Edward A Lemke

List of Publications by Year
in descending order

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104 papers	10,945 citations	43973 48 h-index	33814 99 g-index
117 all docs	117 docs citations	117 times ranked	12645 citing authors

#	Article	IF	Citations
1	Condensed, Microtubule-coating Thin Organelles for Orthogonal Translation in Mammalian Cells. Journal of Molecular Biology, 2022, 434, 167454.	2.0	6
2	Role of Solvent Compatibility in the Phase Behavior of Binary Solutions of Weakly Associating Multivalent Polymers. Biomacromolecules, 2022, 23, 349-364.	2.6	7
3	Cargo transport through the nuclear pore complex at a glance. Journal of Cell Science, 2021, 134, .	1.2	53
4	FRET-based dynamic structural biology: Challenges, perspectives and an appeal for open-science practices. ELife, 2021, 10, .	2.8	152
5	Synthesis and Evaluation of Novel Ringâ€Strained Noncanonical Amino Acids for Residueâ€Specific Bioorthogonal Reactions in Living Cells. Chemistry - A European Journal, 2021, 27, 6094-6099.	1.7	14
6	Faces, facets, and functions of biomolecular condensates driven by multivalent proteins and nucleic acids. Biophysical Journal, 2021, 120, E1-E4.	0.2	1
7	There is plenty of room in protein-RNA condensates. Biophysical Journal, 2021, 120, 1121-1122.	0.2	5
8	Physics of the nuclear pore complex: Theory, modeling and experiment. Physics Reports, 2021, 921, 1-53.	10.3	44
9	Comparative analysis of the coordinated motion of Hsp70s from different organelles observed by single-molecule three-color FRET. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	3.3	10
10	Bio-orthogonal Red and Far-Red Fluorogenic Probes for Wash-Free Live-Cell and Super-resolution Microscopy. ACS Central Science, 2021, 7, 1561-1571.	5.3	57
11	Dual film-like organelles enable spatial separation of orthogonal eukaryotic translation. Cell, 2021, 184, 4886-4903.e21.	13.5	28
12	When two become one: Integrating FRET and EPR into one structural model. Biophysical Journal, 2021, 120, 4637-4638.	0.2	1
13	Synthetic biomolecular condensates to engineer eukaryotic cells. Current Opinion in Chemical Biology, 2021, 64, 174-181.	2.8	25
14	PED in 2021: a major update of the protein ensemble database for intrinsically disordered proteins. Nucleic Acids Research, 2021, 49, D404-D411.	6.5	95
15	The liquid state of FG-nucleoporins mimics permeability barrier properties of nuclear pore complexes. Journal of Cell Biology, 2020, 219, .	2.3	93
16	Raising the ribosomal repertoire. Nature Chemistry, 2020, 12, 503-504.	6.6	10
17	Inducible Genetic Code Expansion in Eukaryotes. ChemBioChem, 2020, 21, 3216-3219.	1.3	7
18	Multifunctionality of F-rich nucleoporins. Biochemical Society Transactions, 2020, 48, 2603-2614.	1.6	10

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19	Molecular determinants of large cargo transport into the nucleus. ELife, 2020, 9, .	2.8	31
20	Mechanismâ€Dependent Modulation of Ultrafast Interfacial Water Dynamics in Intrinsically Disordered Protein Complexes. Angewandte Chemie - International Edition, 2019, 58, 4720-4724.	7.2	19
21	MechanismusabhÃngige Regulation der ultraschnellen Dynamik von Wasser an GrenzflÃchen in Komplexen mit intrinsisch ungeordneten Proteinen. Angewandte Chemie, 2019, 131, 4769-4774.	1.6	2
22	Phase Separation Comes of Age: From Phenomenology to Single Molecules. Molecular Cell, 2019, 74, 413-415.	4.5	2
23	Designer membraneless organelles enable codon reassignment of selected mRNAs in eukaryotes. Science, 2019, 363, .	6.0	129
24	Associating HIV-1 envelope glycoprotein structures with states on theÂvirus observed by smFRET. Nature, 2019, 568, 415-419.	13.7	156
25	Bistetrazineâ€Cyanines as Doubleâ€Clicking Fluorogenic Twoâ€Point Binder or Crosslinker Probes. Chemistry - A European Journal, 2018, 24, 8841-8847.	1.7	19
26	Beyond the Transport Function of Import Receptors: Whatâ€™s All the FUS about?. Cell, 2018, 173, 549-553.	13.5	14
27	Fluorogenic Tetrazine-Siliconrhodamine Probe for the Labeling of Noncanonical Amino Acid Tagged Proteins. Methods in Molecular Biology, 2018, 1728, 337-363.	0.4	2
28	MultiBacTAG-Genetic Code Expansion Using the Baculovirus Expression System in Sf21 Cells. Methods in Molecular Biology, 2018, 1728, 297-311.	0.4	4
29	Palladium-unleashed proteins: gentle aldehyde decaging for site-selective protein modification. Chemical Communications, 2018, 54, 1501-1504.	2.2	12
30	Two Differential Binding Mechanisms of FG-Nucleoporins and Nuclear Transport Receptors. Cell Reports, 2018, 22, 3660-3671.	2.9	41
31	Probing Differential Binding Mechanisms of Phenylalanine-Glycine-Rich Nucleoporins by Single-Molecule FRET. Methods in Enzymology, 2018, 611, 327-346.	0.4	1
32	Precision and accuracy of single-molecule FRET measurementsâ€"a multi-laboratory benchmark study. Nature Methods, 2018, 15, 669-676.	9.0	350
33	Comment on â€œInnovative scattering analysis shows that hydrophobic disordered proteins are expanded in waterâ€. Science, 2018, 361, .	6.0	27
34	Direct Visualization of the Conformational Dynamics of Single Influenza Hemagglutinin Trimers. Cell, 2018, 174, 926-937.e12.	13.5	118
35	Synthesis of Azidoâ€Glycans for Chemical Glycomodification of Proteins. European Journal of Organic Chemistry, 2018, 2018, 4296-4305.	1.2	7
36	Shining a Light on Phase Separation in the Cell. Cell, 2017, 168, 11-13.	13.5	42

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37	Bisazide Cyanine Dyes as Fluorogenic Probes for Bis-Cyclooctynylated Peptide Tags and as Fluorogenic Cross-Linkers of Cyclooctynylated Proteins. Bioconjugate Chemistry, 2017, 28, 1552-1559.	1.8	20
38	A Versatile Tool for Live-Cell Imaging and Super-Resolution Nanoscopy Studies of HIV-1 Env Distribution and Mobility. Cell Chemical Biology, 2017, 24, 635-645.e5.	2.5	55
39	Orthogonal spin labeling using click chemistry for in vitro and in vivo applications. Journal of Magnetic Resonance, 2017, 275, 38-45.	1.2	54
40	Monomeric Huntingtin Exon 1 Has Similar Overall Structural Features for Wild-Type and Pathological Polyglutamine Lengths. Journal of the American Chemical Society, 2017, 139, 14456-14469.	6.6	87
41	Decoupling of size and shape fluctuations in heteropolymeric sequences reconciles discrepancies in SAXS vs. FRET measurements. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6342-E6351.	3.3	195
42	Floppy but not sloppy: Interaction mechanism of FG-nucleoporins and nuclear transport receptors. Seminars in Cell and Developmental Biology, 2017, 68, 34-41.	2.3	81
43	Sampling Long- versus Short-Range Interactions Defines the Ability of Force Fields To Reproduce the Dynamics of Intrinsically Disordered Proteins. Journal of Chemical Theory and Computation, 2017, 13, 3964-3974.	2.3	22
44	Application of Noncanonical Amino Acids for Protein Labeling in a Genomically Recoded <i>Escherichia coli</i>. ACS Synthetic Biology, 2017, 6, 233-255.	1.9	29
45	Architecture of TAF11/TAF13/TBP complex suggests novel regulation properties of general transcription factor TFIID. ELife, 2017, 6, .	2.8	29
46	New Redâ€Emitting Tetrazineâ€Phenoxazine Fluorogenic Labels for Liveâ€Cell Intracellular Bioorthogonal Labeling Schemes. Chemistry - A European Journal, 2016, 22, 8972-8979.	1.7	58
47	Titelbild: Verbesserte Erweiterung des eukaryotischen genetischen Codes fÃ¼r seitenspezifische, hochauflÃ¶sende Click-PAINT-Mikroskopie (Angew. Chem. 52/2016). Angewandte Chemie, 2016, 128, 16163-16163.	1.6	0
48	Labeling of virus components for advanced, quantitative imaging analyses. FEBS Letters, 2016, 590, 1896-1914.	1.3	34
49	Nanoscale devices for linkerless long-term single-molecule observation. Current Opinion in Biotechnology, 2016, 39, 105-112.	3.3	21
50	The Multiple Faces of Disordered Nucleoporins. Journal of Molecular Biology, 2016, 428, 2011-2024.	2.0	82
51	Genetic code expansion for multiprotein complex engineering. Nature Methods, 2016, 13, 997-1000.	9.0	63
52	Debugging Eukaryotic Genetic Code Expansion for Siteâ€Specific Clickâ€PAINT Superâ€Resolution Microscopy. Angewandte Chemie - International Edition, 2016, 55, 16172-16176.	7.2	117
53	Verbesserte Erweiterung des eukaryotischen genetischen Codes fÃ¼r seitenspezifische, hochauflÃ¶sende Clickâ€PAINTâ€Mikroskopie. Angewandte Chemie, 2016, 128, 16406-16410.	1.6	11
54	Hydrophilic <i>trans</i>â€Cyclooctenylated Noncanonical Amino Acids for Fast Intracellular Protein Labeling. ChemBioChem, 2016, 17, 1518-1524.	1.3	39

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55	Origin of Orthogonality of Strainâ€Promoted Click Reactions. Chemistry - A European Journal, 2015, 21, 12431-12435.	1.7	44
56	Frontispiece: Highly Stabletrans-Cyclooctene Amino Acids for Live-Cell Labeling. Chemistry - A European Journal, 2015, 21, n/a-n/a.	1.7	0
57	Highly Stable <i>trans</i>â€Cyclooctene Amino Acids for Liveâ€Cell Labeling. Chemistry - A European Journal, 2015, 21, 12266-12270.	1.7	58
58	Kirkwoodâ€"Buff Approach Rescues Overcollapse of a Disordered Protein in Canonical Protein Force Fields. Journal of Physical Chemistry B, 2015, 119, 7975-7984.	1.2	70
59	Plasticity of an Ultrafast Interaction between Nucleoporins and Nuclear Transport Receptors. Cell, 2015, 163, 734-745.	13.5	255
60	Labeling proteins on live mammalian cells using click chemistry. Nature Protocols, 2015, 10, 780-791.	5.5	127
61	Single-molecule FRET and crosslinking studies in structural biology enabled by noncanonical amino acids. Current Opinion in Structural Biology, 2015, 32, 66-73.	2.6	24
62	Large-Scale Conformational Dynamics Control H5N1 Influenza Polymerase PB2 Binding to Importin Î±. Journal of the American Chemical Society, 2015, 137, 15122-15134.	6.6	49
63	In situ structural analysis of the human nuclear pore complex. Nature, 2015, 526, 140-143.	13.7	361
64	Super-resolution Microscopy of Clickable Amino Acids Reveals the Effects of Fluorescent Protein Tagging on Protein Assemblies. ACS Nano, 2015, 9, 11034-11041.	7.3	26
65	Genetic code expansion enabled site-specific dual-color protein labeling: superresolution microscopy and beyond. Current Opinion in Chemical Biology, 2015, 28, 164-173.	2.8	65
66	The CD27L and CTP1L Endolysins Targeting Clostridia Contain a Built-in Trigger and Release Factor. PLoS Pathogens, 2014, 10, e1004228.	2.1	37
67	Minimal Tags for Rapid Dualâ€Color Liveâ€Cell Labeling and Superâ€Resolution Microscopy. Angewandte Chemie - International Edition, 2014, 53, 2245-2249.	7.2	254
68	Detektion von Mehrbindigkeit und differenziellen AffinitÃten in groÃŸen, intrinsisch ungeordneten Proteinen mithilfe von Segmentbewegungsanalyse. Angewandte Chemie, 2014, 126, 7492-7496.	1.6	7
69	The Exploding Genetic Code. ChemBioChem, 2014, 15, 1691-1694.	1.3	44
70	Unnatural Amino Acid Mutagenesis Reveals Dimerization As a Negative Regulatory Mechanism of VHRâ€™s Phosphatase Activity. ACS Chemical Biology, 2014, 9, 1451-1459.	1.6	12
71	Continuous throughput and long-term observation of single-molecule FRET without immobilization. Nature Methods, 2014, 11, 297-300.	9.0	53
72	Mapping Multivalency and Differential Affinities within Large Intrinsically Disordered Protein Complexes with Segmental Motion Analysis. Angewandte Chemie - International Edition, 2014, 53, 7364-7367.	7.2	37

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73	New Generation of Bioorthogonally Applicable Fluorogenic Dyes with Visible Excitations and Large Stokes Shifts. Bioconjugate Chemistry, 2014, 25, 1370-1374.	1.8	34
74	Schnelle, zweifarbige Proteinmarkierung an lebenden Zellen fÃ¼r die hochauflÃ¶sende Mikroskopie. Angewandte Chemie, 2014, 126, 2278-2282.	1.6	51
75	Genetically Encoded Click Chemistry for Single-Molecule FRET of Proteins. Methods in Cell Biology, 2013, 113, 169-187.	0.5	30
76	What precisionâ€proteinâ€tuning and nanoâ€resolved single molecule sciences can do for each other. BioEssays, 2013, 35, 65-74.	1.2	16
77	A near-infrared fluorophore for live-cell super-resolution microscopy of cellular proteins. Nature Chemistry, 2013, 5, 132-139.	6.6	779
78	Fourier ring correlation as a resolution criterion for super-resolution microscopy. Journal of Structural Biology, 2013, 183, 363-367.	1.3	269
79	Cell typeâ€specific nuclear pores: a case in point for contextâ€dependent stoichiometry of molecular machines. Molecular Systems Biology, 2013, 9, 648.	3.2	277
80	Facilitated aggregation of FG nucleoporins under molecular crowding conditions. EMBO Reports, 2013, 14, 178-183.	2.0	78
81	A new family of bioorthogonally applicable fluorogenic labels. Organic and Biomolecular Chemistry, 2013, 11, 3297.	1.5	46
82	Intramolecular three-colour single pair FRET of intrinsically disordered proteins with increased dynamic range. Molecular BioSystems, 2012, 8, 2531.	2.9	32
83	Genetic Encoding of a Bicyclo[6.1.0]nonyneâ€Charged Amino Acid Enables Fast Cellular Protein Imaging by Metalâ€Free Ligation. ChemBioChem, 2012, 13, 2094-2099.	1.3	153
84	Click Strategies for Single-Molecule Protein Fluorescence. Journal of the American Chemical Society, 2012, 134, 5187-5195.	6.6	106
85	Amino Acids for Dielsâ€"Alder Reactions in Living Cells. Angewandte Chemie - International Edition, 2012, 51, 4166-4170.	7.2	298
86	Conserved features of intermediates in amyloid assembly determine their benign or toxic states. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 11172-11177.	3.3	115
87	Principles for designing fluorescent sensors and reporters. Nature Chemical Biology, 2011, 7, 480-483.	3.9	97
88	Single Molecule Study of the Intrinsically Disordered FG-Repeat Nucleoporin 153. Biophysical Journal, 2011, 101, 1710-1719.	0.2	97
89	Site-Specific Labeling of Proteins for Single-Molecule FRET Measurements Using Genetically Encoded Ketone Functionalities. Methods in Molecular Biology, 2011, 751, 3-15.	0.4	26
90	Visualizing a one-way protein encounter complex by ultrafast single-molecule mixing. Nature Methods, 2011, 8, 239-241.	9.0	128

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91	Genetically Encoded Copperâ€Free Click Chemistry. Angewandte Chemie - International Edition, 2011, 50, 3878-3881.	7.2	269
92	Precision Control of Cellular Pathways with Light. ChemBioChem, 2010, 11, 1825-1827.	1.3	11
93	Direct single-molecule observation of a protein living in two opposed native structures. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 10153-10158.	3.3	72
94	Interplay of Î±-synuclein binding and conformational switching probed by single-molecule fluorescence. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 5645-5650.	3.3	379
95	Microfluidic Device for Single-Molecule Experiments with Enhanced Photostability. Journal of the American Chemical Society, 2009, 131, 13610-13612.	6.6	61
96	Genetic Incorporation of a Small, Environmentally Sensitive, Fluorescent Probe into Proteins in <i>Saccharomyces cerevisiae</i>. Journal of the American Chemical Society, 2009, 131, 12921-12923.	6.6	183
97	Single-molecule biophysics: at the interface of biology, physics and chemistry. Journal of the Royal Society Interface, 2008, 5, 15-45.	1.5	263
98	A General and Efficient Method for the Site-Specific Dual-Labeling of Proteins for Single Molecule Fluorescence Resonance Energy Transfer. Journal of the American Chemical Society, 2008, 130, 17664-17665.	6.6	159
99	A natively unfolded yeast prion monomer adopts an ensemble of collapsed and rapidly fluctuating structures. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 2649-2654.	3.3	296
100	Control of protein phosphorylation with a genetically encoded photocaged amino acid. Nature Chemical Biology, 2007, 3, 769-772.	3.9	208
101	Molecular Anatomy of a Trafficking Organelle. Cell, 2006, 127, 831-846.	13.5	1,985
102	Single Synaptic Vesicle Tracking in Individual Hippocampal Boutons at Rest and during Synaptic Activity. Journal of Neuroscience, 2005, 25, 11034-11044.	1.7	49
103	Visualization of Synaptic Vesicle Movement in Intact Synaptic Boutons Using Fluorescence Fluctuation Spectroscopy. Biophysical Journal, 2005, 89, 2091-2102.	0.2	76
104	Identification and mutational studies of conserved amino acids in the outer membrane receptor protein, FepA, which affect transport but not binding of ferric-enterobactin in Escherichia coli. BioMetals, 2003, 16, 507-518.	1.8	25