

Mitchel J Doktycz

List of Publications by Year in descending order

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167
papers

7,156
citations

57758

44
h-index

64796

79
g-index

174
all docs

174
docs citations

174
times ranked

9644
citing authors

#	ARTICLE	IF	CITATIONS
1	Machine learning-based prediction of enzyme substrate scope: Application to bacterial nitrilases. <i>Proteins: Structure, Function and Bioinformatics</i> , 2021, 89, 336-347.	2.6	30
2	Cultivating the Bacterial Microbiota of <i>Populus</i> Roots. <i>MSystems</i> , 2021, 6, e0130620.	3.8	17
3	A lysate proteome engineering strategy for enhancing cell-free metabolite production. <i>Metabolic Engineering Communications</i> , 2021, 12, e00162.	3.6	11
4	Advances and perspectives in discovery and functional analysis of small secreted proteins in plants. <i>Horticulture Research</i> , 2021, 8, 130.	6.3	20
5	Liquid Chromatography Coupled to Refractive Index or Mass Spectrometric Detection for Metabolite Profiling in Lysate-based Cell-free Systems. <i>Journal of Visualized Experiments</i> , 2021, , .	0.3	0
6	Plant-Microbe Interactions: From Genes to Ecosystems Using <i>Populus</i> as a Model System. <i>Phytobiomes Journal</i> , 2021, 5, 29-38.	2.7	31
7	Formation, characterization and modeling of emergent synthetic microbial communities. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 1917-1927.	4.1	12
8	Metaproteomics reveals insights into microbial structure, interactions, and dynamic regulation in defined communities as they respond to environmental disturbance. <i>BMC Microbiology</i> , 2021, 21, 308.	3.3	11
9	Targeted Growth Medium Dropouts Promote Aromatic Compound Synthesis in Crude <i>E. coli</i> Cell-Free Systems. <i>ACS Synthetic Biology</i> , 2020, 9, 2986-2997.	3.8	4
10	A carotenoid-deficient mutant of the plant-associated microbe <i>Pantoea</i> sp. YR343 displays an altered membrane proteome. <i>Scientific Reports</i> , 2020, 10, 14985.	3.3	6
11	Pore-scale hydrodynamics influence the spatial evolution of bacterial biofilms in a microfluidic porous network. <i>PLoS ONE</i> , 2019, 14, e0218316.	2.5	55
12	Label-free time- and space-resolved exometabolite sampling of growing plant roots through nanoporous interfaces. <i>Scientific Reports</i> , 2019, 9, 10272.	3.3	12
13	Microfluidics and Metabolomics Reveal Symbiotic Bacterial-Fungal Interactions Between <i>Mortierella elongata</i> and <i>Burkholderia</i> Include Metabolite Exchange. <i>Frontiers in Microbiology</i> , 2019, 10, 2163.	3.5	37
14	Computationally Guided Discovery and Experimental Validation of Indole-3-acetic Acid Synthesis Pathways. <i>ACS Chemical Biology</i> , 2019, 14, 2867-2875.	3.4	8
15	Microfluidics-based separation of actinium-225 from radium-225 for medical applications. <i>Separation Science and Technology</i> , 2019, 54, 1994-2002.	2.5	0
16	Increasing access to microfluidics for studying fungi and other branched biological structures. <i>Fungal Biology and Biotechnology</i> , 2019, 6, 1.	5.1	17
17	Loss of carotenoids from membranes of <i>Pantoea</i> sp. YR343 results in altered lipid composition and changes in membrane biophysical properties. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2019, 1861, 1338-1345.	2.6	14
18	Microbial Cell Imaging Using Atomic Force Microscopy. , 2019, , 45-70.		0

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19	Characterization of Indole-3-acetic Acid Biosynthesis and the Effects of This Phytohormone on the Proteome of the Plant-Associated Microbe <i>Pantoea</i> sp. YR343. <i>Journal of Proteome Research</i> , 2018, 17, 1361-1374.	3.7	28
20	Nano-Enabled Approaches to Chemical Imaging in Biosystems. <i>Annual Review of Analytical Chemistry</i> , 2018, 11, 351-373.	5.4	1
21	Abiotic Stresses Shift Belowground <i>Populus</i> -Associated Bacteria Toward a Core Stress Microbiome. <i>MSystems</i> , 2018, 3, .	3.8	89
22	Quantifying the Spatiotemporal Dynamics of Plant Root Colonization by Beneficial Bacteria in a Microfluidic Habitat. <i>Advanced Biology</i> , 2018, 2, 1800048.	3.0	31
23	Exploration of the Biosynthetic Potential of the <i>Populus</i> Microbiome. <i>MSystems</i> , 2018, 3, .	3.8	34
24	Elucidating the potential of crude cell extracts for producing pyruvate from glucose. <i>Synthetic Biology</i> , 2018, 3, ysy006.	2.2	20
25	Elucidating Duramycin's Bacterial Selectivity and Mode of Action on the Bacterial Cell Envelope. <i>Frontiers in Microbiology</i> , 2018, 9, 219.	3.5	14
26	<i>In Vivo</i> Protein Dynamics on the Nanometer Length Scale and Nanosecond Time Scale. <i>Journal of Physical Chemistry Letters</i> , 2017, 8, 1899-1904.	4.6	29
27	Proteomics-Based Tools for Evaluation of Cell-Free Protein Synthesis. <i>Analytical Chemistry</i> , 2017, 89, 11443-11451.	6.5	21
28	Imaging the Root Hair Morphology of <i>Arabidopsis</i> Seedlings in a Two-layer Microfluidic Platform. <i>Journal of Visualized Experiments</i> , 2017, .	0.3	8
29	Automated Interpretation and Extraction of Topographic Information from Time of Flight Secondary Ion Mass Spectrometry Data. <i>Scientific Reports</i> , 2017, 7, 17099.	3.3	21
30	β -(1,3)-Glucan Unmasking in Some <i>Candida albicans</i> Mutants Correlates with Increases in Cell Wall Surface Roughness and Decreases in Cell Wall Elasticity. <i>Infection and Immunity</i> , 2017, 85, .	2.2	44
31	Cellular Interfacing with Arrays of Vertically Aligned Carbon Nanofibers and Nanofiber-Templated Materials. , 2017, , 177-202.		0
32	A Carotenoid-Deficient Mutant in <i>Pantoea</i> sp. YR343, a Bacteria Isolated from the Rhizosphere of <i>Populus deltoides</i> , Is Defective in Root Colonization. <i>Frontiers in Microbiology</i> , 2016, 7, 491.	3.5	48
33	Two Poplar-Associated Bacterial Isolates Induce Additive Favorable Responses in a Constructed Plant-Microbiome System. <i>Frontiers in Plant Science</i> , 2016, 7, 497.	3.6	113
34	Enrichment of Root Endophytic Bacteria from <i>Populus deltoides</i> and Single-Cell-Genomics Analysis. <i>Applied and Environmental Microbiology</i> , 2016, 82, 5698-5708.	3.1	53
35	While-you-wait proteins? Producing biomolecules at the point of need. <i>Expert Review of Proteomics</i> , 2016, 13, 707-709.	3.0	7
36	Toward Microfluidic Reactors for Cell-Free Protein Synthesis at the Point-of-Care. <i>Small</i> , 2016, 12, 810-817.	10.0	60

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37	Microreactors: Toward Microfluidic Reactors for Cell-Free Protein Synthesis at the Point-of-Care (Small 6/2016). <i>Small</i> , 2016, 12, 690-690.	10.0	3
38	Diversity of <i>Pseudomonas</i> Genomes, Including Populus-Associated Isolates, as Revealed by Comparative Genome Analysis. <i>Applied and Environmental Microbiology</i> , 2016, 82, 375-383.	3.1	70
39	Stochastic Assembly of Bacteria in Microwell Arrays Reveals the Importance of Confinement in Community Development. <i>PLoS ONE</i> , 2016, 11, e0155080.	2.5	42
40	Integration of Nanostructures Within Microfluidic Devices. , 2016, , 1671-1678.		0
41	Biofilms in Microfluidic Devices. , 2016, , 251-257.		0
42	Nanofluidic interfaces in microfluidic networks. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015, 33, 06FM01.	1.2	2
43	Microstencils to generate defined, multi-species patterns of bacteria. <i>Biomicrofluidics</i> , 2015, 9, 064103.	2.4	8
44	Characterization of extended channel bioreactors for continuous-flow protein production. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015, 33, .	1.2	11
45	Metabolic functions of <i>Pseudomonas fluorescens</i> strains from <i>Populus deltoides</i> depend on rhizosphere or endosphere isolation compartment. <i>Frontiers in Microbiology</i> , 2015, 6, 1118.	3.5	60
46	Fabrication of nanoporous membranes for tuning microbial interactions and biochemical reactions. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2015, 33, 06FM03.	1.2	7
47	Modular microfluidics for point-of-care protein purifications. <i>Lab on A Chip</i> , 2015, 15, 1799-1811.	6.0	58
48	New surface radiolabeling schemes of super paramagnetic iron oxide nanoparticles (SPIONs) for biodistribution studies. <i>Nanoscale</i> , 2015, 7, 6545-6555.	5.6	22
49	Using Raman spectroscopy and SERS for in situ studies of rhizosphere bacteria. , 2015, 9550, .		1
50	Evaluation and validation of de novo and hybrid assembly techniques to derive high-quality genome sequences. <i>Bioinformatics</i> , 2014, 30, 2709-2716.	4.1	99
51	Thrombin-Mediated Transcriptional Regulation Using DNA Aptamers in DNA-Based Cell-Free Protein Synthesis. <i>ACS Synthetic Biology</i> , 2014, 3, 340-346.	3.8	28
52	Microstructured Block Copolymer Surfaces for Control of Microbe Adhesion and Aggregation. <i>Biosensors</i> , 2014, 4, 63-75.	4.7	9
53	<i>Populus trichocarpa</i> and <i>Populus deltoides</i> Exhibit Different Metabolomic Responses to Colonization by the Symbiotic Fungus <i>Laccaria bicolor</i> . <i>Molecular Plant-Microbe Interactions</i> , 2014, 27, 546-556.	2.6	69
54	Volume labeling with Alexa Fluor dyes and surface functionalization of highly sensitive fluorescent silica (SiO ₂) nanoparticles. <i>Nanoscale</i> , 2013, 5, 10369.	5.6	20

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55	Relating nanomaterial properties and microbial toxicity. <i>Nanoscale</i> , 2013, 5, 463-474.	5.6	211
56	Enteroaggregative <i>Escherichia coli</i> : surface protein dispersin increases bacterial uptake of ciprofloxacin. <i>International Journal of Antimicrobial Agents</i> , 2013, 42, 462-465.	2.5	7
57	Layer-by-Layer Templated Assembly of Silica at the Nanoscale. <i>Langmuir</i> , 2013, 29, 2193-2199.	3.5	6
58	Microscale confinement features can affect biofilm formation. <i>Microfluidics and Nanofluidics</i> , 2013, 14, 895-902.	2.2	42
59	Multi-Input Regulation and Logic with T7 Promoters in Cells and Cell-Free Systems. <i>PLoS ONE</i> , 2013, 8, e78442.	2.5	34
60	Draft Genome Sequence of <i>Rhizobium</i> sp. Strain PDO1-076, a Bacterium Isolated from <i>Populus deltoides</i> . <i>Journal of Bacteriology</i> , 2012, 194, 2383-2384.	2.2	16
61	Adhesion and Formation of Microbial Biofilms in Complex Microfluidic Devices. , 2012, , .		1
62	Research Highlights: Shear-activated nanotherapeutics. <i>Nanomedicine</i> , 2012, 7, 1653-1655.	3.3	2
63	Expression optimization and synthetic gene networks in cell-free systems. <i>Nucleic Acids Research</i> , 2012, 40, 3763-3774.	14.5	113
64	Monodisperse alginate microgel formation in a three-dimensional microfluidic droplet generator. <i>Biomicrofluidics</i> , 2012, 6, 44108.	2.4	38
65	Twenty-One Genome Sequences from <i>Pseudomonas</i> Species and 19 Genome Sequences from Diverse Bacteria Isolated from the Rhizosphere and Endosphere of <i>Populus deltoides</i> . <i>Journal of Bacteriology</i> , 2012, 194, 5991-5993.	2.2	164
66	Enzyme Reactions in Nanoporous, Picoliter Volume Containers. <i>Analytical Chemistry</i> , 2012, 84, 1092-1097.	6.5	12
67	<i>Pseudomonas fluorescens</i> Induces Strain-Dependent and Strain-Independent Host Plant Responses in Defense Networks, Primary Metabolism, Photosynthesis, and Fitness. <i>Molecular Plant-Microbe Interactions</i> , 2012, 25, 765-778.	2.6	100
68	In Vivo Toxicity of Titanium Dioxide and Gold Nanoparticles. , 2012, , 1083-1090.		0
69	Bioadhesives. , 2012, , 194-201.		0
70	Cytotoxicity Induced by Engineered Silver Nanocrystallites Is Dependent on Surface Coatings and Cell Types. <i>Langmuir</i> , 2012, 28, 2727-2735.	3.5	222
71	Bacterial Electrical Conduction. , 2012, , 173-173.		0
72	Insect Flight and Micro Air Vehicles (MAVs). , 2012, , 1096-1109.		0

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73	Effects of sub-minimum inhibitory concentrations of ciprofloxacin on enteroaggregative <i>Escherichia coli</i> and the role of the surface protein dispersin. <i>International Journal of Antimicrobial Agents</i> , 2011, 38, 27-34.	2.5	16
74	Bacterial Immobilization for Imaging by Atomic Force Microscopy. <i>Journal of Visualized Experiments</i> , 2011, , .	0.3	28
75	Continuous protein production in nanoporous, picolitre volume containers. <i>Lab on A Chip</i> , 2011, 11, 3523.	6.0	38
76	Microbial Cell Imaging Using Atomic Force Microscopy. , 2011, , 45-70.		0
77	Characterization of cell surface and extracellular matrix remodeling of <i>Azospirillum brasilense</i> chemotaxis-like 1 signal transduction pathway mutants by atomic force microscopy. <i>FEMS Microbiology Letters</i> , 2011, 314, 131-139.	1.8	14
78	The chemotaxis-like Che1 pathway has an indirect role in adhesive cell properties of <i>Azospirillum brasilense</i> . <i>FEMS Microbiology Letters</i> , 2011, 323, 105-112.	1.8	21
79	Monodispersed biocompatible silver sulfide nanoparticles: Facile extracellular biosynthesis using the β -proteobacterium, <i>Shewanella oneidensis</i> . <i>Acta Biomaterialia</i> , 2011, 7, 4253-4258.	8.3	138
80	Biofabrication of discrete spherical gold nanoparticles using the metal-reducing bacterium <i>Shewanella oneidensis</i> . <i>Acta Biomaterialia</i> , 2011, 7, 2148-2152.	8.3	247
81	Model for biological communication in a nanofabricated cell-mimic driven by stochastic resonance. <i>Nano Communication Networks</i> , 2011, 2, 39-49.	2.9	12
82	Electric field induced bacterial flocculation of enteroaggregative <i>Escherichia coli</i> 042. <i>Applied Physics Letters</i> , 2011, 98, 253701.	3.3	9
83	Distinct Microbial Communities within the Endosphere and Rhizosphere of <i>Populus deltoides</i> Roots across Contrasting Soil Types. <i>Applied and Environmental Microbiology</i> , 2011, 77, 5934-5944.	3.1	524
84	Atomic force microscopy of biological samples. <i>Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology</i> , 2010, 2, 618-634.	6.1	160
85	Nanostructured silicon membranes for control of molecular transport. <i>Journal of Vacuum Science and Technology B: Nanotechnology and Microelectronics</i> , 2010, 28, C6P48-C6P52.	1.2	7
86	An optimized nanoparticle separator enabled by electron beam induced deposition. <i>Nanotechnology</i> , 2010, 21, 165303.	2.6	13
87	Surface Charge- and Space-Dependent Transport of Proteins in Crowded Environments of Nanotailored Posts. <i>ACS Nano</i> , 2010, 4, 3345-3355.	14.6	23
88	Effects of Engineered Cerium Oxide Nanoparticles on Bacterial Growth and Viability. <i>Applied and Environmental Microbiology</i> , 2010, 76, 7981-7989.	3.1	323
89	Silver Nanocrystallites: Biofabrication using <i>Shewanella oneidensis</i> , and an Evaluation of Their Comparative Toxicity on Gram-negative and Gram-positive Bacteria. <i>Environmental Science & Technology</i> , 2010, 44, 5210-5215.	10.0	299
90	A surfactant and template-free route for synthesizing ceria nanocrystals with tunable morphologies. <i>Journal of Materials Chemistry</i> , 2010, 20, 7776.	6.7	49

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91	Development and fabrication of nanoporous silicon-based bioreactors within a microfluidic chip. <i>Lab on A Chip</i> , 2010, 10, 1174.	6.0	33
92	Controlled microfluidic production of alginate beads for in situ encapsulation of microbes. , 2009, , .		5
93	Cell free translation in engineered picoliter volume containers. , 2009, 2009, 1-4.		5
94	Diverse and conserved nano- and mesoscale structures of diatom silica revealed by atomic force microscopy. <i>Journal of Microscopy</i> , 2009, 235, 172-187.	1.8	38
95	An in vivo imaging-based assay for detecting protein interactions over a wide range of binding affinities. <i>Analytical Biochemistry</i> , 2009, 395, 166-177.	2.4	2
96	Effects of ultramicroelectrode dimensions on the electropolymerization of polypyrrole. <i>Journal of Applied Physics</i> , 2009, 105, 124312.	2.5	8
97	Effects of Colistin on Surface Ultrastructure and Nanomechanics of <i>Pseudomonas aeruginosa</i> Cells. <i>Langmuir</i> , 2009, 25, 3728-3733.	3.5	85
98	A Comparison of Hybridization Efficiency between Flat Glass and Channel Glass Solid Supports. <i>Molecular Biotechnology</i> , 2008, 38, 71-80.	2.4	4
99	Channel Glass-based Detection of Human Short Insertion/Deletion Polymorphisms by Tandem Hybridization. <i>Molecular Biotechnology</i> , 2008, 38, 145-153.	2.4	2
100	Application of AFM in understanding biomineral formation in diatoms. <i>Pflugers Archiv European Journal of Physiology</i> , 2008, 456, 127-137.	2.8	47
101	Positional control of catalyst nanoparticles for the synthesis of high density carbon nanofiber arrays. <i>Carbon</i> , 2008, 46, 1378-1383.	10.3	9
102	A General System for Studying Protein-Protein Interactions in Gram-Negative Bacteria. <i>Journal of Proteome Research</i> , 2008, 7, 3319-3328.	3.7	24
103	Actuatable Membranes Based on Polypyrrole-Coated Vertically Aligned Carbon Nanofibers. <i>ACS Nano</i> , 2008, 2, 247-254.	14.6	26
104	Size-selectivity and anomalous subdiffusion of nanoparticles through carbon nanofiber-based membranes. <i>Nanotechnology</i> , 2008, 19, 415301.	2.6	13
105	Chapter 4 Biomineralization at the Nanoscale. <i>Methods in Cell Biology</i> , 2008, 90, 61-86.	1.1	11
106	Controlling the dimensions of carbon nanofiber structures through the electropolymerization of pyrrole. <i>Synthetic Metals</i> , 2007, 157, 282-289.	3.9	18
107	Nano-enabled synthetic biology. <i>Molecular Systems Biology</i> , 2007, 3, 125.	7.2	124
108	Comparison of the indentation and elasticity of <i>E. coli</i> and its spheroplasts by AFM. <i>Ultramicroscopy</i> , 2007, 107, 934-942.	1.9	33

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109	The Near-Naked Hairless (Hr) Mutation Disrupts Hair Formation but Is Not Due to a Mutation in the Hairless Coding Region. <i>Journal of Investigative Dermatology</i> , 2007, 127, 1605-1614.	0.7	8
110	Reversible Electrowetting of Vertically Aligned Superhydrophobic Carbon Nanofibers. <i>Langmuir</i> , 2006, 22, 9030-9034.	3.5	98
111	Site-Specific Biochemical Functionalization along the Height of Vertically Aligned Carbon Nanofiber Arrays. <i>Chemistry of Materials</i> , 2006, 18, 3203-3211.	6.7	33
112	Evaluation of a surface-sampling probe electrospray mass spectrometry system for the analysis of surface-deposited and affinity-captured proteins. <i>Rapid Communications in Mass Spectrometry</i> , 2006, 20, 1144-1152.	1.5	29
113	Control of catalyst particle crystallographic orientation in vertically aligned carbon nanofiber synthesis. <i>Carbon</i> , 2006, 44, 1503-1510.	10.3	27
114	Automated image analysis of atomic force microscopy images of rotavirus particles. <i>Ultramicroscopy</i> , 2006, 106, 829-837.	1.9	30
115	Measuring cell surface elasticity on enteroaggregative <i>Escherichia coli</i> wild type and dispersin mutant by AFM. <i>Ultramicroscopy</i> , 2006, 106, 695-702.	1.9	44
116	Nanoscale control of silica morphology and three-dimensional structure during diatom cell wall formation. <i>Journal of Materials Research</i> , 2006, 21, 2689-2698.	2.6	100
117	Molecular transport in a crowded volume created from vertically aligned carbon nanofibres: a fluorescence recovery after photobleaching study. <i>Nanotechnology</i> , 2006, 17, 5659-5668.	2.6	17
118	Global Molecular and Morphological Effects of 24-Hour Chromium(VI) Exposure on <i>Shewanella oneidensis</i> MR-1. <i>Applied and Environmental Microbiology</i> , 2006, 72, 6331-6344.	3.1	96
119	Biochemical functionalization of vertically aligned carbon nanofibres. <i>Nanotechnology</i> , 2006, 17, 2032-2039.	2.6	29
120	Cellular secretion studied by force microscopy. <i>Journal of Cellular and Molecular Medicine</i> , 2006, 10, 847-856.	3.6	0
121	Mounting of <i>Escherichia coli</i> spheroplasts for AFM imaging. <i>Ultramicroscopy</i> , 2005, 105, 96-102.	1.9	26
122	Reagent Jetting Based Deposition Technologies for Array Construction. <i>Biological and Medical Physics Series</i> , 2005, , 63-72.	0.4	1
123	Automated Image Analysis of Fluorescence Microscopic Images to Identify Protein-protein Interactions. , 2005, 2006, 797-800.		1
124	Tailored transport through vertically aligned carbon nanofibre membranes; controlled synthesis, modelling, and passive diffusion experiments. <i>Nanotechnology</i> , 2005, 16, 3101-3109.	2.6	17
125	Optimized beadmilling of tissues for high-throughput RNA production and microarray-based analyses. <i>Analytical Biochemistry</i> , 2004, 332, 100-108.	2.4	6
126	Microarrays of Biomimetic Cells Formed by the Controlled Synthesis of Carbon Nanofiber Membranes. <i>Nano Letters</i> , 2004, 4, 1809-1814.	9.1	45

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127	Surface Patterning of Silica Nanostructures Using Bio-Inspired Templates and Directed Synthesis. <i>Langmuir</i> , 2004, 20, 8431-8436.	3.5	61
128	DNA Microarrays Detect 4-Nonylphenol-induced Alterations in Gene Expression During Zebrafish Early Development. <i>Ecotoxicology</i> , 2003, 12, 469-474.	2.4	47
129	AFM imaging of bacteria in liquid media immobilized on gelatin coated mica surfaces. <i>Ultramicroscopy</i> , 2003, 97, 209-216.	1.9	186
130	Effects of Microfabrication Processing on the Electrochemistry of Carbon Nanofiber Electrodes. <i>Journal of Physical Chemistry B</i> , 2003, 107, 10722-10728.	2.6	29
131	Vertically aligned carbon nanofibers as sacrificial templates for nanofluidic structures. <i>Applied Physics Letters</i> , 2003, 82, 976-978.	3.3	34
132	Intracellular integration of synthetic nanostructures with viable cells for controlled biochemical manipulation. <i>Nanotechnology</i> , 2003, 14, 551-556.	2.6	187
133	Fingerprinting of prokaryotic 16S rRNA genes using oligodeoxyribonucleotide microarrays and virtual hybridization. <i>Nucleic Acids Research</i> , 2003, 31, 779-789.	14.5	32
134	Instrumentation for continuous array genotyping of short insertion/deletion polymorphisms. , 2003, 4966, 138.		1
135	Automated High-Throughput Probe Production for DNA Microarray Analysis. <i>BioTechniques</i> , 2003, 34, 402-407.	1.8	5
136	Glucose biosensing using an enzyme-coated microcantilever. <i>Applied Physics Letters</i> , 2002, 81, 385-387.	3.3	101
137	Genomes to Life "Center for Molecular and Cellular Systems": A Research Program for Identification and Characterization of Protein Complexes. <i>OMICS A Journal of Integrative Biology</i> , 2002, 6, 287-303.	2.0	7
138	Nanopipe fabrication using vertically aligned carbon nanofiber templates. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2002, 20, 2730.	1.6	15
139	Controlled transport of latex beads through vertically aligned carbon nanofiber membranes. <i>Applied Physics Letters</i> , 2002, 81, 135-137.	3.3	54
140	Towards environmental toxicogenomics " development of a flow-through, high-density DNA hybridization array and its application to ecotoxicity assessment. <i>Science of the Total Environment</i> , 2001, 274, 137-149.	8.0	23
141	Improving Spot Homogeneity by Using Polymer Substrates in Matrix-Assisted Laser Desorption/Ionization Mass Spectrometry of Oligonucleotides. <i>Analytical Chemistry</i> , 2001, 73, 2617-2624.	6.5	52
142	Modification of an Automated Liquid-Handling System for Reagent-Jet, Nanoliter-Level Dispensing. <i>BioTechniques</i> , 2001, 30, 878-885.	1.8	16
143	Spin-column isolation of DNA"protein interactions from complex protein mixtures for AFM imaging. <i>Ultramicroscopy</i> , 2001, 86, 139-143.	1.9	7
144	Identifying sequence similarities between DNA molecules. <i>Ultramicroscopy</i> , 2000, 82, 237-244.	1.9	3

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145	Comparison of techniques for enzyme immobilization on silicon supports. <i>Enzyme and Microbial Technology</i> , 1999, 24, 26-34.	3.2	164
146	MALDI-TOF Analysis of Polymerase Chain Reaction Products from Methanotrophic Bacteria. <i>Analytical Chemistry</i> , 1998, 70, 2693-2698.	6.5	30
147	Comparative analyses of the secondary structures of synthetic and intracellular yeast MFA2 mRNAs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1998, 95, 14614-14621.	7.1	21
148	<title>Detection and analysis of polymerase chain reaction products by mass spectrometry</title>. , 1997, 2985, 120.		1
149	Mapping Individual Cosmid DNAs by Direct AFM Imaging. <i>Genomics</i> , 1997, 41, 379-384.	2.9	46
150	Direct atomic force microscope imaging of EcoRI endonuclease site specifically bound to plasmid DNA molecules.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996, 93, 8826-8829.	7.1	57
151	Detection of Bacterial DNA Polymerase Chain Reaction Products by Matrix-assisted Laser Desorption/Ionization Mass Spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 1996, 10, 377-382.	1.5	52
152	Detection of Bacterial DNA Polymerase Chain Reaction Products by Matrix-assisted Laser Desorption/Ionization Mass Spectrometry. <i>Rapid Communications in Mass Spectrometry</i> , 1996, 10, 377-382.	1.5	1
153	Mapping site-specific endonuclease binding to DNA by direct imaging with atomic force microscopy (AFM). , 1995, , .		0
154	Optical melting as a tool for optimizing sequencing by hybridization (SBH) analysis of DNA. , 1995, , .		1
155	Analysis of Polymerase Chain Reaction-Amplified DNA Products by Mass Spectrometry Using Matrix-Assisted Laser Desorption and Electrospray: Current Status. <i>Analytical Biochemistry</i> , 1995, 230, 205-214.	2.4	67
156	Optical Melting of 128 Octamer DNA Duplexes. <i>Journal of Biological Chemistry</i> , 1995, 270, 8439-8445.	3.4	72
157	Accumulation and Storage of Ionized Duplex DNA Molecules in a Quadrupole Ion Trap. <i>Analytical Chemistry</i> , 1994, 66, 3416-3422.	6.5	51
158	Discontinuous Electrophoresis of DNA: Adjusting DNA Mobility by Trailing Ion Net Mobility. <i>Analytical Biochemistry</i> , 1993, 213, 400-406.	2.4	10
159	Studies of DNA dumbbells. IV. Preparation and melting of a DNA dumbbell with the 16 base-pair sequence 5'G-T-A-T-C-C-C-T-C-T-G-G-A-T-A-C3' linked on the ends by dodecyl chains. <i>Biopolymers</i> , 1993, 33, 1765-1777.	2.4	20
160	Studies of DNA dumbbells. V. A DNA triplex formed between a 28 base-pair DNA dumbbell substrate and a 16 base linear single strand. <i>Biopolymers</i> , 1993, 33, 1779-1789.	2.4	10
161	Sequence Dependence of the Free Energy of B-Z Junction Formation in Deoxyoligonucleotides. <i>Journal of Molecular Biology</i> , 1993, 231, 475-488.	4.2	36
162	<title>Development of resonance ionization spectroscopy for genome mapping and DNA sequencing using stable isotopes as DNA labels</title>. , 1993, 1891, 27.		0

#	ARTICLE	IF	CITATIONS
163	Studies of DNA dumbbells. I. Melting curves of 17 DNA dumbbells with different duplex stem sequences linked by T4 endloops: Evaluation of the nearest-neighbor stacking interactions in DNA. Biopolymers, 1992, 32, 849-864.	2.4	123
164	Electrophoresis and detection of tin-labeled DNAs on open-faced gels. Electrophoresis, 1992, 13, 521-528.	2.4	4
165	Analysis of melting transitions of the DNA hairpins formed from the oligomer sequences d[GGATAC(X)4GTATCC] (X = A, T, G, C). Biopolymers, 1990, 29, 1715-1734.	2.4	59
166	Thermodynamic stability of the 5' dangling-ended DNA hairpins formed from sequences 5'-(XY)2GGATAC(T)4GTATCC-3', where X, Y = A, T, G, C. Biopolymers, 1990, 30, 829-845.	2.4	45
167	Energetics of B-Z junction formation in a sixteen base-pair duplex DNA. Journal of Molecular Biology, 1990, 212, 3-6.	4.2	19