

Richard A Mathies

List of Publications by Year in descending order

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195
papers

20,182
citations

10650

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times ranked

14663
citing authors

#	ARTICLE	IF	CITATIONS
1	Optimization of Fluorescence Labeling of Trace Analytes: Application to Amino Acid Biosignature Detection with Pacific Blue. <i>Analytical Chemistry</i> , 2022, 94, 1240-1247.	3.2	7
2	Science Objectives for Flagship-Class Mission Concepts for the Search for Evidence of Life at Enceladus. <i>Astrobiology</i> , 2022, 22, 685-712.	1.5	21
3	Method for detecting and quantitating capture of organic molecules in hypervelocity impacts. <i>MethodsX</i> , 2021, 8, 101239.	0.7	5
4	Venus, an Astrobiology Target. <i>Astrobiology</i> , 2021, 21, 1163-1185.	1.5	38
5	On the Feasibility of Informative Biosignature Measurements Using an Enceladus Plume Organic Analyzer. <i>Planetary Science Journal</i> , 2021, 2, 163.	1.5	6
6	Quantitative evaluation of the feasibility of sampling the ice plumes at Enceladus for biomarkers of extraterrestrial life. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	9
7	Feasibility of Enceladus plume biosignature analysis: Successful capture of organic ice particles in hypervelocity impacts. <i>Meteoritics and Planetary Science</i> , 2020, 55, .	0.7	10
8	Fabrication of high-quality glass microfluidic devices for bioanalytical and space flight applications. <i>MethodsX</i> , 2020, 7, 101043.	0.7	12
9	Characterizing organic particle impacts on inert metal surfaces: Foundations for capturing organic molecules during hypervelocity transits of Enceladus plumes. <i>Meteoritics and Planetary Science</i> , 2020, 55, 465-479.	0.7	19
10	Monitoring transient cell-to-cell interactions in a multi-layered and multi-functional allergy-on-a-chip system. <i>Lab on A Chip</i> , 2019, 19, 1916-1921.	3.1	12
11	Rapid and Fully Microfluidic Ebola Virus Detection with CRISPR-Cas13a. <i>ACS Sensors</i> , 2019, 4, 1048-1054.	4.0	215
12	Resonance Raman Characterization of Tetracene Monomer and Nanocrystals: Excited State Lattice Distortions With Implications For Efficient Singlet Fission. <i>Journal of Physical Chemistry A</i> , 2019, 123, 3863-3875.	1.1	5
13	Difference Bands in Time-Resolved Femtosecond Stimulated Raman Spectra of Photoexcited Intermolecular Electron Transfer from Chloronaphthalene to Tetracyanoethylene. <i>Journal of Physical Chemistry A</i> , 2018, 122, 3594-3605.	1.1	18
14	Evidence for a vibrational phase-dependent isotope effect on the photochemistry of vision. <i>Nature Chemistry</i> , 2018, 10, 449-455.	6.6	75
15	Excited-state vibrational dynamics toward the polaron in methylammonium lead iodide perovskite. <i>Nature Communications</i> , 2018, 9, 2525.	5.8	129
16	Operation of pneumatically-actuated membrane-based microdevices for in situ analysis of extraterrestrial organic molecules after prolonged storage and in multiple orientations with respect to Earth's gravitational field. <i>Sensors and Actuators B: Chemical</i> , 2018, 272, 229-235.	4.0	8
17	Multiplexed efficient on-chip sample preparation and sensitive amplification-free detection of Ebola virus. <i>Biosensors and Bioelectronics</i> , 2017, 91, 489-496.	5.3	91
18	Critical Role of Methylammonium Librational Motion in Methylammonium Lead Iodide (CH ₃ NH ₃ PbI ₃) Perovskite Photochemistry. <i>Nano Letters</i> , 2017, 17, 4151-4157.	4.5	55

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19	Microfluidic System for Detection of Viral RNA in Blood Using a Barcode Fluorescence Reporter and a Photocleavable Capture Probe. <i>Analytical Chemistry</i> , 2017, 89, 12433-12440.	3.2	41
20	Feasibility of Detecting Bioorganic Compounds in Enceladus Plumes with the Enceladus Organic Analyzer. <i>Astrobiology</i> , 2017, 17, 902-912.	1.5	35
21	Non-Bonded Interactions Drive the Subpicosecond Bilin Photoisomerization in the P _{fr} State of Phytochrome Cph1. <i>ChemPhysChem</i> , 2016, 17, 369-374.	1.0	15
22	Femtosecond Stimulated Raman Spectroscopy. <i>ChemPhysChem</i> , 2016, 17, 1217-1217.	1.0	2
23	Femtosecond Stimulated Raman Spectroscopy. <i>ChemPhysChem</i> , 2016, 17, 1224-1251.	1.0	153
24	Forensic Typing of Single Cells Using Droplet Microfluidics. , 2016, , 71-94.		0
25	High-performance detection of somatic D-loop mutation in urothelial cell carcinoma patients by polymorphism ratio sequencing. <i>Journal of Molecular Medicine</i> , 2016, 94, 1015-1024.	1.7	7
26	End-to-end automated microfluidic platform for synthetic biology: from design to functional analysis. <i>Journal of Biological Engineering</i> , 2016, 10, 3.	2.0	54
27	Femtosecond Stimulated Raman Exposes the Role of Vibrational Coherence in Condensed-Phase Photoreactivity. <i>Accounts of Chemical Research</i> , 2016, 49, 616-625.	7.6	83
28	Pneumatically actuated microvalve circuits for programmable automation of chemical and biochemical analysis. <i>Lab on A Chip</i> , 2016, 16, 812-819.	3.1	59
29	Microfluidic hydrogel arrays for direct genotyping of clinical samples. <i>Biosensors and Bioelectronics</i> , 2016, 79, 371-378.	5.3	21
30	Optofluidic analysis system for amplification-free, direct detection of Ebola infection. <i>Scientific Reports</i> , 2015, 5, 14494.	1.6	104
31	Reactive and unreactive pathways in a photochemical ring opening reaction from 2D femtosecond stimulated Raman. <i>Physical Chemistry Chemical Physics</i> , 2015, 17, 9231-9240.	1.3	42
32	Microfluidic Linear Hydrogel Array for Multiplexed Single Nucleotide Polymorphism (SNP) Detection. <i>Analytical Chemistry</i> , 2015, 87, 3165-3170.	3.2	40
33	Single cell measurement of telomerase expression and splicing using microfluidic emulsion cultures. <i>Nucleic Acids Research</i> , 2015, 43, e104-e104.	6.5	3
34	Exciton Mobility in Organic Photovoltaic Heterojunctions from Femtosecond Stimulated Raman. <i>Journal of Physical Chemistry Letters</i> , 2015, 6, 2919-2923.	2.1	16
35	Molecular Orientation and Optical Properties of 3,3'-Diethylthiatricarbocyanine Iodide Adsorbed to Gold Surfaces: Consequences for Surface-Enhanced Resonance Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2015, 119, 9980-9987.	1.5	14
36	Supramolecular Ga ₄ L ₆ Cage Photosensitizes 1,3-Rearrangement of Encapsulated Guest via Photoinduced Electron Transfer. <i>Journal of the American Chemical Society</i> , 2015, 137, 10128-10131.	6.6	92

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37	A coherent picture of vision. <i>Nature Chemistry</i> , 2015, 7, 945-947.	6.6	32
38	Minimizing inhibition of PCR-STR typing using digital agarose droplet microfluidics. <i>Forensic Science International: Genetics</i> , 2015, 14, 203-209.	1.6	18
39	Integration of programmable microfluidics and on-chip fluorescence detection for biosensing applications. <i>Biomicrofluidics</i> , 2014, 8, 054111.	1.2	47
40	Single-Cell Forensic Short Tandem Repeat Typing within Microfluidic Droplets. <i>Analytical Chemistry</i> , 2014, 86, 703-712.	3.2	45
41	Photoactivated Bioconjugation Between <i>ortho</i> -Azidophenols and Anilines: A Facile Approach to Biomolecular Photopatterning. <i>Journal of the American Chemical Society</i> , 2014, 136, 12600-12606.	6.6	39
42	Characterization of a Conical Intersection in a Charge-Transfer Dimer with Two-Dimensional Time-Resolved Stimulated Raman Spectroscopy. <i>Journal of Physical Chemistry A</i> , 2014, 118, 4955-4965.	1.1	63
43	Chromophore Dynamics in the PYP Photocycle from Femtosecond Stimulated Raman Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2014, 118, 659-667.	1.2	44
44	THE FIRST STEP IN VISION: VISUALIZING WAVEPACKET MOTION THROUGH A CONICAL INTERSECTION. , 2014, , .		0
45	Conical intersection dynamics in Rhodopsin and its analog isorhodopsin. , 2013, , .		0
46	Electron Transfer Dynamics of Triphenylamine Dyes Bound to TiO ₂ Nanoparticles from Femtosecond Stimulated Raman Spectroscopy. <i>Journal of Physical Chemistry C</i> , 2013, 117, 6990-6997.	1.5	29
47	Single molecule quantitation and sequencing of rare translocations using microfluidic nested digital PCR. <i>Nucleic Acids Research</i> , 2013, 41, e159-e159.	6.5	33
48	Rapid fabrication of nickel molds for prototyping embossed plastic microfluidic devices. <i>Lab on A Chip</i> , 2013, 13, 1468.	3.1	42
49	Digitally programmable microfluidic automaton for multiscale combinatorial mixing and sample processing. <i>Lab on A Chip</i> , 2013, 13, 288-296.	3.1	50
50	Universal Microfluidic Automaton for Autonomous Sample Processing: Application to the Mars Organic Analyzer. <i>Analytical Chemistry</i> , 2013, 85, 7682-7688.	3.2	65
51	Low Frequency Resonant Impulsive Raman Modes Reveal Inversion Mechanism for Azobenzene. <i>Journal of Physical Chemistry A</i> , 2013, 117, 11472-11478.	1.1	22
52	Optimally shaped narrowband picosecond pulses for femtosecond stimulated Raman spectroscopy. <i>Optics Express</i> , 2013, 21, 21685.	1.7	26
53	Probing structural evolution along multidimensional reaction coordinates with femtosecond stimulated Raman spectroscopy. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 405-414.	1.3	65
54	Microfabricated Linear Hydrogel Microarray for Single-Nucleotide Polymorphism Detection. <i>Analytical Chemistry</i> , 2012, 84, 963-970.	3.2	16

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55	Structural Dynamics of a Noncovalent Charge Transfer Complex from Femtosecond Stimulated Raman Spectroscopy. <i>Journal of Physical Chemistry B</i> , 2012, 116, 10453-10460.	1.2	22
56	Conformational Homogeneity and Excited-State Isomerization Dynamics of the Bilin Chromophore in Phytochrome Cph1 from Resonance Raman Intensities. <i>Biophysical Journal</i> , 2012, 102, 709-717.	0.2	21
57	Lifting Gate Polydimethylsiloxane Microvalves and Pumps for Microfluidic Control. <i>Analytical Chemistry</i> , 2012, 84, 2067-2071.	3.2	94
58	Cellular Microfabrication: Observing Intercellular Interactions Using Lithographically-Defined DNA Capture Sequences. <i>Langmuir</i> , 2012, 28, 8120-8126.	1.6	20
59	Photoexcited structural dynamics of an azobenzene analog 4-nitro-4'-dimethylamino-azobenzene from femtosecond stimulated Raman. <i>Physical Chemistry Chemical Physics</i> , 2012, 14, 6298.	1.3	36
60	Detection of mitochondrial deoxyribonucleic acid alterations in urine from urothelial cell carcinoma patients. <i>International Journal of Cancer</i> , 2012, 131, 158-164.	2.3	23
61	Direct Attachment of Microbial Organisms to Material Surfaces Through Sequence-Specific DNA Hybridization. <i>Advanced Materials</i> , 2012, 24, 2380-2385.	11.1	32
62	Analysis of Carbonaceous Biomarkers with the Mars Organic Analyzer Microchip Capillary Electrophoresis System: Carboxylic Acids. <i>Astrobiology</i> , 2011, 11, 519-528.	1.5	26
63	Single-Cell Multiplex Gene Detection and Sequencing with Microfluidically Generated Agarose Emulsions. <i>Angewandte Chemie - International Edition</i> , 2011, 50, 390-395.	7.2	129
64	Conical intersection dynamics in a rhodopsin analog: 9-cis isorhodopsin. , 2011, , .		0
65	Analysis of carbonaceous biomarkers with the Mars Organic Analyzer microchip capillary electrophoresis system: Aldehydes and ketones. <i>Electrophoresis</i> , 2010, 31, 3642-3649.	1.3	30
66	Conical intersection dynamics of the primary photoisomerization event in vision. <i>Nature</i> , 2010, 467, 440-443.	13.7	779
67	Microvalve Enabled Digital Microfluidic Systems for High-Performance Biochemical and Genetic Analysis. <i>Journal of the Association for Laboratory Automation</i> , 2010, 15, 455-463.	2.8	35
68	Femtosecond Stimulated Raman Spectroscopy. , 2010, , .		0
69	Multichannel Capillary Electrophoresis Microdevice and Instrumentation for in Situ Planetary Analysis of Organic Molecules and Biomarkers. <i>Analytical Chemistry</i> , 2010, 82, 2372-2379.	3.2	63
70	High-Performance Single Cell Genetic Analysis Using Microfluidic Emulsion Generator Arrays. <i>Analytical Chemistry</i> , 2010, 82, 3183-3190.	3.2	210
71	A digital microfluidic platform for the automation of quantitative biomolecular assays. <i>Lab on A Chip</i> , 2010, 10, 685-691.	3.1	53
72	Ultrafast excited-state isomerization in phytochrome revealed by femtosecond stimulated Raman spectroscopy. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 1784-1789.	3.3	190

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73	Integrated microfluidic systems for high-performance genetic analysis. Trends in Biotechnology, 2009, 27, 572-581.	4.9	125
74	Mapping GFP structure evolution during proton transfer with femtosecond Raman spectroscopy. Nature, 2009, 462, 200-204.	13.7	410
75	Femtosecond Time-Resolved Stimulated Raman Reveals the Birth of Bacteriorhodopsin's J and K Intermediates. Journal of the American Chemical Society, 2009, 131, 7592-7597.	6.6	73
76	Polymerase Chain Reaction-Capillary Electrophoresis Genetic Analysis Microdevice with In-Line Affinity Capture Sample Injection. Analytical Chemistry, 2009, 81, 1371-1377.	3.2	34
77	Enhanced Amine and Amino Acid Analysis Using Pacific Blue and the Mars Organic Analyzer Microchip Capillary Electrophoresis System. Analytical Chemistry, 2009, 81, 2537-2544.	3.2	87
78	Homogeneity of Phytochrome Cph1 Vibronic Absorption Revealed by Resonance Raman Intensity Analysis. Journal of the American Chemical Society, 2009, 131, 13946-13948.	6.6	38
79	Polycyclic Aromatic Hydrocarbon Analysis with the Mars Organic Analyzer Microchip Capillary Electrophoresis System. Analytical Chemistry, 2009, 81, 790-796.	3.2	61
80	Probing Interfacial Electron Transfer in Coumarin 343 Sensitized TiO ₂ Nanoparticles with Femtosecond Stimulated Raman. Journal of the American Chemical Society, 2009, 131, 15630-15632.	6.6	75
81	Direct Cell Surface Modification with DNA for the Capture of Primary Cells and the Investigation of Myotube Formation on Defined Patterns. Langmuir, 2009, 25, 6985-6991.	1.6	135
82	DNA-barcode directed capture and electrochemical metabolic analysis of single mammalian cells on a microelectrode array. Lab on A Chip, 2009, 9, 2010.	3.1	44
83	PMMA/PDMS valves and pumps for disposable microfluidics. Lab on A Chip, 2009, 9, 3088.	3.1	150
84	Capillary Electrophoresis Analysis of Organic Amines and Amino Acids in Saline and Acidic Samples Using the Mars Organic Analyzer. Astrobiology, 2009, 9, 823-831.	1.5	33
85	Immunomagnetic bead-based cell concentration microdevice for dilute pathogen detection. Biomedical Microdevices, 2008, 10, 909-917.	1.4	81
86	Femtosecond Raman-Induced Kerr effect spectroscopy. Journal of Raman Spectroscopy, 2008, 39, 1526-1530.	1.2	26
87	Resonance Raman Cross-Sections and Vibronic Analysis of Rhodamine 6G from Broadband Stimulated Raman Spectroscopy. ChemPhysChem, 2008, 9, 697-699.	1.0	222
88	High-Throughput Single Copy DNA Amplification and Cell Analysis in Engineered Nanoliter Droplets. Analytical Chemistry, 2008, 80, 3522-3529.	3.2	196
89	Integrated microfluidic bioprocessor for single-cell gene expression analysis. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 20173-20178.	3.3	216
90	Femtosecond Time-Resolved Optical and Raman Spectroscopy of Photoinduced Spin Crossover: Temporal Resolution of Low-to-High Spin Optical Switching. Journal of the American Chemical Society, 2008, 130, 14105-14107.	6.6	149

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91	Development of a Tunable Femtosecond Stimulated Raman Apparatus and Its Application to \hat{I}^2 -Carotene. <i>Journal of Physical Chemistry B</i> , 2008, 112, 4826-4832.	1.2	56
92	Origin of negative and dispersive features in anti-Stokes and resonance femtosecond stimulated Raman spectroscopy. <i>Journal of Chemical Physics</i> , 2008, 129, 064507.	1.2	71
93	Femtosecond broadband Stimulated Raman Spectroscopy. , 2008, , .		0
94	Polarization dependence of vibrational coupling signals in femtosecond stimulated Raman spectroscopy. <i>Journal of Chemical Physics</i> , 2007, 127, 124501.	1.2	21
95	Self-assembled cellular microarrays patterned using DNA barcodes. <i>Lab on A Chip</i> , 2007, 7, 1442.	3.1	59
96	Micropneumatic Digital Logic Structures for Integrated Microdevice Computation and Control. <i>Journal of Microelectromechanical Systems</i> , 2007, 16, 1378-1385.	1.7	57
97	Integrated Affinity Capture, Purification, and Capillary Electrophoresis Microdevice for Quantitative Double-Stranded DNA Analysis. <i>Analytical Chemistry</i> , 2007, 79, 8549-8556.	3.2	36
98	Inline Injection Microdevice for Attomole-Scale Sanger DNA Sequencing. <i>Analytical Chemistry</i> , 2007, 79, 4499-4506.	3.2	40
99	Organic amine biomarker detection in the Yungay region of the Atacama Desert with the Urey instrument. <i>Journal of Geophysical Research</i> , 2007, 112, .	3.3	49
100	Application of the Mars Organic Analyzer to Nucleobase and Amine Biomarker Detection. <i>Astrobiology</i> , 2006, 6, 824-837.	1.5	34
101	Development and multiplexed control of latching pneumatic valves using microfluidic logical structures. <i>Lab on A Chip</i> , 2006, 6, 623.	3.1	224
102	Microfluidic Serial Dilution Circuit. <i>Analytical Chemistry</i> , 2006, 78, 7522-7527.	3.2	60
103	Programmable Cell Adhesion Encoded by DNA Hybridization. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 896-901.	7.2	165
104	Direct observation of the ultrafast intersystem crossing in tris(2,2'-bipyridine)ruthenium(II) using femtosecond stimulated Raman spectroscopy. <i>Molecular Physics</i> , 2006, 104, 1275-1282.	0.8	99
105	Nitric Oxide Binding to Prokaryotic Homologs of the Soluble Guanylate Cyclase \hat{I}^2 1 H-NOX Domain. <i>Journal of Biological Chemistry</i> , 2006, 281, 21892-21902.	1.6	66
106	Generation of narrow-bandwidth picosecond visible pulses from broadband femtosecond pulses for femtosecond stimulated Raman. <i>Applied Physics Letters</i> , 2006, 89, 121124.	1.5	40
107	Direct Observation of Anharmonic Coupling in the Time Domain with Femtosecond Stimulated Raman Scattering. <i>Physical Review Letters</i> , 2006, 96, 238303.	2.9	55
108	Microfabricated bioprocessor for integrated nanoliter-scale Sanger DNA sequencing. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 7240-7245.	3.3	252

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109	Development and evaluation of a microdevice for amino acid biomarker detection and analysis on Mars. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 1041-1046.	3.3	257
110	An integrated microfluidic processor for single nucleotide polymorphism-based DNA computing. Lab on A Chip, 2005, 5, 1033.	3.1	59
111	Femtosecond Stimulated Raman Study of Excited-State Evolution in Bacteriorhodopsin. Journal of Physical Chemistry B, 2005, 109, 10449-10457.	1.2	129
112	Microfluidic Device for Electric Field-Driven Single-Cell Capture and Activation. Analytical Chemistry, 2005, 77, 6935-6941.	3.2	64
113	Dependence of line shapes in femtosecond broadband stimulated Raman spectroscopy on pump-probe time delay. Journal of Chemical Physics, 2005, 122, 024505.	1.2	47
114	Structural Observation of the Primary Isomerization in Vision with Femtosecond-Stimulated Raman. Science, 2005, 310, 1006-1009.	6.0	600
115	Femtosecond Time-Resolved Stimulated Raman Spectroscopy of the S ₂ (1Bu ⁺) Excited State of β^2 -Carotene. Journal of Physical Chemistry A, 2004, 108, 5921-5925.	1.1	109
116	Theory of femtosecond stimulated Raman spectroscopy. Journal of Chemical Physics, 2004, 121, 3632-3642.	1.2	140
117	Femtosecond broadband stimulated Raman spectroscopy: Apparatus and methods. Review of Scientific Instruments, 2004, 75, 4971-4980.	0.6	285
118	Chiral separation of fluorescamine-labeled amino acids using microfabricated capillary electrophoresis devices for extraterrestrial exploration. Journal of Chromatography A, 2003, 1021, 191-199.	1.8	95
119	Vibrational structure of the S ₂ (1Bu) excited state of diphenyloctatetraene observed by femtosecond stimulated Raman spectroscopy. Chemical Physics Letters, 2003, 382, 81-86.	1.2	33
120	Monolithic membrane valves and diaphragm pumps for practical large-scale integration into glass microfluidic devices. Sensors and Actuators B: Chemical, 2003, 89, 315-323.	4.0	458
121	Femtosecond Broadband Stimulated Raman: A New Approach for High-Performance Vibrational Spectroscopy. Applied Spectroscopy, 2003, 57, 1317-1323.	1.2	121
122	Femtosecond Time-Resolved Stimulated Raman Spectroscopy: Application to the Ultrafast Internal Conversion in β^2 -Carotene. Journal of Physical Chemistry A, 2003, 107, 8208-8214.	1.1	184
123	Polymorphism Ratio Sequencing: A New Approach for Single Nucleotide Polymorphism Discovery and Genotyping. Genome Research, 2003, 13, 287-293.	2.4	34
124	High throughput DNA sequencing with a microfabricated 96-lane capillary array electrophoresis bioprocessor. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 574-579.	3.3	251
125	Microfabricated 384-Lane Capillary Array Electrophoresis Bioanalyzer for Ultrahigh-Throughput Genetic Analysis. Analytical Chemistry, 2002, 74, 5076-5083.	3.2	271
126	Wavelength Dependent Cis-Trans Isomerization in Vision. Biochemistry, 2001, 40, 13774-13778.	1.2	163

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127	Fully integrated PCR-capillary electrophoresis microsystem for DNA analysis. <i>Lab on A Chip</i> , 2001, 1, 102.	3.1	270
128	Energy-Transfer Cassette Labeling for Capillary Array Electrophoresis Short Tandem Repeat DNA Fragment Sizing. <i>Bioconjugate Chemistry</i> , 2001, 12, 493-500.	1.8	22
129	Resonance Raman Structural Evidence that the Cis-to-Trans Isomerization in Rhodopsin Occurs in Femtoseconds. <i>Journal of Physical Chemistry B</i> , 2001, 105, 1240-1249.	1.2	56
130	Fluorescence and Resonance Raman Spectra of the Aqueous Solvated Electron. <i>Journal of Physical Chemistry A</i> , 2001, 105, 10952-10960.	1.1	62
131	Chromophore Structure in Lumirhodopsin and Metarhodopsin I by Time-Resolved Resonance Raman Microchip Spectroscopy. <i>Biochemistry</i> , 2001, 40, 7929-7936.	1.2	56
132	High-Pressure Gel Loader for Capillary Array Electrophoresis Microchannel Plates. <i>BioTechniques</i> , 2001, 31, 1150-1154.	0.8	34
133	Genotyping Energy-Transfer-Cassette-labeled Short-Tandem-Repeat Amplicons with Capillary Array Electrophoresis Microchannel Plates. <i>Clinical Chemistry</i> , 2001, 47, 1614-1621.	1.5	41
134	High speed single nucleotide polymorphism typing of a hereditary haemochromatosis mutation with capillary array electrophoresis microplates. <i>Electrophoresis</i> , 2000, 21, 2352-2358.	1.3	50
135	Turn Geometry for Minimizing Band Broadening in Microfabricated Capillary Electrophoresis Channels. <i>Analytical Chemistry</i> , 2000, 72, 3030-3037.	3.2	172
136	High speed single nucleotide polymorphism typing of a hereditary haemochromatosis mutation with capillary array electrophoresis microplates. <i>Electrophoresis</i> , 2000, 21, 2352-2358.	1.3	3
137	Time-Resolved Ultraviolet Resonance Raman of Protein Structural Changes in The KI-Intermediate Of Bacteriorhodopsin. <i>Laser Chemistry</i> , 1999, 19, 165-168.	0.5	6
138	Ultra-high throughput rotary capillary array electrophoresis scanner for fluorescent DNA sequencing and analysis. <i>Electrophoresis</i> , 1999, 20, 1508-1517.	1.3	72
139	Picosecond time-resolved Raman system for studying photochemical reaction dynamics: application to the primary events in vision. <i>Journal of Raman Spectroscopy</i> , 1999, 30, 777-783.	1.2	35
140	Single-Molecule Detection of DNA Separations in Microfabricated Capillary Electrophoresis Chips Employing Focused Molecular Streams. <i>Analytical Chemistry</i> , 1999, 71, 5137-5145.	3.2	134
141	Optimization of High-Speed DNA Sequencing on Microfabricated Capillary Electrophoresis Channels. <i>Analytical Chemistry</i> , 1999, 71, 566-573.	3.2	221
142	Radial Capillary Array Electrophoresis Microplate and Scanner for High-Performance Nucleic Acid Analysis. <i>Analytical Chemistry</i> , 1999, 71, 5354-5361.	3.2	269
143	Ultra-high throughput rotary capillary array electrophoresis scanner for fluorescent DNA sequencing and analysis. , 1999, 20, 1508.		3
144	Photons, Femtoseconds and Dipolar Interactions: A Molecular Picture of the Primary Events in Vision. <i>Novartis Foundation Symposium</i> , 1999, 224, 70-101.	1.2	15

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145	Microfabrication Technology for the Production of Capillary Array Electrophoresis Chips. <i>Biomedical Microdevices</i> , 1998, 1, 7-26.	1.4	121
146	A three-wavelength labeling approach for DNA sequencing using energy transfer primers and capillary electrophoresis. <i>Electrophoresis</i> , 1998, 19, 1403-1414.	1.3	13
147	Vibrational Assignment of Torsional Normal Modes of Rhodopsin: A Probing Excited-State Isomerization Dynamics along the Reactive C11C12 Torsion Coordinate. <i>Journal of Physical Chemistry B</i> , 1998, 102, 2787-2806.	1.2	107
148	High-throughput genetic analysis using microfabricated 96-sample capillary array electrophoresis microplates. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998, 95, 2256-2261.	3.3	255
149	High-Speed DNA Genotyping Using Microfabricated Capillary Array Electrophoresis Chips. <i>Analytical Chemistry</i> , 1997, 69, 2181-2186.	3.2	333
150	Ultraviolet Resonance Raman Examination of the Light-Induced Protein Structural Changes in Rhodopsin Activation. <i>Biochemistry</i> , 1997, 36, 13153-13159.	1.2	40
151	Multiplex dsDNA Fragment Sizing Using Dimeric Intercalation Dyes and Capillary Array Electrophoresis: Ionic Effects on the Stability and Electrophoretic Mobility of DNA-Dye Complexes. <i>Analytical Chemistry</i> , 1997, 69, 1355-1363.	3.2	43
152	Microsatellite-based cancer detection using capillary array electrophoresis and energy-transfer fluorescent primers. <i>Electrophoresis</i> , 1997, 18, 1742-1749.	1.3	73
153	Femtosecond time-resolved spectroscopy of the primary photochemistry of phytochrome. <i>Biospectroscopy</i> , 1997, 3, 421-433.	0.4	53
154	Femtosecond time-resolved spectroscopy of the primary photochemistry of phytochrome. , 1997, 3, 421.		1
155	Retinal Analog Study of the Role of Steric Interactions in the Excited State Isomerization Dynamics of Rhodopsin. <i>Biochemistry</i> , 1996, 35, 16230-16240.	1.2	92
156	Functional Integration of PCR Amplification and Capillary Electrophoresis in a Microfabricated DNA Analysis Device. <i>Analytical Chemistry</i> , 1996, 68, 4081-4086.	3.2	741
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