Emmanuel Delamarche

List of Publications by Year
in descending order

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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	Patterned Delivery of Immunoglobulins to Surfaces Using Microfluidic Networks. Science, 1997, 276, 779-781.	6.0	673
2	Microcontact Printing of Proteins. Advanced Materials, 2000, 12, 1067-1070.	11.1	557
3	Printing Patterns of Proteins. Langmuir, 1998, 14, 2225-2229.	1.6	514
4	Surface Stress in the Self-Assembly of Alkanethiols on Gold. Science, 1997, 276, 2021-2024.	6.0	501
5	Printing meets lithography: Soft approaches to high-resolution patterning. IBM Journal of Research and Development, 2001, 45, 697-719.	3.2	450
6	Microfluidic Chips for Pointâ€ofâ€Care Immunodiagnostics. Advanced Materials, 2011, 23, H151-76.	11.1	415
7	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
8	Lab-on-a-chip devices: How to close and plug the lab?. Microelectronic Engineering, 2015, 132, 156-175.	1.1	388
9	Autonomous Microfluidic Capillary System. Analytical Chemistry, 2002, 74, 6139-6144.	3.2	372
10	Controlled Particle Placement through Convective and Capillary Assembly. Langmuir, 2007, 23, 11513-11521.	1.6	332
11	Stability of molded polydimethylsiloxane microstructures. Advanced Materials, 1997, 9, 741-746.	11.1	331
12	Micromosaic Immunoassays. Analytical Chemistry, 2001, 73, 8-12.	3.2	321
13	Capillary pumps for autonomous capillary systems. Lab on A Chip, 2007, 7, 119-125.	3.1	308
14	Golden interfaces: The Surface of Self-Assembled Monolayers. Advanced Materials, 1996, 8, 719-729.	11.1	303
15	Toward one-step point-of-care immunodiagnostics using capillary-driven microfluidics and PDMS substrates. Lab on A Chip, 2009, 9, 3330.	3.1	302
16	Real-Space Observation of Nanoscale Molecular Domains in Self-Assembled Monolayers. Langmuir, 1994, 10, 2869-2871.	1.6	262
17	Thermal Stability of Self-Assembled Monolayers. Langmuir, 1994, 10, 4103-4108.	1.6	260
18	Transport Mechanisms of Alkanethiols during Microcontact Printing on Gold. Journal of Physical Chemistry B, 1998, 102, 3324-3334.	1.2	242

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19	Microfluidics for Processing Surfaces and Miniaturizing Biological Assays. Advanced Materials, 2005, 17, 2911-2933.	11.1	231
20	Self-Assembled Microarrays of Attoliter Molecular Vessels. Angewandte Chemie - International Edition, 2003, 42, 5580-5583.	7.2	198
21	Fabricating Arrays of Single Protein Molecules on Glass Using Microcontact Printing. Journal of Physical Chemistry B, 2003, 107, 703-711.	1.2	196
22	Lithography beyond light: Microcontact printing with monolayer resists. IBM Journal of Research and Development, 1997, 41, 159-170.	3.2	193
23	High-sensitivity miniaturized immunoassays for tumor necrosis factor ? using microfluidic systems. Lab on A Chip, 2004, 4, 563.	3.1	193
24	Multipurpose microfluidic probe. Nature Materials, 2005, 4, 622-628.	13.3	193
25	Contact-Inking Stamps for Microcontact Printing of Alkanethiols on Gold. Langmuir, 1999, 15, 300-304.	1.6	177
26	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
27	Hydrophilic Poly(dimethylsiloxane) Stamps for Microcontact Printing. Advanced Materials, 2001, 13, 1164-1167.	11.1	169
28	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
29	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
30	Immobilization of Antibodies on a Photoactive Self-Assembled Monolayer on Gold. Langmuir, 1996, 12, 1997-2006.	1.6	158
31	Order in Microcontact Printed Self-Assembled Monolayers. Journal of the American Chemical Society, 1997, 119, 3017-3026.	6.6	158
32	Modeling and Optimization of High-Sensitivity, Low-Volume Microfluidic-Based Surface Immunoassays. Biomedical Microdevices, 2005, 7, 99-110.	1.4	151
33	Microcontact Printing Using Poly(dimethylsiloxane) Stamps Hydrophilized by Poly(ethylene oxide) Silanes. Langmuir, 2003, 19, 8749-8758.	1.6	150
34	Fabricating Microarrays of Functional Proteins Using Affinity Contact Printing. Angewandte Chemie - International Edition, 2002, 41, 2320-2323.	7.2	146
35	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
36	End-Group-Dominated Molecular Order in Self-Assembled Monolayers. The Journal of Physical Chemistry, 1995, 99, 7102-7107.	2.9	140

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37	Valves for autonomous capillary systems. Microfluidics and Nanofluidics, 2008, 5, 395-402.	1.0	140
38	Structure of Hydrophilic Self-Assembled Monolayers: A Combined Scanning Tunneling Microscopy and Computer Simulation Study. Langmuir, 1994, 10, 4116-4130.	1.6	128
39	Affinity capture of proteins from solution and their dissociation by contact printing. Nature Biotechnology, 2001, 19, 866-869.	9.4	127
40	Fabrication of Metal Nanowires Using Microcontact Printing. Langmuir, 2003, 19, 6301-6311.	1.6	126
41	Microfluidics in the â€œOpen Spaceâ€•for Performing Localized Chemistry on Biological Interfaces. Angewandte Chemie - International Edition, 2012, 51, 11224-11240.	7.2	115
42	Facile Preparation of Complex Protein Architectures with Sub-100-nm Resolution on Surfaces. Angewandte Chemie - International Edition, 2007, 46, 6837-6840.	7.2	112
43	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
44	Stress at the Solidâ^'Liquid Interface of Self-Assembled Monolayers on Gold Investigated with a Nanomechanical Sensor. Langmuir, 2000, 16, 9694-9696.	1.6	109
45	A Vertical Microfluidic Probe. Langmuir, 2011, 27, 5686-5693.	1.6	101
46	Recognition of Individual Tail Groups in Self-Assembled Monolayers. Langmuir, 1995, 11, 3876-3881.	1.6	99
47	Microcontact-Printing Chemical Patterns with Flat Stamps. Journal of the American Chemical Society, 2000, 122, 6303-6304.	6.6	88
48	Domain and Molecular Superlattice Structure of Dodecanethiol Self-Assembled on Au(111). Europhysics Letters, 1994, 27, 365-370.	0.7	86
49	Defect-Tolerant and Directional Wet-Etch Systems for Using Monolayers as Resists. Langmuir, 2002, 18, 2374-2377.	1.6	84
50	Self-Assembled Monolayers of Eicosanethiol on Palladium and Their Use in Microcontact Printing. Langmuir, 2002, 18, 2406-2412.	1.6	79
51	Continuous flow in open microfluidics using controlled evaporation. Lab on A Chip, 2005, 5, 1355.	3.1	78
52	Patterned Electroless Deposition of Copper by Microcontact Printing Palladium(II) Complexes on Titanium-Covered Surfaces. Langmuir, 2000, 16, 6367-6373.	1.6	77
53	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
54	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

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55	Capillary-driven multiparametric microfluidic chips for one-step immunoassays. Biosensors and Bioelectronics, 2011, 27, 64-70.	5.3	73
56	Formation of Gradients of Proteins on Surfaces with Microfluidic Networks. Langmuir, 2000, 16, 9125-9130.	1.6	71
57	Reagents in microfluidics: an â€˜inâ€™ and â€˜outâ€™ challenge. Chemical Society Reviews, 2013, 42, 8494.	18.7	71
58	Micro-immunohistochemistry using a microfluidic probe. Lab on A Chip, 2012, 12, 1040.	3.1	63
59	Positive Microcontact Printing. Journal of the American Chemical Society, 2002, 124, 3834-3835.	6.6	62
60	Diffusion of Alkanethiols in PDMS and Its Implications on Microcontact Printing (Î¼CP). Langmuir, 2005, 21, 622-632.	1.6	61
61	Soft and rigid two-level microfluidic networks for patterning surfaces. Journal of Micromechanics and Microengineering, 2001, 11, 532-541.	1.5	60
62	Self-coalescing flows in microfluidics for pulse-shaped delivery of reagents. Nature, 2019, 574, 228-232.	13.7	55
63	Electroless Deposition of Cu on Glass and Patterning with Microcontact Printing. Langmuir, 2003, 19, 6567-6569.	1.6	54
64	Structure and stability of self-assembled monolayers. Thin Solid Films, 1996, 273, 54-60.	0.8	53
65	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
66	Microcontact Printing of Proteins Inside Microstructures. Langmuir, 2005, 21, 11296-11303.	1.6	43
67	Capillary soft valves for microfluidics. Lab on A Chip, 2012, 12, 1972.	3.1	43
68	Sub-nanoliter, real-time flow monitoring in microfluidic chips using a portable device and smartphone. Scientific Reports, 2018, 8, 10603.	1.6	42
69	Selective local lysis and sampling of live cells for nucleic acid analysis using a microfluidic probe. Scientific Reports, 2016, 6, 29579.	1.6	41
70	High-Performance Immunoassays Based on Through-Stencil Patterned Antibodies and Capillary Systems. Analytical Chemistry, 2008, 80, 1763-1769.	3.2	40
71	Hierarchical Hydrodynamic Flow Confinement: Efficient Use and Retrieval of Chemicals for Microscale Chemistry on Surfaces. Langmuir, 2014, 30, 3640-3645.	1.6	40
72	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

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73	Direct Patterning of NiB on Glass Substrates Using Microcontact Printing and Electroless Deposition. Langmuir, 2003, 19, 6283-6296.	1.6	39
74	Autonomous capillary system for one-step immunoassays. Biomedical Microdevices, 2009, 11, 1-8.	1.4	39
75	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
76	Controlled release of reagents in capillary-driven microfluidics using reagent integrators. Lab on A Chip, 2011, 11, 2680.	3.1	38
77	Printing Meets Lithography: Soft Approaches to High-Resolution Patterning. Chimia, 2002, 56, 527-542.	0.3	33
78	Malaria and the â€˜lastâ€™ parasite: how can technology help?. Malaria Journal, 2018, 17, 260.	0.8	32
79	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
80	Surface potential studies of self-assembling monolayers using Kelvin probe force microscopy. Surface and Interface Analysis, 1999, 27, 368-373.	0.8	29
81	Making Gold Nanostructures Using Self-Assembled Monolayers and a Scanning Tunneling Microscope. Journal of Physical Chemistry B, 1997, 101, 9263-9269.	1.2	28
82	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
83	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
84	Methods for immobilizing receptors in microfluidic devices: A review. Micro and Nano Engineering, 2021, 11, 100085.	1.4	25
85	Microcontact Printing of Proteins. Advanced Materials, 2000, 12, 1067-1070.	11.1	24
86	Multilayered microfluidic probe heads. Journal of Micromechanics and Microengineering, 2009, 19, 115006.	1.5	23
87	Cellular microarrays for use with capillary-driven microfluidics. Analytical and Bioanalytical Chemistry, 2008, 390, 801-808.	1.9	22
88	Patterning NiB Electroless Deposited on Glass Using an Electroplated Cu Mask, Microcontact Printing, and Wet Etching. Langmuir, 2003, 19, 5892-5897.	1.6	21
89	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
90	Flockâ€Based Microfluidics. Advanced Materials, 2013, 25, 2672-2676.	11.1	20

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91	Overflow Microfluidic Networks for Open and Closed Cell Cultures on Chip. Analytical Chemistry, 2010, 82, 3936-3942.	3.2	18
92	Selective wet-etching of microcontact-printed Cu substrates with control over the etch profile. Microelectronic Engineering, 2003, 67-68, 326-332.	1.1	17
93	A microfluidic device for depositing and addressing two cell populations with intercellular population communication capability. Biomedical Microdevices, 2010, 12, 275-282.	1.4	17
94	Electrogates for stop-and-go control of liquid flow in microfluidics. Applied Physics Letters, 2018, 112, .	1.5	17
95	High-Content Optical Codes for Protecting Rapid Diagnostic Tests from Counterfeiting. Analytical Chemistry, 2018, 90, 7383-7390.	3.2	17
96	Screening cell surface receptors using micromosaic immunoassays. Biomedical Microdevices, 2007, 9, 135-141.	1.4	16
97	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
98	Immuno-gold silver staining assays on capillary-driven microfluidics for the detection of malaria antigens. Biomedical Microdevices, 2019, 21, 24.	1.4	16
99	Biopatterning: The Art of Patterning Biomolecules on Surfaces. Langmuir, 2021, 37, 9637-9651.	1.6	16
100	Crypto anchors. IBM Journal of Research and Development, 2019, 63, 4:1-4:12.	3.2	15
101	Controlled deposition of cells in sealed microfluidics using flow velocity boundaries. Lab on A Chip, 2009, 9, 1395.	3.1	14
102	A bead-based immunogold-silver staining assay on capillary-driven microfluidics. Biomedical Microdevices, 2018, 20, 41.	1.4	13
103	Largeâ€Scale Arrays of Aligned Single Viruses. Advanced Materials, 2010, 22, 111-114.	11.1	12
104	Protein Tethering into Multiscale Geometries by Covalent Subtractive Printing. Advanced Materials, 2011, 23, 1550-1553.	11.1	12
105	Pharmacology on microfluidics: multimodal analysis for studying cellâ€“cell interaction. Current Opinion in Pharmacology, 2013, 13, 821-828.	1.7	10
106	Advanced Capillary Soft Valves for Flow Control in Self-Driven Microfluidics. Micromachines, 2013, 4, 1-8.	1.4	10
107	Complex Nucleic Acid Hybridization Reactions inside Capillaryâ€Driven Microfluidic Chips. Small, 2020, 16, e2005476.	5.2	10
108	High-grade optical polydimethylsiloxane for microfluidic applications. Biomedical Microdevices, 2011, 13, 1027-1032.	1.4	9

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109	Dielectrophoretic microbead sorting using modular electrode design and capillary-driven microfluidics. Biomedical Microdevices, 2017, 19, 95.	1.4	8
110	Capillary Microfluidics for Monitoring Medication Adherence. Angewandte Chemie - International Edition, 2021, 60, 17784-17796.	7.2	8
111	Microfluidic Diagnostic Devices: Microfluidic Chips for Pointâ€ofâ€Care Immunodiagnostics (Adv. Mater.) Tj ETQq1 1 0.784314 rgBT /O	11.1	7
112	Microcontact Processing for Microtechnology and Biology. Chimia, 2007, 61, 126-132.	0.3	6
113	The floating microfluidic probe: Distance control between probe and sample using hydrodynamic levitation. Applied Physics Letters, 2014, 104, 263501.	1.5	6
114	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
115	Arraying single microbeads in microchannels using dielectrophoresis-assisted mechanical traps. Applied Physics Letters, 2015, 107, 204102.	1.5	5
116	Programmable hydraulic resistor for microfluidic chips using electrogate arrays. Scientific Reports, 2019, 9, 17242.	1.6	5
117	Microscale Interfacial Polymerization on a Chip. Angewandte Chemie - International Edition, 2021, 60, 24064-24069.	7.2	5
118	Microcontact Printing of Proteins. , 2005, , 31-52.		4
119	A method to characterize pattern density effects: chemical flare and develop loading. Proceedings of SPIE, 2010, , .	0.8	4
120	Heterogeneous integration of gels into microfluidics using a mesh carrier. Biomedical Microdevices, 2014, 16, 829-835.	1.4	4
121	Chemiluminescence generation and detection in a capillary-driven microfluidic chip. Proceedings of SPIE, 2017, , .	0.8	4
122	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
123	Microfluidic Capillary Systems for The Autonomous Transport of Bio/Chemicals. , 2002, , 952-954.		4
124	Largeâ€Scale Dried Reagent Reconstitution and Diffusion Control Using Microfluidic Selfâ€Coalescence Modules. Small, 2022, 18, e2105939.	5.2	4
125	Two complementary methods to characterize long range proximity effects due to develop loading. , 2010, , .		3
126	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

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127	Precision Diagnostics for Mobile Health Using Capillary-driven Microfluidics. Chimia, 2017, 71, 385.	0.3	3
128	Capillary-driven microfluidic chips with evaporation-induced flow control and dielectrophoretic microbead trapping. Proceedings of SPIE, 2014, , .	0.8	2
129	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
130	Single-bead arrays for fluorescence-based immunoassays on capillary-driven microfluidic chips. , 2016, , .		1
131	Hele-Shaw Flow Theory in the Context of Open Microfluidics: From Dipoles to Quadrupoles. , 2018, , 63-82.		1
132	Single-Cell Analysis with the BioPen. , 2018, , 187-219.		0
133	Microfluidic Probes for Single-Cell Proteomic Analysis. , 0, , 221-248.		0
134	Development of Pipettes as Mobile Nanofluidic Devices for Mass Spectrometric Analysis. , 2018, , 273-293.		0
135	Microfluidic Probes for Scanning Electrochemical Microscopy. , 0, , 373-390.		0
136	Chemistrode for High Temporal- and Spatial-Resolution Chemical Analysis. , 0, , 391-410.		0
137	Hierarchical Hydrodynamic Flow Confinement (hHFC) and Recirculation for Performing Microscale Chemistry on Surfaces. , 2018, , 21-45.		0
138	Hydrodynamic Flow Confinement-Assisted Immunohistochemistry from Micrometer to Millimeter Scale. , 2018, , 101-114.		0
139	Microfluidic Probe for Neural Organotypic Brain Tissue and Cell Perfusion. , 2018, , 139-154.		0
140	The Multifunctional Pipette. , 2018, , 155-185.		0
141	Capillary Microfluidics for Monitoring Medication Adherence. Angewandte Chemie, 2021, 133, 17928-17940.	1.6	0
142	Microscale interfacial polymerization on a chip. Angewandte Chemie, 0, , .	1.6	0