Jonathan Cooper

List of Publications by Year
in descending order

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447 papers	27,925 citations	7568 77 h-index	7950 149 g-index
459 all docs	459 docs citations	459 times ranked	24042 citing authors

#	Article	IF	Citations
1	Mitochondrial Complex I Deficiency in Parkinson's Disease. Journal of Neurochemistry, 1990, 54, 823-827.	3.9	1,860
2	MITOCHONDRIAL COMPLEX I DEFICIENCY IN PARKINSON'S DISEASE. Lancet, The, 1989, 333, 1269.	13.7	1,248
3	Reversible inhibition of cytochrome c oxidase, the terminal enzyme of the mitochondrial respiratory chain, by nitric oxide. FEBS Letters, 1994, 345, 50-54.	2.8	1,109
4	Mitochondrial defect in Huntington's disease caudate nucleus. Annals of Neurology, 1996, 39, 385-389.	5.3	690
5	Anatomic and Disease Specificity of NADH CoQ₁ Reductase (Complex I) Deficiency in Parkinson's Disease. Journal of Neurochemistry, 1990, 55, 2142-2145.	3.9	670
6	A review of the immobilization of enzymes in electropolymerized films. Journal of Electroanalytical Chemistry, 1993, 362, 1-12.	3.8	465
7	Biochemical abnormalities and excitotoxicity in Huntington's disease brain. Annals of Neurology, 1999, 45, 25-32.	5.3	439
8	A novel Î±-synuclein missense mutation in Parkinson disease. Neurology, 2013, 80, 1062-1064.	1.1	396
9	Irreversible Inhibition of Mitochondrial Complex I by 1-Methyl-4-Phenylpyridinium: Evidence for Free Radical Involvement. Journal of Neurochemistry, 1992, 58, 786-789.	3.9	368
10	Platelet mitochondria function in Parkinson's disease. Annals of Neurology, 1992, 32, 782-788.	5.3	337
11	Deficit of in vivo mitochondrial ATP production in patients with Friedreich ataxia. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 11492-11495.	7.1	337
12	Indices of oxidative stress and mitochondrial function in individuals with incidental Lewy body disease. Annals of Neurology, 1994, 35, 38-44.	5.3	333
13	BRAIN, SKELETAL MUSCLE AND PLATELET HOMOGENATE MITOCHONDRIAL FUNCTION IN PARKINSON'S DISEASE. Brain, 1992, 115, 333-342.	7.6	332
14	Analyses of mitochondrial respiratory chain function and mitochondrial DNA deletion in human skeletal muscle: Effect of ageing. Journal of the Neurological Sciences, 1992, 113, 91-98.	0.6	322
15	Complex I Inhibitors Induce Doseâ€Dependent Apoptosis in PC12 Cells: Relevance to Parkinson's Disease. Journal of Neurochemistry, 1994, 63, 1987-1990.	3.9	318
16	Mitochondrial dysfunction and free radical damage in the Huntington R6/2 transgenic mouse. Annals of Neurology, 2000, 47, 80-86.	5.3	315
17	Clinical, biochemical and molecular genetic correlations in Friedreich's ataxia. Human Molecular Genetics, 2000, 9, 275-282.	2.9	312
18	Mitochondrial myopathies: Clinical and biochemical features of 30 patients with major deletions of muscle mitochondrial DNA. Annals of Neurology, 1989, 26, 699-708.	5.3	309

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19	Mitochondrial DNA transmission of the mitochondrial defect in Parkinson's disease. Annals of Neurology, 1998, 44, 177-186.	5.3	301
20	The 2019 surface acoustic waves roadmap. Journal Physics D: Applied Physics, 2019, 52, 353001.	2.8	236
21	Paper-based microfluidics for DNA diagnostics of malaria in low resource underserved rural communities. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4834-4842.	7.1	233
22	3D manipulation of particles into crystal structures using holographic optical tweezers. Optics Express, 2004, 12, 220.	3.4	230
23	Complex I, Iron, and ferritin in Parkinson's disease substantia nigra. Annals of Neurology, 1994, 36, 876-881.	5.3	229
24	Dual Color Plasmonic Pixels Create a Polarization Controlled Nano Color Palette. ACS Nano, 2016, 10, 492-498.	14.6	218
25	Mitochondria in the etiology and pathogenesis of parkinson's disease. Annals of Neurology, 1998, 44, S89-98.	5.3	206
26	Microfluidic Single-Cell Array Cytometry for the Analysis of Tumor Apoptosis. Analytical Chemistry, 2009, 81, 5517-5523.	6.5	197
27	Expression of mutant alpha-synuclein causes increased susceptibility to dopamine toxicity. Human Molecular Genetics, 2000, 9, 2683-2689.	2.9	182
28	Influence of microRNA deregulation on chaperone-mediated autophagy and Î±-synuclein pathology in Parkinson's disease. Cell Death and Disease, 2013, 4, e545-e545.	6.3	181
29	Assembly of 3-dimensional structures using programmable holographic optical tweezers. Optics Express, 2004, 12, 5475.	3.4	175
30	Shaping acoustic fields as a toolset for microfluidic manipulations in diagnostic technologies. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 15162-15167.	7.1	171
31	Full length article. Brain Research, 1997, 777, 110-118.	2.2	167
32	Protein Expression, Aggregation, and Triggered Release from Polymersomes as Artificial Cellâ€like Structures. Angewandte Chemie - International Edition, 2012, 51, 6416-6420.	13.8	162
33	Tumors on chips: oncology meets microfluidics. Current Opinion in Chemical Biology, 2010, 14, 556-567.	6.1	159
34	Coenzyme Q₁₀ and vitamin E deficiency in Friedreichâ€™s ataxia: predictor of efficacy of vitamin E and coenzyme Q₁₀ therapy. European Journal of Neurology, 2008, 15, 1371-1379.	3.3	156
35	Surface Acoustic Wave Nebulization of Peptides As a Microfluidic Interface for Mass Spectrometry. Analytical Chemistry, 2010, 82, 3985-3989.	6.5	152
36	Mitochondrial function, GSH and iron in neurodegeneration and Lewy body diseases. Journal of the Neurological Sciences, 1998, 158, 24-29.	0.6	147

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37	A new point mutation associated with mitochondrial encephalomyopathy. Human Molecular Genetics, 1993, 2, 2081-2087.	2.9	143
38	Direct electron transfer reactions between immobilized cytochrome c and modified gold electrodes. Journal of Electroanalytical Chemistry, 1993, 347, 267-275.	3.8	142
39	Microrheology with optical tweezers. Lab on A Chip, 2009, 9, 2568.	6.0	138
40	Interactive approach to optical tweezers control. Applied Optics, 2006, 45, 897.	2.1	137
41	Comparison of FaxÃ©nâ€™s correction for a microsphere translating or rotating near a surface. Physical Review E, 2009, 79, 026301.	2.1	137
42	Assessment of biocompatibility of 3D printed photopolymers using zebrafish embryo toxicity assays. Lab on A Chip, 2016, 16, 291-297.	6.0	135
43	Microfluidic single cell arrays to interrogate signalling dynamics of individual, patient-derived hematopoietic stem cells. Lab on A Chip, 2009, 9, 2659.	6.0	134
44	A Missense Mutation of Cytochrome Oxidase Subunit II Causes Defective Assembly and Myopathy. American Journal of Human Genetics, 1999, 65, 1030-1039.	6.2	131
45	Oxidative-phosphorylation defects in liver of patients with Wilson's disease. Lancet, The, 2000, 356, 469-474.	13.7	130
46	3D interferometric optical tweezers using a single spatial light modulator. Optics Express, 2005, 13, 3777.	3.4	130
47	Surface acoustic waves induced micropatterning of cells in gelatin methacryloyl (GelMA) hydrogels. Biofabrication, 2017, 9, 015020.	7.1	126
48	Paperâ€Origamiâ€Based Multiplexed Malaria Diagnostics from Whole Blood. Angewandte Chemie - International Edition, 2016, 55, 15250-15253.	13.8	125
49	Mitochondrial function and parental sex effect in Huntington's disease. Lancet, The, 1990, 336, 749.	13.7	123
50	Molecular Mechanisms in Mitochondrial DNA Depletion Syndrome. Human Molecular Genetics, 1997, 6, 935-942.	2.9	121
51	Micron-Scale Patterning of Biological Molecules. Angewandte Chemie International Edition in English, 1995, 34, 91-93.	4.4	116
52	Implementation of Multichannel Sensors for Remote Biomedical Measurements in a Microsystems Format. IEEE Transactions on Biomedical Engineering, 2004, 51, 525-535.	4.2	116
53	Molecular clutch drives cell response to surface viscosity. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, 1192-1197.	7.1	115
54	Microrheology with optical tweezers: data analysis. New Journal of Physics, 2012, 14, 115032.	2.9	109

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55	Nanofabrication of electrode arrays by electron-beam and nanoimprint lithographies. Lab on A Chip, 2006, 6, 1020.	6.0	107
56	On-chip electrocoalescence of microdroplets as a function of voltage, frequency and droplet size. Lab on A Chip, 2009, 9, 2652.	6.0	107
57	Liver failure associated with mitochondrial DNA depletion. Journal of Hepatology, 1998, 28, 556-563.	3.7	106
58	Phononic crystal structures for acoustically driven microfluidic manipulations. Lab on A Chip, 2011, 11, 323-328.	6.0	105
59	Metabolic monitoring of the electrically stimulated single heart cell within a microfluidic platform. Lab on A Chip, 2006, 6, 1424.	6.0	104
60	Micromachining Sensors for Electrochemical Measurement in Subnanoliter Volumes. Analytical Chemistry, 1997, 69, 253-258.	6.5	103
61	Cyclosporin inhibition of apoptosis induced by mitochondrial complex I toxins. Brain Research, 1998, 809, 12-17.	2.2	102
62	Plasmonic Split-Ring Resonators as Dichroic Nanophotonic DNA Biosensors. Journal of the American Chemical Society, 2009, 131, 17615-17619.	13.7	102
63	Mitochondrial function in Parkinson's disease. Annals of Neurology, 1992, 32, S116-S124.	5.3	96
64	Nuclear complementation restores mtDNA levels in cultured cells from a patient with mtDNA depletion. American Journal of Human Genetics, 1993, 53, 663-9.	6.2	95
65	Cardiac energetics are abnormal in Friedreich ataxia patients in the absence of cardiac dysfunction and hypertrophy: An in vivo 31P magnetic resonance spectroscopy study. Cardiovascular Research, 2001, 52, 111-119.	3.8	93
66	Creating permanent 3D arrangements of isolated cells using holographic optical tweezers. Lab on A Chip, 2005, 5, 1224.	6.0	91
67	Friedreich's Ataxia: Disease mechanisms, antioxidant and Coenzyme Q₁₀ therapy. BioFactors, 2003, 18, 163-171.	5.4	88
68	Imaging phase separation in model lipid membranes through the use of BODIPY based molecular rotors. Physical Chemistry Chemical Physics, 2015, 17, 18393-18402.	2.8	86
69	Evaluation of Three-Dimensional Microchannel Glass Biochips for Multiplexed Nucleic Acid Fluorescence Hybridization Assays. Analytical Chemistry, 2001, 73, 2412-2420.	6.5	85
70	Ultra-Low-Volume, Real-Time Measurements of Lactate from the Single Heart Cell Using Microsystems Technology. Analytical Chemistry, 2002, 74, 908-914.	6.5	85
71	Aberration correction in holographic optical tweezers. Optics Express, 2006, 14, 4169.	3.4	85
72	Flame Hydrolysis Deposition of Glass on Silicon for the Integration of Optical and Microfluidic Devices. Analytical Chemistry, 2000, 72, 1093-1097.	6.5	84

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73	SERRS. In Situ Substrate Formation and Improved Detection Using Microfluidics. Analytical Chemistry, 2002, 74, 1503-1508.	6.5	83
74	Gradient Microfluidics Enables Rapid Bacterial Growth Inhibition Testing. Analytical Chemistry, 2014, 86, 3131-3137.	6.5	83
75	Quantitation of a mitochondrial DNA deletion in Parkinson's disease. FEBS Letters, 1992, 299, 218-222.	2.8	79
76	Phononic Crystals for Shaping Fluids. Advanced Materials, 2011, 23, 1458-1462.	21.0	79
77	Acoustic suppression of the coffee-ring effect. Soft Matter, 2015, 11, 7207-7213.	2.7	79
78	Complex I function in familial and sporadic dystonia. Annals of Neurology, 1997, 41, 556-559.	5.3	78
79	Optimization of the Geometry and Porosity of Microelectrode Arrays for Sensor Design. Analytical Chemistry, 2002, 74, 5717-5725.	6.5	78
80	Defining the trapping limits of holographical optical tweezers. Journal of Modern Optics, 2004, 51, 409-414.	1.3	77
81	Platelet mitochondrial function in Leber's hereditary optic neuropathy. Journal of the Neurological Sciences, 1994, 122, 80-83.	0.6	76
82	Bead-Based DNA Diagnostic Assay for Chlamydia Using Nanoparticle-Mediated Surface-Enhanced Resonance Raman Scattering Detection within a Lab-on-a-Chip Format. Analytical Chemistry, 2007, 79, 2844-2849.	6.5	76
83	Direct electron transfer reactions of glucose oxidase immobilised at a self-assembled monolayer. Journal of the Chemical Society Chemical Communications, 1995, , 1293.	2.0	75
84	Micromachined Nanocalorimetric Sensor for Ultra-Low-Volume Cell-Based Assays. Analytical Chemistry, 2002, 74, 2190-2197.	6.5	75
85	Measuring storage and loss moduli using optical tweezers: Broadband microrheology. Physical Review E, 2010, 81, 026308.	2.1	75
86	Tuneable surface acoustic waves for fluid and particle manipulations on disposable chips. Lab on A Chip, 2010, 10, 1898.	6.0	75
87	Rapid Veterinary Diagnosis of Bovine Reproductive Infectious Diseases from Semen Using Paper-Origami DNA Microfluidics. ACS Sensors, 2018, 3, 403-409.	7.8	75
88	Iron induced oxidative stress and mitochondrial dysfunction: relevance to Parkinson's disease. Brain Research, 1993, 627, 349-353.	2.2	74
89	Smoking and mitochondrial function: a model for environmental toxins. QJM - Monthly Journal of the Association of Physicians, 1993, 86, 657-660.	0.5	74
90	Mitochondrial DNA (mtDNA) diseases: correlation of genotype to phenotype. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1995, 1271, 135-140.	3.8	74

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91	The influence of nuclear background on the biochemical expression of 3460 Leber's hereditary optic neuropathy. Annals of Neurology, 1998, 44, 187-193.	5.3	74
92	Miniaturized Embryo Array for Automated Trapping, Immobilization and Microperfusion of Zebrafish Embryos. PLoS ONE, 2012, 7, e36630.	2.5	74
93	Characterization of cellular chemical dynamics using combined microfluidic and Raman techniques. Analytical and Bioanalytical Chemistry, 2008, 390, 833-840.	3.7	73
94	Molecular defects of NADH-ubiquinone oxidoreductase (Complex I) in mitochondrial diseases. Journal of Bioenergetics and Biomembranes, 1988, 20, 365-382.	2.3	72
95	Glutamate oxidase enzyme electrodes: microsensors for neurotransmitter determination using electrochemically polymerized permselective films. Journal of Electroanalytical Chemistry, 1995, 388, 143-149.	3.8	72
96	Microrheology with Optical Tweezers: Measuring the relative viscosity of solutions â€˜at a glanceâ€™. Scientific Reports, 2015, 5, 8831.	3.3	71
97	Signal Enhancement of Surface Enhanced Raman Scattering and Surface Enhanced Resonance Raman Scattering Using in Situ Colloidal Synthesis in Microfluidics. Analytical Chemistry, 2010, 82, 2119-2123.	6.5	70
98	Characterising the formation of a bioelectrochemical interface at a self-assembled monolayer using X-ray photoelectron spectroscopy. Bioelectrochemistry, 1997, 42, 15-23.	1.0	69
99	Rescue of the Friedreich's ataxia knockout mouse by human YAC transgenesis. Neurogenetics, 2001, 3, 185-193.	1.4	68
100	Production of Quantum Dot Barcodes Using Biological Selfâ€Assembly. Advanced Materials, 2009, 21, 4020-4024.	21.0	68
101	Patterning and Regeneration of Surfaces with Antibodies. Analytical Chemistry, 1995, 67, 3605-3607.	6.5	67
102	MOLECULAR BASIS OF MITOCHONDRIAL MYOPATHIES: POLYPEPTIDE ANALYSIS IN COMPLEX-1 DEFICIENCY. Lancet, The, 1988, 331, 500-503.	13.7	66
103	Direct, Real-Time Sensing of Free Radical Production by Activated Human Glioblastoma Cells. Free Radical Biology and Medicine, 1998, 24, 1304-1309.	2.9	66
104	Electrocoalescence Mechanisms of Microdroplets Using Localized Electric Fields in Microfluidic Channels. Langmuir, 2010, 26, 14443-14449.	3.5	66
105	Mitochondrial respiratory chain function in multiple system atrophy. Movement Disorders, 1997, 12, 418-422.	3.9	65
106	Optical tweezers: wideband microrheology. Journal of Optics (United Kingdom), 2011, 13, 044022.	2.2	65
107	A 31P magnetic resonance spectroscopy study of mitochondrial function in skeletal muscle of patients with Parkinson's disease. Journal of the Neurological Sciences, 1994, 125, 77-81.	0.6	64
108	Functional consequences of the 3460-bp mitochondrial DNA mutation associated with Leberâ€™s hereditary optic neuropathy. Journal of the Neurological Sciences, 1999, 165, 10-17.	0.6	64

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109	Toward a miniature wireless integrated multisensor microsystem for industrial and biomedical applications. IEEE Sensors Journal, 2002, 2, 628-635.	4.7	64
110	Role of Oxidative Damage in Friedreich's Ataxia. Neurochemical Research, 2004, 29, 561-567.	3.3	64
111	Multipoint Holographic Optical Velocimetry in Microfluidic Systems. Physical Review Letters, 2006, 96, 134502.	7.8	64
112	Lipid topology and electrostatic interactions underpin lytic activity of linear cationic antimicrobial peptides in membranes. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E8324-E8332.	7.1	63
113	Single-Cell Measurements of Purine Release Using a Micromachined Electroanalytical Sensor. Analytical Chemistry, 1998, 70, 1164-1170.	6.5	62
114	Continuous cell sorting in a flow based on single cell resonance Raman spectra. Lab on A Chip, 2016, 16, 1420-1429.	6.0	62
115	Congenital encephalomyopathy and adult-onset myopathy and diabetes mellitus: different phenotypic associations of a new heteroplasmic mtDNA tRNA glutamic acid mutation. American Journal of Human Genetics, 1995, 56, 1026-33.	6.2	62
116	Integrated immunoassay using tuneable surface acoustic waves and lensfree detection. Lab on A Chip, 2011, 11, 2725.	6.0	61
117	Electrochemical Sensors for Direct Reagentless Measurement of Superoxide Production by Human Neutrophils. Free Radical Research Communications, 1992, 17, 399-406.	1.8	60
118	The first SERRS multiplexing from labelled oligonucleotides in a microfluidics lab-on-a-chip. Chemical Communications, 2004, , 118.	4.1	60
119	Mitochondrial Myopathy with a Defect of Mitochondrial-Protein Transport. New England Journal of Medicine, 1990, 323, 37-42.	27.0	59
120	Simultaneous determination of follicle stimulating hormone and luteinising hormone using a multianalyte immunosensor. Analytica Chimica Acta, 1995, 310, 251-256.	5.4	59
121	Mitochondrial dysfunction in neurodegeneration. Journal of Bioenergetics and Biomembranes, 1997, 29, 175-183.	2.3	59
122	Design and fabrication of a silica on silicon integrated optical biochip as a fluorescence microarray platform. Biosensors and Bioelectronics, 2003, 18, 175-184.	10.1	59
123	Multiple plasmon resonances from gold nanostructures. Applied Physics Letters, 2007, 90, 143105.	3.3	59
124	Detection of Nitrosyl Complexes in Human Substantia Nigra, in Relation to Parkinson's Disease. Biochemical and Biophysical Research Communications, 1996, 228, 298-305.	2.1	58
125	A microdroplet-based shift register. Lab on A Chip, 2010, 10, 3069.	6.0	58
126	Thermostable reduced nicotinamide adenine dinucleotide oxidase: application to amperometric enzyme assay. Analytical Chemistry, 1989, 61, 25-29.	6.5	57

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127	Dynamic Analysis of Drug-Induced Cytotoxicity Using Chip-Based Dielectrophoretic Cell Immobilization Technology. Analytical Chemistry, 2011, 83, 2133-2144.	6.5	56
128	Wormometryâ€onâ€aâ€chip: Innovative technologies for in situ analysis of small multicellular organisms. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2011, 79A, 799-813.	1.5	55
129	Low sample volume origami-paper-based graphene-modified aptasensors for label-free electrochemical detection of cancer biomarker-EGFR. Microsystems and Nanoengineering, 2020, 6, 32.	7.0	55
130	Mitochondrial function in neurodegeneration and ageing. Mutation Research - DNAging, 1992, 275, 133-143.	3.2	54
131	Lab-on-a-chip technologies for proteomic analysis from isolated cells. Journal of the Royal Society Interface, 2008, 5, S123-30.	3.4	54
132	Î±-Synuclein expression in HEK293 cells enhances the mitochondrial sensitivity to rotenone. Neuroscience Letters, 2003, 351, 29-32.	2.1	53
133	Monitoring Genetic Population Biomarkers for Wastewater-Based Epidemiology. Analytical Chemistry, 2017, 89, 9941-9945.	6.5	53
134	Intracellular Protein Determination Using Droplet-Based Immunoassays. Analytical Chemistry, 2011, 83, 5361-5368.	6.5	52
135	Characterization of electron transfer reactions of microperoxidase assembled at short-chain thiol-monolayers on gold. Biosensors and Bioelectronics, 1997, 12, 1143-1155.	10.1	51
136	Electrically initiated upstream coalescence cascade of droplets in a microfluidic flow. Physical Review E, 2009, 80, 046303.	2.1	51
137	Chip-Based Dynamic Real-Time Quantification of Drug-Induced Cytotoxicity in Human Tumor Cells. Analytical Chemistry, 2009, 81, 6952-6959.	6.5	51
138	Rareâ€Cell Enrichment by a Rapid, Labelâ€Free, Ultrasonic Isopycnic Technique for Medical Diagnostics. Angewandte Chemie - International Edition, 2014, 53, 5587-5590.	13.8	51
139	Characterisation of spatial and temporal changes in pH gradients in microfluidic channels using optically trapped fluorescent sensors. Lab on A Chip, 2006, 6, 788.	6.0	50
140	Tuneable visible resonances in crescent shaped nano-split-ring resonators. Applied Physics Letters, 2007, 91, .	3.3	50
141	Friedreichâ€™s ataxia: Coenzyme Q10 and vitamin E therapy. Mitochondrion, 2007, 7, S127-S135.	3.4	50
142	Surface-Enhanced Raman Signatures of Pigmentation of Cyanobacteria from within Geological Samples in a Spectroscopic-Microfluidic Flow Cell. Analytical Chemistry, 2007, 79, 7036-7041.	6.5	50
143	Smartphone-based DNA diagnostics for malaria detection using deep learning for local decision support and blockchain technology for security. Nature Electronics, 2021, 4, 615-624.	26.0	50
144	Mitochondrial DNA mutation underlying Leigh's syndrome: Clinical, pathological, biochemical, and genetic studies of a patient presenting with progressive myoclonic epilepsy. Journal of the Neurological Sciences, 1994, 121, 57-65.	0.6	49

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145	Microfabricated analytical systems for integrated cancer cytomics. Analytical and Bioanalytical Chemistry, 2010, 398, 193-209.	3.7	49
146	Integration of paper microfluidic sensors into contact lenses for tear fluid analysis. Lab on A Chip, 2020, 20, 3970-3979.	6.0	49
147	Miniaturized analytical methods for determination of environmental contaminants of emerging concern â€“ A review. Analytica Chimica Acta, 2021, 1158, 238108.	5.4	49
148	Mitochondrial DNA Depletion Syndrome is Expressed in Amniotic Fluid Cell Cultures. American Journal of Pathology, 1999, 155, 67-70.	3.8	48
149	Stimulation of Single Isolated Adult Ventricular Myocytes within a Low Volume Using a Planar Microelectrode Array. Biophysical Journal, 2003, 85, 1766-1774.	0.5	47
150	Dynamic analysis of apoptosis using cyanine SYTO probes: From classical to microfluidic cytometry. Experimental Cell Research, 2009, 315, 1706-1714.	2.6	47
151	i-Rheo: Measuring the materials' linear viscoelastic properties â€œin a stepâ€!. Journal of Rheology, 2016, 60, 649-660.	2.6	47
152	Single-Cell Measurements of Human Neutrophil Activation Using Electrorotation. Analytical Chemistry, 1998, 70, 2607-2612.	6.5	46
153	The liquidâ€“liquid diffusive extraction of hydrocarbons from a North Sea oil using a microfluidic format. Lab on A Chip, 2006, 6, 740-743.	6.0	46
154	Biocompatibility of a Lab-on-a-Pill Sensor in Artificial Gastrointestinal Environments. IEEE Transactions on Biomedical Engineering, 2006, 53, 2333-2340.	4.2	46
155	Application of quantum dot barcodes prepared using biological self-assembly to multiplexed immunoassays. Chemical Communications, 2010, 46, 2814.	4.1	46
156	Nanogap Ring Antennae as Plasmonically Coupled SERRS Substrates. Small, 2011, 7, 119-125.	10.0	45
157	NADH oxidase from the extreme thermophile Thermus aquaticus YT-1. Purification and characterisation. FEBS Journal, 1988, 174, 267-271.	0.2	44
158	Screening of Biomineralization Using Microfluidics. Analytical Chemistry, 2009, 81, 473-478.	6.5	44
159	How well do we recognise non-motor symptoms in a British Parkinsonâ€™s disease population?. Journal of Neurology, 2011, 258, 1513-1517.	3.6	44
160	Photo-patterning of sensor surfaces with biomolecular structures: characterisation using AFM and fluorescence microscopy. Biosensors and Bioelectronics, 1995, 10, 841-846.	10.1	43
161	Strategies towards functionalised electronically conducting organic copolymers. Journal of Materials Chemistry, 2000, 10, 107-114.	6.7	43
162	Permanent 3D microstructures in a polymeric host created using holographic optical tweezers. Journal of Modern Optics, 2004, 51, 627-632.	1.3	43

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163	Microfluidic cell arrays for metabolic monitoring of stimulated cardiomyocytes. Electrophoresis, 2010, 31, 1405-1413.	2.4	43
164	The Val158Met COMT polymorphism is a modifier of the age at onset in Parkinson's disease with a sexual dimorphism. Journal of Neurology, Neurosurgery and Psychiatry, 2013, 84, 666-673.	1.9	43
165	Paper microfluidic implementation of loop mediated isothermal amplification for early diagnosis of hepatitis C virus. Nature Communications, 2021, 12, 6994.	12.8	43
166	Cytochrome oxidase immunohistochemistry: clues for genetic mechanisms. Brain, 2000, 123, 591-600.	7.6	42
167	A Programmable Microsystem Using System-on-Chip for Real-time Biotelemetry. IEEE Transactions on Biomedical Engineering, 2005, 52, 1251-1260.	4.2	42
168	Monitoring the Uptake and Redistribution of Metal Nanoparticles during Cell Culture Using Surface-Enhanced Raman Scattering Spectroscopy. Analytical Chemistry, 2010, 82, 7369-7373.	6.5	42
169	Dynamics of the Formation of Mixed Alkanethiol Monolayers:Â Applications in Structuring Biointerfacial Arrangements. Langmuir, 1998, 14, 5139-5146.	3.5	41
170	Heat conduction nanocalorimeter for pl-scale single cell measurements. Applied Physics Letters, 2002, 80, 2029-2031.	3.3	41
171	Inclusion formation in Huntington's disease R6/2 mouse muscle cultures. Journal of Neurochemistry, 2003, 87, 1-6.	3.9	41
172	Nebulisation on a disposable array structured with phononic lattices. Lab on A Chip, 2012, 12, 1268.	6.0	41
173	L-Dihydroxyphenylalanine and complex I deficiency in Parkinson's disease brain. Movement Disorders, 1995, 10, 295-297.	3.9	40
174	Dynamic in Situ Electrochemical Neutron Reflectivity Measurements. Journal of the American Chemical Society, 2004, 126, 15362-15363.	13.7	40
175	SERRS immunoassay for quantitative human CRP analysis. Analyst, The, 2008, 133, 1355.	3.5	40
176	Determination of the asphaltene and carboxylic acid content of a heavy oil using a microfluidic device. Lab on A Chip, 2009, 9, 828-832.	6.0	40
177	Effect of Laser Irradiation on Cell Function and Its Implications in Raman Spectroscopy. Applied and Environmental Microbiology, 2018, 84, .	3.1	40
178	Multiplex, Real-Time, Point-of-care RT-LAMP for SARS-CoV-2 Detection Using the HFman Probe. ACS Sensors, 2022, 7, 730-739.	7.8	40
179	Free radicals and mitochondrial dysfunction in Parkinson's disease. Biochemical Society Transactions, 1993, 21, 367-370.	3.4	39
180	Biological Implications of Polymeric Microdevices for Live Cell Assays. Analytical Chemistry, 2009, 81, 9828-9833.	6.5	39

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181	Miniaturized optoelectronic tweezers controlled by GaN micro-pixel light emitting diode arrays. Optics Express, 2011, 19, 2720.	3.4	39
182	Continuous flow separation of particles within an asymmetric microfluidic device. Lab on A Chip, 2006, 6, 561.	6.0	38
183	Hierarchical Nanotexturing Enables Acoustofluidics on Slippery yet Sticky, Flexible Surfaces. Nano Letters, 2020, 20, 3263-3270.	9.1	38
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