

# Laurent Malaquin

## List of Publications by Year in Descending Order

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

72  
papers

2,705  
citations

25  
h-index

51  
g-index

77  
ext. papers

3,103  
ext. citations

6.5  
avg, IF

4.89  
L-index

#	Paper	IF	Citations
72	Tuning the Nanotopography and Chemical Functionality of 3D Printed Scaffolds through Cellulose Nanocrystal Coatings.. <i>ACS Applied Bio Materials</i> , <b>2021</b> , 4, 8443-8455	4.1	3
71	In vitro models of intestinal epithelium: Toward bioengineered systems. <i>Journal of Tissue Engineering</i> , <b>2021</b> , 12, 2041731420985202	7.5	11
70	Wet spinning of a library of carbohydrate low molecular weight gels. <i>Journal of Colloid and Interface Science</i> , <b>2021</b> , 603, 333-343	9.3	3
69	Extracellular Matrix Mechanical Properties and Regulation of the Intestinal Stem Cells: When Mechanics Control Fate. <i>Cells</i> , <b>2020</b> , 9,	7.9	8
68	4D printing with spin-crossover polymer composites. <i>Journal of Materials Chemistry C</i> , <b>2020</b> , 8, 6001-6005	7.1	15
67	Development of a Droplet Microfluidics Device Based on Integrated Soft Magnets and Fluidic Capacitor for Passive Extraction and Redispersion of Functionalized Magnetic Particles. <i>Advanced Materials Technologies</i> , <b>2020</b> , 5, 1901088	6.8	4
66	Multiplexed Remote SPR Detection of Biological Interactions through Optical Fiber Bundles. <i>Sensors</i> , <b>2020</b> , 20,	3.8	10
65	3D printing of a biocompatible low molecular weight supramolecular hydrogel by dimethylsulfoxide water solvent exchange. <i>Additive Manufacturing</i> , <b>2020</b> , 33, 101162	6.1	5
64	Sliding walls: a new paradigm for fluidic actuation and protocol implementation in microfluidics. <i>Microsystems and Nanoengineering</i> , <b>2020</b> , 6, 18	7.7	3
63	3D deterministic lateral displacement (3D-DLD) cartridge system for high throughput particle sorting. <i>Chemical Communications</i> , <b>2020</b> , 56, 5190-5193	5.8	6
62	Building a microfluidic cell culture platform with stiffness control using Loctite 3525 glue. <i>Lab on A Chip</i> , <b>2019</b> , 19, 3512-3525	7.2	6
61	Wet spinning and radial self-assembly of a carbohydrate low molecular weight gelator into well organized hydrogel filaments. <i>Nanoscale</i> , <b>2019</b> , 11, 15043-15056	7.7	13
60	VEGF (Vascular Endothelial Growth Factor) Functionalized Magnetic Beads in a Microfluidic Device to Improve the Angiogenic Balance in Preeclampsia. <i>Hypertension</i> , <b>2019</b> , 74, 145-153	8.5	10
59	Fabrication of 3D scaffolds reproducing intestinal epithelium topography by high-resolution 3D stereolithography. <i>Biomaterials</i> , <b>2019</b> , 221, 119404	15.6	52
58	Water-in-PDMS Emulsion Templating of Highly Interconnected Porous Architectures for 3D Cell Culture. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2019</b> , 11, 28631-28640	9.5	15
57	Fabrication of Biomolecule Microarrays for Cell Immobilization Using Automated Microcontact Printing. <i>Methods in Molecular Biology</i> , <b>2018</b> , 1771, 83-95	1.4	4
56	Two-photon lithography and microscopy of 3D hydrogel scaffolds for neuronal cell growth. <i>Biomedical Physics and Engineering Express</i> , <b>2018</b> , 4, 027009	1.5	51

55	Direct laser fabrication of free-standing PEGDA-hydrogel scaffolds for neuronal cell growth: Engineering 3D biocompatible microenvironments. <i>Materials Today</i> , <b>2018</b> , 21, 315-316	21.8	20
54	A microfluidic fluidized bed to capture, amplify and detect bacteria from raw samples. <i>Methods in Cell Biology</i> , <b>2018</b> , 147, 59-75	1.8	3
53	Resolution improvement of 3D stereo-lithography through the direct laser trajectory programming: Application to microfluidic deterministic lateral displacement device. <i>Analytica Chimica Acta</i> , <b>2018</b> , 1000, 239-247	6.6	24
52	Dynamic inking of large-scale stamps for multiplexed microcontact printing and fabrication of cell microarrays. <i>PLoS ONE</i> , <b>2018</b> , 13, e0202531	3.7	6
51	Direct laser fabrication of meso-scale 2D and 3D architectures with micrometric feature resolution. <i>Additive Manufacturing</i> , <b>2018</b> , 22, 440-446	6.1	18
50	Simple Synthetic Molecular Hydrogels From Self-Assembling Alkylgalactonamides as Scaffold for 3D Neuronal Cell Growth. <i>ACS Applied Materials &amp; Interfaces</i> , <b>2018</b> , 10, 17004-17017	9.5	17
49	FISH-in-CHIPS: A Microfluidic Platform for Molecular Typing of Cancer Cells. <i>Methods in Molecular Biology</i> , <b>2017</b> , 1547, 211-220	1.4	1
48	Chromatin immunoprecipitation in microfluidic droplets: towards fast and cheap analyses. <i>Lab on A Chip</i> , <b>2017</b> , 17, 530-537	7.2	9
47	High throughput micropatterning of interspersed cell arrays using capillary assembly. <i>Biofabrication</i> , <b>2017</b> , 9, 015015	10.5	7
46	Multiphoton Direct Laser Writing and 3D Imaging of Polymeric Freestanding Architectures for Cell Colonization. <i>Small</i> , <b>2017</b> , 13, 1700621	11	37
45	Magnetic fluidized bed for solid phase extraction in microfluidic systems. <i>Lab on A Chip</i> , <b>2017</b> , 17, 1603-1615	16.15	24
44	Droplet Microfluidic and Magnetic Particles Platform for Cancer Typing. <i>Methods in Molecular Biology</i> , <b>2017</b> , 1547, 113-121	1.4	2
43	A new microfluidic approach for the one-step capture, amplification and label-free quantification of bacteria from raw samples. <i>Chemical Science</i> , <b>2017</b> , 8, 1329-1336	9.4	47
42	Microfluidic platform combining droplets and magnetic tweezers: application to HER2 expression in cancer diagnosis. <i>Scientific Reports</i> , <b>2016</b> , 6, 25540	4.9	37
41	Experimental observation of ultrasound fast and slow waves through three-dimensional printed trabecular bone phantoms. <i>Journal of the Acoustical Society of America</i> , <b>2016</b> , 139, EL13-18	2.2	17
40	Reversible magnetic clamp of a microfluidic interface for the seric detection of food allergies on allergen microarrays. <i>Microelectronic Engineering</i> , <b>2016</b> , 158, 16-21	2.5	4
39	In-mold patterning and actionable axo-somatic compartmentalization for on-chip neuron culture. <i>Lab on A Chip</i> , <b>2016</b> , 16, 2059-68	7.2	24
38	High purity microfluidic sorting and analysis of circulating tumor cells: towards routine mutation detection. <i>Lab on A Chip</i> , <b>2015</b> , 15, 2090-101	7.2	50

37	Controlled sealing of nanopores using an easily fabricated silicon platform combining in situ optical and electrical monitoring. <i>Microelectronic Engineering</i> , <b>2015</b> , 144, 57-60	2.5	1
36	Selective handling of droplets in a microfluidic device using magnetic rails. <i>Microfluidics and Nanofluidics</i> , <b>2015</b> , 19, 141-153	2.8	35
35	Using electrofluidic devices as hyper-elastic strain sensors: Experimental and theoretical analysis. <i>Microelectronic Engineering</i> , <b>2015</b> , 144, 27-31	2.5	18
34	Continuous chemical operations and modifications on magnetic $\text{Fe}_2\text{O}_3$ nanoparticles confined in nanoliter droplets for the assembly of fluorescent and magnetic $\text{SiO}_2@\text{Fe}_2\text{O}_3$ . <i>Chemical Communications</i> , <b>2015</b> , 51, 16904-7	5.8	32
33	FISH in chips: turning microfluidic fluorescence in situ hybridization into a quantitative and clinically reliable molecular diagnosis tool. <i>Lab on A Chip</i> , <b>2015</b> , 15, 811-22	7.2	25
32	Combining microfluidics, optogenetics and calcium imaging to study neuronal communication in vitro. <i>PLoS ONE</i> , <b>2015</b> , 10, e0120680	3.7	49
31	A review of microfabrication and hydrogel engineering for micro-organs on chips. <i>Biomaterials</i> , <b>2014</b> , 35, 1816-32	15.6	166
30	Cyclic olefin copolymer plasma millireactors. <i>Lab on A Chip</i> , <b>2014</b> , 14, 3037-42	7.2	12
29	A three dimensional thermoplastic microfluidic chip for robust cell capture and high resolution imaging. <i>Biomicrofluidics</i> , <b>2014</b> , 8, 024109	3.2	17
28	A low cost and high throughput magnetic bead-based immuno-agglutination assay in confined droplets. <i>Lab on A Chip</i> , <b>2013</b> , 13, 2344-9	7.2	44
27	New non-covalent strategies for stable surface treatment of thermoplastic chips. <i>Lab on A Chip</i> , <b>2013</b> , 13, 4409-18	7.2	24
26	Centrifugal microfluidic platform for radiochemistry: potentialities for the chemical analysis of nuclear spent fuels. <i>Talanta</i> , <b>2013</b> , 116, 488-94	6.2	20
25	Microfluidic: an innovative tool for efficient cell sorting. <i>Methods</i> , <b>2012</b> , 57, 297-307	4.6	110
24	Programmable Magnetic Tweezers and Droplet Microfluidic Device for High-Throughput Nanoliter Multi-Step Assays. <i>Angewandte Chemie</i> , <b>2012</b> , 124, 10923-10927	3.6	5
23	Programmable magnetic tweezers and droplet microfluidic device for high-throughput nanoliter multi-step assays. <i>Angewandte Chemie - International Edition</i> , <b>2012</b> , 51, 10765-9	16.4	52
22	A low-cost, label-free DNA detection method in lab-on-chip format based on electrohydrodynamic instabilities, with application to long-range PCR. <i>Lab on A Chip</i> , <b>2012</b> , 12, 4738-47	7.2	13
21	Fabrication of thermoplastics chips through lamination based techniques. <i>Lab on A Chip</i> , <b>2012</b> , 12, 1849-56		36
20	Design, modeling and characterization of microfluidic architectures for high flow rate, small footprint microfluidic systems. <i>Lab on A Chip</i> , <b>2011</b> , 11, 822-32	7.2	39

19	New family of fluorinated polymer chips for droplet and organic solvent microfluidics. <i>Lab on A Chip</i> , <b>2011</b> , 11, 508-12	7.2	67
18	Polymeric coatings on micro- and nanometric particles for bioapplications. <i>Bioanalytical Reviews</i> , <b>2011</b> , 3, 41-66	1	4
17	Fabrication of high density gold nanoparticle arrays on glass for high sensitivity bio-detection. <i>Microelectronic Engineering</i> , <b>2011</b> , 88, 2474-2477	2.5	3
16	Stress clamp experiments on multicellular tumor spheroids. <i>Physical Review Letters</i> , <b>2011</b> , 107, 188102	7.4	148
15	Collective beating of artificial microcilia. <i>Physical Review Letters</i> , <b>2011</b> , 107, 014501	7.4	38
14	Microfluidic sorting and multimodal typing of cancer cells in self-assembled magnetic arrays. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2010</b> , 107, 14524-9	11.5	260
13	Precision patterning with luminescent nanocrystal-functionalized beads. <i>Langmuir</i> , <b>2010</b> , 26, 14294-300	4	11
12	Patterning of polystyrene by scanning electrochemical microscopy. Biological applications to cell adhesion. <i>Langmuir</i> , <b>2010</b> , 26, 17348-56	4	30
11	A method for fast monitoring of flow rates in microfluidic channels. <i>Journal of Applied Physics</i> , <b>2008</b> , 104, 124909	2.5	5
10	Thermo-resistance based micro-calorimeter for continuous chemical enthalpy measurements. <i>Microelectronic Engineering</i> , <b>2008</b> , 85, 1367-1369	2.5	7
9	An in situ study of the adsorption behavior of functionalized particles on self-assembled monolayers via different chemical interactions. <i>Langmuir</i> , <b>2007</b> , 23, 9990-9	4	33
8	Controlled particle placement through convective and capillary assembly. <i>Langmuir</i> , <b>2007</b> , 23, 11513-21	4	282
7	Nanoparticle printing with single-particle resolution. <i>Nature Nanotechnology</i> , <b>2007</b> , 2, 570-6	28.7	360
6	Printing chemical gradients. <i>Langmuir</i> , <b>2005</b> , 21, 7796-804	4	82
5	Closing the Gap Between Self-Assembly and Microsystems Using Self-Assembly, Transfer, and Integration of Particles. <i>Advanced Materials</i> , <b>2005</b> , 17, 2438-2442	24	61
4	Interdigitated nanoelectrodes for nanoparticle detection. <i>Nanotechnology</i> , <b>2005</b> , 16, S240-S245	3.4	8
3	Development of pH-ISFET sensors for the detection of bacterial activity. <i>Sensors and Actuators B: Chemical</i> , <b>2004</b> , 103, 247-251	8.5	24
2	Effects of ultraviolet/ozone treatment on benzocyclobutene films. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , <b>2003</b> , 21, 766-771	2.9	11

- 1 Imprint lithography using thermo-polymerisation of MMA. *Microelectronic Engineering*, **2002**, 61-62, 429-433 6