Jonathan Cooper

List of Publications by Year
in descending order

Source: https://exaly.com/author-pdf/3524526/publications.pdf

Version: 2024-02-01

447 papers	27,925 citations	7551 77 h-index	7931 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.	2.1	1,860
2	MITOCHONDRIAL COMPLEX I DEFICIENCY IN PARKINSON'S DISEASE. Lancet, The, 1989, 333, 1269.	6.3	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.	1.3	1,109
4	Mitochondrial defect in Huntington's disease caudate nucleus. Annals of Neurology, 1996, 39, 385-389.	2.8	690
5	Anatomic and Disease Specificity of NADH CoQ1Reductase (Complex I) Deficiency in Parkinson's Disease. Journal of Neurochemistry, 1990, 55, 2142-2145.	2.1	670
6	A review of the immobilization of enzymes in electropolymerized films. Journal of Electroanalytical Chemistry, 1993, 362, 1-12.	1.9	465
7	Biochemical abnormalities and excitotoxicity in Huntington's disease brain. Annals of Neurology, 1999, 45, 25-32.	2.8	439
8	A novel Î±-synuclein missense mutation in Parkinson disease. Neurology, 2013, 80, 1062-1064.	1.5	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.	2.1	368
10	Platelet mitochondria function in Parkinson's disease. Annals of Neurology, 1992, 32, 782-788.	2.8	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.	3.3	337
12	Indices of oxidative stress and mitochondrial function in individuals with incidental Lewy body disease. Annals of Neurology, 1994, 35, 38-44.	2.8	333
13	BRAIN, SKELETAL MUSCLE AND PLATELET HOMOGENATE MITOCHONDRIAL FUNCTION IN PARKINSON'S DISEASE. Brain, 1992, 115, 333-342.	3.7	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.	0.3	322
15	Complex I Inhibitors Induce Doseâ€Dependent Apoptosis in PC12 Cells: Relevance to Parkinson's Disease. Journal of Neurochemistry, 1994, 63, 1987-1990.	2.1	318
16	Mitochondrial dysfunction and free radical damage in the Huntington R6/2 transgenic mouse. Annals of Neurology, 2000, 47, 80-86.	2.8	315
17	Clinical, biochemical and molecular genetic correlations in Friedreich's ataxia. Human Molecular Genetics, 2000, 9, 275-282.	1.4	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.	2.8	309

#	Article	IF	Citations
19	Mitochondrial DNA transmission of the mitochondrial defect in Parkinson's disease. Annals of Neurology, 1998, 44, 177-186.	2.8	301
20	The 2019 surface acoustic waves roadmap. Journal Physics D: Applied Physics, 2019, 52, 353001.	1.3	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.	3.3	233
22	3D manipulation of particles into crystal structures using holographic optical tweezers. Optics Express, 2004, 12, 220.	1.7	230
23	Complex I, Iron, and ferritin in Parkinson's disease substantia nigra. Annals of Neurology, 1994, 36, 876-881.	2.8	229
24	Dual Color Plasmonic Pixels Create a Polarization Controlled Nano Color Palette. ACS Nano, 2016, 10, 492-498.	7.3	218
25	Mitochondria in the etiology and pathogenesis of parkinson's disease. Annals of Neurology, 1998, 44, S89-98.	2.8	206
26	Microfluidic Single-Cell Array Cytometry for the Analysis of Tumor Apoptosis. Analytical Chemistry, 2009, 81, 5517-5523.	3.2	197
27	Expression of mutant alpha-synuclein causes increased susceptibility to dopamine toxicity. Human Molecular Genetics, 2000, 9, 2683-2689.	1.4	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.	2.7	181
29	Assembly of 3-dimensional structures using programmable holographic optical tweezers. Optics Express, 2004, 12, 5475.	1.7	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.	3.3	171
31	Full length article. Brain Research, 1997, 777, 110-118.	1.1	167
32	Protein Expression, Aggregation, and Triggered Release from Polymersomes as Artificial Cellâ€like Structures. Angewandte Chemie - International Edition, 2012, 51, 6416-6420.	7.2	162
33	Tumors on chips: oncology meets microfluidics. Current Opinion in Chemical Biology, 2010, 14, 556-567.	2.8	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.	1.7	156
35	Surface Acoustic Wave Nebulization of Peptides As a Microfluidic Interface for Mass Spectrometry. Analytical Chemistry, 2010, 82, 3985-3989.	3.2	152
36	Mitochondrial function, GSH and iron in neurodegeneration and Lewy body diseases. Journal of the Neurological Sciences, 1998, 158, 24-29.	0.3	147

#	Article	IF	Citations
37	A new point mutation associated with mitochondrial encephalomyopathy. Human Molecular Genetics, 1993, 2, 2081-2087.	1.4	143
38	Direct electron transfer reactions between immobilized cytochrome c and modified gold electrodes. Journal of Electroanalytical Chemistry, 1993, 347, 267-275.	1.9	142
39	Microrheology with optical tweezers. Lab on A Chip, 2009, 9, 2568.	3.1	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.	0.8	137
42	Assessment of biocompatibility of 3D printed photopolymers using zebrafish embryo toxicity assays. Lab on A Chip, 2016, 16, 291-297.	3.1	135
43	Microfluidic single cell arrays to interrogate signalling dynamics of individual, patient-derived hematopoietic stem cells. Lab on A Chip, 2009, 9, 2659.	3.1	134
44	A Missense Mutation of Cytochrome Oxidase Subunit II Causes Defective Assembly and Myopathy. American Journal of Human Genetics, 1999, 65, 1030-1039.	2.6	131
45	Oxidative-phosphorylation defects in liver of patients with Wilson's disease. Lancet, The, 2000, 356, 469-474.	6.3	130
46	3D interferometric optical tweezers using a single spatial light modulator. Optics Express, 2005, 13, 3777.	1.7	130
47	Surface acoustic waves induced micropatterning of cells in gelatin methacryloyl (GelMA) hydrogels. Biofabrication, 2017, 9, 015020.	3.7	126
48	Paperâ€Origamiâ€Based Multiplexed Malaria Diagnostics from Whole Blood. Angewandte Chemie - International Edition, 2016, 55, 15250-15253.	7.2	125
49	Mitochondrial function and parental sex effect in Huntington's disease. Lancet, The, 1990, 336, 749.	6.3	123
50	Molecular Mechanisms in Mitochondrial DNA Depletion Syndrome. Human Molecular Genetics, 1997, 6, 935-942.	1.4	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.	2.5	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.	3.3	115
54	Microrheology with optical tweezers: data analysis. New Journal of Physics, 2012, 14, 115032.	1.2	109

#	Article	IF	Citations
55	Nanofabrication of electrode arrays by electron-beam and nanoimprint lithographies. Lab on A Chip, 2006, 6, 1020.	3.1	107
56	On-chip electrocoalescence of microdroplets as a function of voltage, frequency and droplet size. Lab on A Chip, 2009, 9, 2652.	3.1	107
57	Liver failure associated with mitochondrial DNA depletion. Journal of Hepatology, 1998, 28, 556-563.	1.8	106
58	Phononic crystal structures for acoustically driven microfluidic manipulations. Lab on A Chip, 2011, 11, 323-328.	3.1	105
59	Metabolic monitoring of the electrically stimulated single heart cell within a microfluidic platform. Lab on A Chip, 2006, 6, 1424.	3.1	104
60	Micromachining Sensors for Electrochemical Measurement in Subnanoliter Volumes. Analytical Chemistry, 1997, 69, 253-258.	3.2	103
61	Cyclosporin inhibition of apoptosis induced by mitochondrial complex I toxins. Brain Research, 1998, 809, 12-17.	1.1	102
62	Plasmonic Split-Ring Resonators as Dichroic Nanophotonic DNA Biosensors. Journal of the American Chemical Society, 2009, 131, 17615-17619.	6.6	102
63	Mitochondrial function in Parkinson's disease. Annals of Neurology, 1992, 32, S116-S124.	2.8	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.	2.6	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.	1.8	93
66	Creating permanent 3D arrangements of isolated cells using holographic optical tweezers. Lab on A Chip, 2005, 5, 1224.	3.1	91
67	Friedreich's Ataxia: Disease mechanisms, antioxidant and Coenzyme Q₁₀ therapy. BioFactors, 2003, 18, 163-171.	2.6	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.	1.3	86
69	Evaluation of Three-Dimensional Microchannel Glass Biochips for Multiplexed Nucleic Acid Fluorescence Hybridization Assays. Analytical Chemistry, 2001, 73, 2412-2420.	3.2	85
70	Ultra-Low-Volume, Real-Time Measurements of Lactate from the Single Heart Cell Using Microsystems Technology. Analytical Chemistry, 2002, 74, 908-914.	3.2	85
71	Aberration correction in holographic optical tweezers. Optics Express, 2006, 14, 4169.	1.7	85
72	Flame Hydrolysis Deposition of Glass on Silicon for the Integration of Optical and Microfluidic Devices. Analytical Chemistry, 2000, 72, 1093-1097.	3.2	84

#	Article	IF	Citations
73	SERRS. In Situ Substrate Formation and Improved Detection Using Microfluidics. Analytical Chemistry, 2002, 74, 1503-1508.	3.2	83
74	Gradient Microfluidics Enables Rapid Bacterial Growth Inhibition Testing. Analytical Chemistry, 2014, 86, 3131-3137.	3.2	83
75	Quantitation of a mitochondrial DNA deletion in Parkinson's disease. FEBS Letters, 1992, 299, 218-222.	1.3	79
76	Phononic Crystals for Shaping Fluids. Advanced Materials, 2011, 23, 1458-1462.	11.1	79
77	Acoustic suppression of the coffee-ring effect. Soft Matter, 2015, 11, 7207-7213.	1.2	79
78	Complex I function in familial and sporadic dystonia. Annals of Neurology, 1997, 41, 556-559.	2.8	78
79	Optimization of the Geometry and Porosity of Microelectrode Arrays for Sensor Design. Analytical Chemistry, 2002, 74, 5717-5725.	3.2	78
80	Defining the trapping limits of holographical optical tweezers. Journal of Modern Optics, 2004, 51, 409-414.	0.6	77
81	Platelet mitochondrial function in Leber's hereditary optic neuropathy. Journal of the Neurological Sciences, 1994, 122, 80-83.	0.3	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.	3.2	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.	3.2	75
85	Measuring storage and loss moduli using optical tweezers: Broadband microrheology. Physical Review E, 2010, 81, 026308.	0.8	75
86	Tuneable surface acoustic waves for fluid and particle manipulations on disposable chips. Lab on A Chip, 2010, 10, 1898.	3.1	75
87	Rapid Veterinary Diagnosis of Bovine Reproductive Infectious Diseases from Semen Using Paper-Origami DNA Microfluidics. ACS Sensors, 2018, 3, 403-409.	4.0	75
88	Iron induced oxidative stress and mitochondrial dysfunction: relevance to Parkinson's disease. Brain Research, 1993, 627, 349-353.	1.1	74
89	Smoking and mitochondrial function: a model for environmental toxins. QJM - Monthly Journal of the Association of Physicians, 1993, 86, 657-660.	0.2	74
90	Mitochondrial DNA (mtDNA) diseases: correlation of genotype to phenotype. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1995, 1271, 135-140.	1.8	74

#	Article	IF	Citations
91	The influence of nuclear background on the biochemical expression of 3460 Leber's hereditary optic neuropathy. Annals of Neurology, 1998, 44, 187-193.	2.8	74
92	Miniaturized Embryo Array for Automated Trapping, Immobilization and Microperfusion of Zebrafish Embryos. PLoS ONE, 2012, 7, e36630.	1.1	74
93	Characterization of cellular chemical dynamics using combined microfluidic and Raman techniques. Analytical and Bioanalytical Chemistry, 2008, 390, 833-840.	1.9	73
94	Molecular defects of NADH-ubiquinone oxidoreductase (Complex I) in mitochondrial diseases. Journal of Bioenergetics and Biomembranes, 1988, 20, 365-382.	1.0	72
95	Glutamate oxidase enzyme electrodes: microsensors for neurotransmitter determination using electrochemically polymerized permselective films. Journal of Electroanalytical Chemistry, 1995, 388, 143-149.	1.9	72
96	Microrheology with Optical Tweezers: Measuring the relative viscosity of solutions â€˜at a glanceâ€™. Scientific Reports, 2015, 5, 8831.	1.6	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.	3.2	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.	0.7	68
100	Production of Quantum Dot Barcodes Using Biological Selfâ€Assembly. Advanced Materials, 2009, 21, 4020-4024.	11.1	68
101	Patterning and Regeneration of Surfaces with Antibodies. Analytical Chemistry, 1995, 67, 3605-3607.	3.2	67
102	MOLECULAR BASIS OF MITOCHONDRIAL MYOPATHIES: POLYPEPTIDE ANALYSIS IN COMPLEX-1 DEFICIENCY. Lancet, The, 1988, 331, 500-503.	6.3	66
103	Direct, Real-Time Sensing of Free Radical Production by Activated Human Glioblastoma Cells. Free Radical Biology and Medicine, 1998, 24, 1304-1309.	1.3	66
104	Electrocoalescence Mechanisms of Microdroplets Using Localized Electric Fields in Microfluidic Channels. Langmuir, 2010, 26, 14443-14449.	1.6	66
105	Mitochondrial respiratory chain function in multiple system atrophy. Movement Disorders, 1997, 12, 418-422.	2.2	65
106	Optical tweezers: wideband microrheology. Journal of Optics (United Kingdom), 2011, 13, 044022.	1.0	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.	0.3	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.	0.3	64

#	Article	IF	Citations
109	Toward a miniature wireless integrated multisensor microsystem for industrial and biomedical applications. IEEE Sensors Journal, 2002, 2, 628-635.	2.4	64
110	Role of Oxidative Damage in Friedreich's Ataxia. Neurochemical Research, 2004, 29, 561-567.	1.6	64
111	Multipoint Holographic Optical Velocimetry in Microfluidic Systems. Physical Review Letters, 2006, 96, 134502.	2.9	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.	3.3	63
113	Single-Cell Measurements of Purine Release Using a Micromachined Electroanalytical Sensor. Analytical Chemistry, 1998, 70, 1164-1170.	3.2	62
114	Continuous cell sorting in a flow based on single cell resonance Raman spectra. Lab on A Chip, 2016, 16, 1420-1429.	3.1	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.	2.6	62
116	Integrated immunoassay using tuneable surface acoustic waves and lensfree detection. Lab on A Chip, 2011, 11, 2725.	3.1	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.	2.2	60
119	Mitochondrial Myopathy with a Defect of Mitochondrial-Protein Transport. New England Journal of Medicine, 1990, 323, 37-42.	13.9	59
120	Simultaneous determination of follicle stimulating hormone and luteinising hormone using a multianalyte immunosensor. Analytica Chimica Acta, 1995, 310, 251-256.	2.6	59
121	Mitochondrial dysfunction in neurodegeneration. Journal of Bioenergetics and Biomembranes, 1997, 29, 175-183.	1.0	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.	5.3	59
123	Multiple plasmon resonances from gold nanostructures. Applied Physics Letters, 2007, 90, 143105.	1.5	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.	1.0	58
125	A microdroplet-based shift register. Lab on A Chip, 2010, 10, 3069.	3.1	58
126	Thermostable reduced nicotinamide adenine dinucleotide oxidase: application to amperometric enzyme assay. Analytical Chemistry, 1989, 61, 25-29.	3.2	57

#	Article	IF	Citations
127	Dynamic Analysis of Drug-Induced Cytotoxicity Using Chip-Based Dielectrophoretic Cell Immobilization Technology. Analytical Chemistry, 2011, 83, 2133-2144.	3.2	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.	1.1	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.	3.4	55
130	Mitochondrial function in neurodegeneration and ageing. Mutation Research - DNAging, 1992, 275, 133-143.	3.3	54
131	Lab-on-a-chip technologies for proteomic analysis from isolated cells. Journal of the Royal Society Interface, 2008, 5, S123-30.	1.5	54
132	Î±-Synuclein expression in HEK293 cells enhances the mitochondrial sensitivity to rotenone. Neuroscience Letters, 2003, 351, 29-32.	1.0	53
133	Monitoring Genetic Population Biomarkers for Wastewater-Based Epidemiology. Analytical Chemistry, 2017, 89, 9941-9945.	3.2	53
134	Intracellular Protein Determination Using Droplet-Based Immunoassays. Analytical Chemistry, 2011, 83, 5361-5368.	3.2	52
135	Characterization of electron transfer reactions of microperoxidase assembled at short-chain thiol-monolayers on gold. Biosensors and Bioelectronics, 1997, 12, 1143-1155.	5.3	51
136	Electrically initiated upstream coalescence cascade of droplets in a microfluidic flow. Physical Review E, 2009, 80, 046303.	0.8	51
137	Chip-Based Dynamic Real-Time Quantification of Drug-Induced Cytotoxicity in Human Tumor Cells. Analytical Chemistry, 2009, 81, 6952-6959.	3.2	51
138	Rareâ€Cell Enrichment by a Rapid, Labelâ€Free, Ultrasonic Isopycnic Technique for Medical Diagnostics. Angewandte Chemie - International Edition, 2014, 53, 5587-5590.	7.2	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.	3.1	50
140	Tuneable visible resonances in crescent shaped nano-split-ring resonators. Applied Physics Letters, 2007, 91, .	1.5	50
141	Friedreichâ€™s ataxia: Coenzyme Q10 and vitamin E therapy. Mitochondrion, 2007, 7, S127-S135.	1.6	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.	3.2	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.	13.1	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.	0.3	49

#	Article	IF	Citations
145	Microfabricated analytical systems for integrated cancer cytomics. Analytical and Bioanalytical Chemistry, 2010, 398, 193-209.	1.9	49
146	Integration of paper microfluidic sensors into contact lenses for tear fluid analysis. Lab on A Chip, 2020, 20, 3970-3979.	3.1	49
147	Miniaturized analytical methods for determination of environmental contaminants of emerging concern â€“ A review. Analytica Chimica Acta, 2021, 1158, 238108.	2.6	49
148	Mitochondrial DNA Depletion Syndrome is Expressed in Amniotic Fluid Cell Cultures. American Journal of Pathology, 1999, 155, 67-70.	1.9	48
149	Stimulation of Single Isolated Adult Ventricular Myocytes within a Low Volume Using a Planar Microelectrode Array. Biophysical Journal, 2003, 85, 1766-1774.	0.2	47
150	Dynamic analysis of apoptosis using cyanine SYTO probes: From classical to microfluidic cytometry. Experimental Cell Research, 2009, 315, 1706-1714.	1.2	47
151	i-Rheo: Measuring the materials' linear viscoelastic properties â€œin a stepâ€!. Journal of Rheology, 2016, 60, 649-660.	1.3	47
152	Single-Cell Measurements of Human Neutrophil Activation Using Electrorotation. Analytical Chemistry, 1998, 70, 2607-2612.	3.2	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.	3.1	46
154	Biocompatibility of a Lab-on-a-Pill Sensor in Artificial Gastrointestinal Environments. IEEE Transactions on Biomedical Engineering, 2006, 53, 2333-2340.	2.5	46
155	Application of quantum dot barcodes prepared using biological self-assembly to multiplexed immunoassays. Chemical Communications, 2010, 46, 2814.	2.2	46
156	Nanogap Ring Antennae as Plasmonically Coupled SERRS Substrates. Small, 2011, 7, 119-125.	5.2	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.	3.2	44
159	How well do we recognise non-motor symptoms in a British Parkinsonâ€™s disease population?. Journal of Neurology, 2011, 258, 1513-1517.	1.8	44
160	Photo-patterning of sensor surfaces with biomolecular structures: characterisation using AFM and fluorescence microscopy. Biosensors and Bioelectronics, 1995, 10, 841-846.	5.3	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.	0.6	43

#	Article	IF	Citations
163	Microfluidic cell arrays for metabolic monitoring of stimulated cardiomyocytes. Electrophoresis, 2010, 31, 1405-1413.	1.3	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.	0.9	43
165	Paper microfluidic implementation of loop mediated isothermal amplification for early diagnosis of hepatitis C virus. Nature Communications, 2021, 12, 6994.	5.8	43
166	Cytochrome oxidase immunohistochemistry: clues for genetic mechanisms. Brain, 2000, 123, 591-600.	3.7	42
167	A Programmable Microsystem Using System-on-Chip for Real-time Biotelemetry. IEEE Transactions on Biomedical Engineering, 2005, 52, 1251-1260.	2.5	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.	3.2	42
169	Dynamics of the Formation of Mixed Alkanethiol Monolayers:Â Applications in Structuring Biointerfacial Arrangements. Langmuir, 1998, 14, 5139-5146.	1.6	41
170	Heat conduction nanocalorimeter for pl-scale single cell measurements. Applied Physics Letters, 2002, 80, 2029-2031.	1.5	41
171	Inclusion formation in Huntington's disease R6/2 mouse muscle cultures. Journal of Neurochemistry, 2003, 87, 1-6.	2.1	41
172	Nebulisation on a disposable array structured with phononic lattices. Lab on A Chip, 2012, 12, 1268.	3.1	41
173	L-Dihydroxyphenylalanine and complex I deficiency in Parkinson's disease brain. Movement Disorders, 1995, 10, 295-297.	2.2	40
174	Dynamic in Situ Electrochemical Neutron Reflectivity Measurements. Journal of the American Chemical Society, 2004, 126, 15362-15363.	6.6	40
175	SERRS immunoassay for quantitative human CRP analysis. Analyst, The, 2008, 133, 1355.	1.7	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.	3.1	40
177	Effect of Laser Irradiation on Cell Function and Its Implications in Raman Spectroscopy. Applied and Environmental Microbiology, 2018, 84, .	1.4	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.	4.0	40
179	Free radicals and mitochondrial dysfunction in Parkinson's disease. Biochemical Society Transactions, 1993, 21, 367-370.	1.6	39
180	Biological Implications of Polymeric Microdevices for Live Cell Assays. Analytical Chemistry, 2009, 81, 9828-9833.	3.2	39

#	Article	IF	Citations
181	Miniaturized optoelectronic tweezers controlled by GaN micro-pixel light emitting diode arrays. Optics Express, 2011, 19, 2720.	1.7	39
182	Continuous flow separation of particles within an asymmetric microfluidic device. Lab on A Chip, 2006, 6, 561.	3.1	38
183	Hierarchical Nanotexturing Enables Acoustofluidics on Slippery yet Sticky, Flexible Surfaces. Nano Letters, 2020, 20, 3263-3270.	4.5	38
184	High-Throughput Screens for Postgenomics:Â Studies of Protein Crystallization Using Microsystems Technology. Analytical Chemistry, 2002, 74, 3505-3510.	3.2	36
185	Analysis of Protein Adsorption and Binding at Biosensor Polymer Interfaces Using X-ray Photon Spectroscopy and Scanning Electrochemical Microscopy. Analytical Chemistry, 2003, 75, 2559-2570.	3.2	36
186	Construction and Characterization of a Gold Nanoparticle Wire Assembled Using Mg2+-Dependent RNAâ^'RNA Interactions. Nano Letters, 2006, 6, 445-448.	4.5	36
187	SERS mapping of nanoparticle labels in single cells using a microfluidic chip. Chemical Communications, 2010, 46, 7921.	2.2	36
188	Integrated microspectrometer for fluorescence based analysis in a microfluidic format. Lab on A Chip, 2012, 12, 2850.	3.1	36
189	Amperometric enzyme electrode for the determination of aspartate aminotransferase and alanine aminotransferase in serum. Analytica Chimica Acta, 1991, 245, 57-62.	2.6	35
190	Influence of Hydrodynamic Conditions on Quantitative Cellular Assays in Microfluidic Systems. Analytical Chemistry, 2007, 79, 7139-7144.	3.2	35
191	Multipoint viscosity measurements in microfluidic channels using optical tweezers. Lab on A Chip, 2009, 9, 2059.	3.1	35
192	Rasagiline protects against alpha-synuclein induced sensitivity to oxidative stress in dopaminergic cells. Neurochemistry International, 2010, 57, 525-529.	1.9	35
193	Fish on chips: Microfluidic living embryo array for accelerated in vivo angiogenesis assays. Sensors and Actuators B: Chemical, 2013, 189, 11-20.	4.0	35
194	Microfluidic resonant cavities enable acoustophoresis on a disposable superstrate. Lab on A Chip, 2014, 14, 4277-4283.	3.1	35
195	Manipulating and assembling metallic beads with Optoelectronic Tweezers. Scientific Reports, 2016, 6, 32840.	1.6	35
196	Electroanalysis of Metabolic Flux from Single Cells in Simple Picoliter-Volume Microsystems. Analytical Chemistry, 2002, 74, 5001-5008.	3.2	34
197	A combined top-down bottom-up approach for introducing nanoparticle networks into nanoelectrode gaps. Nanotechnology, 2006, 17, 3333-3339.	1.3	34
198	Nanophotonic split-ring resonators as dichroics for molecular spectroscopy. Applied Physics Letters, 2008, 93, 023121.	1.5	34

#	Article	IF	Citations
199	Sequence-Selective Detection of Double-Stranded DNA Sequences Using Pyrroleâ€“Imidazole Polyamide Microarrays. Journal of the American Chemical Society, 2013, 135, 3449-3457.	6.6	34
200	Chemical-Free Lysis and Fractionation of Cells by Use of Surface Acoustic Waves for Sensitive Protein Assays. Analytical Chemistry, 2015, 87, 2161-2169.	3.2	34
201	Particle separation by phase modulated surface acoustic waves. Biomicrofluidics, 2017, 11, 054115.	1.2	34
202	Respiratory-deficient human fibroblasts exhibiting defective mitochondrial DNA replication. Biochemical Journal, 1995, 305, 817-822.	1.7	33
203	A microfluidic-based system for analysis of single cells based on Ca2+ flux. Electrophoresis, 2006, 27, 5093-5100.	1.3	33
204	Microfluidic systems to examine intercellular coupling of pairs of cardiac myocytes. Lab on A Chip, 2007, 7, 731.	3.1	33
205	New rationale for large metazoan embryo manipulations on chip-based devices. Biomicrofluidics, 2012, 6, 024102.	1.2	33
206	Integrating microfluidic generation, handling and analysis of biomimetic giant unilamellar vesicles. Lab on A Chip, 2014, 14, 1806-1810.	3.1	33
207	Paper-based nanosensors to evaluate community-wide illicit drug use for wastewater-based epidemiology. Water Research, 2021, 189, 116559.	5.3	33
208	Human mitochondrial complex I dysfunction. Biochimica Et Biophysica Acta - Bioenergetics, 1992, 1101, 198-203.	0.5	33
209	Evidence for the functional mechanism of a polypyrrole glucose oxidase electrode. Electroanalysis, 1993, 5, 883-886.	1.5	32
210	Use of the 13C-octanoic acid breath test for assessment of solid-phase gastric emptying in dogs. American Journal of Veterinary Research, 2001, 62, 1939-1944.	0.3	32
211	Implementation of radiotelemetry in a lab-in-a-pill format. Lab on A Chip, 2006, 6, 39-45.	3.1	32
212	Optical Properties of Multipleâ€Split Nanophotonic Ring Antennae. Advanced Materials, 2010, 22, 4025-4029.	11.1	32
213	Chronic administration of the oral hypoglycaemic agent diphenyleneiodonium to rats. Biochemical Pharmacology, 1988, 37, 687-694.	2.0	31
214	Mitochondrial function in Alzheimer's disease. Lancet, The, 1993, 341, 969-970.	6.3	31
215	Towards electronic Petri dishes and picolitre-scale single-cell technologies. Trends in Biotechnology, 1999, 17, 226-230.	4.9	31
216	Spectroscopic Evaluation of Protein Affinity Binding at Polymeric Biosensor Films. Journal of the American Chemical Society, 1999, 121, 4302-4303.	6.6	31

#	Article	IF	Citations
217	Use of Neutron Reflectivity to Measure the Dynamics of Solvation and Structural Changes in Polyvinylferrocene Films During Electrochemically Controlled Redox Cycling. Langmuir, 2009, 25, 4093-4103.	1.6	31
218	Hysteresis in Multiphase Microfluidics at a T-Junction. Langmuir, 2010, 26, 9416-9422.	1.6	31
219	Visualization of Surface Acoustic Waves in Thin Liquid Films. Scientific Reports, 2016, 6, 21980.	1.6	31
220	G209A mutant alpha synuclein expression specifically enhances dopamine induced oxidative damage. Neurochemistry International, 2004, 45, 669-676.	1.9	30
221	Using Optical Tweezers for the Characterization of Polyelectrolyte Solutions with Very Low Viscoelasticity. Langmuir, 2013, 29, 9224-9230.	1.6	30
222	Electron-beam-induced densification of Ge-doped flame hydrolysis silica for waveguide fabrication. Applied Physics Letters, 2001, 79, 2889-2891.	1.5	29
223	All-digital interface ASIC for a QCM-based electronic nose. Sensors and Actuators B: Chemical, 2004, 103, 31-36.	4.0	29
224	Apoptosis goes on a chip: advances in the microfluidic analysis of programmed cell death. Analytical Chemistry, 2011, 83, 6439-6446.	3.2	29
225	Rapid ultrasonic isothermal amplification of DNA with multiplexed melting analysis â€“ applications in the clinical diagnosis of sexually transmitted diseases. Chemical Communications, 2015, 51, 2589-2592.	2.2	29
226	Paperâ€Origamiâ€Based Multiplexed Malaria Diagnostics from Whole Blood. Angewandte Chemie, 2016, 128, 15476-15479.	1.6	29
227	The 14484 ND6 mtDNA mutation in Leber hereditary optic neuropathy does not affect fibroblast complex I activity. American Journal of Human Genetics, 1995, 57, 1501-2.	2.6	29
228	Amperometric biosensor for rapid measurement of 3-hydroxybutyrate in undiluted whole blood and plasma. Analytica Chimica Acta, 1990, 237, 99-105.	2.6	28
229	Antibodies to human optic nerve in Leber's hereditary optic neuropathy. Journal of the Neurological Sciences, 1995, 130, 134-138.	0.3	28
230	Microsystems for optical gas sensing incorporating the solvatochromic dye Nile Red. Sensors and Actuators B: Chemical, 2003, 92, 73-80.	4.0	28
231	Integration of Low-Power Microfluidic Pumps with Biosensors within a Laboratory-on-a-Chip Device. Analytical Chemistry, 2009, 81, 1365-1370.	3.2	28
232	Polymer dual ring resonators for label-free optical biosensing using microfluidics. Chemical Communications, 2013, 49, 3095.	2.2	28
233	Visual detection of Brucella in bovine biological samples using DNA-activated gold nanoparticles. PLoS ONE, 2017, 12, e0180919.	1.1	28
234	The molecular pathology of respiratory-chain dysfunction in human mitochondrial myopathies. Biochimica Et Biophysica Acta - Bioenergetics, 1990, 1018, 217-222.	0.5	27

#	Article	IF	Citations
235	Mask-less ultraviolet photolithography based on CMOS-driven micro-pixel light emitting diodes. Optics Express, 2009, 17, 23522.	1.7	27
236	A kinetic study of an amperometric enzyme electrode based on immobilised cytochrome C peroxidase. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1989, 272, 57-70.	0.3	26
237	Miniaturized Electroanalytical Sensor Systems in Micromachined Structures. Electroanalysis, 2000, 12, 631-639.	1.5	26
238	Redox Controlled Partition and Spatial Distribution of Solvent and Salt in Electroactive Polyvinylferrocene Filmsâ€. Langmuir, 2003, 19, 7746-7753.	1.6	26
239	Partial Synchronization of Stochastic Oscillators through Hydrodynamic Coupling. Physical Review Letters, 2012, 108, 240601.	2.9	26
240	Particle separation in surface acoustic wave microfluidic devices using reprogrammable, pseudo-standing waves. Applied Physics Letters, 2018, 113, .	1.5	26
241	Holographic detection of nanoparticles using acoustically actuated nanolenses. Nature Communications, 2020, 11, 171.	5.8	26
242	A MITOCHONDRIAL ENCEPHALOMYOPATHY WITH SPECIFIC DEFICIENCIES OF TWO RESPIRATORY CHAIN POLYPEPTIDES AND A CIRCULATING AUTOANTIBODY TO A MITOCHONDRIAL MATRIX PROTEIN. Brain, 1990, 113, 419-432.	3.7	25
243	Mitochondrial Dysfunction in Friedreich's Ataxia: From Pathogenesis to Treatment Perspectives. Free Radical Research, 2002, 36, 461-466.	1.5	25
244	Simultaneous multianalyte identification of molecular species involved in terrorism using Raman spectroscopy. IEEE Sensors Journal, 2005, 5, 632-640.	2.4	25
245	Investigation of the stability of labelled nanoparticles for SE(R)RS measurements in cells. Chemical Communications, 2011, 47, 4099.	2.2	25
246	Quantitative Characterization of Individual Microdroplets using Surface-Enhanced Resonance Raman Scattering Spectroscopy. Analytical Chemistry, 2012, 84, 1491-1495.	3.2	25
247	Cycling of Rational Hybridization Chain Reaction To Enable Enzyme-Free DNA-Based Clinical Diagnosis. ACS Nano, 2018, 12, 7213-7219.	7.3	25
248	An animal model of mitochondrial myopathy: A biochemical and physiological investigation of rats treated in vivo with the NADH-CoQ reductase inhibitor, diphenyleneiodonium. Journal of the Neurological Sciences, 1988, 83, 335-347.	0.3	24
249	Probing enzyme polymer biosensors using X-ray photoelectron spectroscopy: Determination of glucose oxidase in electropolymerised films. Biosensors and Bioelectronics, 1996, 11, 625-631.	5.3	24
250	Quantitative Comparison between Microfluidic and Microtiter Plate Formats for Cell-Based Assays. Analytical Chemistry, 2008, 80, 179-185.	3.2	24
251	Single cell growth rate and morphological dynamics revealing an â€œopportunisticâ€•persistence. Analyst, The, 2014, 139, 3305-3313.	1.7	24
252	Controlled Rotation and Vibration of Patterned Cell Clusters Using Dielectrophoresis. Analytical Chemistry, 2015, 87, 2389-2395.	3.2	24

#	Article	IF	Citations
253	Tailored Polymers To Probe the Nature of the Bioelectrochemical Interface. Langmuir, 1996, 12, 5681-5688.	1.6	23
254	Strategies towards functionalised electronically conducting organic copolymers: Part 2. Copolymerisation. Journal of Materials Chemistry, 2000, 10, 1785-1793.	6.7	23
255	Interconnected reversible lab-on-a-chip technology. Lab on A Chip, 2002, 2, 65.	3.1	23
256	An integrated fluorescence array as a platform for lab-on-a-chip technology using multimode interference splitters. IEEE Sensors Journal, 2005, 5, 1315-1320.	2.4	23
257	A Multiplexed Impedance Analyzer for Characterizing Polymer-Coated QCM Sensor Arrays. IEEE Sensors Journal, 2006, 6, 996-1002.	2.4	23
258	Extracellular Recordings of Field Potentials from Single Cardiomyocytes. Biophysical Journal, 2006, 91, 2543-2551.	0.2	23
259	Interfacing Cell-Based Assays in Environmental Scanning Electron Microscopy Using Dielectrophoresis. Analytical Chemistry, 2011, 83, 3217-3221.	3.2	23
260	Counterflow Dielectrophoresis for Trypanosome Enrichment and Detection in Blood. Scientific Reports, 2012, 2, 775.	1.6	23
261	Manufacturing with light - micro-assembly of opto-electronic microstructures. Optics Express, 2017, 25, 28838.	1.7	23
262	Real-Time Cytotoxicity Assays. Methods in Molecular Biology, 2011, 731, 285-291.	0.4	23
263	Myopathy in vitamin E deficient rats: muscle fibre necrosis associated with disturbances of mitochondrial function. Journal of Anatomy, 1993, 183 (Pt 3), 451-61.	0.9	23
264	Amperometric enzyme electrode for determination of theophylline in serum. Biosensors and Bioelectronics, 1992, 7, 375-380.	5.3	22
265	Determination of the Biomolecular Composition of an Enzymeâ˜Polymer Biosensor. Journal of Physical Chemistry B, 1997, 101, 2092-2100.	1.2	22
266	Odour mapping using microresistor and piezo-electric sensor pairs. Sensors and Actuators B: Chemical, 2000, 66, 94-97.	4.0	22
267	Temporal and Spatial Profiling of the Modification of an Electroactive Polymeric Interface Using Neutron Reflectivity. Analytical Chemistry, 2001, 73, 5596-5606.	3.2	22
268	Current and future uses of breath analysis as a diagnostic tool. Veterinary Record, 2004, 154, 353-360.	0.2	22
269	Trapping and imaging of micronâ€sized embryos using dielectrophoresis. Electrophoresis, 2011, 32, 3129-3132.	1.3	22
270	Branched hybridization chain reactionâ€”using highly dimensional DNA nanostructures for label-free, reagent-less, multiplexed molecular diagnostics. Microsystems and Nanoengineering, 2019, 5, 37.	3.4	22

#	Article	IF	Citations
271	Concentrated vertical jetting mechanism for isotropically focused Zno/Si surface acoustic waves. International Journal of Multiphase Flow, 2019, 114, 1-8.	1.6	22
272	A kinetic stidy of the catalysed oxidation of 1',3-dimethylferrocene ethylamine by cytochrome c peroxidase. Journal of Electroanalytical Chemistry and Interfacial Electrochemistry, 1991, 312, 155-163.	0.3	21
273	3D Mapping of Microfluidic Flow in Laboratory-on-a-Chip Structures Using Optical Tweezers. Analytical Chemistry, 2008, 80, 4237-4240.	3.2	21
274	Interfacing low-energy SAW nebulization with Liquid Chromatography-Mass Spectrometry for the analysis of biological samples. Scientific Reports, 2015, 5, 9736.	1.6	21
275	Use of optoelectronic tweezers in manufacturingâ€"accurate solder bead positioning. Applied Physics Letters, 2016, 109, .	1.5	21
276	A bio-electronic interface using functionalised conducting poly(pyrroles). Journal of the Chemical Society Chemical Communications, 1995, , 697.	2.0	20
277	Nitric oxide enhances MPP+inhibition of complex I. FEBS Letters, 2001, 504, 50-52.	1.3	20
278	Acoustically controlled enhancement of molecular sensing to assess oxidative stress in cells. Chemical Communications, 2013, 49, 2918.	2.2	20
279	Cell chip array for microfluidic proteomics enabling rapid in situ assessment of intracellular protein phosphorylation. Biomicrofluidics, 2011, 5, 24106.	1.2	19
280	Role of conducting polymeric interfaces in promoting biological electron transfer. Biosensors and Bioelectronics, 1997, 12, 721-727.	5.3	18
281	MitBASE : a comprehensive and integrated mitochondrial DNA database. The present status. Nucleic Acids Research, 2000, 28, 148-152.	6.5	18
282	Visual Observations of SERRS from Single Silver-Coated Silica Microparticles within Optical Tweezers. Angewandte Chemie - International Edition, 2004, 43, 2512-2514.	7.2	18
283	Three-dimensional optical trapping of partially silvered silica microparticles. Optics Letters, 2004, 29, 2488.	1.7	18
284	Surface-enhanced resonance Raman scattering in optical tweezers using co-axial second harmonic generation. Optics Express, 2005, 13, 4148.	1.7	18
285	Fabrication of robust 2-D and 3-D microfluidic networks for lab-on-a-chip bioassays. Journal of Microelectromechanical Systems, 2005, 14, 839-846.	1.7	18
286	Integrating optics and microfluidics for time-correlated single-photon counting in lab-on-a-chip devices. Applied Physics Letters, 2007, 91, 071123.	1.5	18
287	Manipulation of live mouse embryonic stem cells using holographic optical tweezers. Journal of Modern Optics, 2009, 56, 448-452.	0.6	18
288	Microfluidic cell arrays in tumor analysis: new prospects for integrated cytomics. Expert Review of Molecular Diagnostics, 2010, 10, 521-530.	1.5	18

#	Article	IF	Citations
289	Benchmarking methods of enhanced heavy oil recovery using a microscaled bead-pack. Lab on A Chip, 2010, 10, 819.	3.1	18
290	A capillary-based multiplexed isothermal nucleic acid-based test for sexually transmitted diseases in patients. Chemical Communications, 2016, 52, 12187-12190.	2.2	18
291	Swimming Using Surface Acoustic Waves. PLoS ONE, 2013, 8, e42686.	1.1	18
292	Mitochondrial DNA in focal dystonia: A cybrid analysis. Annals of Neurology, 1998, 44, 258-261.	2.8	17
293	MitBASE: a comprehensive and integrated mitochondrial DNA database. Nucleic Acids Research, 1999, 27, 128-133.	6.5	17
294	Creating â€œLivingâ€•Polymer Surfaces to Pattern Biomolecules and Cells on Common Plastics. Biomacromolecules, 2013, 14, 1278-1286.	2.6	17
295	Spatially Selecting a Single Cell for Lysis Using Lightâ€Induced Electric Fields. Small, 2014, 10, 3026-3031.	5.2	17
296	Shapeâ€Dependent Optoelectronic Cell Lysis. Angewandte Chemie - International Edition, 2014, 53, 842-846.	7.2	17
297	Cell proliferation and migration inside single cell arrays. Lab on A Chip, 2015, 15, 208-215.	3.1	17
298	High-Speed Diagnosis of Bacterial Pathogens at the Single Cell Level by Raman Microspectroscopy with Machine Learning Filters and Denoising Autoencoders. ACS Chemical Biology, 2022, 17, 376-385.	1.6	17
299	Reprogrammed tracrRNAs enable repurposing of RNAs as crRNAs and sequence-specific RNA biosensors. Nature Communications, 2022, 13, 1937.	5.8	17
300	Functionalisation and characterisation of novel conducting polymer interfaces. Journal of the Chemical Society Chemical Communications, 1995, , 1471.	2.0	16
301	The determination of gaseous molecular density using a hybrid vapour sensor. Chemical Communications, 1998, , 2753-2754.	2.2	16
302	Sensitivity of respiratory chain activities to lipid peroxidation: effect of vitamin E deficiency. Biochemical Journal, 2001, 357, 887.	1.7	16
303	Spatial distributions of polymer and mobile species in poly(o-toluidine) films. Journal of Electroanalytical Chemistry, 2002, 532, 269-276.	1.9	16
304	Evaluating the Influence of Deposition Conditions on Solvation of Reactive Conducting Polymers with Neutron Reflectivity. Journal of Physical Chemistry B, 2005, 109, 14335-14343.	1.2	16
305	Plasmon Shaping by using Protein Nanoarrays and Molecular Lithography to Engineer Structural Color. Angewandte Chemie - International Edition, 2012, 51, 3562-3566.	7.2	16
306	Characterisation of GLUT4 trafficking in HeLa cells: comparable kinetics and orthologous trafficking mechanisms to 3T3-L1 adipocytes. PeerJ, 2020, 8, e8751.	0.9	16

#	Article	IF	Citations
307	Generation of primary hepatocyte microarrays by piezoelectric printing. Colloids and Surfaces B: Biointerfaces, 2012, 89, 126-132.	2.5	15
308	Frequency dependence of microflows upon acoustic interactions with fluids. Physics of Fluids, 2017, 29, 122008.	1.6	15
309	Biochemical and molecular aspects of human mitochondrial respiratory chain disorders. Biochemical Society Transactions, 1990, 18, 517-519.	1.6	14
310	XPS assaying of electrodeposited copolymer composition to optimise sensor materials. Journal of Electron Spectroscopy and Related Phenomena, 2001, 121, 131-148.	0.8	14
311	Spectroscopic Probing of Dynamic Changes during Stimulation and Cell Remodeling in the Single Cardiac Myocyte. Analytical Chemistry, 2007, 79, 4581-4587.	3.2	14
312	Polymer-based micro-sensor paired arrays for the determination of primary alcohol vapors. Sensors and Actuators B: Chemical, 2007, 125, 85-91.	4.0	14
313	Layer-by-Layer Quantum Dot Constructs Using Self-Assembly Methods. Langmuir, 2010, 26, 16934-16940.	1.6	14
314	Aerosol droplet optical trap loading using surface acoustic wave nebulization. Optics Express, 2013, 21, 30148.	1.7	14
315	A rapid variant-tolerant reverse transcription loop-mediated isothermal amplification assay for the point of care detection of HIV-1. Analyst, The, 2021, 146, 5347-5356.	1.7	14
316	Creation of super-hydrophobic siloxane-modified SU-8 microstuctures. Microelectronic Engineering, 2009, 86, 1325-1328.	1.1	13
317	Real time characterization of hydrodynamics in optically trapped networks of microâ€particles. Journal of Biophotonics, 2010, 3, 244-251.	1.1	13
318	The Use of Surface-Enhanced Raman Scattering for Detecting Molecular Evidence of Life in Rocks, Sediments, and Sedimentary Deposits. Astrobiology, 2010, 10, 629-641.	1.5	13
319	Regional Electroporation of Single Cardiac Myocytes in a Focused Electric Field. Analytical Chemistry, 2010, 82, 585-592.	3.2	13
320	Droplet Microfluidics for High-throughput Analysis of Cells and Particles. Methods in Cell Biology, 2011, 102, 23-48.	0.5	13
321	Additive manufacturing of lab-on-a-chip devices: promises and challenges. , 2013, , .		13
322	Modifications of electrodeposited polymers by ion chelation to produce templates for biomolecule immobilisation. Electrochimica Acta, 2000, 45, 3823-3831.	2.6	12
323	Stimulation of Isolated Ventricular Myocytes Within an Open Architecture Microarray. IEEE Transactions on Biomedical Engineering, 2005, 52, 531-538.	2.5	12
324	Microfluidic Partitioning of the Extracellular Space around Single Cardiac Myocytes. Analytical Chemistry, 2007, 79, 1205-1212.	3.2	12

#	Article	IF	Citations
325	Optically driven pumps and flow sensors for microfluidic systems. Proceedings of the Institution of Mechanical Engineers, Part C: Journal of Mechanical Engineering Science, 2008, 222, 829-837.	1.1	12
326	Hysteresis and Reversibility of a Superhydrophobic Photopatternable Silicone Elastomer. Langmuir, 2010, 26, 7248-7253.	1.6	11
327	Cytoskeletal Protein Expression and its Association within the Hydrophobic Membrane of Artificial Cell Models. ChemBioChem, 2012, 13, 792-795.	1.3	11
328	Rareâ€Cell Enrichment by a Rapid, Labelâ€Free, Ultrasonic Isopycnic Technique for Medical Diagnostics. Angewandte Chemie, 2014, 126, 5693-5696.	1.6	11
329	Reversible DNA micro-patterning using the fluorous effect. Chemical Communications, 2017, 53, 3094-3097.	2.2	11
330	Direct Electrochemical Coupling of Components of the Biological Electron Transfer Chain to Modified Surfaces: Molecular Recognition between Cytochrome c Peroxidase and Cytochrome c. Angewandte Chemie International Edition in English, 1995, 34, 2409-2411.	4.4	10
331	Local Regional Stimulation of Single Isolated Ventricular Myocytes Using Microfluidics. Analytical Chemistry, 2009, 81, 6390-6398.	3.2	10
332	Fish on Chips: Automated Microfluidic Living Embryo Arrays. Procedia Engineering, 2012, 47, 84-87.	1.2	10
333	Expression of membrane-associated proteins within single emulsion cell facsimiles. Analyst, The, 2012, 137, 2939.	1.7	10
334	Confinement of surface waves at the air-water interface to control aerosol size and dispersity. Physics of Fluids, 2017, 29, 112105.	1.6	10
335	Immobilisierung von BiomolekÃ¼len in zweidimensionalen Mustern im MikrometermaÃŸstab. Angewandte Chemie, 1995, 107, 84-86.	1.6	9
336	Modulation of Firefly Luciferase Bioluminescence at Bioelectrochemical Interfaces. Analytical Chemistry, 1998, 70, 4170-4176.	3.2	9
337	Mitochondrial DNA in idiopathic cardiomyopathy. European Heart Journal, 1998, 19, 1725-1729.	1.0	9
338	Metal chelation and spatial profiling of components in crown ether functionalised conducting copolymer films. Electrochimica Acta, 2009, 55, 439-450.	2.6	9
339	Engineering DNA Binding Sites to Assemble and Tune Plasmonic Nanostructures. Advanced Materials, 2014, 26, 4286-4292.	11.1	9
340	An integrated microspectrometer for localised multiplexing measurements. Lab on A Chip, 2015, 15, 283-289.	3.1	9
341	Imaging of protein arrays and gradients using softlithography and biochip technology. Sensors and Actuators B: Chemical, 2002, 82, 233-240.	4.0	8
342	Ultrasonographic assessment of the rate of solid-phase gastric emptying in dogs. Veterinary Record, 2005, 157, 649-652.	0.2	8

#	Article	IF	Citations
343	Microfluidic-based measurements of cytochrome P450 enzyme activity of primary mammalian hepatocytes. Analyst, The, 2010, 135, 1282.	1.7	8
344	How common and what are the determinants of sub-optimal care for Parkinsonâ€™s disease patients: The Milton Keynes community study. Parkinsonism and Related Disorders, 2011, 17, 177-181.	1.1	8
345	Quantification of Functionalised Gold Nanoparticle-Targeted Knockdown of Gene Expression in HeLa Cells. PLoS ONE, 2014, 9, e99458.	1.1	8
346	Magnetite-doped polydimethylsiloxane (PDMS) for phosphopeptide enrichment. Analyst, The, 2014, 139, 4974-4981.	1.7	8
347	Channel integrated optoelectronic tweezer chip for microfluidic particle manipulation. Journal of Micromechanics and Microengineering, 2020, 30, 045004.	1.5	8
348	Elektrochemische Kupplung von Komponenten der biologischen Elektronentransportkette an modifizierte OberflÃchen: molekulare Erkennung zwischen Cytochromâ€câ€Peroxidase und Cytochrom c. Angewandte Chemie, 1995, 107, 2610-2613.	1.6	7
349	Distribution of adsorbed molecules in electronic nose sensors. Physica B: Condensed Matter, 2000, 276-278, 357-358.	1.3	7
350	Friedreich's ataxia. International Review of Neurobiology, 2002, 53, 147-173.	0.9	7
351	Effect of body size on gastric emptying using the 13C-octanoic acid breath test. Journal of Small Animal Practice, 2004, 45, 386-389.	0.5	7
352	The solid-state reaction of a functionalised polypyrrole; analysis using high resolution X-ray photoelectron spectroscopy. Physical Chemistry Chemical Physics, 2004, 6, 2403.	1.3	7
353	Fabrication and tuning of nanoscale metallic ring and split-ring arrays. Journal of Vacuum Science & Technology B, 2007, 25, 2628.	1.3	7
354	Determining Compositional Profiles within Conducting Polymer Films Following Reaction with Vapor Phase Reagents. Journal of Physical Chemistry B, 2007, 111, 4043-4053.	1.2	7
355	Fabrication of double split metallic nanorings for Raman sensing. Microelectronic Engineering, 2009, 86, 1146-1149.	1.1	7
356	DNA-directed spatial assembly of photosynthetic light-harvesting proteins. Organic and Biomolecular Chemistry, 2016, 14, 1359-1362.	1.5	7
357	Creating tissue on chip constructs in microtitre plates for drug discovery. RSC Advances, 2018, 8, 9603-9610.	1.7	7
358	Breaking the Symmetry of Momentum Conservation Using Evanescent Acoustic Fields. Physical Review Letters, 2018, 121, 244301.	2.9	7
359	Highly Efficient Spatially Offset Raman Spectroscopy to Profile Molecular Composition in Bone. IEEE Access, 2020, 8, 62905-62911.	2.6	7
360	Bandpass sorting of heterogeneous cells using a single surface acoustic wave transducer pair. Biomicrofluidics, 2021, 15, 014105.	1.2	7

#	Article	IF	Citations
361	Direct Electron Transfer Between Immobilised Cytochrome C and Gold Electrodes. Molecular Crystals and Liquid Crystals, 1993, 235, 127-132.	0.3	6
362	Fabrication of integrated microanalytical chambers and channels for biological assays using flame hydrolysis deposition glass. Microelectronic Engineering, 1999, 46, 419-422.	1.1	6
363	Determination of solvation and binding site profile within electropolymerised poly(pyrrole-N-propionic Acid). Physica B: Condensed Matter, 2000, 276-278, 359-360.	1.3	6
364	Validation of a method for collection and assay of pentane in the exhaled breath of the horse. Research in Veterinary Science, 2004, 76, 109-112.	0.9	6
365	The extraction of intracrystalline biomarkers and other organic compounds from sulphate minerals using a microfluidic format â€“ a feasibility study for remote fossil-life detection using a microfluidic H-cell. International Journal of Astrobiology, 2007, 6, 27-36.	0.9	6
366	Microfluidics-Based Approaches to the Isolation of African Trypanosomes. Pathogens, 2017, 6, 47.	1.2	6
367	Electrochemically controlled micropatterning of immobilised species on functionalised electrode interfaces. Chemical Communications, 1999, , 1683-1684.	2.2	5
368	Bridging the Gap Between Micro and Nanotechnology: Using Lab-on-a-Chip to Enable Nanosensors for Genomics, Proteomics, and Diagnostic Screening. Lecture Notes in Computer Science, 2004, , 517-521.	1.0	5
369	Optoelectronic tweezers for the measurement of the relative stiffness of erythrocytes. Proceedings of SPIE, 2012, , .	0.8	5
370	Intracellular protein trafficking kinetics in chronic myeloid leukemia stem cells using a microfluidic platform. Integrative Biology (United Kingdom), 2012, 4, 368.	0.6	5
371	Matrix-masking to balance nonuniform illumination in microscopy. Optics Express, 2018, 26, 17279.	1.7	5
372	Computational Image Analysis of Guided Acoustic Waves Enables Rheological Assessment of Sub-nanoliter Volumes. ACS Nano, 2019, 13, 11062-11069.	7.3	5
373	Spatial Heterodyne Offset Raman Spectroscopy Enabling Rapid, High Sensitivity Characterization of Materialsâ€™ Interfaces. Small, 2021, 17, 2101114.	5.2	5
374	Synchronous nanoscale topographic and chemical mapping by differential-confocal controlled Raman microscopy. Photonics Research, 2020, 8, 1441.	3.4	5
375	One-step immunoaffinity purification of complex I subunits from beef heart mitochondria. Protein Expression and Purification, 1992, 3, 223-227.	0.6	4
376	The mitBASE human dataset structure. Nucleic Acids Research, 1998, 26, 116-119.	6.5	4
377	Electrochemical manipulation of localised pH: application to electroanalysis. Journal of Electroanalytical Chemistry, 2002, 520, 13-17.	1.9	4
378	A comparison of the rate of recovery of in exhaled breath with 2H in body water following ingestion of [2H/13C]octanoic acid in a dog. Research in Veterinary Science, 2003, 74, 123-127.	0.9	4

#	Article	IF	Citations
379	Networked wireless microsystem for remote gastrointestinal monitoring. , 0, , .		4
380	A Robust Lithographic Method for Multiplex Surface Pattering. Current Analytical Chemistry, 2013, 9, 29-36.	0.6	4
381	Annular nanoplasmonic void arrays as tunable surface enhanced Raman spectroscopy substrates. Applied Physics Letters, 2014, 105, 033115.	1.5	4
382	Assembling silver nanowires using optoelectronic tweezers. , 2016, , .		4
383	Programmable design of isothermal nucleic acid diagnostic assays through abstraction-based models. Nature Communications, 2022, 13, 1635.	5.8	4
384	Micrometre-scale bioluminescent enzyme photopatterning for bioelectronics applications. Thin Solid Films, 1996, 284-285, 776-779.	0.8	3
385	Enzyme assay using ultra-low volume surface micromachined sensors. Chemical Communications, 1998, , 471-472.	2.2	3
386	Update of the human MitBASE database. Nucleic Acids Research, 1999, 27, 143-146.	6.5	3
387	Miniaturized screening technologies for drug discovery. Biochemical Society Transactions, 2002, 30, 802-806.	1.6	3
388	Gold nanoparticle wires made using RNA-based self-assembly. Journal of Vacuum Science & Technology B, 2006, 24, 3196.	1.3	3
389	OpenSource Labâ€onâ€aâ€Chip Physiometer for Accelerated Zebrafish Embryo Biotests. Current Protocols in Cytometry, 2014, 67, 9.44.1-9.44.16.	3.7	3
390	Hyperelastic Tuning of One-Dimensional Phononic Band Gaps Using Directional Stress. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2018, 65, 1056-1061.	1.7	3
391	Multireflection Polarimetry in Microfluidics. , 2019, 3, 1-4.		3
392	Electrochemical modulation of bioluminescence. Chemical Communications, 1996, , 2493.	2.2	2
393	Optical manipulation of aerosols using surface acoustic wave nebulisation. Proceedings of SPIE, 2011, , .	0.8	2
394	Optoelectronic tweezers for medical diagnostics. , 2012, , .		2
395	Continuous cell lysis in microfluidics through acoustic and optoelectronic tweezers. , 2013, , .		2
396	Treatment of experimental NADH ubiquinone reductase deficiency with menadione. Brain, 1992, 115 (Pt) Tj ETQq0 0 0 rgBT /Overlock 1	3.7	2

#	Article	IF	Citations
397	Human Activity Recognition based on Collaboration of Vision and WiFi Signals. , 2021, , .		2
398	Bio-Electrochemical Characterization of Micromachined Two- Electrode Cell Sensors. International Journal of Nonlinear Sciences and Numerical Simulation, 2002, 3, .	0.4	1
399	Characterization of germanium-doped silica layers deposited by flame-hydrolysis. Optical Materials, 2004, 27, 365-371.	1.7	1
400	Three-dimensional structures in optical tweezers. , 2004, , .		1
401	An optically driven pump for microfluidics. , 2006, , .		1
402	Phononic fluidics: acoustically activated droplet manipulations. Proceedings of SPIE, 2011, , .	0.8	1
403	Intracellular multiplex detection and imaging of stable chemisorbed labels by SERS spectroscopy. , 2012, , .		1
404	Single-Cell Analysis in Microdroplets. , 2012, , 211-228.		1
405	Titelbild: Plasmon Shaping by using Protein Nanoarrays and Molecular Lithography to Engineer Structural Color (Angew. Chem. 15/2012). Angewandte Chemie, 2012, 124, 3551-3551.	1.6	1
406	Molecularly defined plasmonic engineering to visualize antibody binding events by eye. , 2013, , .		1
407	Rheology at the micro-scale: new tools for bio-analysis. Proceedings of SPIE, 2013, , .	0.8	1
408	Green-function Method for Nonlinear Interactions of Elastic Waves. , 2019, , .		1
409	Ultrasonic Wave Mixing for Nonlinear Ultrasonics in a Microfluidic Capillary. , 2019, , .		1
410	Manipulating and assembling metallic beads with Optoelectronic Tweezers. , 0, .		1
411	Optoelectronic Tweezers as a Tool for Medical Diagnostics. , 2011, , .		1
412	Use of Micromachined Electroanalytical Chambers in Biotechnology. Electrochemistry, 1999, 67, 269-275.	0.6	1
413	Tracking Molecular Diffusion across Biomaterialsâ€™ Interfaces Using Stimulated Raman Scattering. ACS Applied Materials & Interfaces, 0, , .	4.0	1
414	Automated analysis in health and the environment. Analytical Proceedings, 1990, 27, 93.	0.4	0

#	Article	IF	Citations
415	A review of research in bioelectronics at Glasgow University. Biosensors and Bioelectronics, 1993, 8, xxii-xxx.	5.3	0
416	An interactive approach to optical tweezer control. Proceedings of SPIE, 2005, , .	0.8	0
417	PCR detection using nanofabricated SERS microchips. , 2005, 5763, 318.		0
418	Surface-enhanced Raman spectroscopy of molecular motors. , 2005, 5763, 117.		0
419	Pachinko biology: Gambling on single cells. , 2009, , .		0
420	Measuring droplet properties through passive microrheology in optical tweezers. Proceedings of SPIE, 2009, , .	0.8	0
421	Miniaturised optoelectronic tweezers controlled by GaN micro light emitting diode arrays. , 2010, , .		0
422	New optical, acoustic, and electrical diagnostics for the developing world. Proceedings of SPIE, 2012, , .	0.8	0
423	Characterization of individual microdroplets by SERRS spectroscopy. Proceedings of SPIE, 2012, , .	0.8	0
424	OET meets acoustic tweezing. Proceedings of SPIE, 2012, , .	0.8	0
425	The Legacy of Volta: Looking to the Future of Bioelectrochemistry, after more than 200 Years. Electrochemistry, 2012, 80, 291-291.	0.6	0
426	Integrated microfluidic spectroscopic sensor using arrayed waveguide grating. Proceedings of SPIE, 2013, , .	0.8	0
427	Adapted AWG design for localised spectroscopic measurements. , 2013, , .		0
428	Optoelectronic cell lysis. , 2014, , .		0
429	Wireless Sensor Microsystem Design: A Practical Perspective. , 2014, , 463-494.		0
430	Editorial â€“ probe and chip approaches to cell analysis. Analyst, The, 2014, 139, 3205.	1.7	0
431	Plasmonics: Engineering DNA Binding Sites to Assemble and Tune Plasmonic Nanostructures (Adv.) Tj ETQq1 1 0.784314 rgBT /Overlock 11.1		0
432	An engineered nano-plasmonic biosensing surface for colorimetric and SERS detection of DNA-hybridization events. , 2015, , .		0

#	Article	IF	Citations
433	Automated particle identification through regression analysis of size, shape and colour. , 2016, , .		0
434	Polarization switchable two-color plasmonic nano-pixels for creating optical surfaces encoded with dual information states. Proceedings of SPIE, 2016, , .	0.8	0
435	Engineering molecularly-active nanoplasmonic surfaces for DNA detection via colorimetry and Raman scattering. Proceedings of SPIE, 2016, , .	0.8	0
436	Microstructures to shape acoustic fields and create complex microfluidic flows. , 2018, , .		0
437	Ultrasonic waves in uniaxially stressed multilayered and one-dimensional phononic structures: Guided and Floquet wave analysis. Journal of the Acoustical Society of America, 2018, 144, 81-91.	0.5	0
438	Non-Classical Second-Order Nonlinear Elastic Wave Interactions. , 2019, , .		0
439	Ultrasonic Surface Acoustic Wave platform for targeted pulmonary delivery of nano drug vehicles. , 2019, , .		0
440	Reassembly of Ultrathin Membranes to Create Asymmetric Giant Unilamellar Vesicles in Microfluidics. , 0, , .		0
441	Optimisation of an Electrochemical Dissolved Oxygen Microsensor for an Environmental Monitoring System. , 2003, , .		0
442	A Robust Lithographic Method for Multiplex Surface Pattering. Current Analytical Chemistry, 2012, 9, 29-36.	0.6	0
443	Holographic Microscopy with Acoustic Modulation for Detection of Nano-sized Particles and Pathogens in Solution. , 2019, , .		0
444	Low-cost, multispectral imaging mini-microscope for longitudinal oximetry in small animals.. , 2019, , .		0
445	Spatially offset Raman spectroscopy for the diagnosis of bone composition. , 2020, , .		0
446	Multi-spectral vascular oximetry of rat dorsal spinal cord. , 2020, , .		0
447	Wireless Sensor Microsystem Design: A Practical Perspective. , 2006, , 373-397.		0