David M Chenoweth

List of Publications by Year in descending order

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79 papers

2,583 citations

172457 29 h-index 206112 48 g-index

92 all docs 92 docs citations 92 times ranked 3348 citing authors

#	Article	IF	Citations
1	Spindle asymmetry drives non-Mendelian chromosome segregation. Science, 2017, 358, 668-672.	12.6	179
2	Localized light-induced protein dimerization in living cells using a photocaged dimerizer. Nature Communications, 2014, 5, 5475.	12.8	154
3	Allosteric modulation of DNA by small molecules. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 13175-13179.	7.1	142
4	Rational design of small molecule fluorescent probes for biological applications. Organic and Biomolecular Chemistry, 2020, 18, 5747-5763.	2.8	138
5	Structural Basis for Cyclic Py-Im Polyamide Allosteric Inhibition of Nuclear Receptor Binding. Journal of the American Chemical Society, 2010, 132, 14521-14529.	13.7	88
6	DNAâ^'CNT Nanowire Networks for DNA Detection. Journal of the American Chemical Society, 2011, 133, 3238-3241.	13.7	86
7	Rational Design and Facile Synthesis of a Highly Tunable Quinoline-Based Fluorescent Small-Molecule Scaffold for Live Cell Imaging. Journal of the American Chemical Society, 2018, 140, 9486-9493.	13.7	80
8	Nuclear body phase separation drives telomere clustering in ALT cancer cells. Molecular Biology of the Cell, 2020, 31, 2048-2056.	2.1	79
9	Optogenetic control of organelle transport using a photocaged chemical inducer of dimerization. Current Biology, 2015, 25, R407-R408.	3.9	75
10	Optogenetic control of kinetochore function. Nature Chemical Biology, 2017, 13, 1096-1101.	8.0	71
11	Cyclic Pyrroleâ^Imidazole Polyamides Targeted to the Androgen Response Element. Journal of the American Chemical Society, 2009, 131, 7182-7188.	13.7	68
12	The effects of thioamide backbone substitution on protein stability: a study in \hat{l}_{\pm} -helical, \hat{l}_{\pm} -sheet, and polyproline II helical contexts. Chemical Science, 2017, 8, 2868-2877.	7.4	61
13	Cyclooctyne-based reagents for uncatalyzed click chemistry: A computational survey. Organic and Biomolecular Chemistry, 2009, 7, 5255.	2.8	58
14	Aza-Glycine Induces Collagen Hyperstability. Journal of the American Chemical Society, 2015, 137, 12422-12425.	13.7	57
15	Next Generation Hairpin Polyamides with $(\langle i\rangle R\langle i\rangle)$ -3,4-Diaminobutyric Acid Turn Unit. Journal of the American Chemical Society, 2008, 130, 6859-6866.	13.7	54
16	Programmable Oligomers for Minor Groove DNA Recognition. Journal of the American Chemical Society, 2006, 128, 9074-9079.	13.7	52
17	Shape changing thin films powered by DNA hybridization. Nature Nanotechnology, 2017, 12, 41-47.	31.5	51
18	Separation using planar chromatography with electroosmotic flow. Journal of Chromatography A, 2000, 903, 211-217.	3.7	49

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19	Recognition of Nucleic Acid Junctions Using Triptyceneâ€Based Molecules. Angewandte Chemie - International Edition, 2014, 53, 13746-13750.	13.8	46
20	Fluorescent Sequence-Specific dsDNA Binding Oligomers. Journal of the American Chemical Society, 2007, 129, 2216-2217.	13.7	41
21	Addressable Terminally Linked DNAâ^'CNT Nanowires. Journal of the American Chemical Society, 2010, 132, 14009-14011.	13.7	40
22	Photoelectrocyclization as an Activation Mechanism for Organelleâ€Specific Liveâ€Cell Imaging Probes. Angewandte Chemie - International Edition, 2015, 54, 6442-6446.	13.8	40
23	A "Clickable―Photoconvertible Small Fluorescent Molecule as a Minimalist Probe for Tracking Individual Biomolecule Complexes. Journal of the American Chemical Society, 2019, 141, 1893-1897.	13.7	40
24	Pyrroleâ€Imidazole Polyamides Distinguish Between Doubleâ€Helical DNA and RNA. Angewandte Chemie - International Edition, 2013, 52, 415-418.	13.8	39
25	General Solution for Stabilizing Triple Helical Collagen. Journal of the American Chemical Society, 2016, 138, 9751-9754.	13.7	38
26	Reversible Control of Protein Localization in Living Cells Using a Photocaged-Photocleavable Chemical Dimerizer. Journal of the American Chemical Society, 2018, 140, 11926-11930.	13.7	37
27	Triple aryne–tetrazine reaction enabling rapid access to a new class of polyaromatic heterocycles. Chemical Science, 2015, 6, 5128-5132.	7.4	36
28	Solution-Phase Synthesis of Pyrroleâ^'Imidazole Polyamides. Journal of the American Chemical Society, 2009, 131, 7175-7181.	13.7	34
29	Halogen Bonding Facilitates Intersystem Crossing in Iodo-BODIPY Chromophores. Journal of Physical Chemistry Letters, 2020, 11, 877-884.	4.6	33
30	DNA Island Formation on Binary Block Copolymer Vesicles. Journal of the American Chemical Society, 2016, 138, 10157-10162.	13.7	30
31	Triptycene-based small molecules modulate (CAG) \hat{A} ·(CTG) repeat junctions. Chemical Science, 2015, 6, 4752-4755.	7.4	29
32	Electronic interactions of i, i + 1 dithioamides: increased fluorescence quenching and evidence for n-to- $i\in^*$ interactions. Chemical Communications, 2016, 52, 7798-7801.	4.1	29
33	Ultrafast Solvation Dynamics and Vibrational Coherences of Halogenated Boron-Dipyrromethene Derivatives Revealed through Two-Dimensional Electronic Spectroscopy. Journal of the American Chemical Society, 2017, 139, 14733-14742.	13.7	29
34	Structural Basis for Aza-Glycine Stabilization of Collagen. Journal of the American Chemical Society, 2017, 139, 9427-9430.	13.7	29
35	Optochemical Control of Protein Localization and Activity within Cell-like Compartments. Biochemistry, 2018, 57, 2590-2596.	2.5	26
36	PEARL-seq: A Photoaffinity Platform for the Analysis of Small Molecule-RNA Interactions. ACS Chemical Biology, 2020, 15, 2374-2381.	3.4	26

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37	The mechanism of the triple aryne–tetrazine reaction cascade: theory and experiment. Chemical Science, 2018, 9, 7688-7693.	7.4	24
38	A Single Stereodynamic Center Modulates the Rate of Selfâ€Assembly in a Biomolecular System. Angewandte Chemie - International Edition, 2015, 54, 10826-10832.	13.8	22
39	Programmable oligomers targeting 5′-GGGG-3′ in the minor groove of DNA and NF-κB binding inhibition. Bioorganic and Medicinal Chemistry, 2007, 15, 759-770.	3.0	21
40	Aryne Compatible Solvents are not Always Innocent. Organic Letters, 2016, 18, 4080-4083.	4.6	21
41	Modulation of the E. coli rpoH Temperature Sensor with Triptyceneâ€Based Small Molecules. Angewandte Chemie - International Edition, 2016, 55, 8258-8261.	13.8	20
42	Tension promotes kinetochore–microtubule release by Aurora B kinase. Journal of Cell Biology, 2021, 220, .	5.2	20
43	Synthesis and properties of lysosome-specific photoactivatable probes for live-cell imaging. Chemical Science, 2015, 6, 4508-4512.	7.4	19
44	Ataluren binds to multiple protein synthesis apparatus sites and competitively inhibits release factor-dependent termination. Nature Communications, 2022, 13, 2413.	12.8	19
45	Lancifodilactone G: Insights about an Unusually Stable Enol. Journal of Organic Chemistry, 2008, 73, 6853-6856.	3.2	18
46	Regiospecific Synthesis of Au-Nanorod/SWCNT/Au-Nanorod Heterojunctions. Nano Letters, 2010, 10, 2466-2469.	9.1	18
47	Synthesis and Conformational Dynamics of the Reported Structure of Xylopyridine A. Journal of the American Chemical Society, 2013, 135, 9213-9219.	13.7	16
48	Sterics and Stereoelectronics in Aza-Glycine: Impact of Aza-Glycine Preorganization in Triple Helical Collagen. Journal of the American Chemical Society, 2019, 141, 18021-18029.	13.7	16
49	Solid-Phase Photochemical Decarboxylative Hydroalkylation of Peptides. Organic Letters, 2021, 23, 8219-8223.	4.6	16
50	Improving the fluorescent probe acridonylalanine through a combination of theory and experiment. Journal of Physical Organic Chemistry, 2018, 31, e3813.	1.9	15
51	Synthesis of 9-Substituted Triptycene Building Blocks for Solid-Phase Diversification and Nucleic Acid Junction Targeting. Organic Letters, 2016, 18, 1096-1099.	4.6	14
52	Multivalent, Soluble Nano-Self Peptides Increase Phagocytosis of Antibody-Opsonized Targets while Suppressing "Self―Signaling. ACS Nano, 2020, 14, 15083-15093.	14.6	12
53	Aza-proline effectively mimics <scp>l</scp> -proline stereochemistry in triple helical collagen. Chemical Science, 2019, 10, 6979-6983.	7.4	11
54	Rules for the design of aza-glycine stabilized triple-helical collagen peptides. Chemical Science, 2020, 11, 10638-10646.	7.4	11

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55	Cysteine-rich domain of type III collagen N-propeptide inhibits fibroblast activation by attenuating $TGF\hat{l}^2$ signaling. Matrix Biology, 2022, 109, 19-33.	3.6	10
56	Oligomerization Route to Pyâ^'Im Polyamide Macrocycles. Organic Letters, 2009, 11, 3590-3593.	4.6	9
57	Incorporation of Aza-Glycine into Collagen Peptides. Journal of Organic Chemistry, 2020, 85, 1706-1711.	3.2	9
58	Bridgehead-Substituted Triptycenes for Discovery of Nucleic Acid Junction Binders. Organic Letters, 2016, 18, 2423-2426.	4.6	8
59	Variation in the Yaa position of collagen peptides containing azaGlycine. Chemical Communications, 2018, 54, 11937-11940.	4.1	8
60	Optogenetic control of mitosis with photocaged chemical dimerizers. Methods in Cell Biology, 2018, 144, 157-164.	1.1	8
61	CRISPR Cas13-Based Tools to Track and Manipulate Endogenous Telomeric Repeat-Containing RNAs in Live Cells. Frontiers in Molecular Biosciences, 2021, 8, 785160.	3.5	8
62	Quinoline-based fluorescent small molecules for live cell imaging. Methods in Enzymology, 2020, 640, 309-326.	1.0	3
63	Solid-Phase Photochemical Peptide Homologation Cyclization. Organic Letters, 2022, 24, 5176-5180.	4.6	3
64	Expansion of the Genetic Alphabet: Unnatural Nucleobases and Their Applications. Journal of Nucleic Acids, 2012, 2012, 1-2.	1.2	2
65	Photoactivatable trimethoprim-based probes for spatiotemporal control of biological processes. Methods in Enzymology, 2020, 638, 273-294.	1.0	2
66	Photoconvertible diazaxanthilidene dyes for live cell imaging. Methods in Enzymology, 2020, 639, 379-388.	1.0	2
67	Chemical Dimerization-Induced Protein Condensates on Telomeres. Journal of Visualized Experiments, 2021, , .	0.3	2
68	Human CD47-Derived Cyclic Peptides Enhance Engulfment of mAb-Targeted Melanoma by Primary Macrophages. Bioconjugate Chemistry, 2022, 33, 1973-1982.	3.6	2
69	A General Strategy for the Design and Evaluation of Heterobifunctional Tools: Applications to Protein Localization and Phase Separation. ChemBioChem, 2022, 23, .	2.6	2
70	Modulation of the E.â€coli rpoH Temperature Sensor with Triptyceneâ€Based Small Molecules. Angewandte Chemie, 2016, 128, 8398-8401.	2.0	1
71	Optogenetic Manipulation of Mouse Oocytes. Methods in Molecular Biology, 2018, 1818, 129-135.	0.9	1
72	Reversible optogenetic control of protein function and localization. Methods in Enzymology, 2019, 624, 25-45.	1.0	1

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73	Frontispiece: Photoelectrocyclization as an Activation Mechanism for Organelle-Specific Live-Cell Imaging Probes. Angewandte Chemie - International Edition, 2015, 54, n/a-n/a.	13.8	O
74	A Rapid Synthesis of Nuclear-Staining Small Fluorescent Molecules for Brain Imaging. Cell Reports Physical Science, 2020, 1, 100227.	5.6	0
75	Preface. Methods in Enzymology, 2020, 641, xix-xx.	1.0	0
76	Preface. Methods in Enzymology, 2020, 639, xv-xvii.	1.0	0
77	Preface. Methods in Enzymology, 2020, 638, xv-xvii.	1.0	0
78	Investigating the Transition of the Core Centromeric Nucleosome Complex from Interphase to Mitosis using Chemical Biology Tools. FASEB Journal, 2022, 36, .	0.5	0
79	Front Cover: A General Strategy for the Design and Evaluation of Heterobifunctional Tools: Applications to Protein Localization and Phase Separation (ChemBioChem 16/2022). ChemBioChem, 2022, 23, .	2.6	0