Emmanuel Delamarche

List of Publications by Year
in descending order

142 papers	13,856 citations	20797 60 h-index	20343 116 g-index
154 all docs	154 docs citations	154 times ranked	10916 citing authors

#	Article	IF	Citations
1	Largeâ€Scale Dried Reagent Reconstitution and Diffusion Control Using Microfluidic Selfâ€Coalescence Modules. Small, 2022, 18, e2105939.	5.2	4
2	Rapid quantitative assays for glucose-6-phosphate dehydrogenase (G6PD) and hemoglobin combined on a capillary-driven microfluidic chip. Lab on A Chip, 2021, 21, 3573-3582.	3.1	4
3	Capillary Microfluidics for Monitoring Medication Adherence. Angewandte Chemie, 2021, 133, 17928-17940.	1.6	0
4	Capillary Microfluidics for Monitoring Medication Adherence. Angewandte Chemie - International Edition, 2021, 60, 17784-17796.	7.2	8
5	Methods for immobilizing receptors in microfluidic devices: A review. Micro and Nano Engineering, 2021, 11, 100085.	1.4	25
6	Biopatterning: The Art of Patterning Biomolecules on Surfaces. Langmuir, 2021, 37, 9637-9651.	1.6	16
7	Microscale Interfacial Polymerization on a Chip. Angewandte Chemie - International Edition, 2021, 60, 24064-24069.	7.2	5
8	Nanodiagnostics to Face SARS-CoV-2 and Future Pandemics: From an Idea to the Market and Beyond. ACS Nano, 2021, 15, 17137-17149.	7.3	32
9	Transposing Lateral Flow Immunoassays to Capillary-Driven Microfluidics Using Self-Coalescence Modules and Capillary-Assembled Receptor Carriers. Analytical Chemistry, 2020, 92, 940-946.	3.2	40
10	Complex Nucleic Acid Hybridization Reactions inside Capillaryâ€Driven Microfluidic Chips. Small, 2020, 16, e2005476.	5.2	10
11	Electro-actuated valves and self-vented channels enable programmable flow control and monitoring in capillary-driven microfluidics. Science Advances, 2020, 6, eaay8305.	4.7	25
12	Crypto anchors. IBM Journal of Research and Development, 2019, 63, 4:1-4:12.	3.2	15
13	Immuno-gold silver staining assays on capillary-driven microfluidics for the detection of malaria antigens. Biomedical Microdevices, 2019, 21, 24.	1.4	16
14	Programmable hydraulic resistor for microfluidic chips using electrogate arrays. Scientific Reports, 2019, 9, 17242.	1.6	5
15	Self-coalescing flows in microfluidics for pulse-shaped delivery of reagents. Nature, 2019, 574, 228-232.	13.7	55
16	Electrogates for stop-and-go control of liquid flow in microfluidics. Applied Physics Letters, 2018, 112, .	1.5	17
17	Single-Cell Analysis with the BioPen. , 2018, , 187-219.		0
18	Development of Pipettes as Mobile Nanofluidic Devices for Mass Spectrometric Analysis. , 2018, , 273-293.		0

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19	Hierarchical Hydrodynamic Flow Confinement (hHFC) and Recirculation for Performing Microscale Chemistry on Surfaces. , 2018, , 21-45.		0
20	Hele-Shaw Flow Theory in the Context of Open Microfluidics: From Dipoles to Quadrupoles. , 2018, , 63-82.		1
21	Hydrodynamic Flow Confinement-Assisted Immunohistochemistry from Micrometer to Millimeter Scale. , 2018, , 101-114.		0
22	Microfluidic Probe for Neural Organotypic Brain Tissue and Cell Perfusion. , 2018, , 139-154.		0
23	The Multifunctional Pipette. , 2018, , 155-185.		0
24	A bead-based immunogold-silver staining assay on capillary-driven microfluidics. Biomedical Microdevices, 2018, 20, 41.	1.4	13
25	Malaria and the â€˜lastâ€™ parasite: how can technology help?. Malaria Journal, 2018, 17, 260.	0.8	32
26	Sub-nanoliter, real-time flow monitoring in microfluidic chips using a portable device and smartphone. Scientific Reports, 2018, 8, 10603.	1.6	42
27	High-Content Optical Codes for Protecting Rapid Diagnostic Tests from Counterfeiting. Analytical Chemistry, 2018, 90, 7383-7390.	3.2	17
28	Chemiluminescence generation and detection in a capillary-driven microfluidic chip. Proceedings of SPIE, 2017, , .	0.8	4
29	Capillary-Driven Microfluidic Chips for Miniaturized Immunoassays: Efficient Fabrication and Sealing of Chips Using a â€œChip-Olateâ€• Process. Methods in Molecular Biology, 2017, 1547, 25-36.	0.4	3
30	Capillary-Driven Microfluidic Chips for Miniaturized Immunoassays: Patterning Capture Antibodies Using Microcontact Printing and Dry-Film Resists. Methods in Molecular Biology, 2017, 1547, 37-47.	0.4	2
31	Mesenchymal stem cells from tumor microenvironment favour breast cancer stem cell proliferation, cancerogenic and metastatic potential, via ionotropic purinergic signalling. Scientific Reports, 2017, 7, 13162.	1.6	44
32	Dielectrophoretic microbead sorting using modular electrode design and capillary-driven microfluidics. Biomedical Microdevices, 2017, 19, 95.	1.4	8
33	Precision Diagnostics for Mobile Health Using Capillary-driven Microfluidics. Chimia, 2017, 71, 385.	0.3	3
34	Selective local lysis and sampling of live cells for nucleic acid analysis using a microfluidic probe. Scientific Reports, 2016, 6, 29579.	1.6	41
35	Single-bead arrays for fluorescence-based immunoassays on capillary-driven microfluidic chips. , 2016, , .		1
36	Arraying single microbeads in microchannels using dielectrophoresis-assisted mechanical traps. Applied Physics Letters, 2015, 107, 204102.	1.5	5

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37	Lab-on-a-chip devices: How to close and plug the lab?. Microelectronic Engineering, 2015, 132, 156-175.	1.1	388
38	â€˜Chip-olateâ€™ and dry-film resists for efficient fabrication, singulation and sealing of microfluidic chips. Journal of Micromechanics and Microengineering, 2014, 24, 097001.	1.5	21
39	The floating microfluidic probe: Distance control between probe and sample using hydrodynamic levitation. Applied Physics Letters, 2014, 104, 263501.	1.5	6
40	A compact and versatile microfluidic probe for local processing of tissue sections and biological specimens. Review of Scientific Instruments, 2014, 85, 034301.	0.6	16
41	Capillary-driven microfluidic chips with evaporation-induced flow control and dielectrophoretic microbead trapping. Proceedings of SPIE, 2014, , .	0.8	2
42	Capillary-driven microfluidic chips with evaporation-induced flow control and dielectrophoretic microbead trapping. Journal of Micro/ Nanolithography, MEMS, and MOEMS, 2014, 13, 033018.	1.0	6
43	Heterogeneous integration of gels into microfluidics using a mesh carrier. Biomedical Microdevices, 2014, 16, 829-835.	1.4	4
44	Hierarchical Hydrodynamic Flow Confinement: Efficient Use and Retrieval of Chemicals for Microscale Chemistry on Surfaces. Langmuir, 2014, 30, 3640-3645.	1.6	40
45	Reagents in microfluidics: an â€˜inâ€™ and â€˜outâ€™ challenge. Chemical Society Reviews, 2013, 42, 8494.	18.7	71
46	Pharmacology on microfluidics: multimodal analysis for studying cellâ€“cell interaction. Current Opinion in Pharmacology, 2013, 13, 821-828.	1.7	10
47	Flockâ€Based Microfluidics. Advanced Materials, 2013, 25, 2672-2676.	11.1	20
48	Advanced Capillary Soft Valves for Flow Control in Self-Driven Microfluidics. Micromachines, 2013, 4, 1-8.	1.4	10
49	Microfluidics in the â€œOpen Spaceâ€•for Performing Localized Chemistry on Biological Interfaces. Angewandte Chemie - International Edition, 2012, 51, 11224-11240.	7.2	115
50	Micro-immunohistochemistry using a microfluidic probe. Lab on A Chip, 2012, 12, 1040.	3.1	63
51	Overflow Microfluidic Networks: Application to the Biochemical Analysis of Brain Cell Interactions in Complex Neuroinflammatory Scenarios. Analytical Chemistry, 2012, 84, 9833-9840.	3.2	25
52	Nanopatterning Reveals an ECM Area Threshold for Focal Adhesion Assembly and Force Transmission that is regulated by Integrin Activation and Cytoskeleton Tension. Journal of Cell Science, 2012, 125, 5110-23.	1.2	111
53	Capillary soft valves for microfluidics. Lab on A Chip, 2012, 12, 1972.	3.1	43
54	Controlled release of reagents in capillary-driven microfluidics using reagent integrators. Lab on A Chip, 2011, 11, 2680.	3.1	38

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55	A Vertical Microfluidic Probe. Langmuir, 2011, 27, 5686-5693.	1.6	101
56	Capillary-driven multiparametric microfluidic chips for one-step immunoassays. Biosensors and Bioelectronics, 2011, 27, 64-70.	5.3	73
57	High-grade optical polydimethylsiloxane for microfluidic applications. Biomedical Microdevices, 2011, 13, 1027-1032.	1.4	9
58	Protein Tethering into Multiscale Geometries by Covalent Subtractive Printing. Advanced Materials, 2011, 23, 1550-1553.	11.1	12
59	Microfluidic Chips for Pointâ€ofâ€Care Immunodiagnostics. Advanced Materials, 2011, 23, H151-76.	11.1	415
60	Microfluidic Diagnostic Devices: Microfluidic Chips for Pointâ€ofâ€Care Immunodiagnostics (Adv. Mater.) Tj ETQq0 0 0 rgBT /Overlock 1	11.1	7
61	A method to characterize pattern density effects: chemical flare and develop loading. Proceedings of SPIE, 2010, , .	0.8	4
62	A microfluidic device for depositing and addressing two cell populations with intercellular population communication capability. Biomedical Microdevices, 2010, 12, 275-282.	1.4	17
63	Largeâ€Scale Arrays of Aligned Single Viruses. Advanced Materials, 2010, 22, 111-114.	11.1	12
64	Two complementary methods to characterize long range proximity effects due to develop loading. , 2010, , .		3
65	Overflow Microfluidic Networks for Open and Closed Cell Cultures on Chip. Analytical Chemistry, 2010, 82, 3936-3942.	3.2	18
66	Multilayered microfluidic probe heads. Journal of Micromechanics and Microengineering, 2009, 19, 115006.	1.5	23
67	Autonomous capillary system for one-step immunoassays. Biomedical Microdevices, 2009, 11, 1-8.	1.4	39
68	Controlled deposition of cells in sealed microfluidics using flow velocity boundaries. Lab on A Chip, 2009, 9, 1395.	3.1	14
69	Toward one-step point-of-care immunodiagnostics using capillary-driven microfluidics and PDMS substrates. Lab on A Chip, 2009, 9, 3330.	3.1	302
70	Cellular microarrays for use with capillary-driven microfluidics. Analytical and Bioanalytical Chemistry, 2008, 390, 801-808.	1.9	22
71	Valves for autonomous capillary systems. Microfluidics and Nanofluidics, 2008, 5, 395-402.	1.0	140
72	High-Performance Immunoassays Based on Through-Stencil Patterned Antibodies and Capillary Systems. Analytical Chemistry, 2008, 80, 1763-1769.	3.2	40

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73	Microcontact Processing for Microtechnology and Biology. Chimia, 2007, 61, 126-132.	0.3	6
74	Controlled Particle Placement through Convective and Capillary Assembly. Langmuir, 2007, 23, 11513-11521.	1.6	332
75	Capillary pumps for autonomous capillary systems. Lab on A Chip, 2007, 7, 119-125.	3.1	308
76	Facile Preparation of Complex Protein Architectures with Sub-100-nm Resolution on Surfaces. Angewandte Chemie - International Edition, 2007, 46, 6837-6840.	7.2	112
77	Screening cell surface receptors using micromosaic immunoassays. Biomedical Microdevices, 2007, 9, 135-141.	1.4	16
78	Multipurpose microfluidic probe. Nature Materials, 2005, 4, 622-628.	13.3	193
79	Microfluidics for Processing Surfaces and Miniaturizing Biological Assays. Advanced Materials, 2005, 17, 2911-2933.	11.1	231
80	Closing the Gap Between Self-Assembly and Microsystems Using Self-Assembly, Transfer, and Integration of Particles. Advanced Materials, 2005, 17, 2438-2442.	11.1	73
81	Modeling and Optimization of High-Sensitivity, Low-Volume Microfluidic-Based Surface Immunoassays. Biomedical Microdevices, 2005, 7, 99-110.	1.4	151
82	Continuous flow in open microfluidics using controlled evaporation. Lab on A Chip, 2005, 5, 1355.	3.1	78
83	Diffusion of Alkanethiols in PDMS and Its Implications on Microcontact Printing (Î¼CP). Langmuir, 2005, 21, 622-632.	1.6	61
84	Microcontact Printing of Proteins Inside Microstructures. Langmuir, 2005, 21, 11296-11303.	1.6	43
85	Microcontact Printing of Proteins. , 2005, , 31-52.		4
86	Simultaneous detection of C-reactive protein and other cardiac markers in human plasma using micromosaic immunoassays and self-regulating microfluidic networks. Biosensors and Bioelectronics, 2004, 19, 1193-1202.	5.3	172
87	High-sensitivity miniaturized immunoassays for tumor necrosis factor ? using microfluidic systems. Lab on A Chip, 2004, 4, 563.	3.1	193
88	Selective wet-etching of microcontact-printed Cu substrates with control over the etch profile. Microelectronic Engineering, 2003, 67-68, 326-332.	1.1	17
89	Preparation of Metallic Films on Elastomeric Stamps and Their Application for Contact Processing and Contact Printing. Advanced Functional Materials, 2003, 13, 145-153.	7.8	141
90	Self-Assembled Microarrays of Attoliter Molecular Vessels. Angewandte Chemie - International Edition, 2003, 42, 5580-5583.	7.2	198

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91	Fabrication of Metal Nanowires Using Microcontact Printing. Langmuir, 2003, 19, 6301-6311.	1.6	126
92	Fabricating Arrays of Single Protein Molecules on Glass Using Microcontact Printing. Journal of Physical Chemistry B, 2003, 107, 703-711.	1.2	196
93	Electroless Deposition of NiB on 15 Inch Glass Substrates for the Fabrication of Transistor Gates for Liquid Crystal Displays. Langmuir, 2003, 19, 5923-5935.	1.6	38
94	Electroless Deposition of Cu on Glass and Patterning with Microcontact Printing. Langmuir, 2003, 19, 6567-6569.	1.6	54
95	Patterning NiB Electroless Deposited on Glass Using an Electroplated Cu Mask, Microcontact Printing, and Wet Etching. Langmuir, 2003, 19, 5892-5897.	1.6	21
96	Direct Patterning of NiB on Glass Substrates Using Microcontact Printing and Electroless Deposition. Langmuir, 2003, 19, 6283-6296.	1.6	39
97	Microcontact Printing Using Poly(dimethylsiloxane) Stamps Hydrophilized by Poly(ethylene oxide) Silanes. Langmuir, 2003, 19, 8749-8758.	1.6	150
98	Printing Meets Lithography: Soft Approaches to High-Resolution Patterning. Chimia, 2002, 56, 527-542.	0.3	33
99	Positive Microcontact Printing. Journal of the American Chemical Society, 2002, 124, 3834-3835.	6.6	62
100	Self-Assembled Monolayers of Eicosanethiol on Palladium and Their Use in Microcontact Printing. Langmuir, 2002, 18, 2406-2412.	1.6	79
101	Defect-Tolerant and Directional Wet-Etch Systems for Using Monolayers as Resists. Langmuir, 2002, 18, 2374-2377.	1.6	84
102	Autonomous Microfluidic Capillary System. Analytical Chemistry, 2002, 74, 6139-6144.	3.2	372
103	Fabricating Microarrays of Functional Proteins Using Affinity Contact Printing. Angewandte Chemie - International Edition, 2002, 41, 2320-2323.	7.2	146
104	Microfluidic Capillary Systems for The Autonomous Transport of Bio/Chemicals. , 2002, , 952-954.		4
105	Printing meets lithography: Soft approaches to high-resolution patterning. IBM Journal of Research and Development, 2001, 45, 697-719.	3.2	450
106	Microfluidic Networks Made of Poly(dimethylsiloxane), Si, and Au Coated with Polyethylene Glycol for Patterning Proteins onto Surfaces. Langmuir, 2001, 17, 4090-4095.	1.6	161
107	Micromosaic Immunoassays. Analytical Chemistry, 2001, 73, 8-12.	3.2	321
108	Hydrophilic Poly(dimethylsiloxane) Stamps for Microcontact Printing. Advanced Materials, 2001, 13, 1164-1167.	11.1	169

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109	Affinity capture of proteins from solution and their dissociation by contact printing. Nature Biotechnology, 2001, 19, 866-869.	9.4	127
110	Soft and rigid two-level microfluidic networks for patterning surfaces. Journal of Micromechanics and Microengineering, 2001, 11, 532-541.	1.5	60
111	Microcontact Printing of Proteins. Advanced Materials, 2000, 12, 1067-1070.	11.1	557
112	Formation of Gradients of Proteins on Surfaces with Microfluidic Networks. Langmuir, 2000, 16, 9125-9130.	1.6	71
113	Stress at the Solidâˆ'Liquid Interface of Self-Assembled Monolayers on Gold Investigated with a Nanomechanical Sensor. Langmuir, 2000, 16, 9694-9696.	1.6	109
114	Patterned Electroless Deposition of Copper by Microcontact Printing Palladium(II) Complexes on Titanium-Covered Surfaces. Langmuir, 2000, 16, 6367-6373.	1.6	77
115	Microcontact-Printing Chemical Patterns with Flat Stamps. Journal of the American Chemical Society, 2000, 122, 6303-6304.	6.6	88
116	Microcontact Printing of Proteins. Advanced Materials, 2000, 12, 1067-1070.	11.1	24
117	Surface potential studies of self-assembling monolayers using Kelvin probe force microscopy. Surface and Interface Analysis, 1999, 27, 368-373.	0.8	29
118	Kelvin Probe Force Microscopy on Surfaces:Â Investigation of the Surface Potential of Self-Assembled Monolayers on Gold. Langmuir, 1999, 15, 8184-8188.	1.6	168
119	Contact-Inking Stamps for Microcontact Printing of Alkanethiols on Gold. Langmuir, 1999, 15, 300-304.	1.6	177
120	Surface stress in the self-assembly of alkanethiols on gold probed .by a force microscopy technique. Applied Physics A: Materials Science and Processing, 1998, 66, S55-S59.	1.1	76
121	Printing Patterns of Proteins. Langmuir, 1998, 14, 2225-2229.	1.6	514
122	Microfluidic Networks for Chemical Patterning of Substrates:Â Design and Application to Bioassays. Journal of the American Chemical Society, 1998, 120, 500-508.	6.6	396
123	Transport Mechanisms of Alkanethiols during Microcontact Printing on Gold. Journal of Physical Chemistry B, 1998, 102, 3324-3334.	1.2	242
124	Lithography beyond light: Microcontact printing with monolayer resists. IBM Journal of Research and Development, 1997, 41, 159-170.	3.2	193
125	Order in Microcontact Printed Self-Assembled Monolayers. Journal of the American Chemical Society, 1997, 119, 3017-3026.	6.6	158
126	Making Gold Nanostructures Using Self-Assembled Monolayers and a Scanning Tunneling Microscope. Journal of Physical Chemistry B, 1997, 101, 9263-9269.	1.2	28

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127	Patterned Delivery of Immunoglobulins to Surfaces Using Microfluidic Networks. Science, 1997, 276, 779-781.	6.0	673
128	Surface Stress in the Self-Assembly of Alkanethiols on Gold. Science, 1997, 276, 2021-2024.	6.0	501
129	Stability of molded polydimethylsiloxane microstructures. Advanced Materials, 1997, 9, 741-746.	11.1	331
130	Immobilization of Antibodies on a Photoactive Self-Assembled Monolayer on Gold. Langmuir, 1996, 12, 1997-2006.	1.6	158
131	Structure and stability of self-assembled monolayers. Thin Solid Films, 1996, 273, 54-60.	0.8	53
132	Golden interfaces: The Surface of Self-Assembled Monolayers. Advanced Materials, 1996, 8, 719-729.	11.1	303
133	Recognition of Individual Tail Groups in Self-Assembled Monolayers. Langmuir, 1995, 11, 3876-3881.	1.6	99
134	End-Group-Dominated Molecular Order in Self-Assembled Monolayers. The Journal of Physical Chemistry, 1995, 99, 7102-7107.	2.9	140
135	Domain and Molecular Superlattice Structure of Dodecanethiol Self-Assembled on Au(111). Europhysics Letters, 1994, 27, 365-370.	0.7	86
136	Thermal Stability of Self-Assembled Monolayers. Langmuir, 1994, 10, 4103-4108.	1.6	260
137	Real-Space Observation of Nanoscale Molecular Domains in Self-Assembled Monolayers. Langmuir, 1994, 10, 2869-2871.	1.6	262
138	Structure of Hydrophilic Self-Assembled Monolayers: A Combined Scanning Tunneling Microscopy and Computer Simulation Study. Langmuir, 1994, 10, 4116-4130.	1.6	128
139	Microfluidic Probes for Single-Cell Proteomic Analysis. , 0, , 221-248.		0
140	Microfluidic Probes for Scanning Electrochemical Microscopy. , 0, , 373-390.		0
141	Chemistrode for High Temporal- and Spatial-Resolution Chemical Analysis. , 0, , 391-410.		0
142	Microscale interfacial polymerization on a chip. Angewandte Chemie, 0, , .	1.6	0