

Jonas O Tegenfeldt

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4165253/publications.pdf>

Version: 2024-02-01

98
papers

6,322
citations

66343

42
h-index

66911

78
g-index

102
all docs

102
docs citations

102
times ranked

5609
citing authors

#	ARTICLE	IF	CITATIONS
1	Cell Sorting Using Electrokinetic Deterministic Lateral Displacement. <i>Micromachines</i> , 2021, 12, 30.	2.9	12
2	Charge-Based Separation of Micro- and Nanoparticles. <i>Micromachines</i> , 2020, 11, 1014.	2.9	14
3	Deterministic Lateral Displacement: Challenges and Perspectives. <i>ACS Nano</i> , 2020, 14, 10784-10795.	14.6	97
4	Microfluidic Particle Sorting in Concentrated Erythrocyte Suspensions. <i>Physical Review Applied</i> , 2019, 12, .	3.8	13
5	Active Posts in Deterministic Lateral Displacement Devices. <i>Advanced Materials Technologies</i> , 2019, 4, 1900339.	5.8	19
6	Microfluidics: Active Posts in Deterministic Lateral Displacement Devices (<i>Adv. Mater. Technol.</i> 9/2019). <i>Advanced Materials Technologies</i> , 2019, 4, 1970048.	5.8	0
7	A Droplet-Based Microfluidics Route to Temperature-Responsive Colloidal Molecules. <i>Journal of Physical Chemistry B</i> , 2019, 123, 9260-9271.	2.6	9
8	Label-free enrichment of primary human skeletal progenitor cells using deterministic lateral displacement. <i>Lab on A Chip</i> , 2019, 19, 513-523.	6.0	45
9	Preparation of colloidal molecules with temperature-tunable interactions from oppositely charged microgel spheres. <i>Soft Matter</i> , 2019, 15, 8512-8524.	2.7	11
10	Fluorescence Microscopy of Nanochannel-Confined DNA. <i>Methods in Molecular Biology</i> , 2018, 1665, 173-198.	0.9	2
11	Separation of pathogenic bacteria by chain length. <i>Analytica Chimica Acta</i> , 2018, 1000, 223-231.	5.4	36
12	Stochastic unfolding of nanoconfined DNA: Experiments, model and Bayesian analysis. <i>Journal of Chemical Physics</i> , 2018, 149, 215101.	3.0	9
13	Open channel deterministic lateral displacement for particle and cell sorting. <i>Lab on A Chip</i> , 2017, 17, 3592-3600.	6.0	44
14	Applications of optical DNA mapping in microbiology. <i>BioTechniques</i> , 2017, 62, 255-267.	1.8	19
15	Microfluidics-Based Approaches to the Isolation of African Trypanosomes. <i>Pathogens</i> , 2017, 6, 47.	2.8	6
16	Simplifying microfluidic separation devices towards field-detection of blood parasites. <i>Analytical Methods</i> , 2016, 8, 3291-3300.	2.7	32
17	Sorting cells by their dynamical properties. <i>Scientific Reports</i> , 2016, 6, 34375.	3.3	58
18	New technologies for DNA analysis – a review of the READNA Project. <i>New Biotechnology</i> , 2016, 33, 311-330.	4.4	10

#	ARTICLE	IF	CITATIONS
19	Extension of nanoconfined DNA: Quantitative comparison between experiment and theory. <i>Physical Review E</i> , 2015, 92, 062701.	2.1	26
20	Visualizing the entire DNA from a chromosome in a single frame. <i>Biomicrofluidics</i> , 2015, 9, 044114.	2.4	20
21	From immobilized cells to motile cells on a bed-of-nails: effects of vertical nanowire array density on cell behaviour. <i>Scientific Reports</i> , 2015, 5, 18535.	3.3	56
22	How nanochannel confinement affects the DNA melting transition within the Poland-Scheraga model. <i>Journal of Chemical Physics</i> , 2015, 143, 115101.	3.0	8
23	A Fast and Scalable Kymograph Alignment Algorithm for Nanochannel-Based Optical DNA Mappings. <i>PLoS ONE</i> , 2015, 10, e0121905.	2.5	9
24	Nanoconfined Circular and Linear DNA: Equilibrium Conformations and Unfolding Kinetics. <i>Macromolecules</i> , 2015, 48, 871-878.	4.8	44
25	Fluidic switching in nanochannels for the control of Inchworm: a synthetic biomolecular motor with a power stroke. <i>Nanoscale</i> , 2014, 6, 15008-15019.	5.6	12
26	Competitive binding-based optical DNA mapping for fast identification of bacteria - multi-ligand transfer matrix theory and experimental applications on <i>Escherichia coli</i> . <i>Nucleic Acids Research</i> , 2014, 42, e118-e118.	14.5	59
27	A highly UV-transparent fused silica biochip for sensitive hepatotoxicity testing by autofluorescence. <i>Biochip Journal</i> , 2014, 8, 115-121.	4.9	3
28	Nanoconfined Circular DNA. <i>Biophysical Journal</i> , 2014, 106, 275a.	0.5	0
29	Controlled microfluidic switching in arbitrary time-sequences with low drag. <i>Lab on A Chip</i> , 2013, 13, 2389.	6.0	10
30	Monomer Distributions and Intrachain Collisions of a Polymer Confined to a Channel. <i>Macromolecules</i> , 2013, 46, 6644-6650.	4.8	18
31	Fluorescent Nanowire Heterostructures as a Versatile Tool for Biology Applications. <i>Nano Letters</i> , 2013, 13, 4728-4732.	9.1	43
32	Probing concentration-dependent behavior of DNA-binding proteins on a single-molecule level illustrated by Rad51. <i>Analytical Biochemistry</i> , 2013, 443, 261-268.	2.4	2
33	Fibroblasts Cultured on Nanowires Exhibit Low Motility, Impaired Cell Division, and DNA Damage. <i>Small</i> , 2013, 9, 4006-4016.	10.0	94
34	Oriental correlations in confined DNA. <i>Physical Review E</i> , 2012, 86, 041802.	2.1	27
35	A single-step competitive binding assay for mapping of single DNA molecules. <i>Biochemical and Biophysical Research Communications</i> , 2012, 417, 404-408.	2.1	67
36	Bandpass Filtering of DNA Elastic Modes Using Confinement and Tension. <i>Biophysical Journal</i> , 2012, 102, 96-100.	0.5	16

#	ARTICLE	IF	CITATIONS
37	Sorting cells by size, shape and deformability. <i>Lab on A Chip</i> , 2012, 12, 1048.	6.0	223
38	Cell Type Dependent Effects of Nanowire Density on Cell Cultures. <i>Biophysical Journal</i> , 2012, 102, 585a.	0.5	0
39	Solute transport on the sub 100 ms scale across the lipid bilayer membrane of individual proteoliposomes. <i>Lab on A Chip</i> , 2012, 12, 4635.	6.0	15
40	Lipid-Based Passivation in Nanofluidics. <i>Nano Letters</i> , 2012, 12, 2260-2265.	9.1	76
41	Vertical oxide nanotubes connected by subsurface microchannels. <i>Nano Research</i> , 2012, 5, 190-198.	10.4	35
42	Separation of parasites from human blood using deterministic lateral displacement. <i>Lab on A Chip</i> , 2011, 11, 1326.	6.0	180
43	Fluorescence Nanoscopy of Single DNA Molecules by Using Stimulated Emission Depletion (STED). <i>Angewandte Chemie - International Edition</i> , 2011, 50, 5581-5583.	13.8	45
44	Fluorescence Microscopy of Nanochannel-Confined DNA. <i>Methods in Molecular Biology</i> , 2011, 783, 159-179.	0.9	1
45	Nano-engineered living bacterial motors for active microfluidic mixing. <i>IET Nanobiotechnology</i> , 2010, 4, 61.	3.8	9
46	Single-molecule denaturation mapping of DNA in nanofluidic channels. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 13294-13299.	7.1	183
47	Literature Search and Review. <i>Assay and Drug Development Technologies</i> , 2010, 8, 408-426.	1.2	0
48	DNA in nanochannels—directly visualizing genomic information. <i>Chemical Society Reviews</i> , 2010, 39, 985.	38.1	149
49	Fluorescence enhancement of single DNA molecules confined in Si/SiO ₂ nanochannels. <i>Lab on A Chip</i> , 2010, 10, 2049.	6.0	17
50	Nanofluidics in hollow nanowires. <i>Nanotechnology</i> , 2010, 21, 155301.	2.6	20
51	Local Conformation of Confined DNA Studied Using Emission Polarization Anisotropy. <i>Small</i> , 2009, 5, 190-193.	10.0	23
52	Directed self-organization of single DNA molecules in a nanoslit via embedded nanopit arrays. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2009, 106, 79-84.	7.1	82
53	Shear-Driven Motion of Supported Lipid Bilayers in Microfluidic Channels. <i>Journal of the American Chemical Society</i> , 2009, 131, 5294-5297.	13.7	54
54	Tipping the balance of deterministic lateral displacement devices using dielectrophoresis. <i>Lab on A Chip</i> , 2009, 9, 2698.	6.0	102

#	ARTICLE	IF	CITATIONS
55	Mechanical Behavior of a Supported Lipid Bilayer under External Shear Forces. <i>Langmuir</i> , 2009, 25, 6279-6286.	3.5	47
56	Nanoimprint in PDMS on glass with two-level hybrid stamp. <i>Microelectronic Engineering</i> , 2008, 85, 210-213.	2.4	13
57	Field-Dependent DNA Mobility in 20 nm High Nanoslits. <i>Nano Letters</i> , 2008, 8, 1785-1790.	9.1	68
58	A Method Improving the Accuracy of Fluorescence Recovery after Photobleaching Analysis. <i>Biophysical Journal</i> , 2008, 95, 5334-5348.	0.5	204
59	Tuneable separation in elastomeric microfluidics devices. <i>Lab on A Chip</i> , 2008, 8, 657.	6.0	78
60	Single-Molecule Detection and Mismatch Discrimination of Unlabeled DNA Targets. <i>Nano Letters</i> , 2008, 8, 183-188.	9.1	95
61	Multidirectional sorting modes in deterministic lateral displacement devices. <i>Physical Review E</i> , 2008, 78, 046304.	2.1	55
62	Nanoconfinement-Enhanced Conformational Response of Single DNA Molecules to Changes in Ionic Environment. <i>Physical Review Letters</i> , 2007, 99, 058302.	7.8	161
63	Nanochannels for Genomic DNA Analysis: The Long and the Short of It., 2007, , 151-186.		7
64	Generic surface modification strategy for sensing applications based on Au/SiO ₂ nanostructures. <i>Biointerphases</i> , 2007, 2, 49-55.	1.6	40
65	Use of PLL-g-PEG in Micro-Fluidic Devices for Localizing Selective and Specific Protein Binding. <i>Langmuir</i> , 2006, 22, 10103-10108.	3.5	62
66	Improving the Instrumental Resolution of Sensors Based on Localized Surface Plasmon Resonance. <i>Analytical Chemistry</i> , 2006, 78, 4416-4423.	6.5	305
67	High resolution 100kV electron beam lithography in SU-8. <i>Microelectronic Engineering</i> , 2006, 83, 1609-1612.	2.4	83
68	Diffusion mechanisms of localised knots along a polymer. <i>Europhysics Letters</i> , 2006, 76, 696-702.	2.0	67
69	Beaming effect of optical near-field in multiple metallic slits with nanometric linewidth and micrometer pitch. <i>Optics Communications</i> , 2005, 253, 198-204.	2.1	7
70	Long-range interactions between transcription factors. <i>Nanotechnology</i> , 2005, 16, 1993-1999.	2.6	7
71	Single-molecule studies of repressor-DNA interactions show long-range interactions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2005, 102, 9796-9801.	7.1	120
72	Topas-based lab-on-a-chip microsystems fabricated by thermal nanoimprint lithography. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 2005, 23, 2944.	1.6	42

#	ARTICLE	IF	CITATIONS
73	Actin-Based Molecular Motors for Cargo Transportation in Nanotechnologyâ€™ Potentials and Challenges. IEEE Transactions on Advanced Packaging, 2005, 28, 547-555.	1.6	47
74	The dynamics of genomic-length DNA molecules in 100-nm channels. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 10979-10983.	7.1	458
75	Micro- and nanofluidics for DNA analysis. Analytical and Bioanalytical Chemistry, 2004, 378, 1678-1692.	3.7	292
76	Polarization dependence of light intensity distribution near a nanometric aluminum slit. Journal of the Optical Society of America B: Optical Physics, 2004, 21, 1005.	2.1	12
77	Fabrication and characterization of a molecular adhesive layer for micro- and nanofabricated electrochemical electrodes. Microelectronic Engineering, 2003, 67-68, 887-892.	2.4	15
78	Sacrificial polymers for nanofluidic channels in biological applications. Nanotechnology, 2003, 14, 578-583.	2.6	98
79	Fabrication of 10 nm enclosed nanofluidic channels. Applied Physics Letters, 2002, 81, 174-176.	3.3	312
80	Role of Molecular Size in Ratchet Fractionation. Physical Review Letters, 2002, 89, 178301.	7.8	68
81	Gradient nanostructures for interfacing microfluidics and nanofluidics. Applied Physics Letters, 2002, 81, 3058-3060.	3.3	199
82	Bacterial chromosome extraction and isolation. Lab on A Chip, 2002, 2, 207.	6.0	79
83	Scanning the controls: genomics and nanotechnology. IEEE Nanotechnology Magazine, 2002, 1, 12-18.	2.0	37
84	Electrodeless Dielectrophoresis of Single- and Double-Stranded DNA. Biophysical Journal, 2002, 83, 2170-2179.	0.5	363
85	A DNA prism for high-speed continuous fractionation of large DNA molecules. Nature Biotechnology, 2002, 20, 1048-1051.	17.5	206
86	Separation of 100-Kilobase DNA Molecules in 10 Seconds. Analytical Chemistry, 2001, 73, 6053-6056.	6.5	134
87	Hydrodynamics in 2½ dimensions: making jets in a plane. Journal of Physics Condensed Matter, 2001, 13, 4891-4902.	1.8	13
88	Near-Field Scanner for Moving Molecules. Physical Review Letters, 2001, 86, 1378-1381.	7.8	71
89	Sorting biomolecules with microdevices. Electrophoresis, 2000, 21, 81-90.	2.4	72
90	Microfabricated arrays for fractionation of large DNA molecules via pulsed field electrophoresis. , 1999, , .		0

#	ARTICLE	IF	CITATIONS
91	Presence of vitronectin and activated complement factor C9 on ventriculoperitoneal shunts and temporary ventricular drainage catheters. <i>Journal of Neurosurgery</i> , 1999, 90, 101-108.	1.6	11
92	Quantitation of Bacterial Adhesion to Polymer Surfaces by Bioluminescence. <i>Zentralblatt Fur Bakteriologie: International Journal of Medical Microbiology</i> , 1998, 287, 7-18.	0.5	13
93	Protein depositions on one hydrocephalus shunt and on fifteen temporary ventricular catheters. <i>Acta Neurochirurgica</i> , 1997, 139, 734-742.	1.7	11
94	Fabrication and characterization of a nanosensor for admittance spectroscopy of biomolecules. <i>Journal of Vacuum Science and Technology A: Vacuum, Surfaces and Films</i> , 1995, 13, 1755-1760.	2.1	35
95	Image widening not only a question of tip sample convolution. <i>Applied Physics Letters</i> , 1995, 66, 1068-1070.	3.3	20
96	Direct observation of the atomic force microscopy tip using inverse atomic force microscopy imaging. <i>Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena</i> , 1994, 12, 2222.	1.6	33
97	Direct observation of the tip shape in scanning probe microscopy. <i>Applied Physics Letters</i> , 1993, 62, 2628-2630.	3.3	80
98	Polarization dependence of light intensity distribution from nanometer metallic slits. , 0, , .		0