

CITATION REPORT

List of articles citing

Rapid Prototyping of Microfluidic Systems in Poly(dimethyls

DOI: 10.1021/ac980656Z

Analytical Chemistry, 1998, 70, 4974-84.

Source: <https://exaly.com/paper-pdf/29422060/citation-report.pdf>

Version: 2024-04-09

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

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

#	Paper	IF	Citations
2346	Optofluidic trapping and transport on solid core waveguides within a microfluidic device. 2007 , 15, 14322		
2345	Optofluidic trapping and transport on solid core waveguides within a microfluidic device. 2007 , 15, 14322		
2344	Optofluidic trapping and transport on solid core waveguides within a microfluidic device. 2007 , 15, 14322		
2343	Theory of dielectric micro-sphere dynamics in a dual-beam optical trap. 2008 , 16, 9306		
2342	Theory of dielectric micro-sphere dynamics in a dual-beam optical trap. 2008 , 16, 9306		
2341	Theory of dielectric micro-sphere dynamics in a dual-beam optical trap. 2008 , 16, 9306		
2340	Single-cell isolation using a DVD optical pickup. 2011 , 19, 10377		
2339	Enhanced optical chromatography in a PDMS microfluidic system. 2005 , 13, 10406		
2338	Enhanced optical chromatography in a PDMS microfluidic system. 2005 , 13, 10406		
2337	Enhanced optical chromatography in a PDMS microfluidic system. 2005 , 13, 10406		
2336	Single-cell isolation using a DVD optical pickup. 2011 , 19, 10377		
2335	Single-cell isolation using a DVD optical pickup. 2011 , 19, 10377		
2334	Pathogenic Bacteria Detection Using RNA-Based Loop-Mediated Isothermal-Amplification-Assisted Nucleic Acid Amplification via Droplet Microfluidics.		
2333	Rapid, Selective, Label-Free Aptameric Capture and Detection of Ricin in Potable Liquids Using a Printed Floating Gate Transistor.		
2332	Liquid Beam Desorption Mass Spectrometry for the Investigation of Continuous Flow Reactions in Microfluidic Chips.		
2331	Systematic Analysis of Different Cell Spheroids with a Microfluidic Device Using Scanning Electrochemical Microscopy and Gene Expression Profiling.		
2330	Crow Track Formed by Mechanical Force on Silicon Crystal Wafer. 1964 , 3, 300-301		

2329	Properties of unstable resonators with field rotation. I. Theoretical principles. 1979 , 9, 1105-1110	7
2328	Nuclear magnetic resonance of rare-earth Van Vleck paramagnets. 1985 , 28, 762-783	16
2327	On a textbook on physical optics. 1987 , 30, 85-86	
2326	Insertion Loss and Acoustic Reflection Expressed by Scattering Matrices with Energy-Dissipation for Surface Acoustic Unidirectional Interdigital-Transducers. 1993 , 32, 2329-2332	
2325	Charged State Control for Organic Domain Structure by Atomic Force Microscope. 1995 , 34, L859-L862	10
2324	Theoretical and experimental investigations of the growth of a large-scale instability in the discharge of an XeCl laser with UV preionisation. 1997 , 27, 23-28	3
2323	Laminated microfluidic structures using a micromolding technique. 1999 ,	3
2322	Site-Dependent Fluorescence Decay of Malachite Green Doped in Onion Cell. 1999 , 38, L324-L326	3
2321	Patterning cells and their environments using multiple laminar fluid flows in capillary networks. 1999 , 96, 5545-8	455
2320	SDS capillary gel electrophoresis of proteins in microfabricated channels. 1999 , 96, 5372-7	109
2319	Rapid prototyping of microfluidic switches in poly(dimethyl siloxane) and their actuation by electro-osmotic flow. 1999 , 9, 211-217	171
2318	Microfabrication in biology and medicine. 1999 , 1, 401-25	272
2317	Patterning proteins and cells using soft lithography. 1999 , 20, 2363-76	1312
2316	Reconfigurable diffraction gratings based on elastomeric microfluidic devices. 1999 , 78, 149-159	67
2315	Self-Assembly and Soft Lithography: An Overview. 1999 , 17, 10-10	
2314	Unconventional Methods for Fabricating and Patterning Nanostructures. 1999 , 99, 1823-1848	1341
2313	Capillary electrophoresis of peptides. 1999 , 20, 3084-105	116
2312	Microfabrication inside capillaries using multiphase laminar flow patterning. 1999 , 285, 83-5	580

2311	Handling of Picoliter Liquid Samples in a Poly(dimethylsiloxane)-Based Microfluidic Device. <i>Analytical Chemistry</i> , 1999 , 71, 4781-4785	7.8	207
2310	Microfabricated Centrifugal Microfluidic Systems: Characterization and Multiple Enzymatic Assays. <i>Analytical Chemistry</i> , 1999 , 71, 4669-4678	7.8	382
2309	Using Elastomeric Membranes as Dry Resists and for Dry Lift-Off. 1999 , 15, 2973-2984		90
2308	Separation and analysis of peptides and proteins. <i>Analytical Chemistry</i> , 1999 , 71, 389R-423R	7.8	72
2307	Microfabricated polymer devices for automated sample delivery of peptides for analysis by electrospray ionization tandem mass spectrometry. <i>Analytical Chemistry</i> , 1999 , 71, 4437-44	7.8	91
2306	Test Channels for Flow Characterization of Processed Plastic Microchannels. 1999 , 605, 253		2
2305	Characterization of Metallized Plastic MEMS. 1999 , 605, 97		1
2304	Electrokinetic control of fluid flow in native poly(dimethylsiloxane) capillary electrophoresis devices. 2000 , 21, 107-15		287
2303	Fabrication of microfluidic systems in poly(dimethylsiloxane). 2000 , 21, 27-40		2618
2302	Capillary electrophoresis on microchip. 2000 , 21, 41-54		431
2301	DNA sequencing by capillary array electrophoresis and microfabricated array systems. 2000 , 21, 55-65		108
2300	Near-infrared laser-induced fluorescence detection in capillary electrophoresis. 2000 , 21, 1267-80		56
2299	Recent developments in electrokinetically driven analysis on microfabricated devices. 2000 , 21, 3931-51		265
2298	Mikrochips als Systeme zur kontrollierten Freisetzung von Medikamenten. 2000 , 112, 2486-2498		3
2297	The use of a novel microreactor for high throughput continuous flow organic synthesis. 2000 , 63, 153-158		141
2296	Chip-based microsystems for genomic and proteomic analysis. 2000 , 19, 364-378		295
2295	Current developments in electrophoretic and chromatographic separation methods on microfabricated devices. 2000 , 19, 352-363		150
2294	Fabrication techniques and materials commonly used for the production of microreactors and micro total analytical systems. 2000 , 19, 396-401		107

2293	A pneumatically-actuated three-way microvalve fabricated with polydimethylsiloxane using the membrane transfer technique. 2000 , 10, 415-420		154
2292	Miniaturized total analysis systems for biological analysis. 2000 , 366, 525-39		233
2291	The Incredibly Shrinking Laboratory Reactions, Separations and Detections. 2000 , 5, 40-45		1
2290	Bioluminescent based chemchip for point-of-care diagnostics.		1
2289	Printing, molding, and near-field photolithographic methods for patterning organic lasers, smart pixels and simple circuits. 2000 , 115, 5-11		65
2288	Development of a positive pressure driven micro-fabricated liquid chromatographic analyzer through rapid-prototyping with poly(dimethylsiloxane) Optimizing chromatographic efficiency with sub-nanoliter injections. 2000 , 51, 1205-12		21
2287	Fabrication of topologically complex three-dimensional microfluidic systems in PDMS by rapid prototyping. <i>Analytical Chemistry</i> , 2000 , 72, 3158-64	7.8	564
2286	Monolithic microfabricated valves and pumps by multilayer soft lithography. 2000 , 288, 113-6		3191
2285	From micro- to nanofabrication with soft materials. 2000 , 290, 1536-40		874
2284	Generation of Solution and Surface Gradients Using Microfluidic Systems. 2000 , 16, 8311-8316		776
2283	Experimental and theoretical scaling laws for transverse diffusive broadening in two-phase laminar flows in microchannels. 2000 , 76, 2376-2378		436
2282	Polymeric microelectromechanical systems. <i>Analytical Chemistry</i> , 2000 , 72, 642A-651A	7.8	234
2281	Room-temperature imprinting method for plastic microchannel fabrication. <i>Analytical Chemistry</i> , 2000 , 72, 1930-3	7.8	143
2280	Plastic microfluidic devices modified with polyelectrolyte multilayers. <i>Analytical Chemistry</i> , 2000 , 72, 4899-903	7.8	142
2279	Design and fabrication of travelling wave dielectrophoresis structures. 2000 , 10, 72-79		69
2278	A low temperature biochemically compatible bonding technique using fluoropolymers for biochemical microfluidic systems.		12
2277	Surface micromachined polymer actuators as valves in PDMS microfluidic system.		10
2276	PDMS (polydimethylsiloxane)-glass hybrid microchip for gene amplification.		2

2275	Pumping techniques available for use in biomedical analysis systems.		3
2274	Patterned deposition of cells and proteins onto surfaces by using three-dimensional microfluidic systems. 2000 , 97, 2408-13		483
2273	Effect of high-aspect-ratio microstructures on cell growth and attachment.		4
2272	.		0
2271	The possibility of generating high-speed shear-driven flows and their potential application in liquid chromatography. <i>Analytical Chemistry</i> , 2000 , 72, 2160-5	7.8	43
2270	Creating addressable aqueous microcompartments above solid supported phospholipid bilayers using lithographically patterned poly(dimethylsiloxane) molds. <i>Analytical Chemistry</i> , 2000 , 72, 2587-9	7.8	34
2269	Nanoparticle characterization in nanoliter volumes by grating light reflection spectroscopy. <i>Analytical Chemistry</i> , 2000 , 72, 4428-34	7.8	5
2268	Ultrasonic micromixer for microfluidic systems.		9
2267	From batch to continuous manufacturing of microbiomedical devices. 2000 , 100, 2679-92		35
2266	Effects of alkaline hydrolysis and dynamic coating on the electroosmotic flow in polymeric microfabricated channels. <i>Analytical Chemistry</i> , 2000 , 72, 1704-6	7.8	43
2265	Fabrication inside microchannels using fluid flow. 2000 , 33, 841-7		133
2264	Dynamic coating using polyelectrolyte multilayers for chemical control of electroosmotic flow in capillary electrophoresis microchips. <i>Analytical Chemistry</i> , 2000 , 72, 5939-44	7.8	263
2263	Dual-electrode electrochemical detection for poly(dimethylsiloxane)-fabricated capillary electrophoresis microchips. <i>Analytical Chemistry</i> , 2000 , 72, 3196-202	7.8	280
2262	Electrokinetically controlled microfluidic analysis systems. 2000 , 29, 155-81		180
2261	SPR imaging measurements of 1-D and 2-D DNA microarrays created from microfluidic channels on gold thin films. <i>Analytical Chemistry</i> , 2001 , 73, 5525-31	7.8	181
2260	An integrated fluorescence detection system in poly(dimethylsiloxane) for microfluidic applications. <i>Analytical Chemistry</i> , 2001 , 73, 4491-8	7.8	347
2259	A method for filling complex polymeric microfluidic devices and arrays. <i>Analytical Chemistry</i> , 2001 , 73, 3193-7	7.8	113
2258	Integrated plastic microfluidic devices with ESI-MS for drug screening and residue analysis. <i>Analytical Chemistry</i> , 2001 , 73, 2048-53	7.8	117

2257	Development of a fully integrated analysis system for ions based on ion-selective optodes and centrifugal microfluidics. <i>Analytical Chemistry</i> , 2001 , 73, 3940-6	7.8	95
2256	Generation of Gradients Having Complex Shapes Using Microfluidic Networks. <i>Analytical Chemistry</i> , 2001 , 73, 1240-1246	7.8	669
2255	Soft lithography in biology and biochemistry. 2001 , 3, 335-73		2115
2254	Surface biopassivation of replicated poly(dimethylsiloxane) microfluidic channels and application to heterogeneous immunoreaction with on-chip fluorescence detection. <i>Analytical Chemistry</i> , 2001 , 73, 4181-9	7.8	153
2253	Trends in miniaturized total analysis systems for point-of-care testing in clinical chemistry. 2001 , 1, 83-95		347
2252	Directed assembly of one-dimensional nanostructures into functional networks. 2001 , 291, 630-3		1912
2251	Polymer based micro-reactors. 2001 , 82, 89-99		36
2250	Flow-through polymerase chain reactions in chip thermocyclers. 2001 , 82, 101-21		68
2249	Pressure-driven laminar flow in tangential microchannels: an elastomeric microfluidic switch. <i>Analytical Chemistry</i> , 2001 , 73, 4682-7	7.8	90
2248	Modular approach to fabrication of three-dimensional microchannel systems in PDMS-application to sheath flow microchips. 2001 , 1, 108-14		43
2247	Rapid fabrication of microfluidic devices in poly(dimethylsiloxane) by photocopying. 2001 , 1, 7-9		90
2246	Low-cost technology for high-density microvalve arrays using polydimethylsiloxane (PDMS).		1
2245	Dielectric spectroscopy for bioanalysis: From 40 Hz to 26.5 GHz in a microfabricated wave guide. 2001 , 78, 996-998		109
2244	Fabrication of a configurable, single-use microfluidic device. <i>Analytical Chemistry</i> , 2001 , 73, 5645-50	7.8	65
2243	Microfluidic arrays of fluid-fluid diffusional contacts as detection elements and combinatorial tools. <i>Analytical Chemistry</i> , 2001 , 73, 5207-13	7.8	110
2242	Interfacing a polymer-based micromachined device to a nanoelectrospray ionization Fourier transform ion cyclotron resonance mass spectrometer. <i>Analytical Chemistry</i> , 2001 , 73, 1286-91	7.8	59
2241	Electroosmotically induced hydraulic pumping with integrated electrodes on microfluidic devices. <i>Analytical Chemistry</i> , 2001 , 73, 4045-9	7.8	116
2240	Separation of 100-kilobase DNA molecules in 10 seconds. <i>Analytical Chemistry</i> , 2001 , 73, 6053-6	7.8	116

2239	Microelectromechanical systems and neurosurgery: a new era in a new millennium. 2001 , 49, 779-97; discussion 797-8		70
2238	Optical coherence tomography of living and fabricated microfluidic systems.		
2237	Photomodification of polymer microchannels induced by static and dynamic excimer ablation: effect on the electroosmotic flow. <i>Analytical Chemistry</i> , 2001 , 73, 3845-53	7.8	30
2236	Microelectromechanical Systems and Neurosurgery: A New Era in a New Millennium. 2001 , 49, 779-798		33
2235	Electroosmotic properties of microfluidic channels composed of poly(dimethylsiloxane). 2001 , 762, 117-25		137
2234	Microfabricated PDMS multichannel emitter for electrospray ionization mass spectrometry. 2001 , 12, 463-9		77
2233	A surface plasmon resonance array biosensor based on spectroscopic imaging. 2001 , 16, 97-108		64
2232	Portable cell-based biosensor system using integrated CMOS cell-cartridges. 2001 , 16, 543-56		141
2231	Fabrication and evaluation of a carbon-based dual-electrode detector for poly(dimethylsiloxane) electrophoresis chips. 2001 , 22, 242-8		121
2230	Electrophoresis in microfabricated devices using photopolymerized polyacrylamide gels and electrode-defined sample injection. 2001 , 22, 300-11		61
2229	Integration of gene amplification and capillary gel electrophoresis on a polydimethylsiloxane-glass hybrid microchip. 2001 , 22, 328-33		138
2228	Microchip capillary electrophoresis/electrochemistry. 2001 , 22, 2526-36		215
2227	Nanoliter capillary electrochromatography columns based on collocated monolithic support structures molded in poly(dimethyl siloxane). 2001 , 22, 3736-43		98
2226	Field-effect flow control in a polydimethylsiloxane-based microfluidic system. 2001 , 22, 3902-7		48
2225	On-line coupling of micro-enzyme reactor with micro-membrane chromatography for protein digestion, peptide separation, and protein identification using electrospray ionization mass spectrometry. 2001 , 924, 315-22		46
2224	Fabrication of polyester microchannels and their applications to capillary electrophoresis. 2001 , 907, 279-89		36
2223	Microfluidic systems with on-line UV detection fabricated in photodefinable epoxy. 2001 , 11, 263-269		183
2222	Nanowire nanosensors for highly sensitive and selective detection of biological and chemical species. 2001 , 293, 1289-92		5041

2221	Fluidics and sample handling in clinical chemical analysis. 2001 , 429, 1-18	77
2220	Subcellular positioning of small molecules. 2001 , 411, 1016	419
2219	Microfabricated polymer chip for capillary gel electrophoresis. 2001 , 17, 958-62	32
2218	Microchip electrophoretic separation systems for biomedical and pharmaceutical analysis. 2001 , 14, 1-12	72
2217	Using three-dimensional microfluidic networks for solving computationally hard problems. 2001 , 98, 2961-6	74
2216	Fabrication of Three-Dimensional Microfluidic Systems by Soft Lithography. 2001 , 26, 523-528	46
2215	Microfluid mechanics: progress and opportunities. 2001 , 13, R271-R295	51
2214	DEVELOPMENT OF AN UPSET EARLY WARNING DEVICE (UEWD) TO PREDICT DEFLOCCULATION EVENTS. 2001 , 2001, 731-746	
2213	An Innovative Separation Platform: Electrophoretic Microchip Technology. 2001 , 3, 529-554	
2212	Lithographically induced self-assembly of microstructures with a liquid-filled gap between the mask and polymer surface. 2001 , 19, 2741	23
2211	Rapid prototyping of active microfluidic components based on magnetically modified elastomeric materials. 2001 , 19, 596	78
2210	Alternative fabrication methods for capillary electrophoretic device manufacturing.	2
2209	In-line pressure monitoring for microfluidic devices using a deformable diffraction grating.	3
2208	A microfluidic device for separating motile sperm from nonmotile sperm via inter-streamline crossings.	1
2207	Rapid compaction during RNA folding. 2002 , 99, 4266-71	190
2206	Hybrid macro/micro fluidics system for a chip-based biosensor. 2002 , 12, N7-N17	44
2205	Development and Characterization of DNA Hybridization Reaction on PDMS Microchip. 2002 , 3,	2
2204	Gradients of substrate-bound laminin orient axonal specification of neurons. 2002 , 99, 12542-7	380

2203	UV Laser Micromachining of Polymers for Microfluidic Applications. 2002 , 7, 78-82		13
2202	Fabrication of Microfluidic Electrocontrolled Chip in Polydimethylsiloxane (PDMS). 2002 , 3,		1
2201	Evaporation-driven microfluidic sample concentration.		
2200	The nanophysiometer: BioMEMS for high bandwidth detection of cellular activity in subnanoliter volumes.		
2199	A low-temperature bonding technique using spin-on fluorocarbon polymers to assemble microsystems. 2002 , 12, 187-191		75
2198	Organic Materials Science. 2002 , 27, 56-65		15
2197	UV Laser Micromachining of Polymers for Microfluidic Applications. 2002 , 7, 78-82		13
2196	Biodegradable Polymer Microfluidics for Tissue Engineering Microvasculature. 2002 , 729, 141		9
2195	Novel Interface to Biological Systems for Retinal Prosthetics. 2002 , 729, 441		2
2194	Integrated optical/microfluidic platform for real-time affinity biosensing. 2002 , 4626, 403		
2193	Biomolecular recognition on well-characterized beads packed in microfluidic channels. <i>Analytical Chemistry</i> , 2002 , 74, 1149-56	7.8	64
2192	A high-throughput continuous sample introduction interface for microfluidic chip-based capillary electrophoresis systems. <i>Analytical Chemistry</i> , 2002 , 74, 1223-31	7.8	91
2191	Using hierarchical self-assembly to form three-dimensional lattices of spheres. 2002 , 124, 14495-502		54
2190	Particle tracking techniques for electrokinetic microchannel flows. <i>Analytical Chemistry</i> , 2002 , 74, 3704-13	7.8	100
2189	A chip-based electrophoresis system with electrochemical detection and hydrodynamic injection. <i>Analytical Chemistry</i> , 2002 , 74, 4054-9	7.8	77
2188	Toward a fully integrated positive-pressure driven microfabricated liquid analyzer. <i>Analytical Chemistry</i> , 2002 , 74, 177-84	7.8	19
2187	An electrospray ionization source for integration with microfluidics. <i>Analytical Chemistry</i> , 2002 , 74, 5897-901	7.8	103
2186	Surface-Tension-Confined Microfluidics. 2002 , 18, 948-951		105

2185	Efficient mixing and reactions within microfluidic channels using microbead-supported catalysts. 2002 , 124, 13360-1		172
2184	Microfluidic control using colloidal devices. 2002 , 296, 1841-4		313
2183	Characterization and optimization of peptide arrays for the study of epitope-antibody interactions using surface plasmon resonance imaging. <i>Analytical Chemistry</i> , 2002 , 74, 5161-8	7.8	245
2182	Microfluidic large-scale integration. 2002 , 298, 580-4		1878
2181	Micro total analysis systems. 1. Introduction, theory, and technology. <i>Analytical Chemistry</i> , 2002 , 74, 2623-86		1871
2180	Chemical Modification of the Surface of Poly(dimethylsiloxane) by Atom-Transfer Radical Polymerization of Acrylamide. 2002 , 18, 9971-9976		150
2179	Dual fluorescence and electrochemical detection on an electrophoresis microchip. <i>Analytical Chemistry</i> , 2002 , 74, 3348-53	7.8	77
2178	Membraneless vanadium redox fuel cell using laminar flow. 2002 , 124, 12930-1		347
2177	Prototyping of microfluidic devices in poly(dimethylsiloxane) using solid-object printing. <i>Analytical Chemistry</i> , 2002 , 74, 1537-45	7.8	211
2176	A polydimethylsiloxane (PDMS) deformable diffraction grating for monitoring of local pressure in microfluidic devices. 2002 , 12, 1-6		100
2175	A prototype two-dimensional capillary electrophoresis system fabricated in poly(dimethylsiloxane). <i>Analytical Chemistry</i> , 2002 , 74, 1772-8	7.8	139
2174	PDMS-glass hybrid microreactor array with embedded temperature control device. Application to cell-free protein synthesis. 2002 , 2, 197-202		101
2173	Plastic fantastic?. 2002 , 2, 31N-36N		91
2172	Physics of bio-molecules and cells. Physique des biomolécules et des cellules. 2002 ,		6
2171	Micro total analysis systems. 2. Analytical standard operations and applications. <i>Analytical Chemistry</i> , 2002 , 74, 2637-52	7.8	1362
2170	Compositional Mapping of Self-Assembled Monolayers Derivatized within Microfluidic Networks. 2002 , 18, 3151-3158		12
2169	Hydrogel-based microreactors as a functional component of microfluidic systems. <i>Analytical Chemistry</i> , 2002 , 74, 4647-52	7.8	148
2168	Microfabricated flow-through PCR device for underwater microbiological study.		4

2167	Combinatorial microfluidic devices for cell biology.			1
2166	Microfermentors for the rapid screening and analysis of biochemical processes.			
2165	A hydrogel readout for autonomous detection of ions in microchannels. 2002 , 2, 76-80			10
2164	Rapid prototyping for injection moulded integrated microfluidic devices and diffractive element arrays. 2002 , 2, 203-6			24
2163	Controlled transport of latex beads through vertically aligned carbon nanofiber membranes. 2002 , 81, 135-137			52
2162	Polymer microfluidic devices. 2002 , 56, 267-87			900
2161	Poly(dimethylsiloxane) as a material for fabricating microfluidic devices. 2002 , 35, 491-9			1903
2160	Physics and applications of microfluidics in biology. 2002 , 4, 261-86			1286
2159	Surface modification of poly(dimethylsiloxane) microfluidic devices by ultraviolet polymer grafting. <i>Analytical Chemistry</i> , 2002 , 74, 4117-23	7.8		359
2158	An integrated fritless column for on-chip capillary electrochromatography with conventional stationary phases. <i>Analytical Chemistry</i> , 2002 , 74, 639-47	7.8		135
2157	Fabrication of microchambers defined by photopolymerized hydrogels and weirs within microfluidic systems: application to DNA hybridization. <i>Analytical Chemistry</i> , 2002 , 74, 3372-7	7.8		90
2156	Soft Lithography and Microfluidics. 2002 , 571-595			5
2155	PDMS-based microfluidic devices for biomedical applications. 2002 , 61-62, 907-914			326
2154	Autonomous Movement and Self-Assembly. 2002 , 114, 674-676			119
2153	Autonomous Movement and Self-Assembly. 2002 , 41, 652-654			442
2152	Lab-on-a-chip: Opportunities for chemical engineering. 2002 , 48, 1590-1595			102
2151	Towards disposable lab-on-a-chip: poly(methylmethacrylate) microchip electrophoresis device with electrochemical detection. 2002 , 23, 596-601			160
2150	Microfluidic chips for clinical and forensic analysis. 2002 , 23, 677-712			443

2149	The analysis of uric acid in urine using microchip capillary electrophoresis with electrochemical detection. 2002 , 23, 767-73	75
2148	Polymer microchips bonded by O ₂ -plasma activation. 2002 , 23, 782-90	86
2147	Poly(dimethylsiloxane) microchip for precolumn reaction and micellar electrokinetic chromatography of biogenic amines. 2002 , 23, 1129-37	70
2146	Recent progress in DNA analysis by capillary electrophoresis. 2002 , 23, 1361-74	77
2145	Indirect fluorescence detection of simple sugars via high-pH electrophoresis in poly(dimethylsiloxane) microfluidic chips. 2002 , 23, 2347-54	23
2144	DNA analysis on microfabricated electrophoretic devices with bubble cells. 2002 , 23, 2477-84	18
2143	Components for integrated poly(dimethylsiloxane) microfluidic systems. 2002 , 23, 3461-73	496
2142	A hybrid microdevice for electrophoresis and electrochromatography using UV detection. 2002 , 23, 3479-86	28
2141	A dynamically modified microfluidic poly(dimethylsiloxane) chip with electrochemical detection for biological analysis. 2002 , 23, 3558-66	91
2140	Prototyping disposable electrophoresis microchips with electrochemical detection using rapid marker masking and laminar flow etching. 2002 , 23, 3735-43	32
2139	Microchip capillary electrophoresis coupled to sinusoidal voltammetry for the detection of native carbohydrates. 2002 , 23, 3750-9	39
2138	On-chip absorption measurements using an integrated waveguide. 2002 , 373, 519-25	24
2137	Polymer microfabrication technologies. 2002 , 8, 32-36	121
2136	Attachment of plastic fluidic components to glass sensing surfaces. 2002 , 17, 105-10	11
2135	PDMS device for patterned application of microfluids to neuronal cells arranged by microcontact printing. 2002 , 17, 87-93	68
2134	Hot embossing in microfabrication. Part I: Experimental. 2002 , 42, 539-550	120
2133	Rapid fabrication of electrochemical enzyme sensor chip using polydimethylsiloxane microfluidic channel. 2002 , 468, 143-152	32
2132	Bioanalysis in microfluidic devices. 2002 , 943, 159-83	249

2131	Use of Air-Liquid Two-Phase Flow in Hydrophobic Microfluidic Channels for Disposable Flow Cytometers. 2002 , 4, 141-149		79
2130	Technology and Applications of Microengineered Reactors. 2002 , 80, 3-30		182
2129	Direct determination of carbohydrates, amino acids, and antibiotics by microchip electrophoresis with pulsed amperometric detection. <i>Analytical Chemistry</i> , 2003 , 75, 4778-83	7.8	122
2128	Measurement of enzyme kinetics using a continuous-flow microfluidic system. <i>Analytical Chemistry</i> , 2003 , 75, 3161-7	7.8	189
2127	Miniaturization of polymerase chain reaction. 2003 , 8, 213-220		15
2126	Covalent immobilization of proteases and nucleases to poly(methylmethacrylate). 2003 , 376, 349-54		16
2125	A microfluidic biosensor based on nucleic acid sequence recognition. 2003 , 376, 1062-8		73
2124	Biochemical analysis with microfluidic systems. 2003 , 377, 556-69		116
2123	Microbubble lensing-induced photobleaching (EBLIP) with application to microflow visualization. 2003 , 35, 178-187		15
2122	Personal sensors for the diagnosis and management of metabolic disorders. 2003 , 22, 32-42		17
2121	Analysis of inorganic and small organic ions with the capillary electrophoresis microchip. 2003 , 24, 2193-207		30
2120	Capillary electrochromatography and preconcentration of neutral compounds on poly(dimethylsiloxane) microchips. 2003 , 24, 3253-9		46
2119	Microfluidic devices fabricated in poly(dimethylsiloxane) for biological studies. 2003 , 24, 3563-76		1321
2118	Cross-linked coatings for electrophoretic separations in poly(dimethylsiloxane) microchannels. 2003 , 24, 3679-88		73
2117	Poly(dimethylsiloxane)-based microfluidic device with electrospray ionization-mass spectrometry interface for protein identification. 2003 , 24, 3648-54		30
2116	Electrokinetic characterization of poly(dimethylsiloxane) microchannels. 2003 , 24, 3674-8		49
2115	Surface modification of poly(dimethylsiloxane) microchannels. 2003 , 24, 3607-19		458
2114	Surface modification in microchip electrophoresis. 2003 , 24, 3595-606		182

2113	Dynamic analyte introduction and focusing in plastic microfluidic devices for proteomic analysis. 2003 , 24, 193-9	44
2112	Surface characterization using chemical force microscopy and the flow performance of modified polydimethylsiloxane for microfluidic device applications. 2003 , 24, 1442-50	65
2111	Separation and determination of sulfonamides in pharmaceutical preparations by a microfluidic capillary electrophoresis system with a continuous sample introduction interface. 2003 , 26, 1376-1382	22
2110	Protein proteolysis and the multi-dimensional electrochromatographic separation of histidine-containing peptide fragments on a chip. 2003 , 984, 97-107	93
2109	Comparison of the performance characteristics of poly(dimethylsiloxane) and Pyrex microchip electrophoresis devices for peptide separations. 2003 , 1004, 225-35	75
2108	Rapid analysis of amino acids in Japanese green tea by microchip electrophoresis using plastic microchip and fluorescence detection. 2003 , 1013, 183-9	52
2107	Diffusion coefficient measurement in a microfluidic analyzer using dual-beam microscale-refractive index gradient detection. Application to on-chip molecular size determination. 2003 , 1013, 77-91	25
2106	Solution phase synthesis of esters within a micro reactor. 2003 , 59, 10173-10179	29
2105	Rapid prototyping of glass microchannels. 2003 , 496, 205-215	75
2104	Microchip electrophoresis-based separation of DNA. 2003 , 30, 1645-54	76
2103	Novel microfabrication approaches for directly patterning PEM fuel cell membranes. 2003 , 123, 172-181	72
2102	Selective chemical treatment of cellular microdomains using multiple laminar streams. 2003 , 10, 123-30	168
2101	A PDMS dermal patch for non-intrusive transdermal glucose sensing. 2003 , 104, 195-204	49
2100	The Artificial Synapse Chip: a flexible retinal interface based on directed retinal cell growth and neurotransmitter stimulation. 2003 , 27, 975-85	57
2099	Measuring protein interactions by microchip self-interaction chromatography. 2003 , 19, 1006-10	30
2098	Zone electrophoresis of proteins on a poly(methyl methacrylate) chip with conductivity detection. 2003 , 990, 179-88	34
2097	Formation of Droplets and Mixing in Multiphase Microfluidics at Low Values of the Reynolds and the Capillary Numbers. 2003 , 19, 9127-9133	561
2096	Robust Interconnects and Packaging for Microfluidic Elastomeric Chips. <i>Analytical Chemistry</i> , 2003 , 75, 5287-5291	7.8 33

2095	Fabrication of histidine-tagged fusion protein arrays for surface plasmon resonance imaging studies of protein-protein and protein-DNA interactions. <i>Analytical Chemistry</i> , 2003 , 75, 4740-6	7.8	172
2094	Three-electrode electrochemical detector and platinum film decoupler integrated with a capillary electrophoresis microchip for amperometric detection. <i>Analytical Chemistry</i> , 2003 , 75, 947-52	7.8	67
2093	DNA hybridization and discrimination of single-nucleotide mismatches using chip-based microbead arrays. <i>Analytical Chemistry</i> , 2003 , 75, 4732-9	7.8	136
2092	Performance of pyrolyzed photoresist carbon films in a microchip capillary electrophoresis device with sinusoidal voltammetric detection. <i>Analytical Chemistry</i> , 2003 , 75, 4265-71	7.8	67
2091	Rapid fabrication of a poly(dimethylsiloxane) microfluidic capillary gel electrophoresis system utilizing high precision machining. 2003 , 3, 93-9		44
2090	Isolation of motile spermatozoa from semen samples using microfluidics. 2003 , 7, 75-81		131
2089	A miniaturized, parallel, serially diluted immunoassay for analyzing multiple antigens. 2003 , 125, 5294-5		144
2088	Fabrication of patterned multicomponent protein gradients and gradient arrays using microfluidic depletion. <i>Analytical Chemistry</i> , 2003 , 75, 5775-82	7.8	69
2087	Nanocapillary array interconnects for gated analyte injections and electrophoretic separations in multilayer microfluidic architectures. <i>Analytical Chemistry</i> , 2003 , 75, 2224-30	7.8	91
2086	Fabrication of complex three-dimensional microchannel systems in PDMS. 2003 , 125, 554-9		220
2085	A microchip electrophoresis device with integrated electrochemical detection: a direct comparison of constant potential amperometry and sinusoidal voltammetry. <i>Analytical Chemistry</i> , 2003 , 75, 3301-7	7.8	29
2084	Chemiluminescence detection for a microchip capillary electrophoresis system fabricated in poly(dimethylsiloxane). <i>Analytical Chemistry</i> , 2003 , 75, 36-41	7.8	117
2083	Creation of an on-chip enzyme reactor by encapsulating trypsin in sol-gel on a plastic microchip. <i>Analytical Chemistry</i> , 2003 , 75, 388-93	7.8	159
2082	Investigations of bivalent antibody binding on fluid-supported phospholipid membranes: the effect of hapten density. 2003 , 125, 4779-84		115
2081	Aging Effects on Oxidized and Amine-Modified Poly(dimethylsiloxane) Surfaces Studied with Chemical Force Titrations: Effects on Electroosmotic Flow Rate in Microfluidic Channels. 2003 , 19, 9792-9798		40
2080	Adsorption of Proteins to Hydrophobic Sites on Mixed Self-Assembled Monolayers \square 2003 , 19, 1861-1872		227
2079	Microchip capillary electrophoresis with an integrated indium tin oxide electrode-based electrochemiluminescence detector. <i>Analytical Chemistry</i> , 2003 , 75, 5435-40	7.8	118
2078	Self-assembly of gears at a fluid/air interface. 2003 , 125, 7948-58		33

2077	Microfabricated Multiphase Reactors for the Selective Direct Fluorination of Aromatics. 2003 , 42, 698-710		163
2076	Microfluidics meets MEMS. 2003 , 91, 930-953		313
2075	Parallel microchannel-based measurements of individual erythrocyte areas and volumes. 2003 , 84, 623-33		76
2074	Solving Mazes Using Microfluidic Networks. 2003 , 19, 4714-4722		67
2073	Biomimetic Nanostructure Fabrication: Nonlithographic Lateral Patterning and Self-Assembly of Functional Bacterial S-Layers at Silicon Supports. 2003 , 3, 315-319		56
2072	A dry process for production of microfluidic devices based on the lamination of laser-printed polyester films. <i>Analytical Chemistry</i> , 2003 , 75, 3853-8	7.8	137
2071	Controlling flows in microchannels with patterned surface charge and topography. 2003 , 36, 597-604		121
2070	Fabrication of all-polymer freestanding waveguides. 2003 , 13, 419-424		37
2069	A microfluidic bioreactor based on hydrogel-entrapped E. coli: cell viability, lysis, and intracellular enzyme reactions. <i>Analytical Chemistry</i> , 2003 , 75, 22-6	7.8	97
2068	Reactive polymer coatings: a first step toward surface engineering of microfluidic devices. <i>Analytical Chemistry</i> , 2003 , 75, 2117-22	7.8	165
2067	Fabrication of thermoset polyester microfluidic devices and embossing masters using rapid prototyped polydimethylsiloxane molds. 2003 , 3, 158-63		78
2066	Multi-layer plastic/glass microfluidic systems containing electrical and mechanical functionality. 2003 , 3, 150-7		47
2065	Isolation and extraction of target microbes using thermal sol-gel transformation. 2003 , 128, 547-51		39
2064	A microfabricated electrochemical oxygen generator for high-density cell culture arrays. 2003 , 12, 590-599		31
2063	Joule heating and heat transfer in poly(dimethylsiloxane) microfluidic systems. 2003 , 3, 141-9		221
2062	Microbarcode sorting device. 2003 , 3, 198-201		6
2061	Design and fabrication of multi-metal electrodes implanted PDMS structures for micro flow devices using 3-D assembly.		1
2060	Microthermopiles integrated with fluidic channels as calorimetric MEMS biosensors.		3

2059	Microchip capillary gel electrophoresis with electrochemical detection for the analysis of known SNPs. 2003 , 3, 241-7	37
2058	PDMS-based microfluidic device with multi-height structures fabricated by single-step photolithography using printed circuit board as masters. 2003 , 128, 1137-42	51
2057	Performance and scaling of an electro-osmotic mixer.	1
2056	MICROFLUIDIC CHANNELS MODIFIED WITH COLLOIDAL PALLADIUM AS AN EFFICIENT CATALYST FOR HIGH THROUGHPUT SUZUKI COUPLING REACTIONS. 2003 , 04, 683-686	
2055	High Throughput Measurements of Polymer Fluids for Formulations *. 2003 , 804, 225	
2054	Integrated CE chip - concentration and high-resolution cyclic CE technology.	
2053	Pumping based on transverse electrokinetic effects. 2003 , 83, 1486-1488	34
2052	Geometry and surface assisted flow discretization.	
2051	Biochips beyond DNA: technologies and applications. 2003 , 9, 1-149	42
2050	Microreplication technologies for polymer-based ETAS applications. 2003 , 21-35	2
2049	Surface chemistry in polymer microfluidic systems. 2003 , 65-82	9
2048	Plastic microfluidic devices: Electrokinetic manipulations, life science applications, and production technologies. 2003 , 83-112	7
2047	Fluidics in Microchannels. 2003 , 483-504	
2046	Novel Low Reynolds Number Mixers for Microfluidic Applications. 2003 , 887	1
2045	Microfabrication of a BioModule composed of microfluidics and digitally controlled microelectrodes for processing biomolecules. 2003 , 12, 757-762	16
2044	Mems fabrication.	9
2043	Assembly and Characterization of Protein Resistant Planar Bilayers in PDMS Microfluidic Devices. 2003 , 774, 721	1
2042	Polymer Microvalve Based on Anisotropic Expansion of Polypyrrole. 2003 , 782, 1	9

2041	Surface Plasmon Resonance Imaging Measurements of DNA, RNA, and Protein Interactions to Biomolecular Arrays. 107-129	2
2040	Polymer Micromachining. 169-181	
2039	Molecular Tagging in Microchannels With Microbubble Lensing-Induced Photobleaching (μ -BLIP). 2003 , 527	
2038	. 2003 ,	23
2037	?????????????????. 2003 , 54, 391-394	0
2036	Localized neurotransmitter release for use in a prototype retinal interface. 2003 , 44, 3144-9	49
2035	Fabrication of the Perfluoro Polymer Passivated PDMS Microstructure. 2004 , 124, 364-368	3
2034	Electrokinetically-Induced Flow Over a Nano-Hole Array Sensor. 2004 , 213	0
2033	Integrated genetic analysis microsystems. 2004 , 37, R245-R261	68
2032	Nanofluidics. 2004 , 575-597	2
2031	Experimental studies of electroosmotic flow. 2004 , 2, 354-462	
2030	Development of a microchip for 2-dimensional capillary electrophoresis. 2004 , 14, 1693-1699	21
2029	.	1
2028	Single-Cell Analysis in a Plastic Microfluidic Channel with a Hadamard Transform Microscopic Fluorescence Image System. 2004 , 37, 2053-2065	2
2027	Topologic mixing on a microfluidic chip. 2004 , 84, 2193-2195	163
2026	Microfluidic method for in-situ deposition and precision patterning of thin-film metals on curved surfaces. 2004 , 85, 3629-3631	23
2025	Microfluidic glucose stimulation reveals limited coordination of intracellular Ca ²⁺ activity oscillations in pancreatic islets. 2004 , 101, 12899-903	90
2024	Chapter 11 Microfabricated analytical devices. 2004 , 431-467	

2023 Chapter 9 Capillary zone electrophoresis. **2004**, 369-402

2022 Long-term stability of plasma oxidized PDMS surfaces. **2004**, 2004, 5013-6

17

2021 Biodegradable Microfluidic Scaffolds for Vascular Tissue Engineering. **2004**, 845, 35

1

2020 Microfluidic channel fabrication by PDMS-interface bonding. **2004**,

3

2019 Constructing and probing biomimetic models of the actin cortex with holographic optical tweezers. **2004**, 5514, 446

4

2018 Engineering the morphology and electrophysiological parameters of cultured neurons by microfluidic surface patterning. **2004**, 18, 1267-9

38

2017 Three-dimensional microfabrication using two-photon absorption by femtosecond laser. **2004**,

5

2016 Single cell trap on a chip using in-situ microfabrication with photo-crosslinkable resin and thermal gelation. **2004**,

8

2015 Detection of oxidized low density lipoproteins by indium oxide nanowires-based field effect transistor. **2004**, 2006, 204-7

2014 Pinched flow fractionation (PFF) for continuous particle separation in a microfluidic device.

3

2013 Membraneless Fuel Cells: An Application of Microfluidics. **2004**, 353-360

2012 Microfabricated devices for DNA extraction toward realization of deep-sea in situ gene analysis.

2011 Computerized microfluidic cell culture using elastomeric channels and Braille displays. **2004**, 101, 15861-6

330

2010 Enhanced diffusion due to motile bacteria. **2004**, 16, L78-L81

143

2009 Flow control for capillary-pumped microfluidic systems. **2004**, 14, 1503-1506

52

2008 Magnetoresistive DNA chips. **2004**, 331-386

32

2007 A buckling-based metrology for measuring the elastic moduli of polymeric thin films. **2004**, 3, 545-50

1082

2006 Hybrid replication development for construction of polymeric devices. **2004**, 10, 711-715

6

2005	Flow cytometry for microbial sensing in environmental sustainability applications: current status and future prospects. 2004 , 49, 37-49	34
2004	Application of on-chip cell cultures for the detection of allergic response. 2004 , 19, 741-7	68
2003	In-channel dual-electrode amperometric detection in electrophoretic chips with a palladium film decoupler. 2004 , 1023, 143-50	25
2002	Poly(dimethylsiloxane) microfluidic flow cells for surface plasmon resonance spectroscopy. 2004 , 98, 208-214	29
2001	UV/ozone modification of poly(dimethylsiloxane) microfluidic channels. 2004 , 97, 402-408	213
2000	Near-surface velocimetry using evanescent wave illumination. 2004 , 37, 825-833	83
1999	Micro total analysis system (micro-TAS) in biotechnology. 2004 , 64, 289-99	183
1998	Non-destructive on-chip cell sorting system with real-time microscopic image processing. 2004 , 2, 5	61
1997	A self-priming microfluidic diaphragm pump capable of recirculation fabricated by combining soft lithography and traditional machining. 2004 , 85, 359-63	23
1996	Continuous cell partitioning using an aqueous two-phase flow system in microfluidic devices. 2004 , 88, 489-94	73
1995	Biodegradable Microfluidics. 2004 , 16, 2007-2012	145
1994	Preparation of Microfluidic Devices Using Micropatterning of a Photosensitive Material by a Maskless, Liquid-Crystal-Display Projection Method. 2004 , 16, 1997-2001	32
1993	Formation of Arrayed Droplets by Soft Lithography and Two-Phase Fluid Flow, and Application in Protein Crystallization. 2004 , 16, 1365-1368	118
1992	Native and sodium dodecyl sulfate-capillary gel electrophoresis of proteins on a single microchip. 2004 , 25, 494-501	24
1991	Ultraviolet sealing and poly(dimethylacrylamide) modification for poly(dimethylsiloxane)/glass microchips. 2004 , 25, 914-21	46
1990	Rapid analysis of genetically modified organisms by in-house developed capillary electrophoresis chip and laser-induced fluorescence system. 2004 , 25, 922-30	36
1989	Electroosmotic flow in a poly(dimethylsiloxane) channel does not depend on percent curing agent. 2004 , 25, 1120-4	31
1988	A compactly integrated laser-induced fluorescence detector for microchip electrophoresis. 2004 , 25, 1907-15	64

1987	Electrochemical detector based on sol-gel-derived carbon composite material for capillary electrophoresis microchips. 2004 , 25, 3455-60	5
1986	Separation of proteins on surface-modified poly(dimethylsiloxane) microfluidic devices. 2004 , 25, 3024-31	55
1985	Wall coating for capillary electrophoresis on microchips. 2004 , 25, 3589-601	122
1984	A PDMS micro proton exchange membrane fuel cell by conventional and non-conventional microfabrication techniques. 2004 , 97, 157-167	101
1983	Cell infection within a microfluidic device using virus gradients. 2004 , 98, 347-355	64
1982	Microfluidic fuel cell based on laminar flow. 2004 , 128, 54-60	413
1981	Microfabricated flow-through device for DNA amplification towards in situ gene analysis. 2004 , 101, 151-156	89
1980	Vacuum-assisted thermal bonding of plastic capillary electrophoresis microchip imprinted with stainless steel template. 2004 , 1038, 239-45	57
1979	On-chip electrochromatography using sol-gel immobilized stationary phase with UV absorbance detection. 2004 , 1044, 277-85	47
1978	Integrated microfluidic devices. 2004 , 507, 11-26	530
1977	Enhanced determination of glucose by microchip electrophoresis with pulsed amperometric detection. 2004 , 508, 1-9	51
1976	Capillary electrophoresis microchip coupled with on-line chemiluminescence detection. 2004 , 508, 11-15	40
1975	Composite poly(dimethylsiloxane)/glass microfluidic system with an immobilized enzymatic particle-bed reactor and sequential sample injection for chemiluminescence determinations. 2004 , 507, 129-135	33
1974	Analytical treatment of electrokinetic microfluidics in hydrophobic microchannels. 2004 , 507, 39-53	23
1973	Micro-gas analysis system GAS comprising a microchannel scrubber and a micro-fluorescence detector for measurement of hydrogen sulfide. 2004 , 511, 3-10	31
1972	Microfluidique et applications biologiques : enjeux et tendances. 2004 , 5, 565-575	11
1971	Combinatorial mixing of microfluidic streams. 2004 , 4, 342-50	123
1970	Near-simultaneous and real-time detection of multiple analytes in affinity microcolumns. <i>Analytical Chemistry</i> , 2004 , 76, 6266-73	7.8 29

1969	Frontal photopolymerization for microfluidic applications. 2004 , 20, 10020-9		155
1968	Cationic starch derivatives as dynamic coating additives for analysis of amino acids and peptides using poly(methyl methacrylate) microfluidic devices. <i>Analytical Chemistry</i> , 2004 , 76, 6792-6	7.8	23
1967	Development and assessment of a miniaturised centrifugal chromatograph for reversed-phase separations in micro-channels. 2004 , 129, 704-9		20
1966	Development of a novel microfluidic immunoassay for the detection of <i>Helicobacter pylori</i> infection. 2004 , 129, 823-8		33
1965	Arrays of horizontally-oriented mini-reservoirs generate steady microfluidic flows for continuous perfusion cell culture and gradient generation. 2004 , 129, 1026-31		87
1964	Fabrication of a Spectrophotometric Absorbance Flow Cell Using Injection-Molded Plastic. <i>Analytical Chemistry</i> , 2004 , 76, 238-243	7.8	5
1963	Electrokinetically controlled DNA hybridization microfluidic chip enabling rapid target analysis. <i>Analytical Chemistry</i> , 2004 , 76, 7269-77	7.8	93
1962	Microfabricated systems for nucleic acid analysis. 2004 , 41, 429-65		21
1961	A method for precision patterning of silicone elastomer and its applications. 2004 , 13, 568-575		52
1960	Microfluidic flow transducer based on the measurement of electrical admittance. 2004 , 4, 7-10		51
1959	A water-powered micro drug delivery system. 2004 , 13, 75-82		71
1958	A PDMS-based constant-flowrate microfluidic control device.		2
1957	Using microfluidic channel networks to generate gradients for studying cell migration. 2005 , 294, 347-57		11
1956	Microfabricated suspensions for electrical connections on the tunable elastomer membrane. 2004 , 85, 6051-6053		52
1955	Separation imaging of DNA fragments in poly (dimethylsiloxane) microchip.		
1954	Electrotransfection of mammalian cells using microchannel-type electroporation chip. <i>Analytical Chemistry</i> , 2004 , 76, 7045-52	7.8	50
1953	Induced pressure pumping in polymer microchannels via field-effect flow control. <i>Analytical Chemistry</i> , 2004 , 76, 1942-7	7.8	37
1952	Microfabrication of functional microtool using photo-crosslinkable resin.		

1951	Biochemical, biomolecular and cellular sensing in microfluidics using flow induced admittance spectra. 2004 , 2004, 2565-7		0
1950	Flow velocity measurement in microchannels using magnetoresistive chips. 2004 , 40, 2652-2654		18
1949	Deformation-induced release of ATP from erythrocytes in a poly(dimethylsiloxane)-based microchip with channels that mimic resistance vessels. <i>Analytical Chemistry</i> , 2004 , 76, 4849-55	7.8	58
1948	Potentiometric titrations in a poly(dimethylsiloxane)-based microfluidic device. <i>Analytical Chemistry</i> , 2004 , 76, 2273-80	7.8	31
1947	Surface modification of the channels of poly(dimethylsiloxane) microfluidic chips with polyacrylamide for fast electrophoretic separations of proteins. <i>Analytical Chemistry</i> , 2004 , 76, 2055-61	7.8	133
1946	Microfluidic separation and gateable fraction collection for mass-limited samples. <i>Analytical Chemistry</i> , 2004 , 76, 6419-25	7.8	60
1945	Formation of droplets of alternating composition in microfluidic channels and applications to indexing of concentrations in droplet-based assays. <i>Analytical Chemistry</i> , 2004 , 76, 4977-82	7.8	273
1944	A microfluidic system for large DNA molecule arrays. <i>Analytical Chemistry</i> , 2004 , 76, 5293-301	7.8	155
1943	Microarrays of Biomimetic Cells Formed by the Controlled Synthesis of Carbon Nanofiber Membranes. 2004 , 4, 1809-1814		43
1942	Printed circuit technology for fabrication of plastic-based microfluidic devices. <i>Analytical Chemistry</i> , 2004 , 76, 3229-35	7.8	39
1941	Tailoring the surface properties of poly(dimethylsiloxane) microfluidic devices. 2004 , 20, 5569-74		83
1940	Investigation into the applicability of the centrifugal microfluidics platform for the development of protein-ligand binding assays incorporating enhanced green fluorescent protein as a fluorescent reporter. <i>Analytical Chemistry</i> , 2004 , 76, 7263-8	7.8	61
1939	Fabricating Semiconductor Nano/Microwires and Transfer Printing Ordered Arrays of Them onto Plastic Substrates. 2004 , 4, 1953-1959		193
1938	Real-time surface plasmon resonance imaging measurements for the multiplexed determination of protein adsorption/desorption kinetics and surface enzymatic reactions on peptide microarrays. <i>Analytical Chemistry</i> , 2004 , 76, 5677-84	7.8	169
1937	Recirculation of nanoliter volumes within microfluidic channels. <i>Analytical Chemistry</i> , 2004 , 76, 3018-22	7.8	18
1936	Two-dimensional protein separation with advanced sample and buffer isolation using microfluidic valves. <i>Analytical Chemistry</i> , 2004 , 76, 4426-31	7.8	132
1935	Microfluidic shear devices for quantitative analysis of cell adhesion. <i>Analytical Chemistry</i> , 2004 , 76, 5257-68		319
1934	Transport, location, and quantal release monitoring of single cells on a microfluidic device. <i>Analytical Chemistry</i> , 2004 , 76, 483-8	7.8	87

1933	Titania and alumina sol-gel-derived microfluidics enzymatic-reactors for peptide mapping: design, characterization, and performance. 2004 , 3, 1201-9		64
1932	Giant magnetoresistance monitoring of magnetic picodroplets in an integrated microfluidic system. 2004 , 85, 4783-4785		47
1931	Rapid prototyping of thermoset polyester microfluidic devices. <i>Analytical Chemistry</i> , 2004 , 76, 4697-704	7.8	81
1930	Direct Laser Writing on Electrolessly Deposited Thin Metal Films for Applications in Micro- and Nanofluidics. 2004 , 20, 1833-1837		21
1929	Immobilization of DNA onto poly(dimethylsiloxane) surfaces and application to a microelectrochemical enzyme-amplified DNA hybridization assay. 2004 , 20, 5905-10		70
1928	Elastomer-glass micropump employing active throttles. 2004 , 129, 829-34		15
1927	Poly(dimethylsiloxane) hollow Abbe prism with microlenses for detection based on absorption and refractive index shift. 2004 , 4, 24-7		69
1926	Nanoliter-sized liquid dispenser array for multiple biochemical analysis in microfluidic devices. <i>Analytical Chemistry</i> , 2004 , 76, 895-9	7.8	66
1925	Fabrication of poly(methyl methacrylate) microfluidic chips by atmospheric molding. <i>Analytical Chemistry</i> , 2004 , 76, 2290-7	7.8	112
1924	Development of a microfabricated palladium decoupler/electrochemical detector for microchip capillary electrophoresis using a hybrid glass/poly(dimethylsiloxane) device. <i>Analytical Chemistry</i> , 2004 , 76, 2482-91	7.8	109
1923	Improved surface chemistries, thin film deposition techniques, and stamp designs for nanotransfer printing. 2004 , 20, 6871-8		107
1922	Label-free molecular interaction determinations with nanoscale interferometry. 2004 , 126, 16659-64		69
1921	Dynamic interfacial effect of electroosmotic slip flow with a moving capillary front in hydrophobic circular microchannels. 2004 , 121, 7443-8		12
1920	Microfluidic systems for chemical kinetics that rely on chaotic mixing in droplets. 2004 , 362, 1087-104		305
1919	A rapid prototyping technique for the fabrication of solvent-resistant structures. 2004 , 14, 153-158		101
1918	Pinched flow fractionation: continuous size separation of particles utilizing a laminar flow profile in a pinched microchannel. <i>Analytical Chemistry</i> , 2004 , 76, 5465-71	7.8	521
1917	Cell Migration. 2004 ,		2
1916	Nanoscale hydrophobic recovery: A chemical force microscopy study of UV/ozone-treated cross-linked poly(dimethylsiloxane). 2004 , 20, 785-94		244

1915	Heterogeneous surface charge enhanced micromixing for electrokinetic flows. <i>Analytical Chemistry</i> , 2004 , 76, 3208-13	7.8	196
1914	A barrier embedded chaotic micromixer. 2004 , 14, 798-805		187
1913	Optical tweezers applied to a microfluidic system. 2004 , 4, 196-200		167
1912	Application of fluorescence correlation spectroscopy for velocity imaging in microfluidic devices. 2004 , 58, 1180-6		29
1911	Formation of monodisperse bubbles in a microfluidic flow-focusing device. 2004 , 85, 2649-2651		501
1910	. 2004 , 92, 140-153		89
1909	Oxygen sensation and social feeding mediated by a <i>C. elegans</i> guanylate cyclase homologue. 2004 , 430, 317-22		442
1908	Power-free poly(dimethylsiloxane) microfluidic devices for gold nanoparticle-based DNA analysis. 2004 , 4, 181-5		208
1907	Towards single molecule analysis in PDMS microdevices: from the detection of ultra low dye concentrations to single DNA molecule studies. 2004 , 112, 65-72		26
1906	Optical chromatography for biological separations. 2004 ,		2
1905	Fabrication of PDMS (poly-dimethyl siloxane) molding and 3D structure by two-photon absorption induced by an ultrafast laser. 2004 ,		2
1904	Toward a disposable real-time DNA biosensing platform. 2004 , 5345, 61		1
1903	Velocity imaging in microfluidic devices using fluorescence correlation spectroscopy. 2004 ,		2
1902	Building optical matter with binding and trapping forces. 2004 ,		10
1901	Molecular systems on-chip (MSoC) steps forward for programmable biosystems. 2004 ,		4
1900	Optical manipulation of lipid and polymer nanotubes with optical tweezers. 2004 , 5514, 246		2
1899	Investigation of the staggered herringbone mixer with a simple analytical model. 2004 , 362, 971-86		92
1898	Microchip Design and Experiment for Separation of Microbe from Continuous Sample Liquid Flow Using Optical Tweezers. 2004 , 47, 268-274		1

1897	CD (compact disc)-based DNA hybridization and detection. 2004,	0
1896	Optical chromatography in a PDMS microfluidic environment. 2004,	
1895	Development of surface connectors for microfluidic systems. 2004,	
1894	Chapter 19 Nucleic acids and their constituents. 2004, 905-943	
1893	Three Dimensional Micro Fabrication of Photoresist and Resin Materials by Using Gray-scale Lithography and Molding. 2004, 124, 359-363	9
1892	Electrokinetic Concentration Gradient Generation Using a Converging-Diverging Microchannel. 2005, 457	0
1891	Selective filling for patterning in microfluidic channels. 2005, 21, 4458-63	6
1890	Microfluidic device with integrated temperature control unit for hydrogel actuation. 2005, 5651, 427	1
1889	A novel electrokinetic micromixer?. 2005, 118, 107-115	24
1888	Direct Measurement of Slip Velocities Using Three-Dimensional Total Internal Reflection Velocimetry. 2005, 213	1
1887	Biological Fluid Separation in Microfluidic Channels Using Flow Rate Control. 2005, 283	2
1886	Analytical Applications on Microchips. 2005, 499-542	
1885	Preparation of Z-L-Phe-OH-NBD imprinted microchannel and its molecular recognition study. 2005, 61, 1029-33	12
1884	A novel electrokinetic micromixer. 2005, 118, 107-115	29
1883	Free-standing SU-8 microfluidic chips by adhesive bonding and release etching. 2005, 120, 408-415	94
1882	Immobilization of multi-enzyme microreactors inside microfluidic devices. 2005, 106, 335-342	78
1881	Thin-film organic photodiodes as integrated detectors for microscale chemiluminescence assays. 2005, 106, 878-884	106
1880	Separation of DNA in a versatile microchip. 2005, 107, 975-979	9

1879	Development of a microplate reader compatible microfluidic device for enzyme assay. 2005 , 107, 980-985	19
1878	A reusable microfluidic plate with alternate-choice architecture for assessing growth preference in tissue culture. 2005 , 144, 79-89	33
1877	Electrokinetic generation of temporally and spatially stable concentration gradients in microchannels. 2005 , 288, 606-15	11
1876	Moldless electroplating for cylindrical microchannel fabrication. 2005 , 7, 913-917	10
1875	Fabrication of DNA microarrays onto poly(methyl methacrylate) with ultraviolet patterning and microfluidics for the detection of low-abundant point mutations. 2005 , 340, 123-35	77
1874	Electrokinetic concentration gradient generation using a converging-diverging microchannel. 2005 , 543, 99-108	27
1873	A sol-gel immobilization of nano and micron size sorbents in poly(dimethylsiloxane) (PDMS) microchannels for microscale solid phase extraction (SPE). 2005 , 546, 22-29	35
1872	Fabrication of poly(dimethylsiloxane) microfluidic system based on masters directly printed with an office laser printer. 2005 , 1089, 270-5	64
1871	Functionality and stability of heparin immobilized onto poly(dimethylsiloxane). 2005 , 45, 76-81	16
1870	Bioactive heparin immobilized onto microfluidic channels in poly(dimethylsiloxane) results in hydrophilic surface properties. 2005 , 46, 240-7	24
1869	Enhancing design of immobilized enzymatic microbioreactors using computational simulation. 2005 , 121-124, 639-52	5
1868	Sequence-directed nanolithography of metal and semiconductor nanoparticles on single chains of DNA. 2005 , 1, 211-216	
1867	Micromixers—review. 2005 , 15, R1-R16	1247
1866	Pathogenic bacteria induce aversive olfactory learning in <i>Caenorhabditis elegans</i> . 2005 , 438, 179-84	524
1865	Combining microscience and neurobiology. 2005 , 15, 560-7	49
1864	Microfluidic technologies in drug discovery. 2005 , 10, 1377-83	79
1863	A Microchip-Based System for Immobilizing PC 12 Cells and Amperometrically Detecting Catecholamines Released After Stimulation with Calcium. 2005 , 17, 1171-1180	54
1862	Pyrolyzed Photoresist Carbon Electrodes for Microchip Electrophoresis with Dual-Electrode Amperometric Detection. 2005 , 17, 1153-1159	42

1861	Multilayer poly(vinyl alcohol)-adsorbed coating on poly(dimethylsiloxane) microfluidic chips for biopolymer separation. 2005 , 26, 211-8	110
1860	Integration of a carbon microelectrode with a microfabricated palladium decoupler for use in microchip capillary electrophoresis/electrochemistry. 2005 , 26, 202-10	40
1859	Comparison of surfactants for dynamic surface modification of poly(dimethylsiloxane) microchips. 2005 , 26, 703-9	83
1858	Capillary zone electrophoresis of amino acids on a hybrid poly(dimethylsiloxane)-glass chip. 2005 , 26, 1849-60	24
1857	Isoelectric focusing in cyclic olefin copolymer microfluidic channels coated by polyacrylamide using a UV photografting method. 2005 , 26, 1800-6	85
1856	A polymeric master replication technology for mass fabrication of poly(dimethylsiloxane) microfluidic devices. 2005 , 26, 1825-33	12
1855	On-line chemiluminescence detection for isoelectric focusing of heme proteins on microchips. 2005 , 26, 3595-601	45
1854	Analysis of amino acids and proteins using a poly(methyl methacrylate) microfluidic system. 2005 , 26, 3682-8	18
1853	Single cell manipulation, analytics, and label-free protein detection in microfluidic devices for systems nanobiology. 2005 , 26, 3689-96	113
1852	Focused electrophoretic motion and selected electrokinetic dispensing of particles and cells in cross-microchannels. 2005 , 26, 3552-60	54
1851	Electrokinetic-driven microfluidic system in poly(dimethylsiloxane) for mass spectrometry detection integrating sample injection, capillary electrophoresis, and electrospray emitter on-chip. 2005 , 26, 4674-83	45
1850	New advances in microchip fabrication for electrochromatography. 2005 , 26, 4590-604	46
1849	A multilayer poly(dimethylsiloxane) electrospray ionization emitter for sample injection and online mass spectrometric detection. 2005 , 26, 4684-90	28
1848	Generation of monodisperse particles by using microfluidics: control over size, shape, and composition. 2005 , 44, 724-8	642
1847	Generation of Monodisperse Particles by Using Microfluidics: Control over Size, Shape, and Composition. 2005 , 117, 734-738	152
1846	Photolithographic Route to the Fabrication of Micro/Nanowires of III-V Semiconductors. 2005 , 15, 30-40	98
1845	Tailored Macroporous SiCN and SiC Structures for High-Temperature Fuel Reforming. 2005 , 15, 1336-1342	121
1844	Applications of capillary electrophoresis on microchip. 2005 , 28, 1994-2009	99

1843	Electrokinetic control of fluid in plastified laser-printed poly(ethylene terephthalate)-toner microchips. 2005 , 382, 192-7	29
1842	Aggregation of paramagnetic particles in the presence of a hydrodynamic shear. 2005 , 282, 58-68	26
1841	Transient isotachopheresis of highly saline samples using a microchip. 2005 , 104, 269-275	25
1840	Fabrication of microchip electrophoresis devices and effects of channel surface properties on separation efficiency. 2005 , 107, 818-824	34
1839	A microfluidic chip for heterogeneous immunoassay using electrokinetical control. 2005 , 1, 346-355	40
1838	Towards numerical prototyping of labs-on-chip: modeling for integrated microfluidic devices. 2005 , 1, 301-318	129
1837	Design and fabrication of poly(dimethylsiloxane) electrophoresis microchip with integrated electrodes. 2005 , 11, 1262-1266	13
1836	Performing chemical reactions in virtual capillary of surface tension-confined microfluidic devices. 2005 , 65, 621-630	4
1835	Continuous-flow fractionation of animal cells in microfluidic device using aqueous two-phase extraction. 2005 , 7, 189-95	69
1834	Characterization of polydimethylsiloxane (PDMS) properties for biomedical micro/nanosystems. 2005 , 7, 281-93	830
1833	Evaluation of microfluidic biosensor development using microscopic analysis of molecular beacon hybridization kinetics. 2005 , 7, 7-12	14
1832	Screening and optimization of protein crystallization conditions through gradual evaporation using a novel crystallization platform. 2005 , 38, 988-995	43
1831	Microfluidics for cell-based assays. 2005 , 8, 46-51	29
1830	Electrokinetic Focusing and Dispensing of Particles and Cells on Microfluidic Chips. 2005 , 213	
1829	Vacuum casting, a new answer for manufacturing biomicrosystems. 2005 , 219, 697-701	8
1828	Enhancing Design of Immobilized Enzymatic Microbioreactors Using Computational Simulation. 2005 , 639-652	
1827	Microfluidic gradient-generating device for pharmacological profiling. <i>Analytical Chemistry</i> , 2005 , 77, 3897-903	7.8 120
1826	Multivalent Ligand-Receptor Interactions on Planar Supported Membranes An On-Chip Approach. 2005 , 99-117	1

1825 Who is Einstein?. **2005**, 26, S141-S146

1824 Microfluidic device for rapid (. **2005**, 51, 1836-44

99

1823 Optofluidics. **2005**, 5908, 231

3

1822 Fabrication of 3D microstructure and analysis of voxel generation by ultrafast-laser-induced two-photon absorption. **2005**, 5715, 118

3

1821 Surface-modified polyolefin microfluidic devices for liquid handling. **2005**, 15, 2156-2162

37

1820 Overview of advances in microfluidics and microfabrication. **2006**, 321, 1-2

2

1819 Laser ablation as a fabrication technique for microfluidic devices. **2006**, 321, 27-38

7

1818 Controlled cell deposition techniques. **2005**, 465-492

1817 A Simple Method of Fabricating Weir-type Filters with Interdigital Aligned Full-polymer Microfluidic Channels for Blood Cell Fractionation. **2005**, 2005, 7122-5

1816 . **2005**, 14, 392-399

156

1815 Downstream microwave ammonia plasma treatment of polydimethylsiloxane). **2005**, 23, 208-214

10

1814 In situ detection of single micron-sized magnetic beads using magnetic tunnel junction sensors. **2005**, 86, 253901

97

1813 Laser Manipulation and Fabrication of Functional Microtool Using Photo-crosslinkable Resin.

1812 Hot embossing of micro-featured devices.

4

1811 Electrical impedance based monitoring of viscous drag of living cells.

1810 Integrated Genetic Analysis Microsystems. **2005**, 30, 207-233

15

1809 Continuously variable mixing-ratio micromixer with elastomer valves. **2005**, 15, 1885-1893

16

1808 A modular microfluidic architecture for integrated biochemical analysis. **2005**, 102, 9745-50

158

1807	Low-Temperature Thermal Bonding of PMMA Microfluidic Chips. 2005 , 38, 1127-1136		39
1806	Microfluidic tools for studying the specific binding, adsorption, and displacement of proteins at interfaces. 2005 , 56, 369-87		20
1805	Fabrication and characterization of trapezoidal electrode array for dielectrophoretic separation.		1
1804	Photonic Reporting of Electrochemical Reactions Using Light-Emitting Diodes. 2005 , 152, E371		10
1803	Microoxen: microorganisms to move microscale loads. 2005 , 102, 11963-7		281
1802	Blood plasma separation in microfluidic channels using flow rate control. 2005 , 51, 585-90		31
1801	Electrochemical detection in capillary electrophoresis on microchips. 2005 , 45, 703-758		11
1800	Spectrographic Microfluidic Memory. 2005 , 563		3
1799	Two Phase Electrohydrodynamic Instability Micromixing. 2005 , 267		
1798	Mixing crowded biological solutions in milliseconds. <i>Analytical Chemistry</i> , 2005 , 77, 7618-25	7.8	99
1797	Fabrication of reverse symmetry polymer waveguide sensor chips on nanoporous substrates using dip-floating. 2005 , 15, 1260-1264		41
1796	Determination of levoglucosan from smoke samples using microchip capillary electrophoresis with pulsed amperometric detection. 2005 , 39, 618-23		61
1795	Stability of parallel flows in a microchannel after a T junction. 2005 , 72, 066301		167
1794	Split and recombination micromixer based on PDMS three-dimensional micro structure.		
1793	In situ oligonucleotide synthesis on poly(dimethylsiloxane): a flexible substrate for microarray fabrication. 2005 , 33, e75		50
1792	In-situ microfabrication of permeation membrane with photo-crosslinkable resin for isolation and culture of individual cells.		0
1791	Microfluidic operations using deformable polymer membranes fabricated by single layer soft lithography. 2005 , 5, 350-4		55
1790	Bulk modification of polymeric microfluidic devices. 2005 , 5, 226-30		24

1789	Automated lifetime analysis of a single yeast cell.		3
1788	Film transfer and bonding techniques for covering single-chip ejector array with microchannels and reservoirs. 2005 , 14, 1399-1408		13
1787	Immobilization of individual cells by local photo-polymerization on a chip. 2005 , 130, 304-10		24
1786	Negotiation of obstacles by fungi in micro-fabricated structures: to turn or not to turn?.		1
1785	Electrokinetically based approach for single-nucleotide polymorphism discrimination using a microfluidic device. <i>Analytical Chemistry</i> , 2005 , 77, 4000-7	7.8	64
1784	Auto-tunable microlens chip for sensing applications.		
1783	Microfluidic system for dielectrophoretic separation based on a trapezoidal electrode array. 2005 , 5, 1161-7		146
1782	Effects of flow and diffusion on chemotaxis studies in a microfabricated gradient generator. 2005 , 5, 611-8		220
1781	.		3
1780	Replica multichannel polymer chips with a network of sacrificial channels sealed by adhesive printing method. 2005 , 5, 472-8		74
1779	Development of an integrated optic oxygen sensor using a novel, generic platform. 2005 , 130, 41-5		32
1778	Hydrodynamic fabrication of polymeric barcoded strips as components for parallel bio-analysis and programmable microactuation. 2005 , 5, 1168-72		21
1777	Microfluidic solid phase suspension transport with an elastomer-based, single piezo-actuator, micro throttle pump. 2005 , 5, 318-25		23
1776	A novel fabrication method for hybrid, microfluidic devices.		
1775	Indirect micromanipulation of microorganism with gel micro-bead for monitoring in the permeation cage on a chip. 2005 ,		
1774	Compact variable-focusing microlens with integrated thermal actuator and sensor. 2005 , 17, 2643-2645		25
1773	Stable and fluid ethylphosphocholine membranes in a poly(dimethylsiloxane) microsensor for toxin detection in flooded waters. <i>Analytical Chemistry</i> , 2005 , 77, 2960-5	7.8	27
1772	Chemical force titrations of amine- and sulfonic acid-modified poly(dimethylsiloxane). 2005 , 21, 1290-8		27

1771	Patterned solvent delivery and etching for the fabrication of plastic microfluidic devices. <i>Analytical Chemistry</i> , 2005 , 77, 7478-82	7.8	19
1770	Sol-gel modified poly(dimethylsiloxane) microfluidic devices with high electroosmotic mobilities and hydrophilic channel wall characteristics. <i>Analytical Chemistry</i> , 2005 , 77, 1414-22	7.8	181
1769	Surface-reactive acrylic copolymer for fabrication of microfluidic devices. <i>Analytical Chemistry</i> , 2005 , 77, 6280-7	7.8	21
1768	Autonomous polymer loading and sample injection for microchip electrophoresis. <i>Analytical Chemistry</i> , 2005 , 77, 4759-64	7.8	30
1767	Poly(oxyethylene) based surface coatings for poly(dimethylsiloxane) microchannels. 2005 , 21, 7551-7		110
1766	Thermoplastic elastomer gels: an advanced substrate for microfluidic chemical analysis systems. <i>Analytical Chemistry</i> , 2005 , 77, 5167-73	7.8	48
1765	Directed growth of pure phosphatidylcholine nanotubes in microfluidic channels. 2005 , 21, 10814-7		40
1764	Accelerated particle electrophoretic motion and separation in converging-diverging microchannels. <i>Analytical Chemistry</i> , 2005 , 77, 4323-8	7.8	41
1763	Diffusion of hydrosilanes from the control layer to the vinylsilane-rich flow membrane during the fabrication of microfluidic chips. 2005 , 21, 10487-91		22
1762	Profiling pH gradients across nanocapillary array membranes connecting microfluidic channels. 2005 , 127, 13928-33		46
1761	Masterless soft lithography: patterning UV/ozone-induced adhesion on poly(dimethylsiloxane) surfaces. 2005 , 21, 10096-105		55
1760	Interfacial scattering at electrochemically fabricated atom-scale junctions between thin gold film electrodes in a microfluidic channel. <i>Analytical Chemistry</i> , 2005 , 77, 243-9	7.8	21
1759	Isoelectric focusing in a poly(dimethylsiloxane) microfluidic chip. <i>Analytical Chemistry</i> , 2005 , 77, 1303-9	7.8	113
1758	Simultaneous observation of enzyme surface diffusion and surface reaction using microfluidic patterning of substrate surfaces. <i>Analytical Chemistry</i> , 2005 , 77, 8146-50	7.8	11
1757	Microfluidic immunoassay for bacterial toxins with supported phospholipid bilayer membranes on poly(dimethylsiloxane). <i>Analytical Chemistry</i> , 2005 , 77, 327-34	7.8	99
1756	Laminar flow-based electrochemical microreactor for efficient regeneration of nicotinamide cofactors for biocatalysis. 2005 , 127, 10466-7		47
1755	Computer-controlled microcirculatory support system for endothelial cell culture and shearing. <i>Analytical Chemistry</i> , 2005 , 77, 3993-9	7.8	204
1754	Thermoplastic microfluidic platform for single-molecule detection, cell culture, and actuation. <i>Analytical Chemistry</i> , 2005 , 77, 7122-30	7.8	25

1753	Integrated light collimating system for extended optical-path-length absorbance detection in microchip-based capillary electrophoresis. <i>Analytical Chemistry</i> , 2005 , 77, 5160-6	7.8	82
1752	Enhanced optical chromatography in a PDMS microfluidic system. 2005 , 13, 10406-15		28
1751	Dynamic coating for resolving rhodamine B adsorption to poly(dimethylsiloxane)/glass hybrid chip with laser-induced fluorescence detection. 2005 , 66, 1018-24		31
1750	Reagent-loaded cartridges for valveless and automated fluid delivery in microfluidic devices. <i>Analytical Chemistry</i> , 2005 , 77, 64-71	7.8	140
1749	Microscale integrated sperm sorter. 2006 , 321, 227-44		16
1748	Development of a microfluidic biosensor module for pathogen detection. 2005 , 5, 805-11		143
1747	Xurography: rapid prototyping of microstructures using a cutting plotter. 2005 , 14, 1364-1374		220
1746	Design for mixing using bubbles in branched microfluidic channels. 2005 , 86, 244108		75
1745	Microfluidics for flow cytometric analysis of cells and particles. 2005 , 26, R73-98		296
1744	Fabrication of a poly(dimethylsiloxane)-based electrochemiluminescence detection cell for capillary electrophoresis. <i>Analytical Chemistry</i> , 2005 , 77, 5385-8	7.8	20
1743	Torque-actuated valves for microfluidics. <i>Analytical Chemistry</i> , 2005 , 77, 4726-33	7.8	163
1742	Fabrication of robust 2-D and 3-D microfluidic networks for lab-on-a-chip bioassays. 2005 , 14, 839-846		13
1741	Human neural stem cell growth and differentiation in a gradient-generating microfluidic device. 2005 , 5, 401-6		438
1740	Rapid fabrication of poly(dimethylsiloxane)-based microchip capillary electrophoresis devices using CO ₂ laser ablation. 2005 , 130, 924-30		22
1739	Mini-electrochemical detector for microchip electrophoresis. 2005 , 5, 930-4		23
1738	Microfluidic Techniques. 2005 ,		2
1737	Developing design tools for biological and biomedical applications of micro- and nano-technology. 2005 ,		
1736	Microfluidic chip for low-flow push-pull perfusion sampling in vivo with on-line analysis of amino acids. <i>Analytical Chemistry</i> , 2005 , 77, 7067-73	7.8	83

1735	Hydrodynamic filtration for on-chip particle concentration and classification utilizing microfluidics. 2005 , 5, 1233-9			364
1734	Phase-changing sacrificial materials for solvent bonding of high-performance polymeric capillary electrophoresis microchips. <i>Analytical Chemistry</i> , 2005 , 77, 3536-41	7.8		77
1733	. 2005 , 28, 533-546			61
1732	Stable permanently hydrophilic protein-resistant thin-film coatings on poly(dimethylsiloxane) substrates by electrostatic self-assembly and chemical cross-linking. <i>Analytical Chemistry</i> , 2005 , 77, 3971-78			102
1731	Microfluidic pretreatment of bacterial cells for analysis of intracellular contents. 2005 ,			
1730	Microfluidic packaging of suspended microchannel resonators for biomolecular detection.			2
1729	Microwave plasma treatment of polymer surface for irreversible sealing of microfluidic devices. 2005 , 5, 1173-7			44
1728	Gravity-induced reorientation of the interface between two liquids of different densities flowing laminarly through a microchannel. 2005 , 5, 1259-63			39
1727	Microfluidic channel fabrication in dry film resist for production and prototyping of hybrid chips. 2005 , 5, 158-62			150
1726	Fabrication of discontinuous surface patterns within microfluidic channels using photodefinable vapor-based polymer coatings. <i>Analytical Chemistry</i> , 2005 , 77, 6909-14	7.8		70
1725	Microfluidic technologies as platforms for performing quantitative cellular analyses in an in vitro environment. 2006 , 131, 1197-206			47
1724	Sulfonated-polydimethylsiloxane (PDMS) microdevices with enhanced electroosmotic pumping and stability. 2006 , 84, 720-729			4
1723	Microfluidic Three-Electrode Cell Array for Low-Current Electrochemical Detection. 2006 , 6, 1395-1402			23
1722	Droplet breakup in microfluidic junctions of arbitrary angles. 2006 , 74, 035303			139
1721	A nanofabricated planar aperture as a mimic of the nerve-muscle contact during synaptogenesis. 2006 , 6, 632-8			9
1720	DC-dielectrophoretic separation of microparticles using an oil droplet obstacle. 2006 , 6, 274-9			88
1719	Microfluidic cell fusion under continuous direct current voltage. 2006 , 89, 234102			43
1718	BioMEMS and Biomedical Nanotechnology. 2006 ,			1

1717	Control of electro-osmotic flow by light. 2006 , 89, 263508		19
1716	Microfluidic model of bubble lodging in microvessel bifurcations. 2006 , 89, 244103		34
1715	Bioanalytical Microfluidic Sensors. 2006 ,		
1714	. 2006 , 15, 1108-1120		25
1713	Automated, Biomechatronic System to Study Single Cell Aging.		
1712	REACTIVE POLYMER COATINGS FOR BIOMIMETIC SURFACE ENGINEERING. 2006 , 193, 1457-1468		26
1711	Monodisperse Lipoplex Generation by Integrated Picoliter Micro Reactor and Incubator. 2006 ,		
1710	Production of arrays of chemically distinct nanolitre plugs via repeated splitting in microfluidic devices. 2006 , 6, 1178-86		134
1709	Pulsed amperometric detection with poly(dimethylsiloxane)-fabricated capillary electrophoresis microchips for the determination of EPA priority pollutants. 2006 , 131, 208-14		44
1708	Microfluidic sorting system based on optical waveguide integration and diode laser bar trapping. 2006 , 6, 422-6		147
1707	Switchable surface traps for injectable bead-based chromatography in PDMS microfluidic channels. 2006 , 6, 843-8		102
1706	Atomically flat gold on elastomeric substrate. 2006 , 22, 4734-40		17
1705	Electrokinetic protein preconcentration using a simple glass/poly(dimethylsiloxane) microfluidic chip. <i>Analytical Chemistry</i> , 2006 , 78, 4779-85	7.8	197
1704	Chemotaxis assays of mouse sperm on microfluidic devices. <i>Analytical Chemistry</i> , 2006 , 78, 3354-9	7.8	52
1703	Rheology of complex fluids by particle image velocimetry in microchannels. 2006 , 89, 024104		75
1702	On-chip amperometric measurement of quantal catecholamine release using transparent indium tin oxide electrodes. <i>Analytical Chemistry</i> , 2006 , 78, 2521-5	7.8	96
1701	Active control of the depletion boundary layers in microfluidic electrochemical reactors. 2006 , 6, 1516-24		105
1700	Fabrication of non-biofouling polyethylene glycol micro- and nanochannels by ultraviolet-assisted irreversible sealing. 2006 , 6, 1432-7		92

1699	Enzymatically-generated fluorescent detection in micro-channels with internal magnetic mixing for the development of parallel microfluidic ELISA. 2006 , 6, 555-60	96
1698	Microfluidic chemical cytometry based on modulation of local field strength. 2006 , 3528-30	33
1697	Use of microchip-based hydrodynamic focusing to measure the deformation-induced release of ATP from erythrocytes. 2006 , 131, 930-7	38
1696	Rapid enumeration of bacterial cells in drinking water using a microfluidic device. 2006 ,	
1695	Using feedback control of microflows to independently steer multiple particles. 2006 , 15, 945-956	69
1694	Broadband Permittivity Measurements of Liquid and Biological Samples using Microfluidic Channels. 2006 ,	18
1693	Bubble lodging in bifurcating microvessel networks: a microfluidic model. 2006 ,	
1692	Immunosensing of Staphylococcus enterotoxin B (SEB) in milk with PDMS microfluidic systems using reinforced supported bilayer membranes (r-SBMs). 2006 , 6, 675-81	51
1691	A bio-barcode assay for on-chip attomolar-sensitivity protein detection. 2006 , 6, 1293-9	191
1690	Microfluidic approach for rapid multicomponent interfacial tensiometry. 2006 , 6, 427-36	128
1689	Disposable integrated microfluidic biochip for blood typing by plastic microinjection moulding. 2006 , 6, 794-802	119
1688	On-chip pressure injection for integration of infrared-mediated DNA amplification with electrophoretic separation. 2006 , 6, 601-10	68
1687	Introduction. 2006 , 14, 1091	3
1686	Rapid mold temperature variation for assisting the micro injection of high aspect ratio micro-feature parts using induction heating technology. 2006 , 16, 1783-1791	95
1685	A microfluidic device for continuous, real time blood plasma separation. 2006 , 6, 871-80	328
1684	Mixing with bubbles: a practical technology for use with portable microfluidic devices. 2006 , 6, 207-12	116
1683	Direct measurement of slip velocities using three-dimensional total internal reflection velocimetry. 2006 , 566, 447	100
1682	SYSTEM-LEVEL SIMULATION OF FLOW INDUCED DISPERSION IN LAB-ON-A-CHIP SYSTEMS. 2006 , 189-214	1

1681	Fabrication of porous SiC-based ceramic microchannels via pyrolysis of templated preceramic polymers. 2006 , 21, 1543-1549		7
1680	Centrifuge Based Fluidic Platforms. 2006 , 329-364		
1679	Micro-Fluidic Platforms. 2006 , 139-165		
1678	Flowing crystals: nonequilibrium structure of foam. 2006 , 97, 024503		54
1677	. 2006 , 15, 1152-1158		24
1676	Surface engineering of poly(dimethylsiloxane) microfluidic devices using transition metal sol-gel chemistry. 2006 , 22, 4445-51		103
1675	On-line laser Raman spectroscopic probing of droplets engineered in microfluidic devices. 2006 , 6, 1140-6		71
1674	Grafting epoxy-modified hydrophilic polymers onto poly(dimethylsiloxane) microfluidic chip to resist nonspecific protein adsorption. 2006 , 6, 942-7		104
1673	Controlling electroosmotic flow in poly(dimethylsiloxane) separation channels by means of prepolymer additives. <i>Analytical Chemistry</i> , 2006 , 78, 4588-92	7.8	41
1672	Generation of hydrophilic poly(dimethylsiloxane) for high-performance microchip electrophoresis. <i>Analytical Chemistry</i> , 2006 , 78, 7446-52	7.8	185
1671	PDMS bonding by means of a portable, low-cost corona system. 2006 , 6, 1548-9		257
1670	Formation of droplets and bubbles in a microfluidic T-junction-scaling and mechanism of break-up. 2006 , 6, 437-46		1550
1669	Sample preparation for MALDI mass spectrometry using an elastomeric device reversibly sealed on the MALDI target. <i>Analytical Chemistry</i> , 2006 , 78, 6160-8	7.8	17
1668	Surface modification of confined microgeometries via vapor-deposited polymer coatings. 2006 , 128, 374-80		90
1667	A Passive Refillable Intraocular MEMS Drug Delivery Device. 2006 ,		3
1666	A novel fabrication method of flexible and monolithic 3D microfluidic structures using lamination of SU-8 films. 2006 , 16, 113-121		147
1665	Continuous dielectrophoretic size-based particle sorting. <i>Analytical Chemistry</i> , 2006 , 78, 5019-25	7.8	135
1664	Quantitative real-time measurements of DNA hybridization with alkylated nonoxidized silicon nanowires in electrolyte solution. 2006 , 128, 16323-31		422

1663	High efficiency micellar electrokinetic chromatography of hydrophobic analytes on poly(dimethylsiloxane) microchips. 2006 , 131, 194-201		58
1662	Versatile maskless microscope projection photolithography system and its application in light-directed fabrication of DNA microarrays. 2006 , 77, 063711		21
1661	Initial study of two-phase laminar flow extraction chip for sample preparation for gas chromatography. 2006 , 6, 1067-72		42
1660	Design, fabrication and testing of a micromachined integrated tunable microlens. 2006 , 16, 1221-1226		23
1659	Continuous-flow pl-based sorting of proteins and peptides in a microfluidic chip using diffusion potential. <i>Analytical Chemistry</i> , 2006 , 78, 3528-36	7.8	36
1658	Electroporation of mammalian cells in a microfluidic channel with geometric variation. <i>Analytical Chemistry</i> , 2006 , 78, 5158-64	7.8	127
1657	. 2006 , 15, 237-245		17
1656	Electrohydrodynamic generation and delivery of monodisperse picoliter droplets using a poly(dimethylsiloxane) microchip. <i>Analytical Chemistry</i> , 2006 , 78, 8011-9	7.8	35
1655	PDMS and its suitability for analytical microfluidic devices. 2006 , 2006, 2486-9		40
1654	Photolithographically patterned surface modification of poly(dimethylsiloxane) via UV-initiated graft polymerization of acrylates. 2006 , 22, 3453-5		32
1653	PDMS absorption of small molecules and consequences in microfluidic applications. 2006 , 6, 1484-6		718
1652	Low-power concentration and separation using temperature gradient focusing via Joule heating. <i>Analytical Chemistry</i> , 2006 , 78, 8028-35	7.8	58
1651	Hybridization of DNA to bead-immobilized probes confined within a microfluidic channel. 2006 , 22, 10130-4		28
1650	Capillary electrophoresis separation in the presence of an immiscible boundary for droplet analysis. <i>Analytical Chemistry</i> , 2006 , 78, 6948-54	7.8	69
1649	Use of PLL-g-PEG in micro-fluidic devices for localizing selective and specific protein binding. 2006 , 22, 10103-8		55
1648	Parallel chemical dosing of subcellular targets. <i>Analytical Chemistry</i> , 2006 , 78, 5987-93	7.8	11
1647	Viscosimeter on a microfluidic chip. 2006 , 22, 6438-45		98
1646	On-chip enzyme immunoassay of a cardiac marker using a microfluidic device combined with a portable surface plasmon resonance system. <i>Analytical Chemistry</i> , 2006 , 78, 5525-31	7.8	134

- 1645 Nanofluidic injection and heterogeneous kinetics of organomercaptan surface displacement reactions on colloidal gold in a microfluidic stream. *Analytical Chemistry*, **2006**, 78, 2335-41 7.8 9
- 1644 Wetting micro- and nanofluidic devices using supercritical water. *Analytical Chemistry*, **2006**, 78, 5933-4 7.8 17
- 1643 Microscale patterning of organic films on carbon surfaces using electrochemistry and soft lithography. **2006**, 22, 10739-46 60
- 1642 Refractive Index Determination of Transparent Polymers: Experimental Setup for Multi-Wavelength Determination and Calculation at Specific Frequencies Using Group Contribution Theory. **2006**, 83, 1867 2
- 1641 A split and recombination micromixer fabricated in a PDMS three-dimensional structure. **2006**, 16, 1067-1072 103
- 1640 Femtosecond fabricated photomasks for fabrication of microfluidic devices. **2006**, 14, 10753-8 8
- 1639 Spectrometric determination of the refractive index of optical wave guiding materials used in lab-on-a-chip applications. **2006**, 60, 322-9 42
- 1638 Plastified poly(ethylene terephthalate) (PET)-toner microfluidic chip by direct-printing integrated with electrochemical detection for pharmaceutical analysis. **2006**, 68, 1303-8 42
- 1637 Patterning proteins and cells using soft lithography. **2006**, 161-174 4
- 1636 . **2006**, 6
- 1635 An Electronically Controlled Microfluidic Approach towards Artificial Cells. **2006**, 3, 48-57 12
- 1634 A Practical Method for Rapid Microchannel Fabrication in Polydimethylsiloxane by Replica Molding without Using Silicon Photoresist. **2006**, 39, 1108-1114 17
- 1633 Dropping mode chemiluminescence system with a poly(dimethylsiloxane) cell for applications to semiconductor processes. **2006**, 22, 613-6 3
- 1632 Microbioassay system for an anti-cancer agent test using animal cells on a microfluidic gradient mixer. **2006**, 22, 87-90 33
- 1631 Microfluidics. **2006**,
- 1630 Microscale Flow and Transport Simulation for Electrokinetic and Lab-on-Chip Applications. **2006**, 277-300 1
- 1629 Microfluidics-Based Proteome Analysis. **2006**, 205-223
- 1628 Optically controlled flow pattern in microfluidic devices. **2006**,

1627	Microfluidic devices for continuous blood plasma separation and analysis during pediatric cardiopulmonary bypass procedures. 2006 , 52, 698-704	13
1626	Surface Modification of Thin Polyion Complex Film with a High Specific Binding Affinity and Prevention of Non-specific Adsorption in Surface Plasmon Resonance Immunoassay. 2006 , 74, 121-124	10
1625	Localized Plasma Treatment of Poly(dimethylsiloxane) Surfaces and Its Application to Controlled Cell Cultivation. 2006 , 19, 245-250	9
1624	Printed arrays of aligned GaAs wires for flexible transistors, diodes, and circuits on plastic substrates. 2006 , 2, 1330-4	67
1623	Fungi use efficient algorithms for the exploration of microfluidic networks. 2006 , 2, 1212-20	46
1622	Flowing lattices of bubbles as tunable, self-assembled diffraction gratings. 2006 , 2, 1292-8	58
1621	Polymer chemistry in flow: New polymers, beads, capsules, and fibers. 2006 , 44, 6505-6533	102
1620	Detecting neutral atoms on an atom chip. 2006 , 54, 746-764	8
1619	Controlled buckling of semiconductor nanoribbons for stretchable electronics. 2006 , 1, 201-7	719
1618	Phonons in a one-dimensional microfluidic crystal. 2006 , 2, 743-748	139
1617	Developing optofluidic technology through the fusion of microfluidics and optics. 2006 , 442, 381-6	1385
1616	Fabrication and characterization of planar reference electrode for on-chip electroanalysis. 2006 , 52, 427-433	28
1615	Poly(dimethyl siloxane)-based protein chip for simultaneous detection of multiple samples: use of glycidyl methacrylate photopolymer for site-specific protein immobilization. 2006 , 22, 613-20	19
1614	A microfluidic flow-through device for high throughput electrical lysis of bacterial cells based on continuous dc voltage. 2006 , 22, 582-8	117
1613	Polymeric microfluidic system for DNA analysis. 2006 , 556, 80-96	91
1612	Electrokinetically controlled real-time polymerase chain reaction in microchannel using Joule heating effect. 2006 , 557, 146-151	48
1611	Nonionic surfactant dynamic coating of poly(dimethylsiloxane) channel surface for microchip electrophoresis of amino acids. 2006 , 569, 188-194	33
1610	Merging microfluidics with microarray-based bioassays. 2006 , 23, 213-31	156

1609	Microfabrication of poly (glycerol-sebacate) for contact guidance applications. 2006 , 27, 2558-65	193
1608	Applications of microfluidics in chemical biology. 2006 , 10, 584-91	323
1607	Physiochemical properties of various polymer substrates and their effects on microchip electrophoresis performance. 2006 , 1111, 238-51	129
1606	Proteins modification of poly(dimethylsiloxane) microfluidic channels for the enhanced microchip electrophoresis. 2006 , 1107, 257-64	54
1605	Modification of poly(dimethylsiloxane) microfluidic channels with silica nanoparticles based on layer-by-layer assembly technique. 2006 , 1136, 111-7	38
1604	Electrochemical microfluidic biosensor for nucleic acid detection with integrated minipotentostat. 2006 , 21, 2217-23	103
1603	Design and fabrication of integrated solid-phase extraction-zone electrophoresis microchip. 2006 , 1111, 258-66	17
1602	Hot embossing of microfluidic platform. 2006 , 33, 645-653	41
1601	Electrostatic bonding of a silicon master to a glass wafer for plastic microchannel fabrication. 2006 , 178, 278-282	11
1600	Using thermally printed transparency as photomasks to generate microfluidic structures in PDMS material. 2006 , 126, 463-468	9
1599	Micromolding of biochip devices designed with microchannels. 2006 , 128, 238-247	46
1598	Dynamic automated DNA hybridization on a CD (compact disc) fluidic platform. 2006 , 114, 173-181	38
1597	Rapid, low cost microfabrication technologies toward realization of devices for dielectrophoretic manipulation of particles and nanowires. 2006 , 114, 392-401	22
1596	Separation of catecholamines and dopamine-derived DNA adduct using a microfluidic device with electrochemical detection. 2006 , 120, 42-50	27
1595	Wall effects on electrophoretic motion of spherical polystyrene particles in a rectangular poly(dimethylsiloxane) microchannel. 2006 , 296, 743-8	51
1594	A microfluidic fluororous solid-phase extraction chip for purification of amino acids. 2006 , 301, 697-702	16
1593	PDMS microfluidic chip with integrated waveguides for optical detection. 2006 , 83, 1291-1293	43
1592	New materials for electrochemical sensing VII. Microfluidic chip platforms. 2006 , 25, 219-235	111

1591	Lab on a CD. 2006 , 8, 601-28	460
1590	Chip-based polyketide biosynthesis and functionalization. 2006 , 22, 1102-7	24
1589	Two phase micromixing and analysis using electrohydrodynamic instabilities. 2006 , 2, 399-415	21
1588	Evaluation of micromilled metal mold masters for the replication of microchip electrophoresis devices. 2006 , 3, 1-11	93
1587	Control of serial microfluidic droplet size gradient by step-wise ramping of flow rates. 2006 , 3, 19-25	15
1586	Experimental characterization of the temperature dependence of zeta potential and its effect on electroosmotic flow velocity in microchannels. 2006 , 2, 493-499	54
1585	Polymer nano-engineering for biomedical applications. 2006 , 34, 75-88	56
1584	Electroosmotic flow velocity measurements in a square microchannel. 2006 , 284, 1275-1286	20
1583	Polymers for Microfluidic Chips. 2006 , 14, 121-128	20
1582	Stabilization of two-phase octanol/water flows inside poly(dimethylsiloxane) microchannels using polymer coatings. 2006 , 385, 1376-83	17
1581	Circumventing air bubbles in microfluidic systems and quantitative continuous-flow PCR applications. 2006 , 386, 1327-33	80
1580	A microfluidic system for evaluation of antioxidant capacity based on a peroxyoxalate chemiluminescence assay. 2007 , 387, 277-85	28
1579	Solid supported lipid bilayers: From biophysical studies to sensor design. 2006 , 61, 429-444	857
1578	Filling kinetics of liquids in nanochannels as narrow as 27 nm by capillary force. 2006 , 293, 151-7	88
1577	Preparation of patterned SiC and SiCN microstructures. 2006 , 49, 164-171	0
1576	Statistical optimization of the lysis agents for Gram-negative bacterial cells in a microfluidic device. 2006 , 11, 288-292	8
1575	Development of low-cost microfluidic systems for lab-on-a-chip biosensor applications. 2006 , 2, 143-149	4
1574	High-throughput and real-time study of single cell electroporation using microfluidics: effects of medium osmolarity. 2006 , 95, 1116-25	47

1573	Programmable cell adhesion encoded by DNA hybridization. 2006 , 45, 896-901	143
1572	Reactions in droplets in microfluidic channels. 2006 , 45, 7336-56	1500
1571	Cofabrication of electromagnets and microfluidic systems in poly(dimethylsiloxane). 2006 , 45, 6877-82	105
1570	Continuous separation of microparticles by size with direct current-dielectrophoresis. 2006 , 27, 694-702	161
1569	A rigid poly(dimethylsiloxane) sandwich electrophoresis microchip based on thin-casting method. 2006 , 27, 2917-23	19
1568	Sample pretreatment on a microchip with an integrated electrospray emitter. 2006 , 27, 2075-82	17
1567	Automated screening using microfluidic chip-based PCR and product detection to assess risk of BK virus-associated nephropathy in renal transplant recipients. 2006 , 27, 3753-63	67
1566	Permanent surface modification of polymeric capillary electrophoresis microchips for protein and peptide analysis. 2006 , 27, 3533-46	93
1565	Surface modification of poly(methyl methacrylate) for improved adsorption of wall coating polymers for microchip electrophoresis. 2006 , 27, 3788-96	43
1564	Integration of nanoporous membranes for sample filtration/preconcentration in microchip electrophoresis. 2006 , 27, 4927-34	71
1563	Use of micromolded carbon dual electrodes with a palladium decoupler for amperometric detection in microchip electrophoresis. 2006 , 27, 5032-42	38
1562	Micro free-flow IEF enhanced by active cooling and functionalized gels. 2006 , 27, 4960-9	46
1561	Sol-gel-derived Poly(dimethylsiloxane) Enzymatic Reactor for Microfluidic Peptide Mapping. 2006 , 24, 903-909	5
1560	Fabrication of PDMS/glass microchips by twofold replication of PDMS and its application in genetic analysis. 2006 , 29, 2390-4	7
1559	Programmable Cell Adhesion Encoded by DNA Hybridization. 2006 , 118, 910-915	25
1558	Reaktionen in Mikrofluidiktröpfchen. 2006 , 118, 7494-7516	93
1557	Cofabrication of Electromagnets and Microfluidic Systems in Poly(dimethylsiloxane). 2006 , 118, 7031-7036	35
1556	Smart Microfluidic Channels. 2006 , 16, 1153-1160	148

1555	Three-Dimensional Microfluidic Tissue-Engineering Scaffolds Using a Flexible Biodegradable Polymer. 2005 , 18, 165-169	236
1554	Experimental Demonstration and Numerical Simulation of Organic-Aqueous Liquid Extraction Enhanced by Droplet Formation in a Microfluidic Channel. 2006 , 213	2
1553	Optical enhanced luminescent measurements and sequential reagent mixing on a centrifugal microfluidic device for multi-analyte point-of-care applications. 2006 , 6080, 170	2
1552	Virtual walls in microchannels. 2006 , 2006, 2840-3	2
1551	Micro-molding for poly(dimethylsiloxane) microchips. 2006 , 339, 27-36	8
1550	Processing of temperature field in chemical microreactors with infrared thermography. 2006 , 3, 117-135	40
1549	A conductivity-based interface tracking method for microfluidic application. 2006 , 16, 920-928	8
1548	High-precision micromilling for low-cost fabrication of metal mold masters. 2006 ,	7
1547	Vacuum casting to manufacture a plastic biochip for highly parallel cell transfection. 2006 , 17, 3134-3140	11
1546	Geometry and surface-assisted micro flow discretization. 2006 , 16, 1884-1890	7
1545	Etching of Pyrex glass substrates by inductively coupled plasma reactive ion etching for micro/nanofluidic devices. 2006 , 24, 3162	11
1544	Nanoscale Polymer Fabrication for Biomedical Applications. 2006 , 51-96	3
1543	BioMEMS. 2006 ,	3
1542	Design and fabrication of nanofluidic devices by surface micromachining. 2006 , 17, 2498-503	38
1541	Fabrication of Ceramic Microchannels with Tailored Pores. 2006 , 510-511, 1030-1037	
1540	High-speed microfluidic differential manometer for cellular-scale hydrodynamics. 2006 , 103, 538-42	141
1539	Fabrication of polymer microfluidic systems by hot embossing and laser ablation. 2006 , 339, 37-46	7
1538	Materials for Micro- and Nanofluidics. 2006 , 31, 87-94	18

1537	Need for Simulation-Based Design Analysis and Optimization. 2006 , 11, 118-127	1
1536	BioMEMS and Biomedical Nanotechnology. 2006 ,	7
1535	Environmental micro-patterning for the study of spiral ganglion neurite guidance. 2006 , 11, 134-43	16
1534	High-efficiency electrokinetic micromixing through symmetric sequential injection and expansion. 2006 , 6, 1033-9	45
1533	Wafer Bonding with BCB and SU-8 for MEMS Packaging. 2006 ,	4
1532	.	1
1531	Optical Chemical Sensors. 2006 ,	38
1530	Optical waveguides via viscosity-mismatched microfluidic flows. 2006 , 88, 134109	13
1529	Microfluidic vias enable nested bioarrays and autoregulatory devices in Newtonian fluids. 2006 , 103, 12280-4	60
1528	Microscale tipstreaming in a microfluidic flow focusing device. 2006 , 18, 121512	284
1527	Field-mediated self-assembly and actuation of highly parallel microfluidic devices. 2006 , 88, 263515	38
1526	Dynamic microfluidic photomasking.	
1525	Interplay of biomaterials and micro-scale technologies for advancing biomedical applications. 2006 , 17, 1221-40	35
1524	A PDMS-based gas permeation pump for on-chip fluid handling in microfluidic devices. 2006 , 16, 2396-2402	112
1523	BioMEMS and Biomedical Nanotechnology. 2006 ,	3
1522	Particle motions in low-Reynolds number pressure-driven flows through converging-diverging microchannels. 2006 , 16, 62-69	28
1521	Microfluidic channel fabrication by PDMS-interface bonding. 2006 , 15, S112-S116	79
1520	Microfabricated high-throughput electronic particle detector. 2007 , 78, 104301	32

1519	Design and Fabrication of an Automated Microchip-Based Cell Separation Device. 2007 , 40, 763-778	2
1518	Design and characterization of shell-like actuators based on soft dielectric electroactive polymers. 2007 , 16, 1415-1422	13
1517	Microfluidic system for on-chip high-throughput whole-animal sorting and screening at subcellular resolution. 2007 , 104, 13891-5	244
1516	Optically integrated microfluidic systems for cellular characterization and manipulation. 2007 , 9, S122-S128	13
1515	Direct measurement of slip length in electrolyte solutions. 2007 , 19, 028104	42
1514	Micro- and Nanofabricated Scaffolds. 2007 , 341-358	4
1513	Coupling Microdialysis Sampling to Microchip Electrophoresis in a Reversibly Sealed Device. 2007 , 12, 296-302	7
1512	Rapid prototyping of microfluidic systems using a laser-patterned tape. 2007 , 17, N107-N111	19
1511	Electrowetting-controlled droplet generation in a microfluidic flow-focusing device. 2007 , 19, 462101	33
1510	Microfabricated silicone elastomeric post arrays for measuring traction forces of adherent cells. 2007 , 83, 313-28	80
1509	Combining multiple optical trapping with microflow manipulation for the rapid bioanalytics on microparticles in a chip. 2007 , 78, 116101	11
1508	Manipulation of Droplets in Micro-Channel Through Magnetic Field. 2007 ,	
1507	Microfluidic Flow Cytometer with On-Chip Lens Systems for Improved Signal Resolution. 2007 ,	2
1506	Integrated waveguide with a microfluidic channel in spiral geometry for spectroscopic applications. 2007 , 90, 111108	22
1505	Surface patterning. 2007 , 83, 67-87	13
1504	Sickle cell vasoocclusion and rescue in a microfluidic device. 2007 , 104, 20496-500	144
1503	Experimentally validated quantitative linear model for the device physics of elastomeric microfluidic valves. 2007 , 101, 64505	32
1502	A single-molecule barcoding system using nanoslits for DNA analysis. 2007 , 104, 2673-8	265

1501	Injection Angle Dependence in Flow Focusing Based Droplet Formation. 2007 ,	3
1500	Easily fabricated magnetic traps for single-cell applications. 2007 , 78, 044301	22
1499	Scaling of interface displacement in a microfluidic comparator. 2007 , 90, 114109	21
1498	Use of Bacterial Carpets to Enhance Mixing in Microfluidic Systems. 2007 , 129, 319-324	61
1497	Fabrication of round channels using the surface tension of PDMS and its application to a 3D serpentine mixer. 2007 , 17, 1533-1541	49
1496	A chaotic micromixer modulated by constructive vortex agitation. 2007 , 17, 2084-2092	27
1495	A portable anaerobic microbioreactor reveals optimum growth conditions for the methanogen <i>Methanosaeta concilii</i> . 2007 , 73, 1653-8	72
1494	Hydrogen Peroxide as an Oxidant for Microfluidic Fuel Cells. 2007 , 154, B1220	100
1493	Microfluidics: Fundamentals and Engineering Concepts. 2007 , 1-58	6
1492	BioMEMS and Biomedical Nanotechnology. 2007 ,	16
1491	Photochemical Oxidation of Poly(dimethylsiloxane) Surface and Subsequent Coating with Biomimetic Phosphorylcholine Polymer. 2007 , 20, 245-249	8
1490	Microchip-Based Immunoassay. 2007 , 56, 521-534	4
1489	Separation and simultaneous determination of uric acid and ascorbic acid on a dynamically modified poly(dimethylsiloxane) microchip. 2007 , 23, 1409-14	32
1488	On-chip Capillary Electrophoresis Fractionation of DNA Construct for Cell-free Protein Expression. 2007 , 36, 1346-1347	2
1487	?????????????????????. 2007 , 75, 70-74	1
1486	Electroactive nanowells for spectrographic fluidic memory. 2007 ,	
1485	Cascaded free-flow isoelectric focusing for improved focusing speed and resolution. <i>Analytical Chemistry</i> , 2007 , 79, 9364-71	7.8 34
1484	Refractive multiple optical tweezers for parallel biochemical analysis in micro-fluidics. 2007 ,	2

1483	Micro-optics for optical trapping in microfluidics. 2007 ,		1
1482	Chapter 2 Chip Capillary Electrophoresis and Total Genetic Analysis Systems. 2007 , 2, 45-95		2
1481	Microfluidic platforms for lab-on-a-chip applications. 2007 , 7, 1094-110		785
1480	Rapid prototyping of microfluidic devices with a wax printer. 2007 , 7, 384-7		90
1479	Optofluidic trapping and transport on solid core waveguides within a microfluidic device. 2007 , 15, 14322-34		173
1478	Development of a microfluidic device for determination of cell osmotic behavior and membrane transport properties. 2007 , 55, 200-9		35
1477	Rapid quantification of bacterial cells in potable water using a simplified microfluidic device. 2007 , 68, 643-7		33
1476	Bioactive surface modification of mica and poly(dimethylsiloxane) with hydrophobins for protein immobilization. 2007 , 23, 4465-71		80
1475	Lab-on-chip technologies: making a microfluidic network and coupling it into a complete microsystem—review. 2007 , 17, R15-R49		379
1474	Nanoliter dispensing method by degassed poly(dimethylsiloxane) microchannels and its application in protein crystallization. <i>Analytical Chemistry</i> , 2007 , 79, 4924-30	7.8	61
1473	Fabrication of fritless chromatographic microchips packed with conventional reversed-phase silica particles. <i>Analytical Chemistry</i> , 2007 , 79, 7906-9	7.8	53
1472	Self-assembled epoxy-modified polymer coating on a poly(dimethylsiloxane) microchip for EOF inhibition and biopolymers separation. 2007 , 7, 1490-6		49
1471	Cell-based high content screening using an integrated microfluidic device. 2007 , 7, 1696-704		198
1470	Integrated multilayer microfluidic device with a nanoporous membrane interconnect for online coupling of solid-phase extraction to microchip electrophoresis. 2007 , 7, 1819-24		55
1469	Flow rate analysis of a surface tension driven passive micropump. 2007 , 7, 1475-8		147
1468	Using pattern homogenization of binary grayscale masks to fabricate microfluidic structures with 3D topography. 2007 , 7, 1567-73		24
1467	Development of an on-chip injector for microchip-based flow analyses using laminar flow. 2007 , 7, 1589-96		13
1466	Microfluidic methods for generating continuous droplet streams. 2007 , 40, R319-R336		596

1465	Biomedical and Biotechnological Applications of Elastin-Like Polypeptides. 2007 , 47, 121-154	67
1464	Integrated thin-film polymer/fullerene photodetectors for on-chip microfluidic chemiluminescence detection. 2007 , 7, 58-63	87
1463	A novel metal-protected plasma treatment for the robust bonding of polydimethylsiloxane. 2007 , 7, 1813-8	22
1462	Efficient formation of uniform-sized embryoid bodies using a compartmentalized microchannel device. 2007 , 7, 770-6	132
1461	. 2007 , 16, 401-410	16
1460	Quantification of the heterogeneity in breast cancer cell lines using whole-cell impedance spectroscopy. 2007 , 13, 139-43	152
1459	On-chip microdialysis system with flow-through glucose sensing capabilities. 2007 , 1, 375-83	9
1458	Performance of an integrated microfluidic chip and position sensitive APD for the detection of beta emitting probes in cell cultures. 2007 ,	3
1457	Electrical microfluidic pressure gauge for elastomer microelectromechanical systems. 2007 , 102, 84909-84909	43
1456	A 3D micromixer fabricated with dry film resist. 2007 ,	3
1455	Tunable and movable liquid microlens in situ fabricated within microfluidic channels. 2007 , 91, 041109	23
1454	Fabrication and evaluation of a 3-dimensional microchip device where carbon microelectrodes individually address channels in the separate fluidic layers. 2007 , 132, 1246-53	3
1453	Matrix-dependent adhesion of vascular and valvular endothelial cells in microfluidic channels. 2007 , 7, 1759-66	125
1452	Fabrication improvements for thermoset polyester (TPE) microfluidic devices. 2007 , 7, 923-6	24
1451	Rapid Fabrication of Micromolds for Polymeric Microfluidic Devices. 2007 ,	5
1450	Rapid fabrication of microchannels using microscale plasma activated templating (microPLAT) generated water molds. 2007 , 7, 641-3	44
1449	Addressing a vascular endothelium array with blood components using underlying microfluidic channels. 2007 , 7, 1256-9	55
1448	Dynamic Microfluidic Photomasking. 2007 , 16, 1145-1151	2

1447	A simple polysilsesquioxane sealing of nanofluidic channels below 10 nm at room temperature. 2007 , 7, 1198-201		40
1446	Continuous cytometric bead processing within a microfluidic device for bead based sensing platforms. 2007 , 7, 588-95		26
1445	Fourier transform capillary electrophoresis with laminar-flow gated pressure injection. <i>Analytical Chemistry</i> , 2007 , 79, 6807-15	7.8	6
1444	Amperometric detection of carbohydrates with a portable silicone/quartz capillary microchip by designed fracture sampling. <i>Analytical Chemistry</i> , 2007 , 79, 9427-32	7.8	27
1443	Preliminary studies on the rapid detection of staphylococcus aureus using a microfluidic device and nanopatterned hydrogels. 2007 ,		
1442	Mass spectrometric imaging of peptide release from neuronal cells within microfluidic devices. 2007 , 7, 1454-60		54
1441	Structural forms of single crystal semiconductor nanoribbons for high-performance stretchable electronics. 2007 , 17, 832		99
1440	Monolithic Teflon membrane valves and pumps for harsh chemical and low-temperature use. 2007 , 7, 1469-74		42
1439	. 2007 ,		
1438	Experimental and theoretical analysis of direct-write laser micromachining of polymethyl methacrylate by CO2 laser ablation. 2007 , 101, 024901		63
1437	Focal tunable liquid lens integrated with an electromagnetic actuator. 2007 , 90, 121129		106
1436	Maze exploration and learning in <i>C. elegans</i> . 2007 , 7, 186-92		107
1435	Room temperature microchannel fabrication for microfluidic system. 2007 ,		0
1434	High-throughput microfluidics: improved sample treatment and washing over standard wells. 2007 , 7, 316-21		50
1433	The effects of alkyl sulfates on the analysis of phenolic compounds by microchip capillary electrophoresis with pulsed amperometric detection. 2007 , 132, 997-1004		22
1432	Monodisperse emulsions from a microfluidic device, characterised by diffusion NMR. 2007 , 3, 627-633		29
1431	Microfluidic flow-flash: method for investigating protein dynamics. <i>Analytical Chemistry</i> , 2007 , 79, 122-8	7.8	18
1430	Guidance of actin filament elongation on filament-binding tracks. 2007 , 23, 11911-6		9

1429	Characterization and resolution of evaporation-mediated osmolality shifts that constrain microfluidic cell culture in poly(dimethylsiloxane) devices. <i>Analytical Chemistry</i> , 2007 , 79, 1126-34	7.8	181
1428	Dual functional, polymeric self-assembled monolayers as a facile platform for construction of patterns of biomolecules. 2007 , 23, 10902-5		55
1427	Compact microfluidic structures for generating spatial and temporal gradients. <i>Analytical Chemistry</i> , 2007 , 79, 9471-7	7.8	40
1426	Use of a mixture of n-dodecyl-beta-D-maltoside and sodium dodecyl sulfate in poly(dimethylsiloxane) microchips to suppress adhesion and promote separation of proteins. <i>Analytical Chemistry</i> , 2007 , 79, 9145-9	7.8	21
1425	Rapid electrical lysis of bacterial cells in a microfluidic device. 2007 , 385, 23-35		7
1424	Microfluidic device for the discrimination of single-nucleotide polymorphisms in DNA oligomers using electrochemically actuated alkaline dehybridization. <i>Analytical Chemistry</i> , 2007 , 79, 9014-21	7.8	9
1423	. 2007 ,		
1422	Dual-channel method for interference-free in-channel amperometric detection in microchip capillary electrophoresis. <i>Analytical Chemistry</i> , 2007 , 79, 7182-6	7.8	35
1421	A conversation with Prof. George Whitesides: pioneer in soft nanolithography. Interview by Paul S. Weiss. 2007 , 1, 73-8		5
1420	Three-dimensional hydrodynamic focusing in two-layer polydimethylsiloxane (PDMS) microchannels. 2007 , 17, 1479-1486		116
1419	Variably elastic hydrogel patterned via capillary action in microchannels. 2007 , 23, 1483-8		13
1418	Flow-focusing generation of monodisperse water droplets wrapped by ionic liquid on microfluidic chips: from plug to sphere. 2007 , 23, 11924-31		32
1417	Simulation-based analysis of fluid flow and electrokinetic phenomena in microfluidic devices. 2007 , 27, 41-59		3
1416	Microfluidic platform for single nucleotide polymorphism genotyping of the thiopurine S-methyltransferase gene to evaluate risk for adverse drug events. 2007 , 9, 521-9		25
1415	Stream spreading in multilayer microfluidic flows of suspensions. <i>Analytical Chemistry</i> , 2007 , 79, 1947-53	7.8	15
1414	Thermocapillary valve for droplet production and sorting. 2007 , 75, 046302		170
1413	Adsorption-resistant acrylic copolymer for prototyping of microfluidic devices for proteins and peptides. <i>Analytical Chemistry</i> , 2007 , 79, 1926-31	7.8	30
1412	Flexible microarray construction and fast DNA hybridization conducted on a microfluidic chip for greenhouse plant fungal pathogen detection. 2007 , 55, 10509-16		38

1411	The fabrication of microfluidic structures by means of full-wafer adhesive bonding using a poly(dimethylsiloxane) catalyst. 2007 , 17, 1710-1714		53
1410	A PDMS viscometer for microliter Newtonian fluid. 2007 , 17, 1828-1834		62
1409	Fabrication and testing investigation of low-voltage integrated electrophoresis chip based on silicon-on-insulator-MEMS. 2007 , 6, 033009		1
1408	Rapid fabrication of a microfluidic device with integrated optical waveguides for DNA fragment analysis. 2007 , 7, 1280-7		105
1407	Lab on a Chip for Live-Cell Manipulation. 2007 , 24, 26-36		24
1406	DNA detection on plastic: surface activation protocol to convert polycarbonate substrates to biochip platforms. <i>Analytical Chemistry</i> , 2007 , 79, 426-33	7.8	85
1405	A novel fabrication process for out-of-plane microneedle sheets of biocompatible polymer. 2007 , 17, 1184-1191		71
1404	Electrochemical detection in a microfluidic device of oxidative stress generated by macrophage cells. 2007 , 7, 233-8		71
1403	Microfluidics and Their Applications to Lab-on-a-Chip. 2007 , 523-548		8
1402	Leakage-free bonding of porous membranes into layered microfluidic array systems. <i>Analytical Chemistry</i> , 2007 , 79, 3504-8	7.8	154
1401	Microfluidic logic gates and timers. 2007 , 7, 1449-53		66
1400	Pumping fluids in microfluidic systems using the elastic deformation of poly(dimethylsiloxane). 2007 , 7, 1832-6		42
1399	On-chip surface-based detection with nanohole arrays. <i>Analytical Chemistry</i> , 2007 , 79, 4094-100	7.8	227
1398	Surface-enhanced Raman signatures of pigmentation of cyanobacteria from within geological samples in a spectroscopic-microfluidic flow cell. <i>Analytical Chemistry</i> , 2007 , 79, 7036-41	7.8	49
1397	Printable Single-Crystal Silicon Micro/Nanoscale Ribbons, Platelets and Bars Generated from Bulk Wafers. 2007 , 17, 3051-3062		98
1396	Polyelectrolyte-Clay-Protein Layer Films on Microfluidic PDMS Bioreactor Surfaces for Primary Murine Bone Marrow Culture. 2007 , 17, 2701-2709		46
1395	Microsolidics: Fabrication of Three-Dimensional Metallic Microstructures in Poly(dimethylsiloxane). 2007 , 19, 727-733		179
1394	Rapid Prototyping in Copper Substrates for Digital Microfluidics. 2007 , 19, 133-137		71

1393	Silk Fibroin Microfluidic Devices. 2007 , 19, 2847-2850	158
1392	Recent Developments in Polymer MEMS. 2007 , 19, 3783-3790	325
1391	Enhanced Microchip Electrophoresis of Neurotransmitters on Glucose Oxidase Modified Poly(dimethylsiloxane) Microfluidic Devices. 2007 , 19, 674-680	12
1390	Thermoset polyester as an alternative material for microchip electrophoresis/electrochemistry. 2007 , 28, 1123-9	15
1389	Characterizing doxorubicin-induced apoptosis in HepG2 cells using an integrated microfluidic device. 2007 , 28, 1146-53	44
1388	A sheathless poly(methyl methacrylate) chip-CE/MS interface fabricated using a wire-assisted epoxy-fixing method. 2007 , 28, 1265-73	14
1387	Electrochromatography in poly(dimethyl)siloxane microchips using organic monolithic stationary phases. 2007 , 28, 1668-73	41
1386	A hybrid microdevice with a thin PDMS membrane on the detection window for UV absorbance detection. 2007 , 28, 2474-7	21
1385	Microfluidics in amino acid analysis. 2007 , 28, 2113-24	44
1384	Integration of continuous-flow sampling with microchip electrophoresis using poly(dimethylsiloxane)-based valves in a reversibly sealed device. 2007 , 28, 2478-88	27
1383	In-channel atom-transfer radical polymerization of thermoset polyester microfluidic devices for bioanalytical applications. 2007 , 28, 2904-11	16
1382	Comparative study of floating and dynamic injection modes in electrokinetic separative microsystems. 2007 , 28, 4629-37	3
1381	Bulk modification of PDMS microchips by an amphiphilic copolymer. 2007 , 28, 3302-7	29
1380	Detection of single-base mutations using 1-D microfluidic beads array. 2007 , 28, 4668-78	12
1379	A simplified method for capillary embedment into microfluidic devices - exemplified by sol-gel-based preconcentration. 2007 , 28, 4758-64	3
1378	Temperature gradient focusing in a PDMS/glass hybrid microfluidic chip. 2007 , 28, 4606-11	36
1377	Poly(dimethylsiloxane) Microchips with Two Sharpened Stretching Tips and Its Application to Protein Separation Using Dynamic Coating. 2007 , 25, 190-195	1
1376	Electrochromatographic separation on a poly(dimethylsiloxane)/glass chip by integration of a capillary containing an acrylate monolithic stationary phase. 2007 , 30, 3043-9	8

1375	Separation of three water-soluble vitamins by poly(dimethylsiloxane) microchannel electrophoresis with electrochemical detection. 2007 , 30, 2320-5	6
1374	Surface modification of poly(dimethylsiloxane) for controlling biological cells adhesion using a scanning radical microjet. 2007 , 515, 5172-5178	64
1373	High-performance microfluidic vanadium redox fuel cell. 2007 , 52, 4942-4946	102
1372	Surface patterns of block copolymers in thin layers after vapor treatment. 2007 , 43, 1144-1153	9
1371	Fabrication of a novel poly(dimethylsiloxane) microchips with two sharpened stretching tips. 2007 , 18, 221-224	1
1370	Mixing characterization inside microdroplets engineered on a microcoalescer. 2007 , 62, 1042-1048	87
1369	In-situ grafting hydrophilic polymer on chitosan modified poly(dimethylsiloxane) microchip for separation of biomolecules. 2007 , 1147, 120-6	62
1368	Rapid prototyping of poly(methyl methacrylate) microfluidic systems using solvent imprinting and bonding. 2007 , 1162, 162-6	54
1367	Fully integrated microfluidic separations systems for biochemical analysis. 2007 , 1168, 170-88; discussion 169	76
1366	Development of an integrated direct-contacting optical-fiber microchip with light-emitting diode-induced fluorescence detection. 2007 , 1170, 101-6	24
1365	Rapid discrimination of single-nucleotide mismatches using a microfluidic device with monolayered beads. 2007 , 582, 295-303	24
1364	Simple and rapid methods for the fabrication of polymeric and glass chips for using in analytical chemistry. 2007 , 589, 84-8	8
1363	Polyurethane from biosource as a new material for fabrication of microfluidic devices by rapid prototyping. 2007 , 1173, 151-8	34
1362	Fabrication of microchannel containing nanopillar arrays using micromachined AAO (anodic aluminum oxide) mold. 2007 , 84, 1532-1535	14
1361	Planar and three-dimensional microfluidic fuel cell architectures based on graphite rod electrodes. 2007 , 168, 379-390	107
1360	Planar micro-check valves exploiting large polymer compliance. 2007 , 134, 186-193	34
1359	A fabrication technology for multi-layer polymer-based microsystems with integrated fluidic and electrical functionality. 2007 , 121, 689-697	18
1358	Bioactivated PDMS microchannel evaluated as sensor for human CD4+ cells The concept of a point-of-care method for HIV monitoring. 2007 , 123, 847-855	24

1357	Spiral microchannels on a CD for DNA hybridizations. 2007 , 128, 64-69	36
1356	Fabrication and characterization of a flow-through PCR device with integrated chromium resistive heaters. 2007 , 38, 333-339	14
1355	Simulation of droplet formation and coalescence using lattice Boltzmann-based single-phase model. 2007 , 311, 609-18	39
1354	A single-step photolithographic interface for cell-free gene expression and active biochips. 2007 , 3, 500-10	69
1353	Biomimetic models of the actin cytoskeleton. 2007 , 3, 1015-22	19
1352	Capillary kinetics of water in homogeneous, hydrophilic polymeric micro- to nanochannels. 2007 , 3, 778-82	25
1351	Synthesis of composite emulsions and complex foams with the use of microfluidic flow-focusing devices. 2007 , 3, 1792-802	72
1350	Plasma Modification of PDMS Microfluidic Devices for Control of Electroosmotic Flow. 2007 , 4, 414-424	26
1349	A nanoscale probe for fluidic and ionic transport. 2007 , 2, 104-7	66
1348	Self-formation of sub-60-nm half-pitch gratings with large areas through fracturing. 2007 , 2, 545-8	45
1347	Microfabrication meets microbiology. 2007 , 5, 209-18	596
1346	Measurements of label free protein concentration and conformational changes using a microfluidic UV-LED method. 2007 , 23, 1506-12	12
1345	Fabrication of Ceramic Microscale Structures. 2007 , 90, 2779-2783	20
1344	BIOMEMS AND NANOTECHNOLOGY-BASED APPROACHES FOR RAPID DETECTION OF BIOLOGICAL ENTITIES. 2007 , 15, 1-32	63
1343	Miniaturizing chemistry and biology in microdroplets. 2007 , 1773-88	155
1342	Variable Focusing Microlens Chip for Potential Sensing Applications. 2007 , 7, 11-17	19
1341	A micromachined high throughput Coulter counter for bioparticle detection and counting. 2007 , 17, 304-313	133
1340	Fourier analysis to measure diffusion coefficients and resolve mixtures on a continuous electrophoresis chip. <i>Analytical Chemistry</i> , 2007 , 79, 8222-31	7.8 12

1339	Free-solution, label-free molecular interactions studied by back-scattering interferometry. 2007 , 317, 1732-6	168
1338	Impedimetric detection for DNA hybridization within microfluidic biochips. 2007 , 385, 103-20	4
1337	The effect of fluidic conditions on the continuous-flow bioluminescent detection of ATP in a microfluidic device. 2007 , 12, 470-474	6
1336	Quantitative measurement and control of oxygen levels in microfluidic poly(dimethylsiloxane) bioreactors during cell culture. 2007 , 9, 123-34	190
1335	A microfluidic platform for 3-dimensional cell culture and cell-based assays. 2007 , 9, 25-34	149
1334	Microfluidic devices for size-dependent separation of liver cells. 2007 , 9, 637-45	92
1333	Automatic microfluidic platform for cell separation and nucleus collection. 2007 , 9, 533-43	49
1332	Fabrication of polymer microstructures for MEMS: sacrificial layer micromolding and patterned substrate micromolding. 2007 , 9, 815-21	30
1331	Electroosmotic flow in microchannels with prismatic elements. 2007 , 3, 151-160	21
1330	Droplet-based synthetic method using microflow focusing and droplet fusion. 2007 , 3, 239-243	70
1329	Integrated electrochemical velocimetry for microfluidic devices. 2007 , 3, 403-416	34
1328	Experiment and simulation of mixed flows in a trapezoidal microchannel. 2007 , 3, 347-358	20
1327	Development of sorting, aligning, and orienting motile sperm using microfluidic device operated by hydrostatic pressure. 2007 , 3, 561-570	65
1326	A new technology for microfluidic structures preparation based on a photoimageable ceramic. 2007 , 13, 657-661	2
1325	Shrinkage ratio of PDMS and its alignment method for the wafer level process. 2007 , 14, 205-208	99
1324	On-chip microdialysis system with flow-through sensing components. 2007 , 22, 2422-8	15
1323	Surface modification of microfluidic channels by UV-mediated graft polymerization of non-fouling and smart polymers. 2007 , 76, 1409-1413	62
1322	Design, simulation and experiment of electroosmotic microfluidic chip for cell sorting. 2007 , 133, 340-348	33

1321	Photoresponsive polymer gel microvalves controlled by local light irradiation. 2007 , 140, 176-184	126
1320	Refreshable microfluidic channels constructed using an inkjet printer. 2007 , 122, 141-147	19
1319	Microfluidic ion-sensing devices. 2008 , 613, 20-30	26
1318	A spatially addressable bead-based biosensor for simple and rapid DNA detection. 2008 , 23, 803-10	33
1317	A microfluidic cell array with individually addressable culture chambers. 2008 , 24, 613-7	33
1316	Effects of grafting poly(ethylene oxide) on the amplification efficiency of a poly(dimethylsiloxane)-based flow-through PCR device. 2008 , 143, 326-330	6
1315	A microfluidic study of mouse dendritic cell membrane transport properties of water and cryoprotectants. 2008 , 51, 5687-5694	23
1314	Rotation effect in split and recombination micromixing. 2008 , 129, 364-371	35
1313	In vitro blood flow in a rectangular PDMS microchannel: experimental observations using a confocal micro-PIV system. 2008 , 10, 153-67	131
1312	DC-Dielectrophoretic separation of biological cells by size. 2008 , 10, 243-9	211
1311	The analysis of chemotherapy resistance in human lung cancer cell line with microchip-based system. 2008 , 10, 429-35	8
1310	Gravitation-driven stress-reduced cell handling. 2008 , 390, 857-63	10
1309	Recent advances in electric analysis of cells in microfluidic systems. 2008 , 391, 933-42	61
1308	Magnetic microsphere-based methods to study the interaction of teicoplanin with peptides and bacteria. 2008 , 392, 877-86	11
1307	Low-cost, rapid-prototyping of digital microfluidics devices. 2008 , 4, 349-355	90
1306	Magnetically controlled valve for flow manipulation in polymer microfluidic devices. 2008 , 4, 525-531	19
1305	Improved serpentine laminating micromixer with enhanced local advection. 2008 , 4, 513-523	46
1304	Computational modeling and comparison of three co-laminar microfluidic mixing techniques. 2008 , 5, 43-53	6

1303	Recent advances in microscale pumping technologies: a review and evaluation. 2008 , 5, 145-174	324
1302	Towards a continuous microfluidic rheometer. 2008 , 5, 619-630	34
1301	Fluorescence detection in a micro flow cytometer without on-chip fibers. 2008 , 5, 689-694	8
1300	Experimental characterization of transcription properties of microchannel geometry fabricated by injection molding based on Taguchi method. 2008 , 14, 1581-1588	17
1299	Low-stress fabrication of 3D polymer free standing structures using lamination of photosensitive films. 2008 , 14, 1205-1214	23
1298	Fabrication of microfluidic channel utilizing silicone rubber with vacuum casting. 2008 , 14, 1125-1135	19
1297	Oxygen plasma-induced conversion of polysiloxane into hydrophilic and smooth SiO _x surfaces. 2008 , 40, 649-656	22
1296	Microfluidic pump powered by self-organizing bacteria. 2008 , 4, 111-8	73
1295	Microfluidic synthesis of nanomaterials. 2008 , 4, 698-711	349
1294	Constructing the Phase Diagram of an Aqueous Solution of Poly(N-isopropyl acrylamide) by Controlled Microevaporation in a Nanoliter Microchamber. 2008 , 29, 1363-1367	41
1293	Surface modification of poly(dimethylsiloxane) microfluidic devices and its application in simultaneous analysis of uric acid and ascorbic acid in human urine. 2008 , 31, 2860-7	27
1292	Microfluidics for miniaturized laboratories on a chip. 2008 , 9, 2140-56	121
1291	Electrochromatography in microchips packed with conventional reversed-phase silica particles. 2008 , 29, 1638-42	21
1290	Continuous and precise particle separation by electroosmotic flow control in microfluidic devices. 2008 , 29, 1423-30	36
1289	Comparison of the analytical performance of electrophoresis microchannels fabricated in PDMS, glass, and polyester-toner. 2008 , 29, 4928-37	51
1288	Isoelectric focusing in an ordered micropillar array. 2008 , 29, 2945-52	22
1287	Influence of polymer structure on electroosmotic flow and separation efficiency in successive multiple ionic layer coatings for microchip electrophoresis. 2008 , 29, 3128-34	24
1286	Rapid chip-based capillary electrophoretic mobility shift assay with negative pressure injection for the binding study of transcription factor Abf1 in <i>Saccharomyces cerevisiae</i> . 2008 , 29, 5003-9	13

1285	Simple, fast and high-throughput single-cell analysis on PDMS microfluidic chips. 2008 , 29, 5055-60	33
1284	Microfluidic device for integrated restriction digestion reaction and resulting DNA fragment analysis. 2008 , 29, 4956-63	13
1283	Microfluidic delivery of small molecules into mammalian cells based on hydrodynamic focusing. 2008 , 100, 150-8	52
1282	Microfluidic electroporation for delivery of small molecules and genes into cells using a common DC power supply. 2008 , 100, 579-86	55
1281	Pressure-driven perfusion culture microchamber array for a parallel drug cytotoxicity assay. 2008 , 100, 1156-65	72
1280	Semiconductor wires and ribbons for high-performance flexible electronics. 2008 , 47, 5524-42	253
1279	Microfluidic Synthesis of Reversibly Swelling Porous Polymeric Microcapsules with Controlled Morphology. 2008 , 20, 2177-2182	16
1278	Controllable Microfluidic Production of Microbubbles in Water-in-Oil Emulsions and the Formation of Porous Microparticles. 2008 , 20, 3314-3318	130
1277	Halbleiterdröhte und -bänder als flexible Bauelemente für die Hochleistungselektronik. 2008 , 120, 5606-5624	5
1276	Development of an automated digestion and droplet deposition microfluidic chip for MALDI-TOF MS. 2008 , 19, 964-72	47
1275	Hydrodynamic control of droplet division in bifurcating microchannel and its application to particle synthesis. 2008 , 321, 401-7	69
1274	Design and analysis of a polymeric photo-thermal microactuator. 2008 , 147, 292-299	22
1273	Passive flow switching valves on a centrifugal microfluidic platform. 2008 , 128, 613-621	59
1272	Surface modification of thin polyion complex film for surface plasmon resonance immunosensor. 2008 , 130, 320-325	12
1271	Polymer microchip integrated with nano-electrospray tip for electrophoresis-mass spectrometry. 2008 , 132, 368-373	31
1270	Surface hydrophilic treatment of polyurea film realized by vacuum ultraviolet light irradiation and its application for poly(methylmethacrylate) blood analysis chip. 2008 , 132, 374-379	15
1269	Micropatterning of protein-functionalized magnetic beads on glass using electrostatic self-assembly. 2008 , 132, 361-367	20
1268	Microfluidic valves based on superhydrophobic nanostructures and switchable thermosensitive surface for lab-on-a-chip (LOC) systems. 2008 , 132, 431-438	50

1267	Gastric-fluid-utilizing micro battery for micro medical devices. 2008 , 134, 219-224	32
1266	Single-synapse ablation and long-term imaging in live <i>C. elegans</i> . 2008 , 173, 20-6	59
1265	A microfabricated scaffold for retinal progenitor cell grafting. 2008 , 29, 418-26	121
1264	Micromixing using induced-charge electrokinetic flow. 2008 , 53, 5827-5835	120
1263	Surface modification of polydimethylsiloxane with photo-grafted poly(ethylene glycol) for micropatterned protein adsorption and cell adhesion. 2008 , 63, 301-5	80
1262	In-channel simplified decoupler with renewable electrochemical detection for microchip capillary electrophoresis. 2008 , 619, 115-21	22
1261	On-chip fluorescence-activated particle counting and sorting system. 2008 , 626, 97-103	21
1260	Alginate gelation in microfluidic channels. 2008 , 22, 97-104	51
1259	Electrophoretic separations on microfluidic chips. 2008 , 1184, 542-59	148
1258	Quantification of bacterial cells based on autofluorescence on a microfluidic platform. 2008 , 1181, 153-8	35
1257	Covalent modified hydrophilic polymer brushes onto poly(dimethylsiloxane) microchannel surface for electrophoresis separation of amino acids. 2008 , 1192, 173-9	41
1256	High intensity light emitting diode array as an alternative exposure source for the fabrication of electrophoretic microfluidic devices. 2008 , 1213, 3-7	10
1255	Microchip reversed-phase liquid chromatography with packed column and electrochemical flow cell using polystyrene/poly(dimethylsiloxane). 2008 , 1213, 209-17	14
1254	Sulphur dioxide plasma modification on poly(methyl methacrylate) for fluidic devices. 2008 , 8, 198-205	5
1253	Microfluidic chip for electrochemically-modulated liquid liquid extraction of ions. 2008 , 10, 20-24	31
1252	Ligation-based molecular tools for lab-on-a-chip devices. 2008 , 25, 42-8	16
1251	Novel methods to pattern polymers for microfluidics. 2008 , 85, 972-975	4
1250	Electrowetting --a versatile tool for controlling microdrop generation. 2008 , 26, 91-6	38

1249	Semiconducting Nanowire Field-Effect Transistor Biomolecular Sensors. 2008 , 55, 3119-3130		115
1248	Biocompatible surfactants for water-in-fluorocarbon emulsions. 2008 , 8, 1632-9		508
1247	Electroosmotic flow in rectangular microchannels with Joule heating effects. 2008 , 18, 025025		12
1246	Transition from squeezing to dripping in a microfluidic T-shaped junction. 2008 , 595, 141-161		485
1245	Microfluidic focal thrombosis model for measuring murine platelet deposition and stability: PAR4 signaling enhances shear-resistance of platelet aggregates. 2008 , 6, 2193-201		122
1244	An integrated microfluidic system for long-term perfusion culture and on-line monitoring of intestinal tissue models. 2008 , 8, 741-6		219
1243	Microfluidic droplet-based liquid-liquid extraction. <i>Analytical Chemistry</i> , 2008 , 80, 2680-7	7.8	169
1242	A microfluidic fuel cell with flow-through porous electrodes. 2008 , 130, 4000-6		255
1241	Glass coating for PDMS microfluidic channels by sol-gel methods. 2008 , 8, 516-8		235
1240	Patterned superfunctional surfaces based on a silicone nanofilament coating. 2008 , 4, 450-452		125
1239	Micro Total Analysis System. 359-378		1
1238	Biosensors based on release of compounds upon disruption of lipid bilayers supported on porous microspheres. 2008 , 3, 38		11
1237	Long-term affinity modification on poly(dimethylsiloxane) substrate and its application for ELISA analysis. <i>Analytical Chemistry</i> , 2008 , 80, 1529-35	7.8	43
1236	Cell culture models in microfluidic systems. 2008 , 1, 423-49		272
1235	Shrinky-Dink microfluidics: 3D polystyrene chips. 2008 , 8, 622-4		119
1234	A highly sensitive, highly reproducible laser-induced fluorescence detection system with optical pickup. 2008 , 19, 085404		4
1233	Silane-dextran chemistry on lateral flow polymer chips for immunoassays. 2008 , 8, 1191-7		105
1232	On the role of oxygen in fabricating microfluidic channels with ultraviolet curable materials. 2008 , 8, 1787-92		32

1231	Self-sealed vertical polymeric nanoporous-junctions for high-throughput nanofluidic applications. <i>Analytical Chemistry</i> , 2008 , 80, 3507-11	7.8	98
1230	Solution-Deposited Amorphous Titanium Dioxide on Silicone Rubber: A Conformal, Crack-Free Antibacterial Coating. 2008 , 20, 1390-1396		41
1229	Particle dispersion and separation resolution of pinched flow fractionation. <i>Analytical Chemistry</i> , 2008 , 80, 1641-8	7.8	39
1228	Determining the optimal PDMS/PDMS bonding technique for microfluidic devices. 2008 , 18, 067001		373
1227	Low-cost printing of poly(dimethylsiloxane) barriers to define microchannels in paper. <i>Analytical Chemistry</i> , 2008 , 80, 3387-92	7.8	481
1226	Low-Cost MEMS Technologies. 2008 , 341-378		5
1225	Solventless adhesive bonding using reactive polymer coatings. <i>Analytical Chemistry</i> , 2008 , 80, 4119-24	7.8	79
1224	Two-silane chemical vapor deposition treatment of polymer (nylon) and oxide surfaces that yields hydrophobic (and superhydrophobic), abrasion-resistant thin films. 2008 , 26, 1224-1234		21
1223	Microfluidic stickers. 2008 , 8, 274-9		204
1222	Simultaneous generation of droplets with different dimensions in parallel integrated microfluidic droplet generators. 2008 , 4, 258-262		86
1221	Particle enrichment employing grooved microfluidic channels. 2008 , 92, 173502		5
1220	Photoreactive coating for high-contrast spatial patterning of microfluidic device wettability. 2008 , 8, 2157-60		99
1219	Soft lithography: masters on demand. 2008 , 8, 1379-85		66
1218	Review of an in vitro microfluidic model of sickle cell vaso-occlusion. 2008 , 15, 12-3		5
1217	Polymer thin film deposited on liquid for varifocal encapsulated liquid lenses. 2008 , 93, 124101		75
1216	Peptide-nanowire hybrid materials for selective sensing of small molecules. 2008 , 130, 9583-9		81
1215	Shrinky-Dink microfluidics: rapid generation of deep and rounded patterns. 2008 , 8, 170-2		151
1214	Microfluidic assembly blocks. 2008 , 8, 1365-73		78

1213	Microfluidic CARS cytometry. 2008 , 16, 5782-9	52
1212	Theory of dielectric micro-sphere dynamics in a dual-beam optical trap. 2008 , 16, 9306-17	24
1211	18 Coupling CE and microchip-based devices with mass spectrometry. 2008 , 9, 477-521	7
1210	Synthesis and characterization of particle loaded sol-gel composite material for microfluidic chip system. 2008 , 45, 133-141	2
1209	ABO, D blood typing and subtyping using plug-based microfluidics. <i>Analytical Chemistry</i> , 2008 , 80, 6190-7.8	55
1208	Actuatable membranes based on polypyrrole-coated vertically aligned carbon nanofibers. 2008 , 2, 247-54	22
1207	Single-molecule cut-and-paste surface assembly. 2008 , 319, 594-6	225
1206	Experimental observations of the squeezing-to-dripping transition in T-shaped microfluidic junctions. 2008 , 78, 036317	243
1205	Design considerations for robust suspension-based microfluidic systems for biomedical applications. 2008 ,	2
1204	A disposable planar peristaltic pump for lab-on-a-chip. 2008 , 8, 660-2	34
1203	Experimental and model investigation of the time-dependent 2-dimensional distribution of binding in a herringbone microchannel. 2008 , 8, 557-64	25
1202	Interfacial instabilities in a microfluidic Hele-Shaw cell. 2008 , 4, 1403-1413	52
1201	Influence of channel position on sample confinement in two-dimensional planar microfluidic devices. 2008 , 8, 316-22	9
1200	On-chip counting the number and the percentage of CD4+ T lymphocytes. 2008 , 8, 309-15	68
1199	Quantitative and qualitative analysis of a microfluidic DNA extraction system using a nanoporous ALO(x) membrane. 2008 , 8, 1516-23	53
1198	Lab-on-chip methodologies for the study of transport in porous media: energy applications. 2008 , 8, 689-93	77
1197	Versatile control of multiphase laminar flow for in-channel microfabrication. 2008 , 8, 1695-9	20
1196	Polymer Ultra-violet Light Filter for MEMS Fabrication. 2008 ,	

1195	Fracture-induced alignment of surface wrinkles. 2008 , 4, 1805	16
1194	Two simple and rugged designs for creating microfluidic sheath flow. 2008 , 8, 1097-103	95
1193	On-chip pH measurement using functionalized gel-microbeads positioned by optical tweezers. 2008 , 8, 346-51	30
1192	Managing evaporation for more robust microscale assays. Part 2. Characterization of convection and diffusion for cell biology. 2008 , 8, 860-4	39
1191	Poly(dimethylsiloxane) Microchip Electrophoresis with Contactless Conductivity Detection for Measurement of Chemical Warfare Agent Degradation ProductsView all notes. 2008 , 41, 335-350	28
1190	Polymethylhydrosiloxane (PMHS) as a functional material for microfluidic chips. 2008 , 18, 025026	10
1189	Fiber-focused diode bar optical trapping for microfluidic flow manipulation. 2008 , 92, 013904	20
1188	Doped Polymer Microstructures and Devices. 2008 ,	
1187	Side-by-side comparison of disposable microchips with commercial capillary cartridges for application in capillary isoelectric focusing with whole column imaging detection. 2008 , 8, 1738-41	18
1186	Post-hydrophilic treatment free plastic biochip fabrication method using polyurea film. 2008 ,	
1185	Millisecond treatment of cells using microfluidic devices via two-step carrier-medium exchange. 2008 , 8, 772-8	39
1184	Application of an Equilibrium Model for an Electrified Fluid InterfaceElectrospray Using a PDMS Microfluidic Device. 2008 , 17, 1362-1375	5
1183	Electronic control of elastomeric microfluidic circuits with shape memory actuators. 2008 , 8, 1530-5	62
1182	Maskless photolithography using UV LEDs. 2008 , 8, 1402-4	42
1181	A soft-polymer piezoelectric bimorph cantilever-actuated peristaltic micropump. 2008 , 8, 1664-70	38
1180	Flexible fluidic microchips based on thermoformed and locally modified thin polymer films. 2008 , 8, 1570-9	57
1179	A membrane-based microfluidic device for controlling the flux of platelet agonists into flowing blood. 2008 , 8, 701-9	64
1178	Programmable assembly of a metabolic pathway enzyme in a pre-packaged reusable bioMEMS device. 2008 , 8, 420-30	49

1177	Ultraviolet-based bonding for perfluoropolyether low aspect-ratio microchannels and hybrid devices. 2008 , 8, 1394-7		15
1176	Remotely powered distributed microfluidic pumps and mixers based on miniature diodes. 2008 , 8, 117-24		45
1175	Detection of kinase translocation using microfluidic electroporative flow cytometry. <i>Analytical Chemistry</i> , 2008 , 80, 1087-93	7.8	31
1174	Integrated nanopore/microchannel devices for ac electrokinetic trapping of particles. <i>Analytical Chemistry</i> , 2008 , 80, 657-64	7.8	58
1173	Rapid fabrication of tooling for microfluidic devices via laser micromachining and hot embossing. 2008 , 18, 025012		44
1172	Highly productive droplet formation by anisotropic elongation of a thread flow in a microchannel. 2008 , 24, 13809-13		17
1171	Improved temporal resolution for in vivo microdialysis by using segmented flow. <i>Analytical Chemistry</i> , 2008 , 80, 5607-15	7.8	99
1170	Cellular-scale hydrodynamics. 2008 , 3, 034011		130
1169	Catch strip assay for the relative assessment of two-dimensional protein association kinetics. <i>Analytical Chemistry</i> , 2008 , 80, 944-50	7.8	7
1168	Perturbation of Microfluidic Transport Following Electrokinetic Injection through a Nanocapillary Array Membrane: Injection and Biphasic Recovery. 2008 , 112, 19242-19247		6
1167	Bead-based mesofluidic system for residue analysis of chloramphenicol. 2008 , 56, 9862-7		16
1166	Second-generation maskless photolithography device for surface micropatterning and microfluidic channel fabrication. <i>Analytical Chemistry</i> , 2008 , 80, 1323-7	7.8	51
1165	Interactions between multiple cell types in parallel microfluidic channels: monitoring platelet adhesion to an endothelium in the presence of an anti-adhesion drug. <i>Analytical Chemistry</i> , 2008 , 80, 7543-8	7.8	39
1164	Chemical imaging of pharmaceutical materials: fabrication of micropatterned resolution targets. <i>Analytical Chemistry</i> , 2008 , 80, 5706-12	7.8	8
1163	Functionalized silicone nanofilaments: a novel material for selective protein enrichment. 2008 , 24, 1053-7		42
1162	Polymer-Based Microsystem Techniques. 2008 ,		
1161	High-throughput quantitative polymerase chain reaction in picoliter droplets. <i>Analytical Chemistry</i> , 2008 , 80, 8975-81	7.8	270
1160	Integration of dialysis membranes into a poly(dimethylsiloxane) microfluidic chip for isoelectric focusing of proteins using whole-channel imaging detection. <i>Analytical Chemistry</i> , 2008 , 80, 7401-7	7.8	22

1159	Surface-bound soft matter gradients. 2008 , 24, 2294-317		316
1158	Nucleic acid microarrays created in the double-spiral format on a circular microfluidic disk. 2008 , 8, 826-9		41
1157	Elastomeric microchip electrospray emitter for stable cone-jet mode operation in the nanoflow regime. <i>Analytical Chemistry</i> , 2008 , 80, 3824-31	7.8	35
1156	Imaging new transient nanostructures using a microfluidic chip integrated with a controlled environment vitrification system for cryogenic transmission electron microscopy. 2008 , 24, 12738-41		8
1155	Simple host-guest chemistry to modulate the process of concentration and crystallization of membrane proteins by detergent capture in a microfluidic device. 2008 , 130, 14324-8		25
1154	Improving the compatibility of contact conductivity detection with microchip electrophoresis using a bubble cell. <i>Analytical Chemistry</i> , 2008 , 80, 7624-30	7.8	19
1153	Sample dispersion for segmented flow in microchannels with rectangular cross section. <i>Analytical Chemistry</i> , 2008 , 80, 1558-67	7.8	60
1152	Detection of membrane biointeractions based on fluorescence superquenching. 2008 , 24, 4125-31		19
1151	Development of quantitative cell-based enzyme assays in microdroplets. <i>Analytical Chemistry</i> , 2008 , 80, 3890-6	7.8	177
1150	Microcontact printed antibodies on gold surfaces: function, uniformity, and silicone contamination. 2008 , 24, 3628-35		19
1149	On-chip fuel cell: micro direct methanol fuel cell of an air-breathing, membraneless, and monolithic design. 2008 , 130, 10456-7		101
1148	Surface modification of poly(dimethylsiloxane) with a perfluorinated alkoxy silane for selectivity toward fluorinated tagged peptides. 2008 , 24, 1080-6		30
1147	Injection and cutting methods of animal cells using a microfluidic chip. 2008 ,		
1146	Electromechanical properties of pressure-actuated poly(dimethylsiloxane) microfluidic push-down valves. <i>Analytical Chemistry</i> , 2008 , 80, 6110-3	7.8	14
1145	Drop mixing in a microchannel for lab-on-a-chip platforms. 2008 , 24, 590-601		44
1144	Biomechanical ordering of dense cell populations. 2008 , 105, 15346-51		183
1143	Electroactive controlled release thin films. 2008 , 105, 2280-5		121
1142	Dynamics of shear-induced ATP release from red blood cells. 2008 , 105, 16432-7		199

1141	Power dissipation characteristics of great power and super high speed semiconductor switch. 2008 , 17, 2627-2632	10
1140	MICROFLUIDICS. 2008 , 659-681	4
1139	The mechanical properties of a surface-modified layer on poly(dimethylsiloxane). 2008 , 23, 37-48	92
1138	Neural network approach to modeling hot intrusion process for micromold fabrication. 2008 ,	
1137	Microchannel technologies for artificial lungs: (3) open rectangular channels. 2008 , 54, 390-5	37
1136	The role of feedback in microfluidic flow-focusing devices. 2008 , 366, 2131-43	39
1135	Optical cell monitoring system for underwater targets. 2008 ,	
1134	Design and Fabrication of a Roller Imprinting Device for Microfluidic Device Manufacturing. 2008 ,	2
1133	Formation of Temporary Separating Walls in Microfluidic Devices. 2008 ,	
1132	Fabrication of Cell-Encapsulated Alginate Microfiber Scaffold Using Microfluidic Channel. 2008 , 130, 021016	12
1131	Biocompatible DC-microelectrode array. 2008 ,	1
1130	Comparison of analog and digital nanosystems: Issues for the nano-architect. 2008 ,	7
1129	Microsystems technology and biosensing. 2008 , 109, 285-350	4
1128	A Microfluidic Chip Based on Localized Surface Plasmon Resonance for Real-Time Monitoring of Antigen/Antibody Reactions. 2008 , 47, 1337-1341	39
1127	Thick single-layer positive photoresist mold and poly(dimethylsiloxane) (PDMS) dry etching for the fabrication of a glass/PDMS/glass microfluidic device. 2008 , 18, 115025	23
1126	Microfluidic high-throughput encapsulation and hydrodynamic self-sorting of single cells. 2008 , 105, 3191-6	276
1125	The chemistode: a droplet-based microfluidic device for stimulation and recording with high temporal, spatial, and chemical resolution. 2008 , 105, 16843-8	194
1124	Large-area, high-aspect-ratio SU-8 molds for the fabrication of PDMS microfluidic devices. 2008 , 18, 045021	44

1123	Flow and Stability of Wormlike Micellar and Polymeric Solutions in Converging and T-Shaped Microchannels. 2008 ,	2
1122	Leveraging liquid dielectrophoresis for microfluidic applications. 2008 , 3, 034009	11
1121	Polymers. 2008 , 75-105	1
1120	Merging Microfluidics with Micro-titre Technology for More Efficient Drug Discovery. 2008 , 13, 275-279	4
1119	On-demand liquid-in-liquid droplet metering and fusion utilizing pneumatically actuated membrane valves. 2008 , 18, 115005	39
1118	A temperature control system integrated with a microfluidic chip for sperm analysis. 2008 ,	
1117	Grayscale lithography by a polymer photomask doped with laser dye. 2008 , 26, 62	8
1116	Reactive Polymer Coatings for Biological Applications. 2008 , 283-298	3
1115	A variable optical attenuator based on optofluidic technology. 2008 , 18, 115016	11
1114	An Application of Stream Imaging Technique in the Study of Osmotic Behaviors of Multiple Cells. 2008 , 6, 125-132	
1113	Moving temporary wall in microfluidic devices. 2008 , 78, 066303	3
1112	Shear-induced diffusion of platelike particles in microchannels. 2008 , 101, 254502	31
1111	Fabrication of polymer microfluidic devices with 3D microfeatures that have near optical surface quality. 2008 ,	
1110	Screening the cellular microenvironment: a role for microfluidics. 2008 , 1, 75-93	22
1109	Role of the channel geometry on the bubble pinch-off in flow-focusing devices. 2008 , 100, 034504	179
1108	A low cost and hybrid technology for integrating silicon sensors or actuators in polymer microfluidic systems. 2008 , 18, 017003	7
1107	Contact-mediated cell-assisted cell proliferation in a model eukaryotic single-cell organism: an explanation for the lag phase in shaken cell culture. 2008 , 77, 041905	3
1106	Microfluidic for Lab-on-a-Chip. 2008 , 463-516	3

1105	Controlled double emulsification utilizing 3D PDMS microchannels. 2008 , 18, 065018	38
1104	A PDMS microfluidic chip with nanostructures for bacteria concentration and fast detection. 2008 ,	1
1103	Stability of a jet in confined pressure-driven biphasic flows at low Reynolds number in various geometries. 2008 , 78, 016307	93
1102	Functional Biointerface for Microfluidic Devices Using Phospholipid Polymers. 2008 , 65, 228-234	
1101	Introduction of Amino Groups on Poly(dimethylsiloxane) Surface Using Low-pressure Nitrogen-based Inductively Coupled Plasma. 2008 , 21, 705-710	2
1100	Field-Operable Biosensors for Tropical Dispatch. 2008 ,	
1099	Parallel microfluidic arrays for SPRi detection. 2008 ,	
1098	High-throughput in vivo genetic and drug screening using femtosecond laser microsurgery and microfluidics. 2008 ,	
1097	Nanotechnology Applications in Medicine. 2008 , 94, 206-215	17
1096	Flexible enclosure for fluidic sealing of microcomponents. 2008 ,	1
1095	. 2008 ,	26
1094	Advances in Microfluidic Fuel Cells. 2009 , 99-139	6
1093	A Blocking-Free Microfluidic Fluorescence Heterogeneous Immunoassay for Quantitative Detection of Human C-Reactive Protein. 2009 ,	
1092	Quantitative Measurements of Cryobiological Characteristics of Mouse Dendritic Cells and Its Evaluation Using Commercialized Coulter Counter. 2009 ,	
1091	Modulating temporal and spatial oxygenation over adherent cellular cultures. 2009 , 4, e6891	63
1090	Methods for pumping fluids on biomedical lab-on-a-chip. 2009 , 14, 3913-24	7
1089	Micro valve system for individual cell transportation in microfluidic chip. 2009 ,	1
1088	Comparing the fragmentation chemistry of gas-phase adducts of poly(dimethylsiloxane) oligomers with metal and organic ions. 2009 , 87, 453-459	16

1087	Reciprocating flow-based centrifugal microfluidics mixer. 2009 , 80, 075102	54
1086	Polydimethylsiloxane-based conducting composites and their applications in microfluidic chip fabrication. 2009 , 3, 12007	41
1085	An in-plane, variable optical attenuator using a fluid-based tunable reflective interface. 2009 , 95, 083507	43
1084	Electrokinetic focusing and filtration of cells in a serpentine microchannel. 2009 , 3, 44109	60
1083	Microfluidic crystals: dynamic interplay between rearrangement waves and flow. 2009 , 102, 084501	52
1082	Nanofabricated collagen-inspired synthetic elastomers for primary rat hepatocyte culture. 2009 , 15, 1321-9	22
1081	. 2009 ,	0
1080	A high efficiency micromachined artificial lung. 2009 ,	2
1079	Microfluidic chip with world-to-chip interface for temperature detection in micro-nanoscale. 2009 ,	1
1078	Microfluidics for reconfigurable electromagnetic metamaterials. 2009 , 95, 214102	51
1077	Fluorescent monitoring using microfluidics chip and development of syringe pump for automation of enucleation to automate cloning. 2009 ,	14
1076	Elastic Averaging for Assembly of Three-Dimensional Constructs From Elastomeric Micromolded Layers. 2009 , 18, 531-538	4
1075	DNA electrophoresis in a sparse ordered post array. 2009 , 79, 061904	34
1074	Extracting the hydrodynamic resistance of droplets from their behavior in microchannel networks. 2009 , 3, 12804	73
1073	Suppression of instabilities in multiphase flow by geometric confinement. 2009 , 79, 056310	61
1072	Microfluidic circuits and systems. 2009 , 9, 6-19	16
1071	Elastomeric microfluidic diode and rectifier work with Newtonian fluids. 2009 , 106, 114311	14
1070	A student team in a University of Michigan biomedical engineering design course constructs a microfluidic bioreactor for studies of zebrafish development. 2009 , 6, 201-13	19

1069	Droplet motion in microfluidic networks: Hydrodynamic interactions and pressure-drop measurements. 2009 , 80, 016317	76
1068	Mass transfer and interfacial properties in two-phase microchannel flows. 2009 , 11, 115005	40
1067	Device for the control of oxygen concentration in multiwell cell culture plates. 2009 , 2009, 2097-100	3
1066	Anisotropic etching of amorphous perfluoropolymer films in oxygen-based inductively coupled plasmas. 2009 , 105, 013314	16
1065	Electrophoresis Poly(Dimethylsiloxane)/Glass Chips with Integrated Active Cooling for Quantification of Amino Acids. 2009 , 23, 63-72	3
1064	Probing the debye layer: capacitance and potential of zero charge measured using a debye-layer transistor. 2009 , 102, 156601	4
1063	Microfluidics for Biological Applications. 2009 ,	3
1062	A poly(dimethylsiloxane) viscometer for microliter power law fluids. 2009 , 19, 115005	12
1061	A single-molecule barcoding system using nanoslits for DNA analysis : nanocoding. 2009 , 544, 29-42	21
1060	Visualization and measurement of dissolved oxygen concentrations in hydrodynamic flow focusing. 2009 ,	2
1059	A microfluidic manipulator for enrichment and alignment of moving cells and particles. 2009 , 131, 074505	6
1058	High Throughput Continuous Fabrication of Large Surface Area Microstructured PDMS. 2009 ,	2
1057	A computationally simple method for simulating the micro-embossing of thermoplastic layers. 2009 , 19, 075007	18
1056	Using TIRF microscopy to quantify and confirm efficient mass transfer at the substrate surface of the chemistode. 2009 , 11, 75017	7
1055	The synthesis of a copper/multi-walled carbon nanotube hybrid nanowire in a microfluidic reactor. 2009 , 20, 235606	9
1054	Asymmetric flows over symmetric surfaces: capacitive coupling in induced-charge electro-osmosis. 2009 , 11, 075030	18
1053	Nonperturbative scales in AdS/CFT. 2009 , 42, 254005	17
1052	Multilayered microfluidic probe heads. 2009 , 19, 115006	22

1051	Microfluidic technology in vascular research. 2009 , 2009, 823148	59
1050	Liquid plug propagation in flexible microchannels: A small airway model. 2009 , 21, 71903	29
1049	Arbitrary three-dimensional micro-fabrication by polymer grayscale lithography. 2009 ,	1
1048	An Overview of Microfluidic Mixing Application. 2009 , 83-86, 931-939	3
1047	Mitrofan Fedorovich Stel'makh (1918–1993). 2009 , 39, 110-110	
1046	Templateless prototyping of polydimethylsiloxane microfluidic structures using a pulsed CO ₂ laser. 2009 , 19, 037002	42
1045	BIOMIMETIC MODELS OF THE ACTIN CORTEX. 2009 , 04, 17-32	5
1044	RNA-protein binding kinetics in an automated microfluidic reactor. 2009 , 37, e142	20
1043	Microfluidics, Lung Surfactant, and Respiratory Disorders. 2009 , 40, 203-209	14
1042	Magnetoresistive Detection of Magnetic Beads Flowing at High Speed in Microfluidic Channels. 2009 , 45, 4873-4876	22
1041	The pedestrian watchmaker: genetic clocks from engineered oscillators. 2009 , 583, 3931-7	21
1040	Spatiotemporal control over molecular delivery and cellular encapsulation from electropolymerized micro- and nanopatterned surfaces. 2009 , 19, 2888-2895	6
1039	Materials of Controlled Shape and Stiffness with Photocurable Microfluidic Endoskeleton. 2009 , 21, 2803-2807	23
1038	Stretchable supercapacitors based on buckled single-walled carbon-nanotube macrofilms. 2009 , 21, 4793-7	590
1037	Detection and Analysis of Low-Abundance Cell-Surface Biomarkers Using Enzymatic Amplification in Microfluidic Droplets. 2009 , 121, 2556-2559	12
1036	Fast Built and Designed Microdevices for Early-Stage Liquid-Liquid System Studies. 2009 , 32, 1823-1830	2
1035	A cell lysis and protein purification–single molecule assay devices for evaluation of genetically engineered proteins. 2009 , 92, 20-30	
1034	Microchip frontal affinity chromatography to study the binding of a ligand to teicoplanin-derivatized microbeads. 2009 , 30, 1194-7	7

1033	Continuous particle separation by size via AC-dielectrophoresis using a lab-on-a-chip device with 3-D electrodes. 2009 , 30, 766-72	56
1032	Filmy channel microchip with amperometric detection. 2009 , 30, 3932-8	4
1031	Dielectrophoretic focusing of particles in a microchannel constriction using DC-biased AC electric fields. 2009 , 30, 2668-75	96
1030	Microchip CE analysis of amino acids on a titanium dioxide nanoparticles-coated PDMS microfluidic device with in-channel indirect amperometric detection. 2009 , 30, 3472-9	33
1029	Fabrication of a microfluidic enzyme reactor utilizing magnetic beads. 2009 , 30, 2129-33	10
1028	A microfabricated CE chip for DNA pre-concentration and separation utilizing a normally closed valve. 2009 , 30, 3228-35	31
1027	Rapid discrimination of single-nucleotide mismatches based on reciprocating flow on a compact disc microfluidic device. 2009 , 30, 4270-6	8
1026	Microfluidic droplet trapping array as nanoliter reactors for gas-liquid chemical reaction. 2009 , 30, 3181-8	20
1025	Polymer microchip CE of proteins either off- or on-chip labeled with chameleon dye for simplified analysis. 2009 , 30, 4230-6	19
1024	Photo-Crosslinked Side-Chain Liquid-Crystalline Elastomers for Microsystems. 2009 , 210, 1671-1677	83
1023	Detection and analysis of low-abundance cell-surface biomarkers using enzymatic amplification in microfluidic droplets. 2009 , 48, 2518-21	129
1022	Microbioreactor array for full-factorial analysis of provision of multiple soluble factors in cellular microenvironments. 2009 , 104, 1240-4	20
1021	Microinjection molded disposable microfluidic lab-on-a-chip for efficient detection of agglutination. 2009 , 15, 309-316	23
1020	Electroosmotically driven creeping flows in a wavy microchannel. 2009 , 6, 37-52	25
1019	Experimental characterization of electrical current leakage in poly(dimethylsiloxane) microfluidic devices. 2009 , 6, 589-598	13
1018	In-channel focusing of flowing microparticles utilizing hydrodynamic filtration. 2009 , 6, 571-576	39
1017	Manipulation of microfluidic flow pattern by optically controlled electroosmosis. 2009 , 6, 565-569	6
1016	Refolding of β -galactosidase: microfluidic device for reagent metering and mixing and quantification of refolding yield. 2009 , 7, 275-281	7

1015	Photo-definable microchannels made with spin-on polymers and short sacrificial etch times. 2009 , 7, 283-289	2
1014	Rapid label-free DNA analysis in picoliter microfluidic droplets using FRET probes. 2009 , 6, 391	48
1013	Timing is everything: using fluidics to understand the role of temporal dynamics in cellular systems. 2009 , 6, 717-729	29
1012	Development of an ultrafast quantitative heterogeneous immunoassay on pre-functionalized poly(dimethylsiloxane) microfluidic chips for the next-generation immunosensors. 2009 , 7, 593-598	9
1011	DC dielectrophoretic focusing of particles in a serpentine microchannel. 2009 , 7, 751-756	81
1010	Surface molecular property modifications for poly(dimethylsiloxane) (PDMS) based microfluidic devices. 2009 , 7, 291-306	367
1009	Rapid nanoliter DNA hybridization based on reciprocating flow on a compact disk microfluidic device. 2009 , 640, 93-9	47
1008	Thermoresponsive protein adsorption of poly(N-isopropylacrylamide)-modified streptavidin on polydimethylsiloxane microchannel surfaces. 2009 , 24, 1135-40	28
1007	Continuous particle separation with localized AC-dielectrophoresis using embedded electrodes and an insulating hurdle. 2009 , 54, 1715-1720	96
1006	Synchronized Current Oscillations of Formic Acid Electro-oxidation in a Microchip-based Dual-Electrode Flow Cell. 2009 , 55, 395-403	18
1005	Application of a numerical simulation to improve the separation efficiency of a sperm sorter. 2009 , 11, 25-33	15
1004	Generating steep, shear-free gradients of small molecules for cell culture. 2009 , 11, 65-73	64
1003	A passive MEMS drug delivery pump for treatment of ocular diseases. 2009 , 11, 959-70	116
1002	Dielectrophoresis assisted concentration of micro-particles and their rapid quantitation based on optical means. 2009 , 11, 987-95	17
1001	A self-contained fully-enclosed microfluidic cartridge for lab on a chip. 2009 , 11, 1279-88	12
1000	Disposable plastic microreactors for genomic analyses. 2009 , 11, 1289-95	2
999	Developing a microfluidic-based system to quantify cell capture efficiency. 2009 , 52, 173-81	2
998	Frontal analysis microchip capillary electrophoresis to study the binding of ligands to receptors derivatized on magnetic beads. 2009 , 393, 615-21	10

997	Investigating the translocation of lambda-DNA molecules through PDMS nanopores. 2009 , 394, 437-46	13
996	Characterization of electrokinetic mobility of microparticles in order to improve dielectrophoretic concentration. 2009 , 394, 293-302	59
995	Bioconjugation techniques for microfluidic biosensors. 2009 , 394, 469-79	46
994	Miniaturized tools and devices for bioanalytical applications: an overview. 2009 , 395, 647-68	25
993	Application of external micro-spectrophotometric detection to improve sensitivity on microchips. 2009 , 395, 473-8	7
992	Fabrication of multicomponent protein microarrays with microfluidic devices of poly(dimethylsiloxane). 2009 , 17, 192-196	10
991	Critical stresses for cancer cell detachment in microchannels. 2009 , 38, 1035-47	31
990	Water-vapor permeability control of PDMS by the dispersion of collagen powder. 2009 , 4, 442-449	29
989	Addressable microfluidic polymer chip for DNA-directed immobilization of oligonucleotide-tagged compounds. 2009 , 5, 1547-52	29
988	A biochip model of lymphocyte locomotion on confined chemokine tracks. 2009 , 5, 1723-6	5
987	Dynamic behaviour of microorganisms on microstructures. 2009 , 86, 1455-1458	3
986	Characterization of a multi-chip microelectrofluidic bench for modular fluidic and electric interconnections. 2009 , 140, 342-348	1
985	Spiropyran modified micro-fluidic chip channels as photonically controlled self-indicating system for metal ion accumulation and release. 2009 , 140, 295-303	36
984	Thin-film organic photodiodes for integrated on-chip chemiluminescence detection [Application to antioxidant capacity screening. 2009 , 140, 643-648	58
983	Electromagnetic microfluidic cell labeling device using on-chip microelectromagnet and multi-layered channels. 2009 , 141, 210-216	29
982	Continuous-flow ATP amplification system on a chip. 2009 , 142, 118-122	4
981	Cell Separation by Non-Inertial Force Fields in Microfluidic Systems. 2009 , 36, 92-103	151
980	Sandwich immunoassay on a microfluidic chip using patterns of electrostatically self-assembled streptavidin-coated beads. 2009 , 86, 1404-1406	5

979	An efficient 3-dimensional hydrodynamic focusing microfluidic device by means of locally increased aspect ratio. 2009 , 86, 1343-1346	21
978	The adsorption of globular proteins onto a fluorinated PDMS surface. 2009 , 331, 90-7	25
977	Elastic deformation of soft membrane with finite thickness induced by a sessile liquid droplet. 2009 , 339, 489-94	54
976	Particle electrophoresis and dielectrophoresis in curved microchannels. 2009 , 340, 285-90	65
975	The fabrication of polymer microfluidic devices using a solid-to-solid interfacial polyaddition. 2009 , 50, 5358-5361	37
974	Investigating the stability of viscoelastic stagnation flows in T-shaped microchannels. 2009 , 163, 9-24	66
973	Microfluidic fuel cells: A review. 2009 , 186, 353-369	440
972	Electrochemical performance of a glucose/oxygen microfluidic biofuel cell. 2009 , 193, 602-606	65
971	A fixed-volume microfluidic mixer realized using multilayer PDMS technology. 2009 , 1, 1503-1506	1
970	Fabrication of post-hydrophilic treatment-free plastic biochip using polyurea film. 2009 , 154, 187-191	9
969	Mold temperature variation for assisting micro-molding of DVD micro-featured substrate and dummy using pulsed cooling. 2009 , 151, 87-93	15
968	Line laser beam based laser-induced fluorescence detection system for microfluidic chip electrophoresis analysis. 2009 , 152, 168-175	14
967	Post processing of microstructures by PDMS spray deposition. 2009 , 155, 253-262	24
966	High-sensitivity microchip electrophoresis determination of inorganic anions and oxalate in atmospheric aerosols with adjustable selectivity and conductivity detection. 2009 , 1216, 1503-10	35
965	Application of poly(dimethylsiloxane)/glass microchip for fast electrophoretic separation of serum small, dense low-density lipoprotein. 2009 , 1216, 6343-7	14
964	Droplets and jets in microfluidic devices. 2009 , 12, 247-257	18
963	A microfluidic glucose biofuel cell to generate micropower from enzymes at ambient temperature. 2009 , 11, 592-595	60
962	A microfluidic electrochemical device for high sensitivity biosensing: detection of nanomolar hydrogen peroxide. 2009 , 11, 819-822	59

961	"Macromolecules to PDMS transfer" as a general route for PDMS biochips. 2009 , 24, 1146-52		15
960	Microbeads on microposts: an inverted architecture for bead microarrays. 2009 , 24, 1850-7		11
959	Characterisation of PMMA microfluidic channels and devices fabricated by hot embossing and sealed by direct bonding. 2009 , 9, 1199-1202		70
958	Microfluidic chip: next-generation platform for systems biology. 2009 , 650, 83-97		66
957	Nanoscale patterns of dendrimers obtained by soft lithography using elastomeric stamps spontaneously structured by plasma treatment. 2009 , 25, 7752-8		6
956	Flexible microfluidic device for mechanical property characterization of soft viscoelastic solids such as bacterial biofilms. 2009 , 25, 7743-51		97
955	Synthesis and characterization of a poly(dimethylsiloxane)-poly(ethylene oxide) block copolymer for fabrication of amphiphilic surfaces on microfluidic devices. 2009 , 25, 10390-6		21
954	Optoelectrothermic Control of Highly Integrated Polymer-Based MEMS Applied in an Artificial Skin. 2009 , 21, 979-983		59
953	Aligned Carbon Nanotube Stationary Phases for Electrochromatographic Chip Separations. 2009 , 69, 473-480		64
952	Droplet-based microfluidic systems for high-throughput single DNA molecule isothermal amplification and analysis. <i>Analytical Chemistry</i> , 2009 , 81, 4813-21	7.8	213
951	Dynamics of coalescence of plugs with a hydrophilic wetting layer induced by flow in a microfluidic chemistode. 2009 , 25, 2854-9		39
950	Novel poly(dimethylsiloxane) bonding strategy via room temperature "chemical gluing". 2009 , 25, 3861-6		74
949	Interfacing microchip electrophoresis to a growth tube particle collector for semicontinuous monitoring of aerosol composition. <i>Analytical Chemistry</i> , 2009 , 81, 10029-37	7.8	27
948	Independent control of drop size and velocity in microfluidic flow-focusing generators using variable temperature and flow rate. <i>Analytical Chemistry</i> , 2009 , 81, 2399-402	7.8	86
947	Temperature-programmed natural convection for micromixing and biochemical reaction in a single microfluidic chamber. <i>Analytical Chemistry</i> , 2009 , 81, 4510-6	7.8	42
946	Electroporation of cells in microfluidic droplets. <i>Analytical Chemistry</i> , 2009 , 81, 2027-31	7.8	110
945	Poly(ethylene glycol)-functionalized polymeric microchips for capillary electrophoresis. <i>Analytical Chemistry</i> , 2009 , 81, 6278-84	7.8	20
944	Method for the accurate preparation of cell-spiking standards. <i>Analytical Chemistry</i> , 2009 , 81, 1285-90	7.8	9

943	Optimization of corona-triggered PDMS-PDMS bonding method. 2009 ,		9
942	Time-resolved X-ray scattering and RNA folding. 2009 , 469, 253-68		20
941	A PDMS/LTCC bonding technique for microfluidic application. 2009 , 19, 105016		25
940	dc electrokinetic transport of cylindrical cells in straight microchannels. 2009 , 3, 44110		51
939	Multiple internal reflection photonic lab on a chip. 2009 ,		
938	Self-assembled peptide monolayers as a toxin sensing mechanism within arrayed microchannels. <i>Analytical Chemistry</i> , 2009 , 81, 2760-7	7.8	38
937	Partition coefficient measurements in picoliter drops using a segmented flow microfluidic device. <i>Analytical Chemistry</i> , 2009 , 81, 1471-6	7.8	22
936	The dual nature of extracellular ATP as a concentration-dependent platelet P2X1 agonist and antagonist. 2009 , 1, 655-63		19
935	Personalized metabolic assessment of erythrocytes using microfluidic delivery to an array of luminescent wells. <i>Analytical Chemistry</i> , 2009 , 81, 3102-8	7.8	14
934	Micro- and nanobiosensors: state of the art and trends. 2009 , 20, 012001		49
933	Immunomagnetic separation and rapid detection of bacteria using bioluminescence and microfluidics. 2009 , 79, 787-95		64
932	Environment-friendly photolithography using poly(N-isopropylacrylamide)-based thermoresponsive photoresists. 2009 , 131, 13315-9		66
931	Demonstration of an integrated electroactive polymer actuator on a microfluidic electrophoresis device. 2009 , 9, 2076-84		18
930	Multiorifice flow fractionation: continuous size-based separation of microspheres using a series of contraction/expansion microchannels. <i>Analytical Chemistry</i> , 2009 , 81, 8280-8	7.8	105
929	Rapid replication of master structures by double casting with PDMS. 2009 , 9, 3000-2		64
928	A low temperature surface modification assisted method for bonding plastic substrates. 2009 , 19, 015007		114
927	Design of highly oleophobic cellulose surfaces from structured silicon templates. 2009 , 1, 2443-52		75
926	Isolation of prostate cancer cell subpopulations of functional interest by use of an on-chip magnetic bead-based cell separator. 2009 , 19, 095015		10

925	Surface modification of PDMS by gradient-induced migration of embedded Pluronic. 2009 , 9, 1500-3		54
924	Enrichment of cancer cells using aptamers immobilized on a microfluidic channel. <i>Analytical Chemistry</i> , 2009 , 81, 1033-9	7.8	185
923	Microfluidic systems for pathogen sensing: a review. 2009 , 9, 4804-23		210
922	Continuous focusing of microparticles using inertial lift force and vorticity via multi-orifice microfluidic channels. 2009 , 9, 939-48		166
921	Lab-on-a-print: from a single polymer film to three-dimensional integrated microfluidics. 2009 , 9, 1133-7		33
920	Photodefinable PDMS thin films for microfabrication applications. 2009 , 19, 045024		58
919	Microorifice-based high-yield cell fusion on microfluidic chip: electrofusion of selected pairs and fusant viability. 2009 , 8, 300-5		30
918	On-chip single embryo coculture with microporous-membrane-supported endometrial cells. 2009 , 8, 318-24		15
917	On-chip immunoassay using electrostatic assembly of streptavidin-coated bead micropatterns. <i>Analytical Chemistry</i> , 2009 , 81, 6509-15	7.8	48
916	Tunable open-channel microfluidics on soft poly(dimethylsiloxane) (PDMS) substrates with sinusoidal grooves. 2009 , 25, 12794-9		139
915	Surface micromachined PDMS microfluidic devices fabricated using a sacrificial photoresist. 2009 , 19, 015013		10
914	Aptamer-based microfluidic device for enrichment, sorting, and detection of multiple cancer cells. <i>Analytical Chemistry</i> , 2009 , 81, 7436-42	7.8	225
913	A multiplexed optofluidic biomolecular sensor for low mass detection. 2009 , 9, 2924-32		119
912	Dropspots: a picoliter array in a microfluidic device. 2009 , 9, 44-9		203
911	A microfluidic microreactor for the synthesis of gold nanorods. 2009 , 20, 105601		4
910	Nanoholes as nanochannels: flow-through plasmonic sensing. <i>Analytical Chemistry</i> , 2009 , 81, 4308-11	7.8	223
909	Simultaneous determination of gene expression and enzymatic activity in individual bacterial cells in microdroplet compartments. 2009 , 131, 15251-6		138
908	Measuring rapid enzymatic kinetics by electrochemical method in droplet-based microfluidic devices with pneumatic valves. <i>Analytical Chemistry</i> , 2009 , 81, 5840-5	7.8	118

907	Microfluidics with foams. 2009 , 5, 3385	69
906	Role of geometry and fluid properties in droplet and thread formation processes in planar flow focusing. 2009 , 21, 032103	159
905	Passive breakup of viscoelastic droplets and filament self-thinning at a microfluidic T-junction. 2009 , 53, 663-683	26
904	An integrated cell culture lab on a chip: modular microdevices for cultivation of mammalian cells and delivery into microfluidic microdroplets. 2009 , 9, 1576-82	71
903	Fabrication of a hybrid PDMS/SU-8/quartz microfluidic chip for enhancing UV absorption whole-channel imaging detection sensitivity and application for isoelectric focusing of proteins. 2009 , 9, 1926-32	38
902	Fluorescence-activated droplet sorting (FADS): efficient microfluidic cell sorting based on enzymatic activity. 2009 , 9, 1850-8	648
901	Micro and Nano Technologies in Bioanalysis. 2009 ,	4
900	Sequential processing from cell lysis to protein assay on a chip enabling the optimization of an F(1)-ATPase single molecule assay condition. 2009 , 9, 3567-73	13
899	Fabrication of a multichannel PDMS/glass analytical microsystem with integrated electrodes for amperometric detection. 2009 , 9, 115-21	35
898	A conformal nano-adhesive via initiated chemical vapor deposition for microfluidic devices. 2009 , 9, 411-6	84
897	A screw-actuated pneumatic valve for portable, disposable microfluidics. 2009 , 9, 469-72	40
896	Optical force sensor array in a microfluidic device based on holographic optical tweezers. 2009 , 9, 661-8	29
895	Static microdroplet arrays: a microfluidic device for droplet trapping, incubation and release for enzymatic and cell-based assays. 2009 , 9, 692-8	268
894	Real-time monitoring of two-photon photopolymerization for use in fabrication of microfluidic devices. 2009 , 9, 819-27	32
893	A rapid prototyping method for polymer microfluidics with fixed aspect ratio and 3D tapered channels. 2009 , 9, 2941-6	26
892	Fabrication of reversibly adhesive fluidic devices using magnetism. 2009 , 9, 3016-9	24
891	A new USP Class VI-compliant substrate for manufacturing disposable microfluidic devices. 2009 , 9, 870-6	29
890	The deformation of flexible PDMS microchannels under a pressure driven flow. 2009 , 9, 935-8	112

889	Temporal analysis of protozoan lysis in a microfluidic device. 2009 , 9, 2796-802	9
888	Hybrid microfluidics: a digital-to-channel interface for in-line sample processing and chemical separations. 2009 , 9, 1046-51	95
887	Coalescence and splitting of confined droplets at microfluidic junctions. 2009 , 9, 1102-9	162
886	Rapid and inexpensive fabrication of polymeric microfluidic devices via toner transfer masking. 2009 , 9, 1119-27	30
885	Surface-directed channels filled with organic solvents. 2009 , 9, 1143-6	12
884	Nonviral gene vector formation in monodispersed picolitre incubator for consistent gene delivery. 2009 , 9, 2638-43	33
883	A microfluidic apparatus for the study of ice nucleation in supercooled water drops. 2009 , 9, 2293-305	122
882	Chemotaxis. 2009 ,	7
881	Microfluidics as a functional tool for cell mechanics. 2009 , 3, 12006	79
880	Tracking lineages of single cells in lines using a microfluidic device. 2009 , 106, 18149-54	101
879	Size-dependent filtration and trapping of microparticle in a microfluidic chip using centrifugal force and a graduated mechanical gap. 2009 ,	1
878	SlipChip. 2009 , 9, 2286-92	269
877	Time-resolved lanthanide luminescence for lab-on-a-chip detection of biomarkers on cancerous tissues. 2009 , 134, 1991-3	31
876	Micropumps operated by swelling and shrinking of temperature-sensitive hydrogels. 2009 , 9, 613-8	87
875	Amperometric quantification based on serial dilution microfluidic systems. 2009 , 134, 472-7	5
874	A microfluidic technique for monitoring bloodstream analytes indicative of C-peptide resistance in type 2 diabetes. 2009 , 134, 188-93	10
873	Laminar flow used as "liquid etch mask" in wet chemical etching to generate glass microstructures with an improved aspect ratio. 2009 , 9, 1994-6	25
872	An easy protocol for on-chip transfection of COS-7 cells with a cationic lipid-based reagent. 2009 , 9, 2230-3	7

871	A Dynamic Microarray with Pneumatic Valves for Selective Trapping and Releasing of Microbeads. 2009,	4
870	Multi-wavelength microflow cytometer using groove-generated sheath flow. 2009, 9, 1942-50	124
869	Microfluidic culture of single human embryonic stem cell colonies. 2009, 9, 1749-55	80
868	A Compliance-Based Microflow Stabilizer. 2009, 18, 539-546	17
867	Rapid prototyping of microfluidic systems using a PDMS/polymer tape composite. 2009, 9, 1290-3	70
866	Controlled photopolymerization of hydrogel microstructures inside microchannels for bioassays. 2009, 9, 1301-5	40
865	Tuneable hydrophoretic separation using elastic deformation of poly(dimethylsiloxane). 2009, 9, 1962-5	30
864	Generation of Janus alginate hydrogel particles with magnetic anisotropy for cell encapsulation. 2009, 9, 2981-6	90
863	Characteristics of SiO _x Thin Film Deposited by Atmospheric Pressure Plasma-Enhanced Chemical Vapor Deposition Using PDMSO ₂ He. 2009, 156, D248	14
862	. 2009,	
861	Simultaneous measurement of reactions in microdroplets filled by concentration gradients. 2009, 9, 1707-13	58
860	Generation of arbitrary monotonic concentration profiles by a serial dilution microfluidic network composed of microchannels with a high fluidic-resistance ratio. 2009, 9, 1763-72	52
859	Chemical imaging of microfluidic flows using ATR-FTIR spectroscopy. 2009, 9, 2909-13	95
858	Cellular observations enabled by microculture: paracrine signaling and population demographics. 2009, 1, 267-74	63
857	Nanoengineered platforms for cancer chemoprevention. 2009,	
856	A microfluidic mixing system for single-molecule measurements. 2009, 80, 055105	40
855	Ultrasonic Bonding for MEMS Sealing and Packaging. 2009, 32, 461-467	34
854	Cell sheet technology and cell patterning for biofabrication. 2009, 1, 022002	71

853 Letter from the Editor. **2009**, 20, 010101

852 Hard top soft bottom microfluidic devices for cell culture and chemical analysis. *Analytical Chemistry*, **2009**, 81, 3714-22 7.8 92

851 Isotropically etched radial micropore for cell concentration, immobilization, and picodroplet generation. **2009**, 9, 507-15 7

850 Programmable lab-on-a-chip system for single cell analysis. **2009**,

849 Electrokinetic instabilities of non-dilute colloidal suspensions. **2009**, 619, 331-365 16

848 Facile method for selective immobilization of biomolecules on plastic surfaces. **2009**, 25, 11289-94 30

847 A facile "liquid-molding" method to fabricate PDMS microdevices with 3-dimensional channel topography. **2009**, 9, 1200-5 49

846 Affordable Microfluidic Bead-Sorting Platform for Automated Selection of Porous Particles Functionalized with Bioactive Compounds. **2019**, 9, 7210 7

845 Complex signal processing in synthetic gene circuits using cooperative regulatory assemblies. **2019**, 364, 593-597 67

844 3D Printed Microfluidic Devices for Microchip Electrophoresis of Preterm Birth Biomarkers. *Analytical Chemistry*, **2019**, 91, 7418-7425 7.8 39

843 Optics, Photonics and Laser Technology 2017. **2019**, 1

842 Integrating Microfabrication into Biological Investigations: the Benefits of Interdisciplinarity. **2019**, 10, 5

841 High-throughput phenotyping of cell-to-cell interactions in gel microdroplet pico-cultures. **2019**, 66, 218-224 11

840 Engineering tumor vasculature on an injection-molded plastic array 3D culture (IMPACT) platform. **2019**, 19, 2071-2080 26

839 Microdroplet co-cultivation and interaction characterization of human vaginal bacteria. **2019**, 11, 69-78 5

838 Liver Microphysiological Systems for Predicting and Evaluating Drug Effects. **2019**, 106, 139-147 26

837 Localization of current oscillations and synchronization patterns in microchip-based dual electrode flow cell without resistance balancing. **2019**, 227, 2659-2673 3

836 Colloidal Microfluidics. **2019**, 125-166

835	droPi: A Hand-Held Microfluidic Droplet Imager and Analyzer Built on Raspberry Pi. 2019 , 96, 1152-1156	4
834	Structured Hydrogel Particles With Nanofabricated Interfaces via Controlled Oxygen Inhibition. 2019 , 18, 253-256	4
833	The motion of rigid particles in the Poiseuille flow of pseudoplastic fluids through straight rectangular microchannels. 2019 , 23, 1	6
832	High-throughput acoustofluidic fabrication of tumor spheroids. 2019 , 19, 1755-1763	51
831	Pathogenic Bacteria Detection Using RNA-Based Loop-Mediated Isothermal-Amplification-Assisted Nucleic Acid Amplification via Droplet Microfluidics. 2019 , 4, 841-848	46
830	Activity-Based DNA-Encoded Library Screening. 2019 , 21, 425-435	43
829	Fabrication of 3D PDMS Microchannels of Adjustable Cross-Sections via Versatile Gel Templates. 2019 , 11,	2
828	Size-Controlled Preparation of Monodisperse Microbubbles using Co-Flow Glass Capillary Microfluidic Device. 2019 , 45, 10-15	3
827	Recent advances in direct current electrokinetic manipulation of particles for microfluidic applications. 2019 , 40, 2484-2513	48
826	Reconfigurable Acrylic-tape Hybrid Microfluidics. 2019 , 9, 4824	14
825	Synthesis of Reconfigurable Flow-Based Biochips for Scalable Single-Cell Screening. 2019 , 38, 2255-2270	4
824	Fabrication of microfluidic channels with various cross-sectional shapes using anisotropic etching of Si and self-alignment. 2019 , 125, 1	10
823	Measuring and regulating oxygen levels in microphysiological systems: design, material, and sensor considerations. 2019 , 144, 3190-3215	14
822	Microfluidics-Driven Fabrication of a Low Cost and Ultrasensitive SERS-Based Paper Biosensor. 2019 , 9, 1387	10
821	Nanoarchitectonics in Microfluidic Devices for Sensing and Biosensing. 2019 , 231-252	3
820	A compartmentalized neuron-oligodendrocyte co-culture device for myelin research: design, fabrication and functionality testing. 2019 , 29, 065009	10
819	Corona Treatment for Nanotransfer Molding Adhesion. 2019 , 1, 997-1005	2
818	A novel wide-range microfluidic dilution device for drug screening. 2019 , 13, 024105	1

817	Formation of pressurizable hydrogel-based vascular tissue models by selective gelation in composite PDMS channels.. 2019 , 9, 9136-9144	2
816	Molecular Dynamics Simulation on the Effect of Bonding Pressure on Thermal Bonding of Polymer Microfluidic Chip. 2019 , 11,	10
815	Application of microscale culture technologies for studying lymphatic vessel biology. 2019 , 26, e12547	10
814	In situ probing of switchable nanomechanical properties of responsive high-density polymer brushes on poly(dimethylsiloxane): An AFM nanoindentation approach. 2019 , 93, 118-129	2
813	Rapid Prototyping of Reconfigurable Microfluidic Channels in Undercooled Metal Particle-Elastomer Composites. 2019 , 58, 4137-4142	11
812	Feasibility of Performing Concurrent Coulometric Titrations Using a Multicompartment Electrolysis Cell. 2019 , 4, 3684-3689	5
811	Advances of Microfluidics in Biomedical Engineering. 2019 , 4, 1800663	29
810	Microfluidic Devices Containing ZnO Nanorods with Tunable Surface Chemistry and Wetting-Independent Water Mobility. 2019 , 35, 3265-3271	6
809	Microfluidic techniques for enhancing biofuel and biorefinery industry based on microalgae. 2019 , 12, 33	26
808	Electro-osmotic surface effects generation in an electrokinetic-based transport device: A comparison of RF and MW plasma generating sources. 2019 , 40, 1573-1579	2
807	Oceanography Challenges to Future Earth. 2019 ,	1
806	High-Performance Materials for 3D Printing in Chemical Synthesis Applications. 2019 , 31, e1805982	44
805	Emergent Soft Lithographic Tools for the Fabrication of Functional Polymeric Microstructures. 2019 , 20, 909-925	18
804	Droplet generation at Hele-Shaw microfluidic T-junction. 2019 , 31, 022010	30
803	Control of Pressure-Driven Microdroplet Formation and Optimum Encapsulation in Microfluidic System. 2019 , 181-193	
802	Role of chemical additives on water-based heavy oil mobilization: A microfluidic approach. 2019 , 241, 1195-1202	11
801	Microfluidic rectifier for polymer solutions flowing through porous media. 2019 , 13, 014111	4
800	Micro Channel for Analyzing Mechanical Adaption of Cancer Cell. 2019 ,	

799	Dynamics of colloidal particles in microchannels under combined pressure and electric potential gradients. 2019 , 23, 1	8
798	Maskless, rapid manufacturing of glass microfluidic devices using a picosecond pulsed laser. 2019 , 9, 20215	29
797	Epigenetic subtyping of white blood cells using a thermoplastic elastomer-based microfluidic emulsification device for multiplexed, methylation-specific digital droplet PCR. 2019 , 144, 6541-6553	8
796	Thermo-mechanical and photo-luminescence properties of micro-actuators made of liquid crystal elastomers with cyano-oligo(p-phenylene vinylene) crosslinking bridges. 2019 , 3, 2499-2506	15
795	Nucleoplasmin is a limiting component in the scaling of nuclear size with cytoplasmic volume. 2019 , 218, 4063-4078	13
794	Fabrication of micro-fluidic devices on piezoelectric substrate by help of starch. 2019 , 551, 24-31	
793	Brownian Granular Flows Down Heaps. 2019 , 123, 248005	4
792	Braess's paradox and programmable behaviour in microfluidic networks. 2019 , 574, 647-652	15
791	Microfluidic platforms with nanoscale features. 2019 , 65-90	3
790	Innovation for hepatotoxicity in vitro research models: A review. 2019 , 39, 146-162	12
789	Rapid and low-cost development of microfluidic devices using wax printing and microwave treatment. 2019 , 284, 650-656	20
788	Dynamics of pore fouling by colloidal particles at the particle level. 2019 , 573, 411-424	17
787	Harnessing Motile Amoeboid Cells as Trucks for Microtransport and -Assembly. 2019 , 6, 1801242	1
786	Sample Preconcentration Protocols in Microfluidic Electrophoresis. 2019 , 1906, 65-78	1
785	A new disposable microfluidic electrochemical paper-based device for the simultaneous determination of clinical biomarkers. 2019 , 195, 62-68	45
784	Ultrasonication-assisted spray ionization-based micro-reactors for online monitoring of fast chemical reactions by mass spectrometry. 2019 , 54, 26-34	5
783	Microfluidic investigations of crude oil-brine interface elasticity modifications via brine chemistry to enhance oil recovery. 2019 , 239, 338-346	17
782	Study of thermospray and evaporation effects in a flame-on-a-chip. 2019 , 145, 444-449	

781	Mobile Microfluidics. 2019 , 6,		3
780	Liquid Crystals-Enabled AC Electrokinetics. 2019 , 10,		10
779	Self-assembly of fractal liquid crystal colloids. 2019 , 10, 198		25
778	Microfluidic Long-Term Gradient Generator with Axon Separation Prototyped by 185 nm Diffused Light Photolithography of SU-8 Photoresist. 2018 , 10,		4
777	Recent advances in microfluidic devices for bacteria and fungus research. 2019 , 112, 175-195		32
776	Magnetically Induced Flow Focusing of Non-Magnetic Microparticles in Ferrofluids under Inclined Magnetic Fields. 2019 , 10,		6
775	Nuts and Bolts: Microfluidics for the Production of Biomaterials. 2019 , 4, 1800611		8
774	A novel numerical modeling paradigm for bio particle tracing in non-inertial microfluidics devices. 2019 , 25, 3703-3711		4
773	Heterogeneity Studies of Mammalian Cells for Bioproduction: From Tools to Application. 2019 , 37, 645-660		15
772	Ultrasensitive and Simultaneous Detection of Two Cytokines Secreted by Single Cell in Microfluidic Droplets via Magnetic-Field Amplified SERS. <i>Analytical Chemistry</i> , 2019 , 91, 2551-2558	7.8	34
771	Eco-Friendly Fabrication of Plasmonically Active Substrates Based on End-Grafted Poly(ethylene glycol) Layers. 2019 , 7, 4315-4324		11
770	Tunable soft lithography molds enable rapid-prototyping of multi-height channels for microfluidic large-scale integration. 2019 , 29, 035009		4
769	Studying Glycolytic Oscillations in Individual Yeast Cells by Combining Fluorescence Microscopy with Microfluidics and Optical Tweezers. 2019 , 82, e70		1
768	Microfabrication and microfluidic devices for drug delivery. 2019 , 123-136		4
767	Pressure-driven dynamics of liquid plugs in rectangular microchannels: Influence of the transition between quasi-static and dynamic film deposition regimes. 2019 , 113, 343-357		4
766	Real-time refractive-index sensing by using liquid core/liquid cladding optofluidic waveguide. 2019 , 111, 303-306		3
765	Clog-free and reliable solvent bonding of poly(methyl methacrylate) microdevice mediated by eco-friendly acetic acid at room temperature and its application for polymerase chain reaction and human cell culture. 2019 , 282, 1008-1017		11
764	Fabrication of Glass Microfluidic Devices. 2019 , 1906, 1-12		1

763	Assessment of submicron particle zeta potential in simple electrokinetic microdevices. 2019 , 40, 1395-1399	5
762	Deep Learning with Microfluidics for Biotechnology. 2019 , 37, 310-324	92
761	A microfluidic platform with pneumatically switchable single-cell traps for selective intracellular signals probing. 2019 , 192, 431-438	5
760	Microdevice Development and Artificial Organs. 2019 , 43, 17-20	
759	Droplet Microfluidics as a Tool for the Generation of Granular Matters and Functional Emulsions. 2019 , 36, 50-71	11
758	Automatic Droplet Sequence Generation for Microfluidic Networks With Passive Droplet Routing. 2020 , 39, 387-396	6
757	Mask-Free Plasma Patterning for Biocompatible Material Using Atmospheric Pressure Plasma Jet. 2020 , 4, 108-112	2
756	Screening Therapeutic Agents Specific to Breast Cancer Stem Cells Using a Microfluidic Single-Cell Clone-Forming Inhibition Assay. 2020 , 16, e1901001	4
755	Biopolymer Microparticles Prepared by Microfluidics for Biomedical Applications. 2020 , 16, e1903736	44
754	From Engineered Tissues and Microfluidics to Human Eyes-On-A-Chip. 2020 , 36, 4-6	2
753	3D-Printed Microfluidics for Hands-On Undergraduate Laboratory Experiments. 2020 , 97, 178-183	17
752	Multiscale Soft-Hard Interface Design for Flexible Hybrid Electronics. 2020 , 32, e1902278	35
751	Materials Synthesis and Catalysis in Microfluidic Devices: Prebiotic Chemistry in Mineral Membranes. 2020 , 12, 63-74	16
750	Development and characterization of a store and create microfluidic device to determine the heterogeneous freezing properties of ice nucleating particles. 2020 , 54, 79-93	13
749	Battery-powered distance-based electrochemical sensor using a longitudinally-oriented silver band electrode. 2020 , 308, 127684	4
748	. 2020 ,	4
747	Surface conduction and electroosmotic flow around charged dielectric pillar arrays in microchannels. 2020 , 20, 675-686	9
746	Isothermal drying of plant-based food material: An approach using 2D polydimethylsiloxane (PDMS) micromodels. 2020 , 215, 115385	0

745	An integrated fluidic electrochemical sensor manufactured using fused filament fabrication and supersonic cluster beam deposition. 2020 , 301, 111706		3
744	Continuous flow separation of particles with insulator-based dielectrophoresis chromatography. 2020 , 412, 3891-3902		10
743	Microfluidic Synthesis of Functional Nanoparticles. 2020 , 319-345		5
742	Laborless, Automated Microfluidic Tandem Cell Processor for Visualizing Intracellular Molecules of Mammalian Cells. <i>Analytical Chemistry</i> , 2020 , 92, 2580-2588	7.8	1
741	On-demand Microfluidic Synthesis of Quantum Dots in Digital Droplet Reactors. 2020 , 59, 3730-3735		4
740	Rivalry of diffusion, external field and gravity in micro-convection of magnetic colloids. 2020 , 498, 166247		0
739	Blood brain barrier: A tissue engineered microfluidic chip. 2020 , 331, 108525		9
738	Organ-on-a-chip and 3D printing as preclinical models for medical research and practice. 2020 , 83-95		4
737	Kisspeptin injection improved the semen characteristics and sperm rheotaxis in Ossimi ram. 2020 , 55, 240-247		2
736	A Modular, Reconfigurable Microfabricated Assembly Platform for Microfluidic Transport and Multitype Cell Culture and Drug Testing. 2019 , 11,		5
735	Investigation of process-affected zone in ultrasonic embossing of microchannels on thermoplastic substrates. 2020 , 50, 394-402		7
734	Cation-Specific Electrokinetic Separations Using Prussian Blue Intercalation Reactions. 2020 , 7, 4108-4117		0
733	Assessment of PMMA and polystyrene based microfluidic chips fabricated using CO2 laser machining. 2020 , 534, 147642		8
732	Compliance of a microstructured, soft sampling device for transcutaneous blood gas monitoring.. 2020 , 10, 36386-36395		1
731	Dynamics of progressive pore clogging by colloidal aggregates. 2020 , 16, 9899-9907		8
730	Microfluidics for Medical Additive Manufacturing. 2020 , 6, 1244-1257		19
729	A practical guide to rapid-prototyping of PDMS-based microfluidic devices: A tutorial. 2020 , 1135, 150-174		21
728	A lab in a bento box: an autonomous centrifugal microfluidic system for an enzyme-linked immunosorbent assay. 2020 , 12, 4858-4866		2

727	Self-detachable UV-curable polymers for open-access microfluidic platforms. 2020 , 20, 4215-4224	4
726	Dripping, jetting and tip streaming. 2020 , 83, 097001	43
725	Tutorial review: Enrichment and separation of neutral and charged species by ion concentration polarization focusing. 2020 , 1128, 149-173	10
724	Microfluidic systems for plant root imaging. 2020 , 160, 381-404	3
723	On-chip analysis of atmospheric ice-nucleating particles in continuous flow. 2020 , 20, 2889-2910	11
722	Comparative Analysis of Yeast Replicative Lifespan in Different Trapping Structures Using an Integrated Microfluidic System. 2020 , 5, 2000655	2
721	Active Surface with Dynamic Microstructures and Hierarchical Gradient Enabled by in situ Pneumatic Control. 2020 , 11,	0
720	Three-Dimensional Printing of Acrylonitrile Butadiene Styrene Microreactors for Photocatalytic Applications. 2020 , 59, 20686-20692	2
719	Exploring microfluidics as a tool to evaluate the biological properties of a titanium alloy under dynamic conditions. 2020 , 8, 6309-6321	5
718	Intelligent Microfluidics: The Convergence of Machine Learning and Microfluidics in Materials Science and Biomedicine. 2020 , 3, 1893-1922	26
717	Polydimethylsiloxane chemistry for the fabrication of microfluidicsPerspective on its uniqueness, limitations and alternatives. 2020 ,	
716	Microfluidic Isolation and Enrichment of Nanoparticles. 2020 ,	15
715	Rhodamine B Doped ZnO Monodisperse Microcapsules: Droplet-Based Synthesis, Dynamics and Self-Organization of ZnO Nanoparticles and Dye Molecules. 2020 , 10,	1
714	Polymer Microchannel and Micromold Surface Polishing for Rapid, Low-Quantity Polydimethylsiloxane and Thermoplastic Microfluidic Device Fabrication. 2020 , 12,	2
713	Robust Formation of an Epithelial Layer of Human Intestinal Organoids in a Polydimethylsiloxane-Based Gut-on-a-Chip Microdevice. 2020 , 2,	8
712	Hydrophobic recovery of cross-linked polydimethylsiloxane films and its consequence in soft nano patterning. 2020 , 43, 1	3
711	Tunable infrared transmission for energy-efficient pneumatic building façades. 2020 , 226, 110377	6
710	Rapid and cost-effective benchtop microfabrication of disposable carbon-based electrochemical microfluidic devices. 2020 , 324, 128679	10

709	Point-of-care devices for pathogen detections: The three most important factors to realise towards commercialization. 2020 , 131, 116004	25
708	Dynamic single-cell phenotyping of immune cells using the microfluidic platform DropMap. 2020 , 15, 2920-2955	24
707	Droplet length and generation rate investigation inside microfluidic devices by means of CFD simulations and experiments. 2020 , 161, 260-270	5
706	In Vitro Evaluation of Lipopolyplexes for Gene Transfection: Comparing 2D, 3D and Microdroplet-Enabled Cell Culture. 2020 , 25,	4
705	Inexpensive and nonconventional fabrication of microfluidic devices in PMMA based on a soft-embossing protocol. 2020 , 41, 1641-1650	3
704	Design, Fundamental Principles of Fabrication and Applications of Microreactors. 2020 , 8, 891	15
703	Future of the modern age of analytical chemistry: Nanominiaturization. 2020 , 277-296	2
702	. 2020 , 29, 1100-1102	
701	Suspension Jams in a Leaky Microfluidic Channel. 2020 , 125, 044501	1
700	Hydrogels: The Next Generation Body Materials for Microfluidic Chips?. 2020 , 16, e2003797	22
699	Microfluidic polyimide gas dynamic virtual nozzles for serial crystallography. 2020 , 91, 085108	5
698	Effects of substrates on the performance of optoelectronic devices: A review. 2020 , 7, 1829274	5
697	Mineralogy of microbially induced calcium carbonate precipitates formed using single cell drop-based microfluidics. 2020 , 10, 17535	11
696	Visualization of Bacterial Colonization and Cellular Layers in a Gut-on-a-Chip System Using Optical Coherence Tomography. 2020 , 26, 1211-1219	3
695	Simultaneous Determination of Linear and Nonlinear Electrophoretic Mobilities of Cells and Microparticles. <i>Analytical Chemistry</i> , 2020 , 92, 14885-14891	7.8 9
694	Flow-induced order-order transitions in amyloid fibril liquid crystalline tactoids. 2020 , 11, 5416	10
693	Dielectric tetrahedrons as terahertz resonators switched from perfect absorber to reflector. 2020 , 10, 17134	0
692	The role of valve stiffness in the insurgence of deep vein thrombosis. 2020 , 1, 65	4

691	Application of microfluidic devices for glioblastoma study: current status and future directions. 2020 , 22, 60	7
690	Droplet-Based Combinatorial Assay for Cell Cytotoxicity and Cytokine Release Evaluation. 2020 , 30, 2003479	6
689	Proposal of micro plasma extraction device by autonomous trigger control. 2020 , 103, 29-35	
688	Droplet-Based Cytotoxicity Assay: Implementation of Time-Efficient Screening of Antitumor Activity of Natural Killer Cells. 2020 , 5, 24674-24683	7
687	On-chip density-based sorting of supercooled droplets and frozen droplets in continuous flow. 2020 , 20, 3876-3887	3
686	Rapid Fabrication of Membrane-Integrated Thermoplastic Elastomer Microfluidic Devices. 2020 , 11,	6
685	Advanced Fabrication Techniques of Microengineered Physiological Systems. 2020 , 11,	8
684	Effects of gamma rays on elastomer multimode optical channel waveguides. 2020 , 31, 17202-17211	1
683	Emerging Technologies and Materials for High-Resolution 3D Printing of Microfluidic Chips. 2020 , 1	4
682	Implications of ram sperm rheotaxis analysed by microfluidics for fertility. 2020 , 55, 1541-1547	2
681	Interaction of Light with Matter in Optical Fibre Sensors. 2020 , 399-440	0
680	A Review of Passive Constant Flow Regulators for Microfluidic Applications. 2020 , 10, 8858	7
679	Calcium-Mediated Liposome Fusion to Engineer Giant Lipid Vesicles with Cytosolic Proteins and Reconstituted Mammalian Proteins. 2020 , 4, e2000153	1
678	Modular Microphysiological System for Modeling of Biologic Barrier Function. 2020 , 8, 581163	5
677	An experimental design for the control and assembly of magnetic microwheels. 2020 , 91, 093701	2
676	Electropermanent magnet-driven droplet size modulation for two-phase ferromicrofluidics. 2020 , 24, 1	2
675	Biosensing on the Centrifugal Microfluidic Lab-on-a-Disc Platform. 2020 , 8, 1360	14
674	Microfluidic Probe for In-Situ Extraction of Adherent Cancer Cells to Detect Heterogeneity Difference by Electrospray Ionization Mass Spectrometry. <i>Analytical Chemistry</i> , 2020 , 92, 7900-7906	7.8 7

673	Focusing, sorting, and separating microplastics by serial faradaic ion concentration polarization. 2020 , 11, 5547-5558		16
672	Biomimetic aorta-gonad-Mesonephros-on-a-Chip to study human developmental hematopoiesis. 2020 , 22, 34		0
671	Micromolded Carbon Paste Microelectrodes for Electrogenerated Chemiluminescent Detection on Microfluidic Devices. 2020 , 7, 3244-3252		0
670	Passive micropumping in microfluidics for point-of-care testing. 2020 , 14, 031503		16
669	Multiple particle tracking microrheological characterization: Fundamentals, emerging techniques and applications. 2020 , 127, 201101		12
668	Emerging Applications of Additive Manufacturing in Biosensors and Bioanalytical Devices. 2020 , 5, 2000171		18
667	Direct Visualization of Perm-Selective Ion Transportation. 2020 , 10, 8898		1
666	Fabrication of immobilized enzyme reactors with pillar arrays into polydimethylsiloxane microchip. 2020 , 1108, 70-78		5
665	Innovative catalyst integration on transparent silicone microreactors for photocatalytic applications. 2020 , 383, 164-164		3
664	Scalable microfabrication of drug-loaded core-shell tablets from a single erodible polymer with adjustable release profiles. 2020 , 12, 045007		4
663	Label-Free, High-Throughput Assay of Human Dendritic Cells from Whole-Blood Samples with Microfluidic Inertial Separation Suitable for Resource-Limited Manufacturing. 2020 , 11,		6
662	A simple method for production of hydrophilic, rigid, and sterilized multi-layer 3D integrated polydimethylsiloxane microfluidic chips. 2020 , 20, 2354-2363		13
661	Slowing DNA translocation through a solid-state nanopore by applying hydrophobic microchannel-guided walls. 2020 , 38, 043401		2
660	Mechanical Signature of Red Blood Cells Flowing Out of a Microfluidic Constriction Is Impacted by Membrane Elasticity, Cell Surface-to-Volume Ratio and Diseases. 2020 , 11, 576		4
659	Gut-on-a-chip: Current progress and future opportunities. 2020 , 255, 120196		54
658	Nanoliter-Scale Droplet-Droplet Microfluidic Microextraction Coupled with MALDI-TOF Mass Spectrometry for Metabolite Analysis of Cell Droplets. <i>Analytical Chemistry</i> , 2020 , 92, 8759-8767	7.8	10
657	In-Droplet Electrophoretic Separation and Enrichment of Biomolecules. <i>Analytical Chemistry</i> , 2020 , 92, 8414-8421	7.8	8
656	Design and Comparison of Resonant and Non-Resonant Single-Layer Microwave Heaters for Continuous Flow Microfluidics in Silicon-Glass Technology. 2020 , 13, 2635		4

655	Microfluidic Templating of Spatially Inhomogeneous Protein Microgels. 2020 , 16, e2000432	4
654	Gelatin-Based 3D Microgels for In Vitro T Lineage Cell Generation. 2020 , 6, 2198-2208	7
653	Microtechnological Tools to Achieve Sustainable Food Processes, Products, and Ingredients. 2020 , 12, 101-120	5
652	Design and fabrication of PDMS microfluidics device for rapid and label-free DNA detection. 2020 , 126, 1	2
651	Determination of the X-ray attenuation coefficient of bismuth oxychloride nanoplates in polydimethylsiloxane. 2020 , 55, 7095-7105	7
650	Electrocoalescence of Water-in-Oil Droplets with a Continuous Aqueous Phase: Implementation of Controlled Content Release. 2020 , 5, 7529-7536	6
649	Novel Fabrication Process for Integration of Microwave Sensors in Microfluidic Channels. 2020 , 11,	5
648	Bench scale glass-to-glass bonding for microfluidic prototyping. 2020 , 26, 3581-3589	0
647	Application of Microfluidic Chip Technology in Food Safety Sensing. 2020 , 20,	29
646	Microfluidic-Assisted Preparation of 5-Fluorouracil-Loaded PLGA Nanoparticles as a Potential System for Colorectal Cancer Therapy. 2020 , 13,	6
645	High-throughput single-cell activity-based screening and sequencing of antibodies using droplet microfluidics. 2020 , 38, 715-721	64
644	Direct embedding and versatile placement of electrodes in 3D printed microfluidic-devices. 2020 , 145, 3274-3282	11
643	Microfluidics in Haemostasis: A Review. 2020 , 25,	11
642	Innovations in 3-Dimensional Tissue Models of Human Brain Physiology and Diseases. 2020 , 30, 1909146	19
641	A centrifugal microfluidic emulsifier integrated with oil storage structures for robust digital LAMP. 2020 , 22, 18	7
640	The Importance of Mechanical Forces for Endothelial Cell Biology. 2020 , 11, 684	45
639	Reflow process using wax for fabricating curved shaped molds of PDMS microchannels and chambers. 2020 , 8, 100055	0
638	. 2020 , 14, 35-45	0

637	Catalytic Membrane Microreactors with an Ultrathin Freestanding Membrane for Nitrobenzene Hydrogenation. 2020 , 12, 9806-9813	8
636	Enzymatic-based cytometry, a sensitive single-cell cytometric method to assess BCR-ABL1 activity in CML. 2020 , 20, 942-948	
635	Production and analysis of stable microfluidic devices with tunable surface hydrophilicity via the in-situ tertiary-amine catalyzed Michael addition of a multifunctional thiol to a multifunctional acrylate. 2020 , 126, 109482	2
634	Continuous-flow photo-induced decarboxylative annulative access to fused imidazole derivatives via a microreactor containing immobilized ruthenium. 2020 , 22, 1565-1571	10
633	Analysis of resistance characteristics of liquid flow in microfluidic channels. 2020 , 1449, 012055	
632	Green, Low-Cost, User-Friendly, and Elastomeric (GLUE) Microfluidics. 2020 , 2, 1345-1355	9
631	Microfluidic shear rheology and wall-slip of viscoelastic fluids using holography-based flow kinematics. 2020 , 32, 012006	8
630	Lipid-Stabilized Double Emulsions Generated in Planar Microfluidic Devices. 2020 , 36, 2349-2356	11
629	Rapid label-free detection of intact pathogenic bacteria in situ via surface plasmon resonance imaging enabled by crossed surface relief gratings. 2020 , 145, 2133-2142	17
628	COvalent monolayer patterns in Microfluidics by PLasma etching Open Technology - COMLOT. 2020 , 145, 1629-1635	3
627	Characterization of Mechanical Signature of Eutopic Endometrial Stromal Cells of Endometriosis Patients. 2020 , 27, 364-374	3
626	Characterizing the impact of thermal gels on isotachophoresis in microfluidic devices. 2020 , 41, 691-696	5
625	Microfluidic concentration and separation of circulating tumor cell clusters from large blood volumes. 2020 , 20, 558-567	23
624	Thermosetting polymers in cold sintering: The fabrication of ZnO-polydimethylsiloxane composites. 2020 , 103, 3039-3050	11
623	Wearable biosensors and sample handling strategies. 2020 , 65-88	8
622	Microfluidic solution-processed organic and perovskite nanowires fabricated for field-effect transistors and photodetectors. 2020 , 8, 2353-2362	9
621	Microfluidics in male reproduction: is ex vivo culture of primate testis tissue a future strategy for ART or toxicology research?. 2020 , 26, 179-192	8
620	Real-time gene analysis based on a portable electrochemical microfluidic system. 2020 , 111, 106665	3

619	Microfluidic opportunities in printed electrolyte-gated transistor biosensors. 2020 , 14, 011301	11
618	In Situ Integration of SERS Sensors for On-Chip Catalytic Reactions. 2020 , 5, 1900963	3
617	Optimization of micromilled channels for microfluidic applications using gas-blowing-assisted PDMS coating. 2020 , 24, 1	4
616	Dye-Doped ZnO Microcapsules for High Throughput and Sensitive Optofluidic Micro-Thermometry. 2020 , 11,	2
615	A simple micro check valve using a photo-patterned hydrogel valve core. 2020 , 304, 111878	5
614	Dual shape recovery of red blood cells flowing out of a microfluidic constriction. 2020 , 14, 024116	3
613	Computer-Aided Design of Microfluidic Circuits. 2020 , 22, 285-307	8
612	Pumpless, Self-Driven Microfluidic Channels with Controlled Blood Flow Using an Amphiphilic Silicone. 2020 , 2, 1731-1738	8
611	Tortuosity-powered microfluidic device for assessment of thrombosis and antithrombotic therapy in whole blood. 2020 , 10, 5742	5
610	Scalable microfluidic droplet on-demand generator for non-steady operation of droplet-based assays. 2020 , 20, 1398-1409	7
609	In-flow measurement of cell-cell adhesion using oscillatory inertial microfluidics. 2020 , 20, 1612-1620	8
608	Freeze-Dried Cell-Free Protein Expression System in Microchambers Toward Point-of-Care Diagnostics. 2020 ,	
607	A Single-Layer PDMS Chamber for On-Chip Bacteria Culture. 2020 , 11,	2
606	Controllable pH Manipulations in Micro/Nanofluidic Device Using Nanoscale Electrokinetics. 2020 , 11,	3
605	3D Printed MEMS Technology-Recent Developments and Applications. 2020 , 11,	26
604	Multifunctional Gold Nanoparticles for the SERS Detection of Pathogens Combined with a LAMP-in-Microdroplets Approach. 2020 , 13,	12
603	Integrating Microstructured Electrospun Scaffolds in an Open Microfluidic System for Studies of Human Patient-Derived Primary Cells. 2020 , 6, 3649-3663	5
602	Design and experiment of a focused acoustic sorting chip based on TSAW separation mechanism. 2020 , 26, 2817-2828	3

601	On-Chip Electrical Monitoring of Real-Time Soft and Hard Protein Corona Formation on Carbon Nanoparticles. 2020 , 4, 2000099	9
600	PDMS leaching and its implications for on-chip studies focusing on bone regeneration applications. 2020 , 2, 100004	18
599	Multi-layering of SU-8 exhibits distinct geometrical transitions from circular to planarized profiles. 2020 , 14, 014116	
598	Structural Stability of Optofluidic Nanostructures in Flow-Through Operation. 2020 , 11,	1
597	Metabolic Switching of Tumor Cells under Hypoxic Conditions in a Tumor-on-a-chip Model. 2020 , 11,	14
596	Engineering in Medicine To Address the Challenge of Cancer Drug Resistance: From Micro- and Nanotechnologies to Computational and Mathematical Modeling. 2021 , 121, 3352-3389	13
595	Silicone-based bioscaffolds for cellular therapies. 2021 , 119, 111615	11
594	An ultrahigh-throughput screening platform based on flow cytometric droplet sorting for mining novel enzymes from metagenomic libraries. 2021 , 23, 996-1008	3
593	Fabrication of advanced polydimethylsiloxane-based functional materials: Bulk modifications and surface functionalizations. 2021 , 408, 127262	18
592	Review of silicone surface modification techniques and coatings for antibacterial/antimicrobial applications to improve breast implant surfaces. 2021 , 121, 68-88	22
591	All-graphene-based open fluidics for pumpless, small-scale fluid transport laser-controlled wettability patterning. 2021 , 6, 24-32	4
590	A flexible and cost-effective manual droplet operation platform for miniaturized cell assays and single cell analysis. 2021 , 224, 121874	0
589	Microfluidic Analysis Techniques for Safety Assessment of Pharmaceutical Nano- and Microsystems. 2021 , 97-135	1
588	Human mini-brain models. 2021 , 5, 11-25	11
587	. 2021 ,	0
586	Soft and flexible gold microelectrodes by supersonic cluster beam deposition and femtosecond laser processing. 2021 , 237, 111478	2
585	Single-molecule tracking measurement of PDMS layer during curing process. 2021 , 565, 125576	1
584	Organ-on-a-Chip: A New Paradigm for Drug Development. 2021 , 42, 119-133	66

583	Microchannel geometry vs flow parameters for controlling nanoprecipitation of polymeric nanoparticles. 2021 , 611, 125774	5
582	Miniaturized free-flow electrophoresis: production, optimization, and application using 3D printing technology. 2021 , 42, 305-314	7
581	Synergizing microfluidics with soft robotics: A perspective on miniaturization and future directions. 2021 , 15, 011302	12
580	A bioinspired, passive microfluidic lobe filtration system. 2021 , 21, 3762-3774	2
579	Monodispersed sodium hyaluronate microcapsules for transdermal drug delivery systems.	0
578	Miniaturised detection systems. 2021 , 327-364	
577	Self-powered nanosensors using nanogenerators. 2021 , 617-647	
576	Materials and methods for microfabrication of microfluidic devices. 2021 , 1-78	2
575	Microfluidic devices for imaging and manipulation of <i>C. elegans</i> . 2021 , 295-321	
574	Fluorescent visualization of oil displacement in a microfluidic device for enhanced oil recovery applications. 2021 , 146, 6746-6752	1
573	A depth-averaged model for Newtonian fluid flows in shallow microchannels. 2021 , 33, 012002	7
572	Modernizing the Toolkit for Arthropod Bloodmeal Identification. 2021 , 12,	5
571	A multiplexed nanoliter array-based microfluidic platform for quick, automatic antimicrobial susceptibility testing. 2021 , 21, 2223-2231	4
570	A 3D View of Colorectal Cancer Models in Predicting Therapeutic Responses and Resistance. 2021 , 13,	18
569	Separation of distinct exosome subpopulations: isolation and characterization approaches and their associated challenges. 2021 , 146, 3731-3749	14
568	Paper-Based Kits for Food Analysis and Authentication. 2021 , 249-281	
567	Protective Filtration for Microfluidic Nanoparticle Precipitation for Pharmaceutical Applications. 2021 , 44, 457-464	1
566	Introduction. 2021 , 1-9	

565	Neuromuscular junction-on-a-chip: ALS disease modeling and read-out development in microfluidic devices. 2021 , 157, 393-412	7
564	Emerging Biosecurity Considerations at the Intersection of Biotechnology and Technology. 2021 , 121-132	
563	Micro systems for the study of behavioral responses of <i>C. elegans</i> to various physical and chemical stimuli. 2021 , 323-339	
562	All in One Epoxy-Based Microfluidic Chips at Your Fingertips. 2021 , 3, 801-810	1
561	Understanding and improving FDM 3D printing to fabricate high-resolution and optically transparent microfluidic devices. 2021 , 21, 3715-3729	11
560	Electrophysiology Read-Out Tools for Brain-on-Chip Biotechnology. 2021 , 12,	8
559	Hydrogel-Based Iontronics on a Polydimethylsiloxane Microchip. 2021 , 13, 6606-6614	5
558	Machine learning-aided protein identification from multidimensional signatures. 2021 , 21, 2922-2931	1
557	Phase Changing Materials Based Super Capacitors. 2021 ,	
556	Combined electrokinetic and shear flows control colloidal particle distribution across microchannel cross-sections. 2021 , 17, 611-620	6
555	A Flexible Pressure Sensor Based on Magnetron Sputtered MoS. 2021 , 21,	7
554	Toward Developing Immunocompetent Diabetic Foot Ulcer-on-a-Chip Models for Drug Testing. 2021 , 27, 77-88	4
553	A microfluidic platform for dissociating clinical scale tissue samples into single cells. 2021 , 23, 10	2
552	Variable inter and intraspecies alkaline phosphatase activity within single cells of revived dinoflagellates. 2021 , 15, 2057-2069	2
551	Homogeneous Freezing of Water Using Microfluidics. 2021 , 12,	3
550	Recent Advances in Patterning Natural Polymers: From Nanofabrication Techniques to Applications.. 2021 , 5, e2001060	6
549	Development of a Microfluidic Platform for Trace Lipid Analysis. 2021 , 11,	2
548	Melanoma cells adopt features of both mesenchymal and amoeboid migration within confining channels.	

547	Vertical Orientation of Liquid Crystal on 4--Alkyloxyphenoxyethyl-Substituted Polystyrene Containing Liquid Crystal Precursor. 2021 , 13,	0
546	Darwinian properties and their trade-offs in autocatalytic RNA reaction networks. 2021 , 12, 842	5
545	Rat in vitro spermatogenesis promoted by chemical supplementations and oxygen-tension control. 2021 , 11, 3458	3
544	Experimental study on the effect of flow in microfluidic channel on bovine sperm navigation. 2021 , 118, 110290	1
543	Integrated 3D printed microfluidic circuitry and soft microrobotic actuators via in situ direct laser writing. 2021 , 31, 044001	6
542	Frequency-specific, valveless flow control in insect-mimetic microfluidic devices. 2021 , 16,	0
541	Evaluation of 3D-printed molds for fabrication of non-planar microchannels. 2021 , 15, 024111	2
540	Microfluidic Modules Integrated with Microwave Components-Overview of Applications from the Perspective of Different Manufacturing Technologies. 2021 , 21,	1
539	Irreversible bonding techniques for the fabrication of a leakage-free printed circuit board-based lab-on-chip in microfluidic platforms—review. 2021 , 32, 052001	5
538	Micro-scale technologies propel biology and medicine. 2021 , 15, 021302	0
537	High-Throughput Methods in the Discovery and Study of Biomaterials and Materiobiology. 2021 , 121, 4561-4677	45
536	Evaluation of Lateral and Vertical Dimensions of Micromolds Fabricated by a PolyJetPrinter. 2021 , 12,	1
535	Fabrication Methods for Microfluidic Devices: An Overview. 2021 , 12,	38
534	A simple and low-cost approach for irreversible bonding of polymethylmethacrylate and polydimethylsiloxane at room temperature for high-pressure hybrid microfluidics. 2021 , 11, 4821	12
533	Characterization of Nanoparticle Adsorption on Polydimethylsiloxane-Based Microchannels. 2021 , 21,	
532	Organ-on-a-chip technology: a novel approach to investigate cardiovascular diseases. 2021 ,	14
531	Measuring single-cell protein secretion in immunology: Technologies, advances, and applications. 2021 , 51, 1334-1347	4
530	Cryogenic machining of elastomers: a review. 2021 , 25, 477-525	0

529	Advancements in Microfluidic Systems for the Study of Female Reproductive Biology. 2021 , 162,	2
528	Microfluidics for flexible electronics. 2021 , 44, 105-135	26
527	Microphysiological systems: What it takes for community adoption. 2021 , 246, 1435-1446	4
526	In Vitro Lung Models and Their Application to Study SARS-CoV-2 Pathogenesis and Disease. 2021 , 13,	11
525	Investigation of red blood cell partitioning in an in vitro microvascular bifurcation. 2021 , 45, 1083-1096	4
524	An inexpensive, versatile, compact, programmable temperature controller and thermocycler for simultaneous analysis and visualization within a microscope. 2021 , 25, 1	0
523	Microfluidics for Drug Development: From Synthesis to Evaluation. 2021 , 121, 7468-7529	22
522	Facile Patterning of Thermoplastic Elastomers and Robust Bonding to Glass and Thermoplastics for Microfluidic Cell Culture and Organ-on-Chip. 2021 , 12,	7
521	Circulating Wnt Ligands Activate the Wnt Signaling Pathway in Mature Erythrocytes. 2021 , 41, e243-e264	1
520	Smart Contact Lenses for Biosensing Applications. 2021 , 3, 2000263	18
519	On the potential of microscale electrokinetic cascade devices. 2021 , 42, 2474-2482	1
518	Universal method for fabricating PDMS microfluidic device using SU8, 3D printing and soft lithography. 1-8	1
517	Multivariate thinking for optical microfluidic analytical devices A tutorial review. 2021 , 164, 105959	0
516	Emerging Brain-Pathophysiology-Mimetic Platforms for Studying Neurodegenerative Diseases: Brain Organoids and Brains-on-a-Chip. 2021 , 10, e2002119	7
515	Fabrication of microfluidic channel of polydimethylsiloxane using X-ray lithography and its surface nanostructuring. 251659842110157	0
514	Lung on a Chip Development from Off-Stoichiometry Thiol-Ene Polymer. 2021 , 12,	2
513	Rapid Production of PDMS Microdevices for Electrodriven Separations and Microfluidics by 3D-Printed Scaffold Removal. 2021 , 8, 67	1
512	Bar-coating programmable mechanochromic bilayer PDMS film with angle-dependent and angle-independent structural colors. 2021 , 189, 109264	7

511	PDMS Curing Inhibition on 3D-Printed Molds: Why? Also, How to Avoid It?. <i>Analytical Chemistry</i> , 2021 , 93, 7180-7187	7.8	17
510	State of the art in nonthermal plasma processing for biomedical applications: Can it help fight viral pandemics like COVID-19?. 2021 , 18, e2000215		4
509	Directional Growth of Human Neuronal Axons in a Microfluidic Device with Nanotopography on Azobenzene-Based Material. 2021 , 8, 2100048		8
508	Adoption of reinforcement learning for the intelligent control of a microfluidic peristaltic pump. 2021 , 15, 034101		6
507	Fluidic Flow Measurement Using Single ModeMultimodeSingle Mode Optical Fiber Sensor. 2021 , 21, 13316-13326		0
506	One-dollar microfluidic paper-based analytical devices: Do-It-Yourself approaches. 2021 , 165, 106126		13
505	CO2 laser machining for microfluidics mold fabrication from PMMA with applications on viscoelastic focusing, electrospun nanofiber production, and droplet generation. 2021 , 98, 340-349		2
504	Texture Identification of Objects Using a Robot Fingertip Module with Multimodal Tactile Sensing Capability. 2021 , 11, 5256		1
503	Organosilicon uptake by biological membranes. 2021 , 4, 704		2
502	Selective Fluorination of the Surface of Polymeric Materials after Stereolithography 3D Printing. 2021 , 37, 7341-7348		5
501	Curvy, shape-adaptive imagers based on printed optoelectronic pixels with a kirigami design. 2021 , 4, 513-521		38
500	Methods for immobilizing receptors in microfluidic devices: A review. 2021 , 11, 100085		4
499	Droplet Microfluidics for Food and Nutrition Applications. 2021 , 12,		7
498	Focus on the road to modelling cardiomyopathy in muscular dystrophy. 2021 ,		
497	Flexible and Stretchable Capacitive Sensors with Different Microstructures. 2021 , 33, e2008267		25
496	Stochastic and Age-Dependent Proteostasis Decline Underlies Heterogeneity in Heat-Shock Response Dynamics. 2021 , 17, e2102145		0
495	Photolithography-free fabrication of photoresist-mold for rapid prototyping of microfluidic PDMS devices. 2021 ,		1
494	Prototyping and Production of Polymeric Microfluidic Chip.		1

493	Microfluidics-Based Bioassays and Imaging of Plant Cells. 2021 , 62, 1239-1250		5
492	Usability of Polydimethylsiloxane-Based Microfluidic Devices in Pharmaceutical Research Using Human Hepatocytes. 2021 , 7, 3648-3657		7
491	Modeling nonalcoholic fatty liver disease on a liver lobule chip with dual blood supply. 2021 , 134, 228-239		4
490	Droplet-Based Microfluidic Synthesis of Hydrogel Microparticles via Click Chemistry-Based Cross-Linking for the Controlled Release of Proteins.. 2021 , 4, 6186-6194		
489	Membrane Fouling Phenomena in Microfluidic Systems: From Technical Challenges to Scientific Opportunities. 2021 , 12,		4
488	Recent Advances in Microfluidic Platforms for Programming Cell-Based Living Materials. 2021 , 33, e2005944		4
487	Microfluidics for Time-Resolved Small-Angle X-Ray Scattering.		0
486	Liquid-Liquid Phase-Separated Systems from Reversible Gel-Sol Transition of Protein Microgels. 2021 , 33, e2008670		5
485	PDMS Bonding Technologies for Microfluidic Applications: A Review. 2021 , 11,		18
484	3D microfluidics in PDMS: manufacturing with 3D molding. 2021 , 25, 1		0
483	Fabrication for paper-based microfluidic analytical devices and saliva analysis application. 2021 , 25, 1		6
482	Direct roll transfer printed silicon nanoribbon arrays based high-performance flexible electronics. 2021 , 5,		17
481	High-Content Label-Free Single-Cell Analysis with a Microfluidic Device Using Programmable Scanning Electrochemical Microscopy. <i>Analytical Chemistry</i> , 2021 , 93, 12417-12425	7.8	3
480	Microchip for continuous DNA analysis based on gel electrophoresis coupled with co-injection of size markers and in-channel staining. 2021 , 413, 5685-5694		
479	Microphysiological Systems: Stakeholder Challenges to Adoption in Drug Development. 2021 , 1-13		3
478	Study of the geometry of open channels in a layer-bed-type microfluidic immobilized enzyme reactor. 2021 , 413, 6321-6332		0
477	Electrotaxis-on-Chip to Quantify Neutrophil Migration Towards Electrochemical Gradients. 2021 , 12, 674727		3
476	Light Propagation in Confined Nematic Liquid Crystals and Device Applications. 2021 , 11, 8713		2

- 475 Confining *Trypanosoma brucei* in emulsion droplets reveals population variabilities in division rates and improves in vitro cultivation. **2021**, 11, 18192
- 474 Microfluidic Platforms to Unravel Mysteries of Alzheimer's Disease: How Far Have We Come?. **2021**, 11, 1
- 473 Melanoma cells adopt features of both mesenchymal and amoeboid migration within confining channels. **2021**, 11, 17804 2
- 472 Single cell infection with influenza A virus using drop-based microfluidics.
- 471 Microchip electrophoresis and electrochemical detection: A review on a growing synergistic implementation. **2021**, 391, 138928 5
- 470 Green micro total analysis systems (GMAS) for environmental samples. **2021**, 31, e00128 6
- 469 A milliliter to picoliter-level centrifugal microfluidic concentrator for fast pathogen detection and antimicrobial susceptibility testing. **2021**, 343, 130117 1
- 468 Deformable and Robust Core-Shell Protein Microcapsules Templated by Liquid-Liquid Phase-Separated Microdroplets. **2021**, 8, 2101071 1
- 467 Spatially and optically tailored 3D printing for highly miniaturized and integrated microfluidics. **2021**, 12, 5509 17
- 466 Electro-osmotic diode based on colloidal nano-valves between double membranes. **2021**, 3, 0
- 465 Localized Surface Plasmon Resonance Sensors for Biomarker Detection with On-Chip Microfluidic Devices in Point-of-Care Diagnostics. **2022**, 199-223
- 464 . **2021**, 40, 2104-2116
- 463 An automated low-cost modular hardware and software platform for versatile programmable microfluidic device testing and development. **2021**, 346, 130538 1
- 462 "Barcode" cell sensor microfluidic system: Rapid and sample-to-answer antimicrobial susceptibility testing applicable in resource-limited conditions. **2021**, 192, 113516 0
- 461 Recent progress in preparation of functional microparticles based on microfluidic technique. **2021**, 29, 102740 1
- 460 Fabrication of microfluidic chips. **2022**, 3-35 0
- 459 Tumor-on-a-chip devices for cancer immunotherapy. **2022**, 155-195 1
- 458 Microfluidic capillary electrophoresis chip techniques: theory and different separation modes. **2022**, 99-142

457	Miniaturized devices for point-of-care testing/miniaturization and integration with microfluidic systems. 2022 , 375-383	1
456	Fast prototyping using 3D printed templates and flexible fluoropolymer microcapillary films offers enhanced micromixing in immobilised (bio)catalytic reactions. 2022 , 429, 132266	1
455	Improving plasma bonding of PDMS to gold-patterned glass for electrochemical microfluidic applications. 2021 , 25, 1	2
454	Engineered surfaces: A plausible alternative in overviewing critical barriers for reconstructing modern therapeutics or biomimetic scaffolds. 2021 , 39-80	0
453	Packaging for Bio-micro-electro-mechanical Systems (BioMEMS) and Microfluidic Chips. 2021 , 253-287	
452	Exploring early time points of vimentin assembly in flow by fluorescence fluctuation spectroscopy. 2021 , 21, 735-745	1
451	Microfabricated Devices for Confocal Microscopy on Biological Samples. 2021 , 2304, 93-109	1
450	Surface coatings for microfluidic biomedical devices. 2021 , 79-123	
449	"Scratch it out": carbon copy based paper devices for microbial assays and liver disease diagnosis. 2021 , 13, 3172-3180	5
448	Production of hydrogel microparticles in microfluidic devices: a review. 2021 , 25, 1	6
447	Membrane integration into PDMS-free microfluidic platforms for organ-on-chip and analytical chemistry applications. 2021 , 21, 1866-1885	11
446	A polymer index-matched to water enables diverse applications in fluorescence microscopy. 2021 , 21, 1549-1562	4
445	Peristaltic on-chip pump for tunable media circulation and whole blood perfusion in PDMS-free organ-on-chip and Organ-Disc systems. 2021 , 21, 3963-3978	4
444	Filtering and continuously separating microplastics from water using electric field gradients formed electrochemically in the absence of buffer. 2021 , 12, 13744-13755	0
443	Atom Chip Fabrication. 61-117	3
442	Engineered Tools to Study Intercellular Communication. 2021 , 8, 2002825	10
441	PLANAR OPTICAL SENSORS AND EVANESCENT WAVE EFFECTS. 2006 , 193-215	3
440	Microfluidics and Their Applications to Lab-on-a-Chip. 2004 , 253-278	1

439	Multi-phenotypic Cellular Arrays for Biosensing. 2006 , 79-93	1
438	Chemical and Biomolecular Interactions in the Assembly of Nanowires. 2003 , 235-254	1
437	Magnetically Actuated Microvalves for Active Flow Control. 2008 , 59-65	1
436	Microcontact Printing Techniques. 2003 , 181-212	1
435	Soft Lithography and Imprint-Based Techniques for Microfluidics and Biological Analysis. 2003 , 305-330	4
434	Cilia Induced Bending of Paramecium in Microchannels. 2012 , 207-215	1
433	Microfluidics for Neuronal Imaging. 2014 , 243-259	1
432	Microfluidic model of angiogenic sprouting. 2015 , 1214, 243-54	3
431	Microfluidic Proximity Ligation Assay for Profiling Signaling Networks with Single-Cell Resolution. 2015 , 1346, 169-84	2
430	Spatiotemporal stimulation of single cells using flow photolysis. 2009 , 571, 321-32	5
429	Droplet microfluidics for single-cell analysis. 2012 , 853, 105-39	21
428	Rapid prototyping of PDMS devices using SU-8 lithography. 2013 , 949, 153-68	11
427	Surface treatments for microfluidic biocompatibility. 2013 , 949, 241-68	7
426	Application of Microfluidics to Study Stem Cell Dynamics. 2013 , 435-470	3
425	Microfluidic perfusion culture. 2014 , 1104, 251-63	5
424	On-Chip Drug Screening Technologies for Nanopharmaceutical and Nanomedicine Applications. 2021 , 311-346	2
423	Microfluidics and Lab-on-a-Chip Devices: History and Challenges. 2015 , 1-15	6
422	Centrifuge-Based Fluidic Platforms. 2007 , 549-570	3

421	Nanobiotechnology: soft lithography. 2009 , 47, 341-58	9
420	Microfluidic Devices and Their Applications to Lab-on-a-Chip. 2010 , 503-530	7
419	Trends in Microfluidic Devices for Analytical Chemistry. 2003 , 101-134	1
418	Using Integrated Cancer-on-Chip Platforms to Emulate and Probe Various Cancer Models. 2019 , 151-204	2
417	Formation of Droplets and Bubbles in Microfluidic Systems. 2010 , 163-181	11
416	Monitoring of Cell Growth, Oxygen and pH in Microfermentors. 2002 , 7-9	8
415	Development of Microfluidic Shear Assays for Quantitative Analysis of Cell Adhesion. 2002 , 784-786	1
414	Microfluidics for Tissue Engineering Microvasculature: Endothelial Cell Culture. 2001 , 247-249	5
413	Air-Liquid Two-Phase Microfluidic System for Low-Cost, Low-Volume, and Low-Power Micro Flow Cytometer. 2001 , 468-470	3
412	Microchip-Based Simultaneous On-Line Monitoring of CR(III) and CR(VI) Using Highly Efficient Chemiluminescence Detection. 2001 , 525-526	2
411	Micro-Nano Coupling in Biological Systems. 2003 , 167-204	0
410	Microbiology On-a-Chip. 2000 , 111-114	4
409	An Integrated Fritless Column for Planar Capillary Electrochromatography with Conventional Stationary Phases. 2000 , 225-228	3
408	Centrifugal Microfluidics: Applications. 2000 , 239-242	14
407	Bioinspired Engineering of Organ-on-Chip Devices. 2019 , 1174, 401-440	4
406	FDM 3D Printing in Biomedical and Microfluidic Applications. 2020 , 127-145	0
405	History of Bio-microelectromechanical Systems (BioMEMS). 2021 , 1-20	1
404	Molecular Gradients on Surfaces: Formation and Applications in Soft Condensed Matter Science. 2002 , 1-8	4

403	Numerical model of flow in distensible microfluidic network. 2003 , 1569-1572		2
402	Patterning proteins and cells using soft lithography. 1999 , 161-174		10
401	PATTERNING OF CELLS AND THEIR ENVIRONMENT. 2000 , 209-220		4
400	A novel on-chip immobilization strategy for imaging analysis of neuronal response to gas cues in <i>C. elegans</i> . 2017 , 244, 1152-1159		3
399	High-Temporal-Resolution smFISH Method for Gene Expression Studies in Embryos. <i>Analytical Chemistry</i> , 2021 , 93, 1369-1376	7.8	2
398	Enhanced Quality Factor Label-free Biosensing with Micro-Cantilevers Integrated into Microfluidic Systems. <i>Analytical Chemistry</i> , 2017 , 89, 11929-11936	7.8	13
397	3D printed mold leachates in PDMS microfluidic devices. 2020 , 10, 994		16
396	An integrated platform for large-scale data collection and precise perturbation of live <i>Drosophila</i> embryos. 2016 , 6, 21366		17
395	Chapter 3:Microfluidic Lab-on-a-Chip Sensing in Food Safety and Quality Analysis. 2017 , 61-94		2
394	Autonomous and complex flow control involving multistep injection and liquid replacement in a reaction chamber on steadily rotating centrifugal microfluidic devices. 2017 , 7, 35869-35874		8
393	Microfluidic device fabrication mediated by surface chemical bonding. 2020 , 145, 4096-4110		21
392	Cost-effective template development for the microfluidic device. 2019 , 14, 860-864		1
391	From CAD to microfluidic chip within one day: rapid prototyping of lab-on-chip cartridges using generic polymer parts. 2020 , 30, 115012		5
390	Lattice Boltzmann simulations capture the multiscale physics of soft flowing crystals. 2020 , 378, 20190406		3
389	<i>Vibrio natriegens</i> , a new genomic powerhouse.		24
388	Less is More: Oligomer extraction and hydrothermal annealing increase PDMS bonding forces for new microfluidics assembly and for biological studies.		3
387	Vectorchip: Microfluidic platform for highly parallel bite by bite profiling of mosquito-borne pathogen transmission.		1
386	Machine learning aided top-down proteomics on a microfluidic platform.		1

385	Machine-assisted cultivation and analysis of biofilms.	3
384	Lattice defects induce microtubule self-renewal.	2
383	Label-free visualization of type IV pili dynamics by interferometric scattering microscopy.	3
382	Heterogeneity in heat shock response dynamics caused by translation fidelity decline and proteostasis collapse.	2
381	Fragmentation mechanisms of confined co-flowing capillary threads revealed by active flow focusing. 2016 , 1,	5
380	Stretching of red blood cells at high strain rates. 2017 , 2,	14
379	Trapping and exclusion zones in complex streaming patterns around a large assembly of microfluidic bubbles under ultrasound. 2018 , 3,	3
378	Microfluidic devices for small-angle neutron scattering. 2018 , 51, 570-583	13
377	Generation of multi-level microstructures using a wavelength-selective photoresist and mask-less grayscale lithography. 2020 ,	1
376	Venous Materials: Towards Interactive Fluidic Mechanisms. 2020 ,	2
375	Polypyrrole Nano- and Microsensors and Actuators for Biomedical Applications. 2008 , 367-400	1
374	Microfabrication Techniques in Scaffold Development. 2008 , 87-119	2
373	Miniaturized Sorters. 2010 ,	1
372	Pressure-Driven Microfluidic Device for Droplet Formation with Minimized Dead Volume. 2014 , 47, 841-847	3
371	Three-dimensional confocal Raman temperature characterization of electrokinetically pumped microchannels. 2019 , 58, 5556-5562	1
370	Retina phantom for the evaluation of optical coherence tomography angiography based on microfluidic channels. 2019 , 10, 5535-5548	5
369	Light scattering through the graphene oxide liquid crystal in a micro-channel. 2019 , 27, 23864-23874	5
368	Probing cellular dynamics with a chemical signal generator. 2009 , 4, e4847	49

367	Determinants of leukocyte margination in rectangular microchannels. 2009 , 4, e7104	66
366	Culturing pancreatic islets in microfluidic flow enhances morphology of the associated endothelial cells. 2011 , 6, e24904	53
365	A handheld point-of-care genomic diagnostic system. 2013 , 8, e70266	65
364	A microfluidic system for studying ageing and dynamic single-cell responses in budding yeast. 2014 , 9, e100042	85
363	A Tubular Biomaterial Construct Exhibiting a Negative Poisson's Ratio. 2016 , 11, e0155681	25
362	A Reversibly Sealed, Easy Access, Modular (SEAM) Microfluidic Architecture to Establish In Vitro Tissue Interfaces. 2016 , 11, e0156341	21
361	Direct Bonding between Silicone and Glass by Atmospheric-Pressure Surface Modification. 2011 , 131, 159-164	1
360	Hybrid Micro-Optical Sensors via Sol-Gel Soft Lithography. 2000 , 628, 1	1
359	Microfabrication and Laser Manipulation of Functional Microtool Using In-Situ Photofabrication. 2005 , 17, 335-341	6
358	Microfluidic Perfusion Culture of Human Hepatocytes. 2007 , 19, 550-556	3
357	Size-Dependent Filtration and Trapping of Microparticles in a Microfluidic Chip Using Graduated Gaps and Centrifugal Force. 2010 , 22, 280-285	2
356	Automatic Cell Cutting by High-Precision Microfluidic Control. 2011 , 23, 13-18	11
355	RNA Granules Hitchhike on Lysosomes for Long-Distance Transport, Using Annexin A11 as a Molecular Tether.	4
354	Disposable microfluidic devices: fabrication, function, and application. 2005 , 38, 429-46	327
353	Modern Approach to Medical Diagnostics - the Use of Separation Techniques in Microorganisms Detection. 2019 , 26, 121-165	1
352	Low-Cost Microfabrication Tool Box. 2020 , 11,	8
351	Microfluidic Device with an Integrated Freeze-Dried Cell-Free Protein Synthesis System for Small-Volume Biosensing. 2020 , 12,	2
350	Organising Chemical Reaction Networks in Space and Time with Microfluidics. 2011 , 3, 35-56	1

349	Application of Organ-on-Chip in Drug Discovery. 2020 , 08, 119-134	5
348	Surface Modification of Poly(dimethylsiloxane) Microchip by Using Cetyltrimethylammonium Bromide (CTAB). 2004 , 25, 560-562	6
347	DNA Separation Using Cellulose Derivatives and PEO by PDMS Microchip. 2006 , 27, 519-523	1
346	PDMS Nanoslits without Roof Collapse. 2009 , 30, 1793-1797	10
345	Applications of Microfluidic Devices for Urology. 2017 , 21, S4-9	8
344	Visualization of Ion Transport and pH Change in Ion Concentration Polarization. 2010 , 8, 38-42	1
343	?????????????????????????????????. 2001 , 69, 615-619	2
342	Embedded MicroHeating Elements in Polymeric MicroChannels for Temperature Control and Fluid Flow Sensing. 2004 , 109, 335-44	7
341	Improvement of Particle Alignment Control and Precise Image Acquisition for On-Chip High-Speed Imaging Cell Sorter. 2011 , 50, 06GL06	5
340	Effect of Flow Rates on Generation of Monodisperse ClayPoly(N-isopropylacrylamide) Embolic Microspheres Using Hydrodynamic Focusing Microfluidic Device. 2011 , 50, 06GL12	2
339	Propitious Immobilization of Gold Nanoparticles on Poly(dimethylsiloxane) Substrate for Local Surface Plasmon Resonance Based Biosensor. 2012 , 51, 037001	2
338	Microfluidic Preparation of Monodisperse Multiple Emulsion using Hydrodynamic Control. 2012 , 50, 733-737	7
337	Fully 3D printed fluidic devices with integrated valves and pumps for flow injection analysis. 2021 , 13, 5017-5024	6
336	Personalized gel-droplet monocyte vaccines for cancer immunotherapy. 2021 , 21, 4414-4426	4
335	Complex 3D microfluidic architectures formed by mechanically guided compressive buckling. 2021 , 7, eabj3686	11
334	Long-term imaging of the ventral nerve cord in behaving adult Drosophila.	2
333	Topographical Vacuum Sealing of 3D-Printed Multiplanar Microfluidic Structures. 2021 , 11,	1
332	Microfluidics: Recent Advances Toward Lab-on-Chip Applications in Bioanalysis. 2100738	5

- 331 Modelling Human Physiology on-Chip: Historical Perspectives and Future Directions. **2021**, 12, 1
- 330 A microfluidic platform for highly parallel bite by bite profiling of mosquito-borne pathogen transmission. **2021**, 12, 6018 1
- 329 Optofluidic Devices for Bioanalytical Applications. **2022**, 247-282
- 328 Derivatization of Plastic Microfluidic Devices with Polyelectrolyte Multilayers. **2000**, 67-70 1
- 327 SPR Imaging Measurements of DNA Microarrays in PDMS Microfluidic Channels on Gold Thin Films. **2001**, 441-443 1
- 326 High Aspect Ratio Channels for Capillary Electrophoresis. **2001**, 1146-1149 1
- 325 Micromachined Straight-Through Silicon MicroChannel Array for Monodispersed Microspheres. **2001**, 41-48
- 324 Design of a Self-Contained 3D microvalve in PDMS. **2001**, 1200-1203
- 323 PDMS Microchip for Precolumn Reaction and Micellar Electrokinetic Chromatography of Biogenic Amines. **2001**, 561-562
- 322 PMMA/PDMS Based Microfluidic System with Optical Detection for Total Heavy Metals Concentration Assessment. **2001**, 521-522
- 321 Chip Based Single-Column TITP (Transient Isotachophoresis) Separator. **2002**, 587-589
- 320 Functionalized Parylene Coatings for Microfluidic Applications. **2002**, 443-445
- 319 Electronic biosensing. **2002**,
- 318 Protein Interfacial Behavior in Microfabricated Analysis Systems and Microarrays. **2003**,
- 317 Nanofluidics Structures and Devices. **2004**, 319-355
- 316 Integration of Sub-Wavelength Nanofluidics With Photonic Crystals. **2005**,
- 315 3-D Assembly Methods to Fabricate Multi-Metal Electrodes Implanted PDMS Structures for Micro Flow Devices. **2005**, 125, 393-397 1
- 314 Microfabrication and Integration. **2005**, 55-106

- 313 Analysis and Experimental Characterization of Statistical Errors in Brownian Microscopy. **2006**, 1
- 312 PDMS Membrane Microactuator for Focal Tunable Microlens. **2006**,
- 311 Continuous Particle Cross Over in Microfluidic Channels for Continuous Biosensing. **2006**,
- 310 Microfluidic Sorting System Based on Waveguide Integration and Diode Laser Bar Trapping. **2006**,
- 309 At the Interface: Advanced Microfluidic Assays for Study of Cell Function. **2006**, 55-78
- 308 A Multi-chip Microelectrofluidic Bench for Modular Fluidic and Electrical Interconnections. **2006**, 30, 373-378
- 307 Hot Embossing for Lab-on-a-Chip Applications. **2006**, 117-140
- 306 Micropump Applications in Bio-MEMS. **2006**, 143-175
- 305 Photochemical Oxidation of Poly(dimethylsiloxane) Surface and Subsequent Coating with Biomimetic Phosphorylcholine Polymer. **2007**, 2, 245-249 1
- 304 Application of High-density Plasmas in Biodevice Technology. **2007**, 73, 984-987
- 303 Progress in Nanofluidics for Cell Biology. **2007**, 26-1-26-27
- 302 Nanoengineering of Biomaterial Surfaces.
- 301 On-Chip Chromosome Sorter Using Electric and Magnetic Fields. **2007**, 43-52
- 300 Chemical Applications. **2008**, 321-352 1
- 299 A Cell Lysis and Protein Purification - Single Molecule Assay Devices for Evaluation of Genetically Engineered Proteins. **2008**, 128, 167-175
- 298 Surface Plasmon Resonance Imaging Measurements of Biomolecular Arrays. 107
- 297 Integrated Lab-on-a-Chip System in Life Sciences. **2009**, 161-190
- 296 Lab on a Chip. **2009**, 999-1016

295 Transport of Droplets in Microfluidic Systems. **2010**, 183-202

294 Centrifuge-Based Fluidic Platforms. **2010**, 531-552

293 Chapter 11:Microfluidics: Basic Concepts and Microchip Fabrication. **2010**, 111-149

292 8Chapter Applications to Cellular/Particle Analysis. **2010**, 229-264

291 Automated Cell-Cutting for Cell Cloning. **2010**, 3, 75-80

6

290 Microtechnology for Stem Cell Culture. **2011**, 465-482

289 Thermodynamic Status of Contact Angles. **2010**, 329-421

288 Microfluidic Applications in Vascular Bioengineering. **2011**, 1-30

287 Chemical Sensors and Measurement. **2011**, 117-197

286 Surface Treatment and Planarization. **2011**, 925-1044

285 Demonstration of Three-Dimensional DNA Trapping Using Electric Force and Hydrodrag Force. **2011**, 50, 06GL13

284 The Gene Detection Device for Medical Use. **2012**, 132, 365-370

283 Microfabrication and Microfluidics and Their Application to Clinical Diagnostics. **2012**, 443-468

282 MEMS Design. **2012**, 261-285

o

281 Proposal of High-Integrated Three-Dimensional Microfluidic by Using Centrifugal Force for Enzyme Linked Immunosorbent Assay. **2012**, 15, 38-41

280 Microchip-Based Flow Cytometry in Photonic Sensing: Principles and Applications for Safety and Security Monitoring. 59-87

279 Optofluidic Techniques for the Manipulation of Micro Particles: Principles and Applications to Bioanalyses. 89-118

278 Multiscale, Hierarchical Integration of Soft Polymer Micro- and Nanostructures into Optical MEMS. **2012**, 491-518

277 Microchip UV absorbance detection applied to isoelectric focusing of proteins. **2013**, 949, 507-21

276 Coupling of ECL with Different Techniques. **2013**, 61-106

275 Smartphone Based Optical Detection of Kaposi's Sarcoma Associated Herpesvirus DNA. **2013**,

274 Smartphone Based Optical Detection of Kaposi's Sarcoma Associated Herpesvirus DNA. **2013**,

273 Fabrication Methods. **2013**, 43-70

272 Rapid Assembly of Cellular Aggregation Using Micro-Nano Technologies. **2014**, 43-55

271 Fabrication and Testing. **2014**, 17-24

270 Chapter 8:Microfluidic Diagnostics for Low-resource Settings: Improving Global Health without a Power Cord. **2014**, 151-190

1

269 The Fabrication of Microfluidic Platforms with Pneumatically/Hydraulically Controlled PDMS Valves and Their Use in Neurobiological Research. **2015**, 3-23

268 Chapter 2:Development of Microelectrode-based Biosensors for Biomedical Analysis. **2015**, 19-84

1

267 Evaluation of Particle Counting by Smartphone-based Fluorescence Smartscope and Particle Positioning in Spinning Helical Channel. **2015**, 20, 19-28

1

266 Field Effect Control of Ion, Fluid, and Particle Transport in Micro/Nanofluidics. 2688-2704

265 Polypyrrole: Nano- and Microsensors and Actuators. 6538-6560

264 Pluripotent Stem Cells for Kidney Diseases. **2016**, 69-84

263 Digital Bioassay with Femtoliter Reactor Array. **2016**, 107-116

262 Rapid Creation of Three-Dimensional, Tactile Models from Crystallographic Data. **2016**, 2016, 1-8

261 8 Nanomaterial-Based Immunosensors for Clinical Diagnostics. **2016**, 209-240

260 Polymeric Microfluidics: Fabricated and Modified Using Plasmas. **2016**, 1112-1124

259 Osteokit Fabrication. **2017**, 153-175

258 Introduction. **2017**, 1-24

257 Laser Modification of Wettability of Glass Surface and its Application for Surface Flow Channel. **2017**, 45, 637

256 An organ-on-a-chip approach for investigating root-environment interactions in heterogeneous conditions.

255 Separation-Based Sensors Using Microchip Electrophoresis with Microdialysis for Monitoring Glutamate and Other Bioactive Amines. **2018**, 353-393

254 Fundamentals of rapid injection molding for microfluidic cell-based assays.

253 Recent Trends in Nanomaterials Integration into Simple Biosensing Platforms. **2017**, 389-406

252 Hsf1 phosphorylation generates cell-to-cell variation in Hsp90 levels and promotes phenotypic plasticity.

251 Droplet-based microfluidic analysis and screening of single plant cells.

250 Microfluidic Transfection for High-Throughput Mammalian Protein Expression.

249 Technologien und Materialien für mikrofluidische Systeme. **2018**, 57-76

248 Local Wettability Modification and Its Micro-Fluidic System Application. **2018**, 925-957

247 Preparation of Anisotropic Conductive Graphene Aerogel/Polydimethylsiloxane Composites as LEGO® Modulars.

246 Pathology in a tub step 2: simple, rapid fabrication of curved, circular cross section millifluidic channels for biopsy preparation/3D imaging towards pancreatic cancer detection and diagnosis. **2018**,

245 Integrated Field-effect metal microelectrodes based microfluidic impedance cytometry for cell-in-droplet quantification.

244 Development of an Autonomous Centrifugal Microfluidic Dispenser for POCT. **2018**, 138, 370-375

243 Uncured PDMS Inhibits Myosin In Vitro Motility in a Microfluidic Flow Cell.

242 On-ratio PDMS bonding for multilayer microfluidic device fabrication.

○

- 241 Stretchable phase-mode Fresnel zone plates for focus tuning. **2018**,
- 240 Sample Injection Techniques. **2019**, 1906, 55-64
- 239 Cytoplasmic Volume and Limiting Nucleoplasmin Scale Nuclear Size During *Xenopus Laevis* Development.
- 238 Cytoplasmic volume and limiting nucleoplasmin scale nuclear size during *Xenopus laevis* development.
- 237 Integrated Multilayer Microfluidic Platforms with Silicon Architectures for Next-Generation Health Diagnostic Systems. **2019**, 361-396
- 236 Wavelength-selective negative photoresist for photolithography suitable for generating microstructures with up to three distinct height levels. **2019**,
- 235 Femtosecond laser microfabrication of a PMMA lab on a chip for high throughput size-based inertial sorting. **2019**,
- 234 Suspended liquid subtractive lithography: printing three dimensional channels directly into uncured polymeric matrices. **2019**,
- 233 Retinal phantom for evaluation of retinal OCT-angiography and fundus angiography. **2019**,
- 232 Heparanase-2 protects from endothelial injury by inhibiting TLR4 signaling.
- 231 Biomimetic Aorta-Gonad-Mesonephros-on-a-Chip to Study Human Developmental Hematopoiesis.
- 230 Effect of evaporation through nanoporous medium on diffusiophoresis. **2020**, 8, 1
- 229 Direct digital sensing of proteins in solution through single-molecule optofluidics. 3
- 228 Dynamic analysis of the extended space charge layer using chronopotentiometric measurements. **2020**, 8,
- 227 Study on the effect of displacement fluid viscosity on the microscale residual oil saturation and characteristics. **2021**, 2044, 012026
- 226 Microfluidic Systems for Cancer Diagnosis and Applications. **2021**, 12, 4
- 225 Technologies for Automated Single Cell Isolation. **2022**, 235-262
- 224 Fused Deposition Modeling of Microfluidic Chips in Transparent Polystyrene. **2021**, 12, 2

- 223 Characterization of Atherosclerotic Plaque Coating for Thrombosis Microfluidics Assays.. **2022**, 15, 55-65 1
- 222 Wettability-patterned microchip for emerging biomedical materials and technologies. **2021**, 51, 273-273 6
- 221 Label-Free Isolation of Exosomes Using Microfluidic Technologies. **2021**, 7
- 220 Construction of a liquid-liquid phase separation system from the gel-sol transition of elongated protein microgels in a crowding agent.
- 219 Microchip Electrophoresis for Fluorescence-Based Measurement of Polynucleic Acids: Recent Developments. *Analytical Chemistry*, **2021**, 93, 367-387 7.8 1
- 218 Electrochemiluminescence paper-based analytical devices. **2022**, 213-243
- 217 Capillary Electrophoresis Issues in Forensic DNA Typing. **2020**, 223-238
- 216 SU8/glass microchip capillary electrophoresis integrated with Pt electrodes for separation and simultaneous detection of phenylephrine and acetaminophen. **2021**, 11, 263-269
- 215 CHAPTER 12:Droplet Microfluidics for Precision Medicine. **2020**, 253-278
- 214 Thin-film plastics used in microfluidic channels for microscopy imaging in low resource settings. **2020**,
- 213 A NEW METHOD FOR THE MEASUREMENT OF SOFT MATERIAL THICKNESS.
- 212 Controlled generation of droplets using an electric field in a flow-focusing paper-based device. **2021**, 0
- 211 Polymer-based microfluidic devices: A comprehensive review on preparation and applications. 2
- 210 Microfluidic Tectonics. **2006**, 223-242
- 209 A Multi-Functional Micro Total Analysis System (µTAS) Platform for Transport and Sensing of Biological Fluids using Microchannel Parallel Electrodes. **2006**, 135-158
- 208 Velocity measurements of blood flow in a rectangular PDMS microchannel assessed by confocal micro-PIV system. **2007**, 283-286 2
- 207 Lab-on-a-Chip Devices with Organic Semiconductor-Based Optical Detection. **2008**, 97-140
- 206 Detection of Chemical and Physical Parameters by Means of Organic Field-Effect Transistors. **2008**, 185-212

- 205 Investigating Combinatorial Drug Effects on Adhesion and Suspension Cell Types Using a Microfluidic-Based Sensor System. **2009**, 817-820
- 204 Metabolomic Profiling and Mechanotransduction of Single Chondrocytes Encapsulated in Alginate Microgels.
- 203 A polymer gel index-matched to water enables diverse applications in fluorescence microscopy.
- 202 Chemiluminescence and Its Biomedical Applications. **2021**, 143-195
- 201 Capillary and Microchip Electrophoresis. **2021**, 407-423
- 200 nanolithography toolboxSimplifying the design complexity of microfluidic chips. **2020**, 38, 063002 4
- 199 Microfluidics for positron emission tomography probe development. **2010**, 9, 175-91 14
- 198 Evaluation of Mouse Oocyte In Vitro Maturation Developmental Competency in Dynamic Culture Systems by Design and Construction of A Lab on A Chip Device and Its Comparison with Conventional Culture System. **2016**, 18, 205-13 10
- 197 Regenerative Medicine, Disease Modeling, and Drug Discovery in Human Pluripotent Stem Cell-derived Kidney Tissue. **2017**, 3, 57-67 2
- 196 A novel Y-shaped photoiniferter used for the construction of polydimethylsiloxane surfaces with antibacterial and antifouling properties. **2021**, 1
- 195 Fabricating plasma bonded microfluidic chips by CO2 laser machining of PDMS by the application of viscoelastic particle focusing and droplet generation. **2022**, 73, 260-268 0
- 194 Biomedical Microtechnologies Beyond Scholarly Impact.. **2021**, 12, 1
- 193 Role of Bioanalytical Chemistry in the Twenty-First Century. **2022**, 25-51
- 192 Microchip-Based Devices for Bioanalytical Applications. **2022**, 467-482
- 191 In vitro study on the partitioning of red blood cells using a microchannel network. **2021**, 140, 104281 0
- 190 Emerging microfluidics-enabled platforms for osteoarthritis management: from benchtop to bedside.. **2022**, 12, 891-909 0
- 189 Maximizing interfacial bonding strength between PDMS and PMMA substrates for manufacturing hybrid microfluidic devices withstanding extremely high flow rate and high operation pressure. **2022**, 334, 113330 1
- 188 Double T-junction microfluidic and conventional dripping systems for *Bacillus subtilis* immobilization in calcium alginate microparticles for lipase production.. **2021**, 154, 109976

- 187 A fast microfluidic mixer enabling rapid preparation of homogeneous PEG and bicelle media for RDC in NMR analysis. **2022**, 431, 133817 1
- 186 Rapid assembly of PMMA microfluidic devices with PETE membranes for studying the endothelium. **2022**, 356, 131342 0
- 185 In vitro evaluation of red blood cell flow in bifurcating microchannel. **2020**,
- 184 Human Blood-Brain-Barrier In Vitro Models: Overview and Applications.. **2021**, 1
- 183 Development of a sticker sealed microfluidic device for in situ analytical measurements using synchrotron radiation. **2021**, 11, 23671 0
- 182 Isolation of exosome from the culture medium of Nasopharyngeal cancer (NPC) C666-1 cells using inertial based Microfluidic channel.. **2022**, 24, 12 0
- 181 3D-Printed microfluidic device for protein purification in batch chromatography.. **2022**, 3
- 180 High-throughput formation and image-based analysis of basal-in mammary organoids in 384-well plates.. **2022**, 12, 317 1
- 179 Research on liquid flow behavior in deformed microfluidic channels made of PDMS material. **2022**, 2174, 012057 1
- 178 Design and fabrication of micro/nanofluidics devices and systems.. **2022**, 186, 15-58
- 177 Tactile Sensing for Minimally Invasive Surgery: Conventional Methods and Potential Emerging Tactile Technologies.. **2021**, 8, 705662 2
- 176 Green microfluidics in microchemical engineering for carbon neutrality. **2022**, 2
- 175 Electrogenerated Chemiluminescent Detection of Polyamines on a Microfluidic Device Using Micromolded Carbon Paste Microelectrodes. 0
- 174 Enhanced Electroosmotic Mixing in a Wavy Micromixer Using Surface Charge Heterogeneity. 3
- 173 Selective Single-Cell Expansion on a Microfluidic Chip for Studying Heterogeneity of Glioma Stem Cells.. *Analytical Chemistry*, **2022**, 7.8 0
- 172 3D printed opto-microfluidic autonomous analyzer for photometric applications. **2022**, 337, 113425 0
- 171 Microfluidic concept-based fuel cells. **2022**, 11-40 0
- 170 Microfluidics in Biotechnology: Overview and Status Quo.. **2022**, 1 0

169	Vertical Alignment of Liquid Crystals on Phenylphenoxymethyl-Substituted Polystyrene-PS Derivatives Structurally Similar to LC Molecules.. 2022 , 14,	1
168	Tie-lines reveal interactions driving heteromolecular condensate formation.	0
167	SnCo Nanoalloy/Graphene Anode Constructed by Microfluidic-Assisted Nanoprecipitation for Potassium-Ion Batteries. 2022 , 5, 2616-2625	1
166	Enhanced Blood Plasma Extraction Utilising Viscoelastic Effects in a Serpentine Microchannel.. 2022 , 12,	0
165	Small tools for sweet challenges: advances in microfluidic technologies for glycan synthesis.. 2022 , 1	1
164	Functional Drug Screening using Kidney Cells On-A-Chip: Advances in Disease Modeling and Development of Biomarkers.. 2022 , 3, 194-198	0
163	Microfluidic systems for modeling human development.. 2022 , 149,	0
162	Vascularized Tumor Spheroid-on-a-Chip Model Verifies Synergistic Vasoprotective and Chemotherapeutic Effects.. 2022 ,	5
161	Deterministic Lateral Displacement Microfluidic Chip for Minicell Purification.. 2022 , 13,	2
160	On Single-Cell Enzyme Assays in Marine Microbial Ecology and Biogeochemistry. 2022 , 9,	
159	Metabolomic Profiling and Mechanotransduction of Single Chondrocytes Encapsulated in Alginate Microgels.. 2022 , 11,	0
158	An Easy-to-Fabricate Microfluidic Shallow Trench Induced Three-Dimensional Cell Culturing and Imaging (STICI3D) Platform.. 2022 , 7, 8281-8293	
157	Flow Chemistry: A Sustainable Voyage Through the Chemical Universe en Route to Smart Manufacturing.. 2022 ,	3
156	Integration of reinforcement learning to realize functional variability of microfluidic systems.. 2022 , 16, 024106	2
155	Investigation of replication accuracy of embossed micro-channel through hot embossing using laser patterned copper mold. 2022 ,	1
154	PolyJet-Based 3D Printing against Micromolds to Produce Channel Structures for Microchip Electrophoresis.. 2022 , 7, 13362-13370	0
153	Micro-particle entrapment dynamics in microfluidic pulmonary capillary networks.. 2022 , 137, 111082	0
152	Derivation and Differentiation of Human Pluripotent Stem Cells in Microfluidic Devices.. 2022 ,	0

- 151 Surface functionalization of poly(dimethylsiloxane) substrates facilitates culture of pre-implantation mouse embryos by blocking non-selective adsorption.. **2022**, 19, 20210929
- 150 Hand-powered vacuum-driven microfluidic gradient generator for high-throughput antimicrobial susceptibility testing.. **2022**, 205, 114100 3
- 149 Microfabrication of sealable microcell array with ultrathin metal-graphene membrane. **2022**, 15, 100120
- 148 Noncovalent reversible binding-enabled facile fabrication of leak-free PDMS microfluidic devices without plasma treatment for convenient cell loading and retrieval.. **2022**, 16, 346-358 1
- 147 Rapid Prototyping of Organ-on-a-Chip Devices Using Maskless Photolithography.. **2021**, 13, 4
- 146 Revisiting Airflow and Aerosol Transport Phenomena in the Deep Lungs with Microfluidics.. **2021**, 3
- 145 Single-molecule sizing through nano-cavity confinement.
- 144 Reconfigurable microfluidics. **2022**, 6, 70-80 5
- 143 Nanoscale patterning of in vitro neuronal circuits. 0
- 142 Microfluidic Evaporation, Pervaporation, and Osmosis: From Passive Pumping to Solute Concentration. **2021**, 1
- 141 Microfluidic tools to study cell migration. **2022**, 273-293
- 140 Nanoscale Patterning of Neuronal Circuits.. **2022**, 0
- 139 The revolution of PDMS microfluidics in cellular biology.. **2022**, 1-19 5
- 138 Novel Reproducible Manufacturing and Reversible Sealing Method for Microfluidic Devices. **2022**, 13, 650 0
- 137 Micromechanics of soft materials using microfluidics. **2022**, 47, 119 2
- 136 Real-Time and Monitoring of the Synthesis of Silica Nanoparticles.. **2022**, 1
- 135 Unraveling Cancer Metastatic Cascade Using Microfluidics-based Technologies.. **2022**, 14, 517-543 0
- 134 Alkane-containing polydimethylsiloxane elastomer composite films with excellent tunable light transmittance. **2022**, 128, 112361

133 Table_1.XLSX. **2019**,

132 Data_Sheet_1.PDF. **2020**,

131 Video_1.AVI. **2020**,

130 Table_1.xlsx. **2019**,

129 Table_2.xlsx. **2019**,

128 Data_Sheet_1.PDF. **2020**,

127 Optimization of a PDMS-Based Cell Culture Substrate for High-Density Human-Induced Pluripotent Stem Cell Adhesion and Long-Term Differentiation into Cardiomyocytes under a Xeno-Free Condition.. **2022**,

0

126 Self-Powered Pacemaker Based on All-in-One Flexible Piezoelectric Nanogenerator.

125 Partitioning of Small Hydrophobic Molecules into Polydimethylsiloxane in Microfluidic Analytical Devices. **2022**, 13, 713

1

124 On-Chip Chemical Synthesis Using One-Step 3D Printed Polyperfluoropolyether.

1

123 A guide to the organ-on-a-chip. **2022**, 2,

21

122 Staining-Free, In-Flow Enumeration of Tumor Cells in Blood Using Digital Holographic Microscopy and Deep Learning.

1

121 Freeze-Dried Microfluidic Monodisperse Microbubbles as a New Generation of Ultrasound Contrast Agents.. **2022**,

1

120 A Microfluidic Chip for Studies of the Dynamics of Antibiotic Resistance Selection in Bacterial Biofilms. **2022**, 12,

0

119 Microfluidics Platform for Studies of Peptide - Polyelectrolyte Interaction.. **2022**, 121785

0

118 Breaking through the Poisson Distribution: A compact high-efficiency droplet microfluidic system for single-bead encapsulation and digital immunoassay detection. **2022**, 114384

3

117 Shape and structural relaxation of colloidal tactoids.. **2022**, 13, 2778

0

116 Binding properties of flowing fibrin-targeted microbubbles evaluated with a thrombus-embedded microchannel.

1

- 115 Biomimetic Reusable Microfluidic Reactors with Physically-Immobilized RuBisCO for Glucose Precursor Production. 0
- 114 Fabrication of Microfluidic Chips Using Laser Click Deposition.
- 113 Self-Powered Pacemaker Based on All-in-one Flexible Piezoelectric Nanogenerator. **2022**, 107420 1
- 112 Slip slidin' away: Bristle-driven gliding by *Tetrademus deserticola* (chlorophyta) in microfluidic chambers 1.
- 111 Blood-brain barrier-on-a-chip for brain disease modeling and drug testing. **2022**, 55, 213-219 1
- 110 Granular Matrigel: Restructuring a Trusted Extracellular Matrix Material for Improved Permeability. 1
- 109 Enriching Cations Using Electric Field Gradients Generated by Bipolar Electrodes in the Absence of Buffer. **2022**, 9, 0
- 108 Simple, rapid, and visual electrochemiluminescence sensor for on-site catechol analysis. **2022**, 12, 17330-17336 0
- 107 Mechanics of Spontaneous Deformation in Nanomembranes: Theory, Simulations, and Experiments. **2022**, 143-191
- 106 Dissociation of polymeric micelle under hemodynamic shearing. **2022**, 45, 101517 0
- 105 Development of Micro/Nano Channels Using Electrospinning for Neural Differentiation of Cells. **2022**, 737-760
- 104 How to Get Away with Gradients. **2022**, 31-54
- 103 Widely accessible method for 3D microflow mapping at high spatial and temporal resolutions. **2022**, 8, 0
- 102 Advances in Organ-on-a-Chip Materials and Devices. 5
- 101 Irreversible bonding of PDMS-LiNbO₃ heterostructure for microfluidic application by stepwise plasma modification. **2022**, 128718
- 100 Liver-on-a-Chip devices: The Pros and Cons of Complexity. 0
- 99 Recent Advances in Microgels: From Biomolecules to Functionality. 2200180 2
- 98 Emulsion-templated microparticles with tunable stiffness and topology: Applications as edible microcarriers for cultured meat. **2022**, 287, 121669 0

97	Shape-selective remobilization of microparticles in a mesh-based DEP filter at high throughput. 2022 , 121792	0
96	Engineered Microphysiological Systems for Testing Effectiveness of Cell-Based Cancer Immunotherapies. 2022 , 14, 3561	2
95	New insights into sperm rheotaxis, agglutination and bundle formation in 'Sharkasi' chickens based on an in vitro study. 2022 , 12,	1
94	Microengineered devices enable long-term imaging of the ventral nerve cord in behaving adult <i>Drosophila</i> . 2022 , 13,	0
93	Toxicity of Trastuzumab for breast cancer spheroids: application of a novel on-a-chip concentration gradient generator. 2022 , 108590	
92	A Flexible and Attachable Colorimetric Film Sensor for the Detection of Gaseous Ammonia. 2022 , 12, 664	0
91	Optimization of microfluidic functionalization of a plasmonic-based device for selective capture of anti-folic acid in solution. 2022 , 12, 100226	
90	Responsive Hyaluronic Acid/Ethylacrylamide Microgels Fabricated Using Microfluidics Technique. 2022 , 8, 588	0
89	Hierarchical Self-Assembly of Dipolar ZnO Nanoparticles and Microdroplets. 2022 , 13, 1522	0
88	In-depth insights into the temporal-based fouling mechanism and its exploration in anaerobic membrane bioreactors: A review. 2022 , 375, 134110	0
87	Ion concentration polarization-based multifunctional microfluidic device for analysis of intracellular components. 2022 , 371, 132576	1
86	Self-shrinking soft demoulding for complex high-aspect-ratio microchannels. 2022 , 13,	1
85	Optimizing Immunofunctionalization and Cell Capture on Micromolded Hydrogels via Controlled Oxygen-Inhibited Photopolymerization.	0
84	Single-Cell Infection of Influenza A Virus Using Drop-Based Microfluidics.	1
83	Color balanced transparent luminescent solar concentrator based on a polydimethylsiloxane polymer waveguide with coexisting polar and non-polar fluorescent dyes. 2022 , 30, 37085	2
82	Microfluidics combined with fluorescence in situ hybridization (FISH) for <i>Candida</i> spp. detection. 10,	0
81	Application of Microfluidic Chips in the Detection of Airborne Microorganisms. 2022 , 13, 1576	0
80	Recent advances in microfluidic sensors for nutrients detection in water. 2022 , 116790	1

79	Microplastic particle trapping through microfluidic devices with different shaped pillars. 2022 , 118163	0
78	An integrated microfluidic system for cholangiocarcinoma diagnosis from bile by using specific affinity probes. 2022 , 373, 132724	0
77	Deep learning detector for high precision monitoring of cell encapsulation statistics in microfluidic droplets. 2022 , 22, 4067-4080	2
76	Automatic feedback control by image processing for mixing solutions in a microfluidic device. 2022 , 16, 054106	0
75	Biosensor integrated tissue chips and their applications on Earth and in space. 2022 , 114820	2
74	Towards a fully integrated sub-THz microfluidic sensor platform for dielectric spectroscopy. 2022 , 76, 685-697	0
73	Impact of Non-Muscle Cells on Excitation-Contraction Coupling in the Heart and the Importance of In Vitro Models. 2200117	0
72	Hybrid Microfluidic-Flow Injection System for Determining Copper(II) in Aqueous Solution by Homemade Microfluidic-Chip. 2022 , 19,	0
71	Differential contribution of nuclear size scaling mechanisms between <i>Xenopus</i> species.	1
70	Microfluidic Devices and Microfluidics-Integrated Electrochemical and Optical (Bio)Sensors for Pollution Analysis: A Review. 2022 , 14, 12844	0
69	Single-cell bacterial sequencing of invertible loci reveals promoter inversion rates as a strong determinant of population heterogeneity.	0
68	Single-cell sorting using integrated pneumatic valve droplet microfluidic chip. 2023 , 253, 124044	2
67	CMOS-based microanalysis systems. 2023 , 259-286	0
66	Organ-On-A-Chip Database Revealed Achieving the Human Avatar in Silicon. 2022 , 9, 685	0
65	Microfluidic preparation of composite hydrogel microparticles for the staining of microalgal cells. 2022 , 113026	0
64	Fabrication and Evaluation of Tubule-on-a-Chip with RPTEC/HUVEC Co-Culture Using Injection-Molded Polycarbonate Chips. 2022 , 13, 1932	0
63	Liver-on-a-chip: Considerations, advances, and beyond. 2022 , 16, 061502	2
62	One-step fabrication of multiphasic Janus microparticles with programmed degradation properties based on a microfluidic chip. 2023 , 225, 111516	0

- 61 Sorting of heterogeneous colloids by AC-dielectrophoretic forces in a microfluidic chip with asymmetric orifices. **2023**, 634, 921-929 ○
- 60 Lightweight polyester fabric with elastomeric bismuth titanate composite for high-performing lead-free X-ray shielding. **2023**, 205, 110726 ○
- 59 Chapter 10. Microfluidic Models of the Tumor Microenvironment. **2022**, 252-278 ○
- 58 Massively parallel single-cell sequencing of genetic loci in diverse microbial populations. ○
- 57 Development and Characterisation of a Whole Hybrid Sol-Gel Optofluidic Platform for Biosensing Applications. **2022**, 12, 4192 ○
- 56 Rapid Customization and Manipulation Mechanism of Micro-Droplet Chip for 3D Cell Culture. **2022**, 13, 2050 ○
- 55 Advances in surface modifications of the silicone breast implant and impact on its biocompatibility and biointegration. **2022**, 26, ○
- 54 Taking the Microfluidic Approach to Nucleic Acid Analysis in Forensics: Review and Perspectives. **2022**, 102824 ○
- 53 Highly sensitive β -galactosidase detection using streptavidin-display E. coli and lateral flow immunoassay. **2022**, 114114 ○
- 52 Hematocrit skewness along sequential bifurcations within a microfluidic network induces significant changes in downstream red blood cell partitioning. **2022**, 16, 064104 ○
- 51 Laser induced graphanized microfluidic devices. **2022**, 16, 061505 1
- 50 Microfluidics and Lab-on-a-Chip for Biomedical Applications. **2023**, 263-283 ○
- 49 Lab-on-a-Chip Devices for Medical Diagnosis II: Strategies for Pathogen Detection. **2023**, 285-298 ○
- 48 Animal Model Alternatives in Filovirus and Bornavirus Research. **2023**, 15, 158 ○
- 47 Less Is More: Oligomer Extraction and Hydrothermal Annealing Increase PDMS Adhesion Forces for Materials Studies and for Biology-Focused Microfluidic Applications. **2023**, 14, 214 ○
- 46 MIP-on-a-Chip: Artificial receptors on microfluidic platforms for biomedical applications. **2023**, 115257 ○
- 45 The role of von Willebrand factor in hemostasis pathology. **2023**, 12, 79-102 ○
- 44 Thermally mediated double emulsion droplets formation in a six-way junction microfluidic device. **2023**, 661, 130961 ○

- 43 Tie-Line Analysis Reveals Interactions Driving Heteromolecular Condensate Formation. **2022**, 12, ○
- 42 A Smartphone-Based Disposable Hemoglobin Sensor Based on Colorimetric Analysis. **2023**, 23, 394 ○
- 41 Droplet Detection and Sorting System in Microfluidics: A Review. **2023**, 14, 103 ○
- 40 Automated sample preparation for electrospray ionization mass spectrometry based on CLOCK-controlled autonomous centrifugal microfluidics. ○
- 39 Generation of rat offspring using spermatids produced through in vitro spermatogenesis. ○
- 38 Micro alcohol fuel cells towards autonomous electrochemical sensors. **2023**, 413-469 ○
- 37 Techniques and materials for the fabrication of microfluidic devices. **2023**, 1-36 ○
- 36 Microfluidic Mixer for In Situ Ammonia Analysis of Single Cells in Mass Spectrometry. **2023**, 95, 2321-2328 ○
- 35 Microfluidic Assisted Caenorhabditis elegans Sorting: Current Status and Future Prospects. ○
- 34 Conversion Electrode and Drive Capacitance for Connecting Microfluidic Devices and Triboelectric Nanogenerator. **2023**, 12, 522 ○
- 33 Organs-on-a-chip: a union of tissue engineering and microfabrication. **2023**, ○
- 32 Deep learning assisted holography microscopy for in-flow enumeration of tumor cells in blood. **2023**, 13, 4222-4235 ○
- 31 Effectiveness of organic solvents for recovering collapsed PDMS micropillar arrays. **2023**, 13, 4874-4879 ○
- 30 Multiple protein-patterned surface plasmon resonance biochip for the detection of human immunoglobulin-G. ○
- 29 Eye-on-a-chip. **2023**, 315-369 ○
- 28 Machine learning microfluidic based platform: Integration of Lab-on-Chip devices and data analysis algorithms for red blood cell plasticity evaluation in Pyruvate Kinase Disease monitoring. **2023**, 351, 114187 ○
- 27 Facile fabrication of microperforated membranes with re-useable SU-8 molds for organs-on-chips. **2023**, 5, 100026 ○
- 26 Microfabricated Multichannel Electrospray Ionization Emitters on Polydimethylsiloxane (PDMS) Microfluidic Devices. **2008**, 67-96 ○

25	Rapid Prototyping of Multi-Functional and Biocompatible Parafilm [®] -Based Microfluidic Devices by Laser Ablation and Thermal Bonding. 2023 , 14, 656	0
24	3D printed opto-microfluidic autonomous analyzer for photometric applications. 2023 , 14, e00406	0
23	Regenerative Medicine, Disease Modelling, and Drug Discovery in Human Pluripotent Stem Cell-Derived Kidney Tissue. 57-67	0
22	Resolving entropy contributions in nonequilibrium transitions. 2023 , 107,	0
21	Integrating CRISPR-Cas12a into a Microfluidic Dual-Droplet Device Enables Simultaneous Detection of HPV16 and HPV18. 2023 , 95, 3476-3485	2
20	Direct digital sensing of protein biomarkers in solution. 2023 , 14,	0
19	Hydrophobicity induced drag reduction: Perspectives from the slip length. 2023 , 133, 054701	0
18	Ultralow and Dynamic Flow Field Generator Composed of Microfluidic Peristaltic Pump. 2200366	0
17	A Preliminary Experimental Study of Polydimethylsiloxane (PDMS)-To-PDMS Bonding Using Oxygen Plasma Treatment Incorporating Isopropyl Alcohol. 2023 , 15, 1006	1
16	Integrated Glass Microfluidics with Electrochemical Nanogap Electrodes. 2023 , 95, 4266-4270	0
15	Recent advances in microfluidics for single-cell functional proteomics. 2023 , 23, 1726-1751	0
14	Design and Fabrication of a Fully-Integrated, Miniaturised Fluidic System for the Analysis of Enzyme Kinetics. 2023 , 14, 537	0
13	dCas9-Mediated PCR-Free Detection of Oncogenic Mutation by Nonequilibrium Nanoelectrokinetic Selective Preconcentration. 2023 , 95, 5045-5052	0
12	Microfabrication approaches for oral research and clinical dentistry. 4,	0
11	Preparation and promising optoelectronic applications of lead halide perovskite patterned structures: A review.	0
10	Rectifying jet breakup by electric forcing. 2023 , 2,	0
9	Continuous flow microfluidics for colloidal particle assembly on porous substrates. 2023 , 19, 2564-2569	0
8	Penetration Coefficients of Commercial Nanolimes and a Liquid Mineral Precursor for Pore-Imitating Test SystemsPredictability of Infiltration Behavior. 2023 , 16, 2506	0

- 7 Measuring Encapsulation Efficiency in Cell-Mimicking Giant Unilamellar Vesicles. **2023**, 12, 1227-1238 o
- 6 First Experimental Evidence of Anti-Stokes Laser-Induced Fluorescence Emission in Microdroplets and Microfluidic Systems Driven by Low Thermal Conductivity of Fluorocarbon Carrier Oil. **2023**, 14, 765 o
- 5 AC-electric-field-controlled multi-component droplet coalescence at microscale. o
- 4 AI in microfabrication technology. **2023**, 213-239 o
- 3 Microfluidics and Cancer Treatment: Emerging Concept of Biomedical Engineering. **2023**, 523-562 o
- 2 A workcell 1.0 for programmable and controlled operation of multiple fluidic chips in parallel. o
- 1 Single-step fabrication of superhydrophobic surfaces by two-photon polymerization micro 3D printing. **2023**, 19, 100192 o