-5	3.6	11
194	Localized removal of layers of metal, polymer, or biomaterial by ultrasound cavitation bubbles. <i>Biomicrofluidics</i> , <b>2012</b> , 6, 34114	3.2	36
193	Separations using a porous-shell pillar array column on a capillary LC instrument. <i>Journal of Separation Science</i> , <b>2012</b> , 35, 2010-7	3.4	14
192	Realization of 1 10(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
191	Production and characterization of micro- and nano-features in biomedical alumina and zirconia ceramics using a tape casting route. <i>Journal of Materials Science: Materials in Medicine</i> , <b>2012</b> , 23, 1637-44	4.5	12



190	Flow of CO <sub>2</sub> ethanol and of CO <sub>2</sub> methanol in a non-adiabatic microfluidic T-junction at high pressures. <i>Microfluidics and Nanofluidics</i> , <b>2012</b> , 12, 927-940	2.8	16
189	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
188	Submicron-patterning of bulk titanium by nanoimprint lithography and reactive ion etching. <i>Nanotechnology</i> , <b>2012</b> , 23, 065306	3.4	23
187	Local deposition and patterning of catalytic thin films in microsystems. <i>Journal of Micromechanics and Microengineering</i> , <b>2012</b> , 22, 045023	2	3
186	Mimicking insect communication: release and detection of pheromone, biosynthesized by an alcohol acetyl transferase immobilized in a microreactor. <i>PLoS ONE</i> , <b>2012</b> , 7, e47751	3.7	9
185	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
184	Pheromone synthesis in a biomicroreactor coated with anti-adsorption polyelectrolyte multilayer. <i>Biomicrofluidics</i> , <b>2011</b> , 5, 34102-3410212	3.2	7
183	Measurement of reaction heats using a polysilicon-based microcalorimetric sensor. <i>Sensors and Actuators A: Physical</i> , <b>2011</b> , 169, 308-316	3.9	15
182	A Chemoemitter System Mimicking Chemical Communication in Insects. <i>Procedia Computer Science</i> , <b>2011</b> , 7, 142-143	1.6	1
181	Charge Injection From Carbon Nanofibers Into Hexane Under Ambient Conditions. <i>IEEE Transactions on Electron Devices</i> , <b>2011</b> , 58, 3514-3518	2.9	2
180	Oxidative Conversion of Hexane to Olefins-Influence of Plasma and Catalyst on Reaction Pathways. <i>Plasma Chemistry and Plasma Processing</i> , <b>2011</b> , 31, 291-306	3.6	7
179	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
178	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
177	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
176	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
175	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
174	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
173	The development of titanium silicide/Boron-doped polysilicon resistive temperature sensors. <i>Journal of Micromechanics and Microengineering</i> , <b>2011</b> , 21, 105022	2	8

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16	Texture Variations in Sol-Gel Derived PZT Films on Substrates with Platinum Metallization. <i>Materials Research Society Symposia Proceedings</i> , <b>1994</b> , 343, 451		4
15	Vapour growth of silicon: growth anisotropy and adsorption. <i>Journal of Crystal Growth</i> , <b>1991</b> , 115, 542-550	6	8
14	Reduced pressure silicon CVD on hemispherical substrates. <i>Journal of Crystal Growth</i> , <b>1991</b> , 108, 319-334	6	4
13	A theoretical study of adsorption equilibria in silicon CVD. <i>Journal of Crystal Growth</i> , <b>1990</b> , 104, 727-743	1.6	14
12	The influence of the chlorine-hydrogen ratio in the gas phase on the stability of the {113} faces of silicon in Si-H-Cl CVD. <i>Journal of Crystal Growth</i> , <b>1990</b> , 102, 233-244	1.6	10
11	Equilibrium structure of Si(001) in relation to adsorption processes during silicon CVD. <i>Surface Science</i> , <b>1990</b> , 233, 123-130	1.8	3

10	Roughening effects during silicon CVD studied by the use of hemispherical substrates. <i>Surface Science</i> , <b>1990</b> , 236, 85-102	1.8	3
9	Influence of temperature on the crystal habit of silicon in the Si?H?Cl CVD system I. Experimental results. <i>Journal of Crystal Growth</i> , <b>1989</b> , 96, 821-831	1.6	36
8	Influence of temperature on the crystal habit of silicon in the Si?H?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
7	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
6	High aspect ratio single crystalline silicon microstructures fabricated with multi layer substrates		2
5	Etching technology for microchannels		19
4	Silicon micromachined hollow microneedles for transdermal liquid transfer		27
3	An electrochemical micro actuator		6
2			7
1	Additive Manufacturing of 3D Luminescent ZrO 2 :Eu 3+ Architectures. <i>Advanced Optical Materials</i> , <b>2021</b> , 13, 2102758	1.5	4