

# Jochen Arlt

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4384054/publications.pdf>

Version: 2024-02-01

83  
papers

7,151  
citations

94433

37  
h-index

98798

67  
g-index

84  
all docs

84  
docs citations

84  
times ranked

5574  
citing authors

#	ARTICLE	IF	CITATIONS
1	Probing the dynamics of turbid colloidal suspensions using differential dynamic microscopy. <i>Soft Matter</i> , 2022, 18, 1858-1867.	2.7	6
2	Run-to-Tumble Variability Controls the Surface Residence Times of <i>E. coli</i> Bacteria. <i>Physical Review Letters</i> , 2022, 128, .	7.8	12
3	Particle sizing for flowing colloidal suspensions using flow-differential dynamic microscopy. <i>Soft Matter</i> , 2021, 17, 3945-3953.	2.7	5
4	Characterising shear-induced dynamics in flowing complex fluids using differential dynamic microscopy. <i>Soft Matter</i> , 2021, 17, 8838-8849.	2.7	4
5	Dynamic and static quenching of 2-aminopurine fluorescence by the natural DNA nucleotides in solution. <i>Methods and Applications in Fluorescence</i> , 2020, 8, 025002.	2.3	32
6	A combined rheometry and imaging study of viscosity reduction in bacterial suspensions. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 2326-2331.	7.1	42
7	Anisotropic dynamics and kinetic arrest of dense colloidal ellipsoids in the presence of an external field studied by differential dynamic microscopy. <i>Science Advances</i> , 2020, 6, eaaw9733.	10.3	27
8	Dynamic optical rectification and delivery of active particles. <i>Soft Matter</i> , 2019, 15, 7026-7032.	2.7	7
9	Spontaneous shrinking of soft nanoparticles boosts their diffusion in confined media. <i>Nature Communications</i> , 2019, 10, 4294.	12.8	26
10	Dynamics-dependent density distribution in active suspensions. <i>Nature Communications</i> , 2019, 10, 2321.	12.8	28
11	High-throughput characterisation of bull semen motility using differential dynamic microscopy. <i>PLoS ONE</i> , 2019, 14, e0202720.	2.5	12
12	Painting with light-powered bacteria. <i>Nature Communications</i> , 2018, 9, 768.	12.8	116
13	Bacteria as living patchy colloids: Phenotypic heterogeneity in surface adhesion. <i>Science Advances</i> , 2018, 4, eaao1170.	10.3	48
14	In vivo single cell analysis reveals Gata2 dynamics in cells transitioning to hematopoietic fate. <i>Journal of Experimental Medicine</i> , 2018, 215, 233-248.	8.5	37
15	Probing the Spatiotemporal Dynamics of Catalytic Janus Particles with Single-Particle Tracking and Differential Dynamic Microscopy. <i>Physical Review Letters</i> , 2018, 121, 078001.	7.8	72
16	Tricyanocyanine- <i>N</i> -triazoles: the scaffold-of-choice for long-term near-infrared imaging of immune cells <i>in vivo</i> . <i>Chemical Science</i> , 2018, 9, 7261-7270.	7.4	48
17	Ureasil organic-inorganic hybrids as photoactive waveguides for conjugated polyelectrolyte luminescent solar concentrators. <i>Materials Chemistry Frontiers</i> , 2017, 1, 2271-2282.	5.9	18
18	Single cells undergoing cell fate change during endothelial-to-hematopoietic cell transition show pulsatile Gata2 expression. <i>Experimental Hematology</i> , 2017, 53, S43.	0.4	0

#	ARTICLE	IF	CITATIONS
19	Tunable White-Light Emission from Conjugated Polymer-Ureasil Materials. <i>Advanced Functional Materials</i> , 2016, 26, 532-542.	14.9	33
20	Targeted design leads to tunable photoluminescence from perylene dicarboxydiimide-poly(oxyalkylene)/siloxane hybrids for luminescent solar concentrators. <i>Journal of Materials Chemistry C</i> , 2016, 4, 4049-4059.	5.5	23
21	<i>Escherichia coli</i> as a model active colloid: A practical introduction. <i>Colloids and Surfaces B: Biointerfaces</i> , 2016, 137, 2-16.	5.0	99
22	Synergistic photoluminescence enhancement in conjugated polymer-di-ureasil organic-inorganic composites. <i>Chemical Science</i> , 2015, 6, 7227-7237.	7.4	27
23	Filling an Emulsion Drop with Motile Bacteria. <i>Physical Review Letters</i> , 2014, 113, 268101.	7.8	61
24	Taking Two-Photon Excitation to Exceptional Path-Lengths in Photonic Crystal Fiber. <i>ACS Photonics</i> , 2014, 1, 790-793.	6.6	9
25	Switching of Swimming Modes in <i>Magnetospirillum gryphiswaldense</i> . <i>Biophysical Journal</i> , 2014, 106, 37-46.	0.5	29
26	A study of pile-up in integrated time-correlated single photon counting systems. <i>Review of Scientific Instruments</i> , 2013, 84, 103105.	1.3	71
27	Time-Domain Fluorescence Lifetime Imaging Techniques Suitable for Solid-State Imaging Sensor Arrays. <i>Sensors</i> , 2012, 12, 5650-5669.	3.8	51
28	A High-Throughput Time-Resolved Mini-Silicon Photomultiplier With Embedded Fluorescence Lifetime Estimation in 0.13 $\mu\text{m}^2$ CMOS. <i>IEEE Transactions on Biomedical Circuits and Systems</i> , 2012, 6, 562-570.	4.0	69
29	A 100Mphoton/s time-resolved mini-silicon photomultiplier with on-chip fluorescence lifetime estimation in 0.13 $\mu\text{m}^2$ CMOS imaging technology. , 2012, , .		11
30	Colloids in a bacterial bath: simulations and experiments. <i>Soft Matter</i> , 2011, 7, 5228.	2.7	99
31	Optically trapped microsensors for microfluidic temperature measurement by fluorescence lifetime imaging microscopy. <i>Lab on A Chip</i> , 2011, 11, 3821.	6.0	62
32	Changes to lipid droplet configuration in mCMV-infected fibroblasts: live cell imaging with simultaneous CARS and two-photon fluorescence microscopy. <i>Biomedical Optics Express</i> , 2011, 2, 2504.	2.9	12
33	Video-rate fluorescence lifetime imaging camera with CMOS single-photon avalanche diode arrays and high-speed imaging algorithm. <i>Journal of Biomedical Optics</i> , 2011, 16, 1.	2.6	89
34	Intracellular imaging of host-pathogen interactions using combined CARS and two-photon fluorescence microscopies. <i>Journal of Biophotonics</i> , 2010, 3, 138-146.	2.3	19
35	Hardware implementation algorithm and error analysis of high-speed fluorescence lifetime sensing systems using center-of-mass method. <i>Journal of Biomedical Optics</i> , 2010, 15, 017006.	2.6	49
36	Fluorescence lifetime biosensing with DNA microarrays and a CMOS-SPAD imager. <i>Biomedical Optics Express</i> , 2010, 1, 1302.	2.9	29

#	ARTICLE	IF	CITATIONS
37	Real-time fluorescence lifetime imaging system with a 32 Å— 32 0131¼m CMOS low dark-count single-photon avalanche diode array. Optics Express, 2010, 18, 10257.	3.4	108
38	Passive and Active Microrheology of Hard-sphere Colloids. Journal of Physical Chemistry B, 2009, 113, 3806-3812.	2.6	88
39	Trapping multiple particles in single optical tweezers. Optics Communications, 2008, 281, 135-140.	2.1	28
40	Optical tweezer micromanipulation of filamentous fungi. Fungal Genetics and Biology, 2007, 44, 1-13.	2.1	38
41	Experimentally manipulating fungi with optical tweezers*. Mycoscience, 2007, 48, 15-19.	0.8	13
42	Time-Multiplexed Laguerre-Gaussian holographic optical tweezers for biological applications. Optics Express, 2006, 14, 3065.	3.4	49
43	Multiple trap Laguerre-Gaussian holographic optical tweezers using a multiplexed ferroelectric SLM. , 2006, , .		0
44	Linear and nonlinear microrheology of dense colloidal suspensions. , 2006, , .		0
45	Hydrodynamics of bacterial suspensions. , 2005, , .		0
46	Force measurement in colloidal glasses using optical tweezers. , 2005, , .		0
47	Spectral imaging in a snapshot. , 2005, , .		20
48	Measuring fungal growth forces with optical tweezers. , 2005, , .		1
49	Cell Biology of Conidial Anastomosis Tubes in Neurospora crassa. Eukaryotic Cell, 2005, 4, 911-919.	3.4	157
50	Spherical aberration correction for optical tweezers. , 2004, , .		1
51	Single Molecule Fluorescence Imaging and Its Application to the Study of DNA Condensation. Journal of Fluorescence, 2004, 14, 65-69.	2.5	8
52	Spherical aberration correction for optical tweezers. Optics Communications, 2004, 236, 145-150.	2.1	64
53	Study of DNA deformation under flow using optical tweezers. , 2004, , .		0
54	Condensation of hydrodynamically stretched DNA using single-molecule fluorescence imaging and optical tweezers. , 2004, , .		1

#	ARTICLE	IF	CITATIONS
55	Handedness and azimuthal energy flow of optical vortex beams. Journal of Modern Optics, 2003, 50, 1573-1580.	1.3	92
56	<title>Laguerre-Gaussian laser modes for biophotonics and micromanipulation</title>. , 2003, 5147, 48.		1
57	Continuous motion of interference patterns using the angular Doppler effect. , 2003, 5121, 98.		1
58	Aberration corrected fully steerable optical tweezers. , 2003, , .		0
59	Handedness and azimuthal energy flow of optical vortex beams. Journal of Modern Optics, 2003, 50, 1573-1580.	1.3	0
60	Moving interference patterns created using the angular Doppler-effect. Optics Express, 2002, 10, 844.	3.4	36
61	Orbital angular momentum of a high-order Bessel light beam. Journal of Optics B: Quantum and Semiclassical Optics, 2002, 4, S82-S89.	1.4	357
62	Creation and Manipulation of Three-Dimensional Optically Trapped Structures. Science, 2002, 296, 1101-1103.	12.6	481
63	Revolving interference patterns for the rotation of optically trapped particles. Optics Communications, 2002, 201, 21-28.	2.1	88
64	Guiding a cold atomic beam along a co-propagating and oblique hollow light guide. Optics Communications, 2002, 214, 247-254.	2.1	39
65	Controlled Rotation of Optically Trapped Microscopic Particles. Science, 2001, 292, 912-914.	12.6	960
66	Optical dipole traps and atomic waveguides based on Bessel light beams. Physical Review A, 2001, 63, .	2.5	118
67	Optical micromanipulation using a Bessel light beam. Optics Communications, 2001, 197, 239-245.	2.1	531
68	Bethâ€™s experiment using optical tweezers. American Journal of Physics, 2001, 69, 271-276.	0.7	32
69	Spatial transformation of Laguerre-Gaussian laser modes. Journal of Modern Optics, 2001, 48, 783-787.	1.3	24
70	Generation of high-order Bessel beams by use of an axicon. Optics Communications, 2000, 177, 297-301.	2.1	710
71	Atom guiding along Laguerre-Gaussian and Bessel light beams. Applied Physics B: Lasers and Optics, 2000, 71, 549-554.	2.2	190
72	Generation of a beam with a dark focus surrounded by regions of higher intensity:â€fthe optical bottle beam. Optics Letters, 2000, 25, 191.	3.3	415

#	ARTICLE	IF	CITATIONS
73	Toroidal optical dipole traps for atomic Bose-Einstein condensates using Laguerre-Gaussian beams. Physical Review A, 2000, 63, .	2.5	141
74	An experiment to study a "nondiffracting" light beam. American Journal of Physics, 1999, 67, 912-915.	0.7	57
75	A polarisation spectrometer locked diode laser for trapping cold atoms. Optics Communications, 1999, 170, 79-84.	2.1	26
76	The generation of Bessel beams at millimetre-wave frequencies by use of an axicon. Optics Communications, 1999, 170, 213-215.	2.1	116
77	Efficiency of second-harmonic generation with Bessel beams. Physical Review A, 1999, 60, 2438-2441.	2.5	49
78	Parametric down-conversion for light beams possessing orbital angular momentum. Physical Review A, 1999, 59, 3950-3952.	2.5	105
79	The production of multiringed Laguerre-Gaussian modes by computer-generated holograms. Journal of Modern Optics, 1998, 45, 1231-1237.	1.3	269
80	High-order Laguerre-Gaussian laser modes for studies of cold atoms. Optics Communications, 1998, 156, 300-306.	2.1	121
81	Coherent Pulse Propagation and the Dynamics of Rydberg Wave Packets. Physical Review Letters, 1997, 79, 4774-4777.	7.8	15
82	An experiment to observe the intensity and phase structure of Laguerre-Gaussian laser modes. American Journal of Physics, 1996, 64, 77-82.	0.7	219
83	Toroidal optical dipole traps for two-dimensional Bose-Einstein condensates. , 0, , .		0