David Marr

List of Publications by Year
in descending order

48 papers	2,293 citations	279798 23 h-index	243625 44 g-index
49 all docs	49 docs citations	49 times ranked	2221 citing authors

#	Article	IF	Citations
1	Microfluidic Control Using Colloidal Devices. Science, 2002, 296, 1841-1844.	12.6	386
2	Microfluidic sorting system based on optical waveguide integration and diode laser bar trapping. Lab on A Chip, 2006, 6, 422.	6.0	187
3	Design of a scanning laser optical trap for multiparticle manipulation. Review of Scientific Instruments, 2000, 71, 2196-2200.	1.3	172
4	Optical trapping, manipulation, and sorting of cells and colloids in microfluidic systems with diode laser bars. Optics Express, 2004, 12, 4390.	3.4	160
5	Surface-enabled propulsion and control of colloidal microwheels. Nature Communications, 2016, 7, 10225.	12.8	130
6	Fabrication of linear colloidal structures for microfluidic applications. Applied Physics Letters, 2002, 81, 1555-1557.	3.3	125
7	Hydrodynamic focusing for vacuum-pumped microfluidics. Microfluidics and Nanofluidics, 2005, 1, 280-283.	2.2	91
8	Electrically Switchable Colloidal Ordering in Confined Geometries. Langmuir, 2001, 17, 2301-2304.	3.5	76
9	Laminar-Flow-Based Separations at the Microscale. Biotechnology Progress, 2002, 18, 1439-1442.	2.6	63
10	Electric Field-Reversible Three-Dimensional Colloidal Crystals. Langmuir, 2003, 19, 5967-5970.	3.5	60
11	Flow control for capillary-pumped microfluidic systems. Journal of Micromechanics and Microengineering, 2004, 14, 1503-1506.	2.6	59
12	Enhanced Fibrinolysis with Magnetically Powered Colloidal Microwheels. Small, 2017, 13, 1700954.	10.0	59
13	In situ assembly of linked geometrically coupled microdevices. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 20141-20145.	7.1	56
14	Magnetic Microlassos for Reversible Cargo Capture, Transport, and Release. Langmuir, 2017, 33, 5932-5937.	3.5	53
15	Cell deformation cytometry using diode-bar optical stretchers. Journal of Biomedical Optics, 2010, 15, 1.	2.6	52
16	Optical Trapping for the Manipulation of Colloidal Particles. Advanced Materials, 2000, 12, 917-920.	21.0	49
17	Tailored Surfaces Using Optically Manipulated Colloidal Particles. Langmuir, 1999, 15, 8565-8568.	3.5	46
18	Reconfigurable microbots folded from simple colloidal chains. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 18186-18193.	7.1	45

#	Article	IF	Citations
19	Microwheels on microroads: Enhanced translation on topographic surfaces. Science Robotics, 2019, 4, .	17.6	41
20	Void Morphology in Polyethylene/Carbon Black Composites. Macromolecules, 1997, 30, 2120-2124.	4.8	32
21	Viscoelasticity as a Biomarker for High-Throughput Flow Cytometry. Biophysical Journal, 2013, 105, 2281-2288.	0.5	32
22	Single-cell isolation using a DVD optical pickup. Optics Express, 2011, 19, 10377.	3.4	28
23	Measuring cell mechanics by optical alignment compression cytometry. Lab on A Chip, 2013, 13, 1571.	6.0	27
24	Engineered microparticles and nanoparticles for fibrinolysis. Journal of Thrombosis and Haemostasis, 2019, 17, 2004-2015.	3.8	26
25	Morphology Characterization in Multicomponent Macromolecular Systems Using Scanning Probe Phase Microscopy. Langmuir, 1997, 13, 1840-1843.	3.5	22
26	Fiber-focused diode bar optical trapping for microfluidic flow manipulation. Applied Physics Letters, 2008, 92, 013904.	3.3	22
27	Highâ€throughput linear optical stretcher for mechanical characterization of blood cells. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2016, 89, 391-397.	1.5	19
28	ac/dc Magnetic Fields for Enhanced Translation of Colloidal Microwheels. Langmuir, 2019, 35, 3455-3460.	3.5	18
29	Optical waveguides via viscosity-mismatched microfluidic flows. Applied Physics Letters, 2006, 88, 134109.	3.3	16
30	Characterization of La_{1âˆ’x}Sr_xMnO₃perovskite catalysts for hydrogen peroxide reduction. Physical Chemistry Chemical Physics, 2016, 18, 16786-16793.	2.8	16
31	Imaging of a linear diode bar for an optical cell stretcher. Biomedical Optics Express, 2015, 6, 807.	2.9	15
32	Non reciprocal skewed rolling of a colloidal wheel due to induced chirality. Soft Matter, 2016, 12, 9314-9320.	2.7	14
33	A simple microfluidic dispenser for single-microparticle and cell samples. Lab on A Chip, 2014, 14, 4673-4679.	6.0	13
34	Multimodal microwheel swarms for targeting in three-dimensional networks. Scientific Reports, 2022, 12, 5078.	3.3	13
35	Breaking the fibrinolytic speed limit with microwheel coâ€delivery of tissue plasminogen activator and plasminogen. Journal of Thrombosis and Haemostasis, 2022, 20, 486-497.	3.8	13
36	An experimental design for the control and assembly of magnetic microwheels. Review of Scientific Instruments, 2020, 91, 093701.	1.3	12

#	Article	IF	Citations
37	Erythrocyte deformation in high-throughput optical stretchers. Physical Review E, 2012, 85, 041923.	2.1	11
38	Morphological control of mesoscale colloidal models. Fluid Phase Equilibria, 2001, 185, 157-163.	2.5	8
39	Cell elongation via intrinsic antipodal stretching forces. Physical Review E, 2012, 86, 061901.	2.1	7
40	AFM and SALS Characterization of Spherulitic Structure in Polyethylene. Langmuir, 1996, 12, 1084-1087.	3.5	5
41	Morphology characterization of high-impact resistant polypropylene using AFM and SALS. Journal of Applied Polymer Science, 2000, 78, 452-457.	2.6	5
42	FACS-style detection for real-time cell viscoelastic cytometry. RSC Advances, 2015, 5, 105636-105642.	3.6	5
43	Small-Angle Neutron Scattering from Device-Quality a-Si:H and a-Si:D Prepared by PECVD and HWCVD. Materials Research Society Symposia Proceedings, 2000, 609, 1621.	0.1	2
44	Chain Assembly Kinetics from Magnetic Colloidal Spheres. Langmuir, 2022, 38, 5730-5737.	3.5	2
45	Morphology Characterization in Multicomponent Polymer Systems using Scanning Probe Microscopy. Materials Research Society Symposia Proceedings, 1996, 461, 211.	0.1	0
46	Colloidal Systems for Binary Mixtures Studies. ACS Symposium Series, 2004, , 27-39.	0.5	0
47	Two-photon absorption fluorescence imaging to characterize microfluidic device performance. , 2006, , .		0
48	A novel fast-mixing microfluidic device for studying nonequilibrium systems using femtosecond spectroscopies. , 2006, , .		0