Thorben Cordes

List of Publications by Year
in descending order

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Version: 2024-02-01

84 papers	4,727 citations	109321 35 h-index	114465 63 g-index
110 all docs	110 docs citations	110 times ranked	4767 citing authors

#	Article	IF	Citations
1	Toward dynamic structural biology: Two decades of single-molecule FÃ¶rster resonance energy transfer. Science, 2018, 359, .	12.6	414
2	Precision and accuracy of single-molecule FRET measurementsâ€”a multi-laboratory benchmark study. Nature Methods, 2018, 15, 669-676.	19.0	350
3	The 2015 super-resolution microscopy roadmap. Journal Physics D: Applied Physics, 2015, 48, 443001.	2.8	291
4	On the Mechanism of Trolox as Antiblinking and Antibleaching Reagent. Journal of the American Chemical Society, 2009, 131, 5018-5019.	13.7	287
5	Controlling the fluorescence of ordinary oxazine dyes for single-molecule switching and superresolution microscopy. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 8107-8112.	7.1	250
6	Make them Blink: Probes for Superâ€Resolution Microscopy. ChemPhysChem, 2010, 11, 2475-2490.	2.1	183
7	Alternating-laser excitation: single-molecule FRET and beyond. Chemical Society Reviews, 2014, 43, 1156-1171.	38.1	161
8	FRET-based dynamic structural biology: Challenges, perspectives and an appeal for open-science practices. ELife, 2021, 10, .	6.0	152
9	Opportunities and challenges in single-molecule and single-particle fluorescence microscopy for mechanistic studies of chemical reactions. Nature Chemistry, 2013, 5, 993-999.	13.6	142
10	Conformational dynamics in substrate-binding domains influences transport in the ABC importer GlnPQ. Nature Structural and Molecular Biology, 2015, 22, 57-64.	8.2	119
11	A simple and versatile design concept for fluorophore derivatives with intramolecular photostabilization. Nature Communications, 2016, 7, 10144.	12.8	106
12	Conformational and dynamic plasticity in substrate-binding proteins underlies selective transport in ABC importers. ELife, 2019, 8, .	6.0	93
13	Light-triggered Î²-hairpin folding and unfolding. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 15729-15734.	7.1	88
14	Mechanisms and advancement of antifading agents for fluorescence microscopy and single-molecule spectroscopy. Physical Chemistry Chemical Physics, 2011, 13, 6699.	2.8	78
15	The Transcription Bubble of the RNA Polymeraseâ€“Promoter Open Complex Exhibits Conformational Heterogeneity and Millisecond-Scale Dynamics: Implications for Transcription Start-Site Selection. Journal of Molecular Biology, 2013, 425, 875-885.	4.2	77
16	Resolving Single-Molecule Assembled Patterns with Superresolution Blink-Microscopy. Nano Letters, 2010, 10, 645-651.	9.1	74
17	FÃ¶rster resonance energy transfer and protein-induced fluorescence enhancement as synergetic multi-scale molecular rulers. Scientific Reports, 2016, 6, 33257.	3.3	74
18	Lightâ€Switchable Peptides with a Hemithioindigo Unit: Peptide Design, Photochromism, and Optical Spectroscopy. ChemPhysChem, 2016, 17, 1252-1263.	2.1	73

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19	The Hammett Relationship and Reactions in the Excited Electronic State:â€‰ HemithioindigoZ/E-Photoisomerization. Journal of Physical Chemistry A, 2008, 112, 581-588.	2.5	72
20	'Self-healing' dyes: intramolecular stabilization of organic fluorophores. Nature Methods, 2012, 9, 426-427.	19.0	72
21	Hemithioindigo-based photoswitches as ultrafast light trigger in chromopeptides. Chemical Physics Letters, 2006, 428, 167-173.	2.6	69
22	Mechanism of Intramolecular Photostabilization in Selfâ€Healing Cyanine Fluorophores. ChemPhysChem, 2013, 14, 4084-4093.	2.1	65
23	An integrated transport mechanism of the maltose ABC importer. Research in Microbiology, 2019, 170, 321-337.	2.1	62
24	A Quantitative Theoretical Framework For Protein-Induced Fluorescence Enhancementâ€“FÃ¶rster-Type Resonance Energy Transfer (PIFE-FRET). Journal of Physical Chemistry B, 2016, 120, 6401-6410.	2.6	60
25	Single-molecule photophysics of oxazines on DNA and its application in a FRET switch. Photochemical and Photobiological Sciences, 2009, 8, 486-496.	2.9	59
26	Molecular Driving Forces for Z/E Isomerization Mediated by Heteroatoms: The Example Hemithioindigo. Journal of Physical Chemistry A, 2010, 114, 13016-13030.	2.5	58
27	Light-Switchable Hemithioindigoâ€“Hemistilbene-Containing Peptides: Ultrafast Spectroscopy of the Z â†' E Isomerization of the Chromophore and the Structural Dynamics of the Peptide Moiety. Journal of Physical Chemistry B, 2012, 116, 4181-4191.	2.6	57
28	Conformational dynamics of the <scp>ABC</scp> transporter McjD seen by singleâ€molecule <scp>FRET</scp>. EMBO Journal, 2018, 37, .	7.8	54
29	Single-Molecule Redox Blinking of Perylene Diimide Derivatives in Water. Journal of the American Chemical Society, 2010, 132, 2404-2409.	13.7	49
30	Chemical control of Hemithioindigo-photoisomerization â€“ Substituent-effects on different molecular parts. Chemical Physics Letters, 2008, 455, 197-201.	2.6	48
31	Ultrafast Hemithioindigo-based peptide-switches. Chemical Physics, 2009, 358, 103-110.	1.9	42
32	Sensing DNA Opening in Transcription Using Quenchable Fol̂rster Resonance Energy Transfer. Biochemistry, 2010, 49, 9171-9180.	2.5	42
33	Linking Singleâ€Molecule Blinking to Chromophore Structure and Redox Potentials. ChemPhysChem, 2012, 13, 931-937.	2.1	42
34	Accelerated and Efficient Photochemistry from Higher Excited Electronic States in Fulgide Molecules. Journal of Physical Chemistry A, 2008, 112, 13364-13371.	2.5	41
35	Photochemical Zâ†'E Isomerization of a Hemithioindigo/Hemistilbene Ï‰â€Amino Acid. ChemPhysChem, 2007, 8, 1713-1721.	2.1	35
36	The Power of Two: Covalent Coupling of Photostabilizers for Fluorescence Applications. Journal of Physical Chemistry Letters, 2014, 5, 3792-3798.	4.6	35

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37	Self-Healing Dyesâ€"Keeping the Promise?. Journal of Physical Chemistry Letters, 2020, 11, 4462-4480.	4.6	35
38	ABCE1 Controls Ribosome Recycling by an Asymmetric Dynamic Conformational Equilibrium. Cell Reports, 2019, 28, 723-734.e6.	6.4	34
39	Watching conformational dynamics of ABC transporters with single-molecule tools. Biochemical Society Transactions, 2015, 43, 1041-1047.	3.4	32
40	Single-molecule FRET reveals the pre-initiation and initiation conformations of influenza virus promoter RNA. Nucleic Acids Research, 2016, 44, gkw884.	14.5	32
41	Intramolecular photostabilization via triplet-state quenching: design principles to make organic fluorophores â€œself-healingâ€. Faraday Discussions, 2015, 184, 221-235.	3.2	31
42	Molecular structure, DNA binding mode, photophysical properties and recommendations for use of SYBR Gold. Nucleic Acids Research, 2021, 49, 5143-5158.	14.5	31
43	On the impact of competing intra- and intermolecular triplet-state quenching on photobleaching and photoswitching kinetics of organic fluorophores. Physical Chemistry Chemical Physics, 2019, 21, 3721-3733.	2.8	30
44	Molecular and Spectroscopic Characterization of Green and Red Cyanine Fluorophores from the Alexa Fluor and AF Series**. ChemPhysChem, 2021, 22, 1566-1583.	2.1	27
45	Intrinsically Resolution Enhancing Probes for Confocal Microscopy. Nano Letters, 2010, 10, 672-679.	9.1	26
46	The photochemical ring opening reaction of chromene as seen by transient absorption and fluorescence spectroscopy. Photochemical and Photobiological Sciences, 2013, 12, 1202-1209.	2.9	26
47	Folding and Unfolding of Light-Triggered Î²-Hairpin Model Peptides. Journal of Physical Chemistry B, 2011, 115, 5219-5226.	2.6	24
48	Single-Molecule Observation of Ligand Binding and Conformational Changes in FeuA. Biophysical Journal, 2019, 117, 1642-1654.	0.5	24
49	Self-healing dyes for super-resolution fluorescence microscopy. Journal Physics D: Applied Physics, 2019, 52, 034001.	2.8	24
50	Wavelength and solvent independent photochemistry: the electrocyclic ring-closure of indolylfulgides. Photochemical and Photobiological Sciences, 2009, 8, 528-534.	2.9	23
51	The fork protection complex recruits FACT to reorganize nucleosomes during replication. Nucleic Acids Research, 2022, 50, 1317-1334.	14.5	23
52	Targetable Conformationally Restricted Cyanines Enable Photonâ€Countâ€Limited Applications**. Angewandte Chemie - International Edition, 2021, 60, 26685-26693.	13.8	21
53	Synthesis of novel photochromic pyrans via palladium-mediated reactions. Beilstein Journal of Organic Chemistry, 2009, 5, 25.	2.2	19
54	Slower processes of the ultrafast photo-isomerization of an azobenzene observed by IR spectroscopy. Chemical Physics, 2007, 341, 258-266.	1.9	18

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55	Multi-parameter photon-by-photon hidden Markov modeling. Nature Communications, 2022, 13, 1000.	12.8	18
56	N-Methyl deuterated rhodamines for protein labelling in sensitive fluorescence microscopy. Chemical Science, 2022, 13, 8605-8617.	7.4	16
57	Photochromic Bis(thiophen-3-yl)maleimides Studied with Time-Resolved Spectroscopy. Journal of Physical Chemistry A, 2009, 113, 1033-1039.	2.5	15
58	ColiCoords: A Python package for the analysis of bacterial fluorescence microscopy data. PLoS ONE, 2019, 14, e0217524.	2.5	15
59	Caging and Photoactivation in Single-Molecule FÃ¶rster Resonance Energy Transfer Experiments. Biochemistry, 2017, 56, 2031-2041.	2.5	14
60	Selective Functionalization of Tailored Nanostructures. ACS Nano, 2012, 6, 9214-9220.	14.6	13
61	Quantum optics, molecular spectroscopy and low-temperature spectroscopy: general discussion. Faraday Discussions, 2015, 184, 275-303.	3.2	13
62	Photoisomerization of hemithioindigo compounds: Combining solvent- and substituent- effects into an advanced reaction model. Chemical Physics, 2018, 515, 614-621.	1.9	13
63	Micro-structured electrode arrays:. Vacuum, 2004, 73, 327-332.	3.5	12
64	Triggering Closure of a Sialic Acid TRAP Transporter Substrate Binding Protein through Binding of Natural or Artificial Substrates. Journal of Molecular Biology, 2021, 433, 166756.	4.2	10
65	Plasmonics, Tracking and Manipulating, and Living Cells: general discussion. Faraday Discussions, 2015, 184, 451-473.	3.2	9
66	Singleâ€molecule studies of conformational states and dynamics in the ABC importer OpuA. FEBS Letters, 2021, 595, 717-734.	2.8	9
67	Structural dynamics in the evolution of a bilobed protein scaffold. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	9
68	Selective functionalization of patterned glass surfaces. Journal of Materials Chemistry B, 2014, 2, 2606-2615.	5.8	8
69	A Trap-Door Mechanism for Zinc Acquisition by Streptococcus pneumoniae AdcA. MBio, 2021, 12, .	4.1	8
70	Molecular and Spectroscopic Characterization of Green and Red Cyanine Fluorophores from the Alexa Fluor and AF Series. ChemPhysChem, 2021, 22, 1546-1546.	2.1	8
71	Structural and biophysical characterization of the tandem substrate-binding domains of the ABC importer GlnPQ. Open Biology, 2021, 11, 200406.	3.6	7
72	Structural Dynamics of the Functional Nonameric Type III Translocase Export Gate. Journal of Molecular Biology, 2021, 433, 167188.	4.2	7

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73	Linker Molecules Convert Commercial Fluorophores into Tailored Functional Probes during Biolabelling. Angewandte Chemie - International Edition, 2022, 61, .	13.8	7
74	Characterization of Fluorescent Proteins with Intramolecular Photostabilization**. ChemBioChem, 2021, 22, 3283-3291.	2.6	6
75	Kinetic Modelling of Transport Inhibition by Substrates in ABC Importers. Journal of Molecular Biology, 2020, 432, 5565-5576.	4.2	5
76	Targetable conformationally restricted cyanines enable photonâ€count limited applications. Angewandte Chemie, 0, , .	2.0	5
77	The complex photo-rearrangement of a heterocyclic N-oxide: Kinetics from picoseconds to minutes. Journal of Photochemistry and Photobiology A: Chemistry, 2009, 206, 10-17.	3.9	4
78	Controlling the emission of organic dyes for high sensitivity and super-resolution microscopy. Proceedings of SPIE, 2009, , .	0.8	3
79	Linker Molecules Convert Commercial Fluorophores into Tailored Functional Probes during Bioâ€labeling. Angewandte Chemie, 0, , .	2.0	3
80	Excitation wavelength dependent pumpâ€“probe signatures ofÂmolecular crystals. Applied Physics A: Materials Science and Processing, 2009, 96, 99-106.	2.3	2
81	Far-Field Nanoscopy with Conventional Fluorophores: Photostability, Photophysics, and Transient Binding. Springer Series on Fluorescence, 2012, , 215-242.	0.8	2
82	Superresolution techniques, biophysics with nanostructures, and fluorescence energy transfer: general discussion. Faraday Discussions, 2015, 184, 143-162.	3.2	1
83	A novel single molecule fluorescence quenching technique for measuring distances below 3 nm. Biophysical Journal, 2022, 121, 431a.	0.5	0
84	InnenrÃ¼cktitelbild: Linker Molecules Convert Commercial Fluorophores into Tailored Functional Probes during Biolabelling (Angew. Chem. 19/2022). Angewandte Chemie, 2022, 134, .	2.0	0