

Philip E Dawson

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3611174/publications.pdf>

Version: 2024-02-01

87
papers

11,406
citations

81900

39
h-index

45317

90
g-index

172
all docs

172
docs citations

172
times ranked

10092
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis of proteins by native chemical ligation. <i>Science</i> , 1994, 266, 776-779.	12.6	3,712
2	Synthesis of Native Proteins by Chemical Ligation. <i>Annual Review of Biochemistry</i> , 2000, 69, 923-960.	11.1	1,049
3	An Efficient Fmoc-SPPS Approach for the Generation of Thioester Peptide Precursors for Use in Native Chemical Ligation. <i>Angewandte Chemie - International Edition</i> , 2008, 47, 6851-6855.	13.8	449
4	Nucleophilic Catalysis of Oxime Ligation. <i>Angewandte Chemie - International Edition</i> , 2006, 45, 7581-7584.	13.8	440
5	Nucleophilic Catalysis of Hydrazone Formation and Transimination: Implications for Dynamic Covalent Chemistry. <i>Journal of the American Chemical Society</i> , 2006, 128, 15602-15603.	13.7	394
6	Cellular Uptake and Fate of PEGylated Gold Nanoparticles Is Dependent on Both Cell-Penetration Peptides and Particle Size. <i>ACS Nano</i> , 2011, 5, 6434-6448.	14.6	381
7	Rapid Oxime and Hydrazone Ligations with Aromatic Aldehydes for Biomolecular Labeling. <i>Bioconjugate Chemistry</i> , 2008, 19, 2543-2548.	3.6	324
8	Multifunctional Compact Zwitterionic Ligands for Preparing Robust Biocompatible Semiconductor Quantum Dots and Gold Nanoparticles. <i>Journal of the American Chemical Society</i> , 2011, 133, 9480-9496.	13.7	276
9	Kinetics of Metal-Affinity Driven Self-Assembly between Proteins or Peptides and CdSe/ZnS Quantum Dots. <i>Journal of Physical Chemistry C</i> , 2007, 111, 11528-11538.	3.1	257
10	Self-Assembled Quantum Dot-Peptide Bioconjugates for Selective Intracellular Delivery. <i>Bioconjugate Chemistry</i> , 2006, 17, 920-927.	3.6	246
11	Recent progress in the bioconjugation of quantum dots. <i>Coordination Chemistry Reviews</i> , 2014, 263-264, 101-137.	18.8	190
12	Chemical Protein Synthesis Using a Second-Generation <i>N</i> -Acylurea Linker for the Preparation of Peptide-Thioester Precursors. <i>Journal of the American Chemical Society</i> , 2015, 137, 7197-7209.	13.7	179
13	Intracellular Delivery of Quantum Dot-Protein Cargos Mediated by Cell Penetrating Peptides. <i>Bioconjugate Chemistry</i> , 2008, 19, 1785-1795.	3.6	155
14	Acetone-Linked Peptides: A Convergent Approach for Peptide Macrocyclization and Labeling. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 8665-8668.	13.8	143
15	Delivering quantum dot-peptide bioconjugates to the cellular cytosol: escaping from the endolysosomal system. <i>Integrative Biology (United Kingdom)</i> , 2010, 2, 265.	1.3	124
16	Selecting Improved Peptidyl Motifs for Cytosolic Delivery of Disparate Protein and Nanoparticle Materials. <i>ACS Nano</i> , 2013, 7, 3778-3796.	14.6	124
17	Autocrine selection of a GLP-1R G-protein biased agonist with potent antidiabetic effects. <i>Nature Communications</i> , 2015, 6, 8918.	12.8	124
18	Expanding Reactivity in DNA-Encoded Library Synthesis via Reversible Binding of DNA to an Inert Quaternary Ammonium Support. <i>Journal of the American Chemical Society</i> , 2019, 141, 9998-10006.	13.7	119

#	ARTICLE	IF	CITATIONS
19	Spatiotemporal Multicolor Labeling of Individual Cells Using Peptide-Functionalized Quantum Dots and Mixed Delivery Techniques. <i>Journal of the American Chemical Society</i> , 2011, 133, 10482-10489.	13.7	115
20	Native Chemical Ligation Combined with Desulfurization and Deselenization: A General Strategy for Chemical Protein Synthesis. <i>Israel Journal of Chemistry</i> , 2011, 51, 862-867.	2.3	115
21	Cytotoxicity of Quantum Dots Used for <i>In Vitro</i> Cellular Labeling: Role of QD Surface Ligand, Delivery Modality, Cell Type, and Direct Comparison to Organic Fluorophores. <i>Bioconjugate Chemistry</i> , 2013, 24, 1570-1583.	3.6	113
22	Leveraging the Knorr Pyrazole Synthesis for the Facile Generation of Thioester Surrogates for use in Native Chemical Ligation. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 11634-11639.	13.8	113
23	Enhanced Catalysis of Oxime-Based Bioconjugations by Substituted Anilines. <i>Bioconjugate Chemistry</i> , 2014, 25, 93-101.	3.6	110
24	Polyvalent Display and Packing of Peptides and Proteins on Semiconductor Quantum Dots: Predicted Versus Experimental Results. <i>Small</i> , 2010, 6, 555-564.	10.0	109
25	Combining Chemoselective Ligation with Polyhistidine-Driven Self-Assembly for the Modular Display of Biomolecules on Quantum Dots. <i>ACS Nano</i> , 2010, 4, 267-278.	14.6	91
26	Photoligation of an Amphiphilic Polymer with Mixed Coordination Provides Compact and Reactive Quantum Dots. <i>Journal of the American Chemical Society</i> , 2015, 137, 5438-5451.	13.7	91
27	Synthesis of constrained helical peptides by thioether ligation: application to analogs of gp41. <i>Chemical Communications</i> , 2005, , 2552.	4.1	83
28	Purple-, Blue-, and Green-Emitting Multishell Alloyed Quantum Dots: Synthesis, Characterization, and Application for Ratiometric Extracellular pH Sensing. <i>Chemistry of Materials</i> , 2017, 29, 7330-7344.	6.7	74
29	On Resin Side-Chain Cyclization of Complex Peptides Using CuAAC. <i>Organic Letters</i> , 2011, 13, 2822-2825.	4.6	71
30	Quantum Dot-“Peptide”-Fullerene Bioconjugates for Visualization of <i>in Vitro</i> and <i>in Vivo</i> Cellular Membrane Potential. <i>ACS Nano</i> , 2017, 11, 5598-5613.	14.6	68
31	Delivery and Tracking of Quantum Dot Peptide Bioconjugates in an Intact Developing Avian Brain. <i>ACS Chemical Neuroscience</i> , 2015, 6, 494-504.	3.5	67
32	Concurrent Modulation of Quantum Dot Photoluminescence Using a Combination of Charge Transfer and Förster Resonance Energy Transfer: Competitive Quenching and Multiplexed Biosensing Modality. <i>Journal of the American Chemical Society</i> , 2017, 139, 363-372.	13.7	64
33	Recent Advances in Biocatalysis with Chemical Modification and Expanded Amino Acid Alphabet. <i>Chemical Reviews</i> , 2021, 121, 6173-6245.	47.7	62
34	Nanoparticle Targeting to Neurons in a Rat Hippocampal Slice Culture Model. <i>ASN Neuro</i> , 2012, 4, AN20120042.	2.7	61
35	Serine-Selective Bioconjugation. <i>Journal of the American Chemical Society</i> , 2020, 142, 17236-17242.	13.7	58
36	Oxime conjugation in protein chemistry: from carbonyl incorporation to nucleophilic catalysis. <i>Journal of Peptide Science</i> , 2016, 22, 271-279.	1.4	52

#	ARTICLE	IF	CITATIONS
37	DNA Encoded Libraries: A Visitor's Guide. <i>Israel Journal of Chemistry</i> , 2020, 60, 268-280.	2.3	51
38	Structure of Hepatitis C Virus Envelope Glycoprotein E1 Antigenic Site 314-324 in Complex with Antibody IGH526. <i>Journal of Molecular Biology</i> , 2015, 427, 2617-2628.	4.2	44
39	RASS-Enabled S/P ¹³ C and S ¹⁵ N Bond Formation for DEL Synthesis. <i>Angewandte Chemie - International Edition</i> , 2020, 59, 7377-7383.	13.8	44
40	Methods, setup and safe handling for anhydrous hydrogen fluoride cleavage in Boc solid-phase peptide synthesis. <i>Nature Protocols</i> , 2015, 10, 1067-1083.	12.0	41
41	The Role of Negative Charge in the Delivery of Quantum Dots to Neurons. <i>ASN Neuro</i> , 2015, 7, 175909141559238.	2.7	39
42	Site-specific cellular delivery of quantum dots with chemoselectively-assembled modular peptides. <i>Chemical Communications</i> , 2013, 49, 7878.	4.1	37
43	Copying Life: Synthesis of an Enzymatically Active Mirror-Image DNA-Ligase Made of D-Amino Acids. <i>Cell Chemical Biology</i> , 2019, 26, 645-651.e3.	5.2	33
44	Leveraging the Knorr Pyrazole Synthesis for the Facile Generation of Thioester Surrogates for use in Native Chemical Ligation. <i>Angewandte Chemie</i> , 2018, 130, 11808-11813.	2.0	32
45	Examining the Polyproline Nanoscopic Ruler in the Context of Quantum Dots. <i>Chemistry of Materials</i> , 2015, 27, 6222-6237.	6.7	30
46	Synthesizing and Modifying Peptides for Chemoselective Ligation and Assembly into Quantum Dot-Peptide Bioconjugates. <i>Methods in Molecular Biology</i> , 2013, 1025, 47-73.	0.9	29
47	Nanoparticle cellular uptake by dendritic wedge peptides: achieving single peptide facilitated delivery. <i>Nanoscale</i> , 2017, 9, 10447-10464.	5.6	28
48	Synthesis of a three zinc finger protein, Zif268, by native chemical ligation. , 1999, 51, 363-369.		26
49	Evaluation of diverse peptidyl motifs for cellular delivery of semiconductor quantum dots. <i>Analytical and Bioanalytical Chemistry</i> , 2013, 405, 6145-6154.	3.7	26
50	Temperature Dependence of CN and SCN IR Absorptions Facilitates Their Interpretation and Use as Probes of Proteins. <i>Analytical Chemistry</i> , 2015, 87, 11561-11567.	6.5	26
51	Rigid Peptide Macrocycles from On-Resin Glaser Stapling. <i>ChemBioChem</i> , 2018, 19, 1031-1035.	2.6	25
52	Site-Specific Three-Color Labeling of Î±-Synuclein via Conjugation to Uniquely Reactive Cysteines during Assembly by Native Chemical Ligation. <i>Cell Chemical Biology</i> , 2018, 25, 797-801.e4.	5.2	25
53	3,4-Dihydroxyphenylalanine Peptides as Nonperturbative Quantum Dot Sensors of Aminopeptidase. <i>ACS Nano</i> , 2016, 10, 6090-6099.	14.6	23
54	Controlling the Architecture, Coordination, and Reactivity of Nanoparticle Coating Utilizing an Amino Acid Central Scaffold. <i>Journal of the American Chemical Society</i> , 2015, 137, 16084-16097.	13.7	22

#	ARTICLE	IF	CITATIONS
55	An L-RNA Aptamer that Binds and Inhibits RNase. <i>Chemistry and Biology</i> , 2015, 22, 1437-1441.	6.0	22
56	Arginine selective reagents for ligation to peptides and proteins. <i>Journal of Peptide Science</i> , 2016, 22, 311-319.	1.4	21
57	Adapting the Glaser Reaction for Bioconjugation: Robust Access to Structurally Simple, Rigid Linkers. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 10438-10442.	13.8	21
58	Recent Advances in Enzyme Engineering through Incorporation of Unnatural Amino Acids. <i>Biotechnology and Bioprocess Engineering</i> , 2019, 24, 592-604.	2.6	21
59	Native Chemical Ligation of Peptides and Proteins. <i>Current Protocols in Chemical Biology</i> , 2019, 11, e61.	1.7	21
60	Trimerization of the HIV Transmembrane Domain in Lipid Bilayers Modulates Broadly Neutralizing Antibody Binding. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 2688-2692.	13.8	20
61	An Integrated Cofactor/Co-product Recycling Cascade for the Biosynthesis of Nylon Monomers from Cycloalkylamines. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 3481-3486.	13.8	19
62	Chemical synthesis of human protein S thrombin-sensitive module and first epidermal growth factor module. <i>Biopolymers</i> , 1998, 46, 53-63.	2.4	18
63	Two for the Price of One: Heterobivalent Ligand Design Targeting Two Binding Sites on Voltage-Gated Sodium Channels Slows Ligand Dissociation and Enhances Potency. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 12773-12785.	6.4	15
64	Probing the Quenching of Quantum Dot Photoluminescence by Peptide-Labeled Ruthenium(II) Complexes. <i>Journal of Physical Chemistry C</i> , 2014, 118, 9239-9250.	3.1	14
65	Improving the Gastrointestinal Stability of Linaclotide. <i>Journal of Medicinal Chemistry</i> , 2021, 64, 8384-8390.	6.4	14
66	Click-Based Libraries of SFTI-1 Peptides: New Methods Using Reversed-Phase Silica. <i>ACS Combinatorial Science</i> , 2016, 18, 139-143.	3.8	13
67	Post-translational Backbone Engineering through Selenomethionine-Mediated Incorporation of Freidinger Lactams. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 8697-8701.	13.8	13
68	Synthetic Elaboration of Native DNA by RASS (SENDR). <i>ACS Central Science</i> , 2020, 6, 1789-1799.	11.3	12
69	Light-Triggered In Situ Biosynthesis of Artificial Melanin for Skin Protection. <i>Advanced Science</i> , 2022, 9, e2103503.	11.2	12
70	Expedient on-resin synthesis of peptidic benzimidazoles. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2018, 28, 2679-2681.	2.2	11
71	Structural characterization of anti-CCL5 activity of the tick salivary protein evasin-4. <i>Journal of Biological Chemistry</i> , 2020, 295, 14367-14378.	3.4	11
72	Borylated oximes: versatile building blocks for organic synthesis. <i>Chemical Communications</i> , 2017, 53, 11237-11240.	4.1	9

#	ARTICLE	IF	CITATIONS
73	<i>In vivo</i> biosynthesis of tyrosine analogs and their concurrent incorporation into a residue-specific manner for enzyme engineering. <i>Chemical Communications</i> , 2019, 55, 15133-15136.	4.1	9
74	RASS-Enabled S/P ^α C and S ^α N Bond Formation for DEL Synthesis. <i>Angewandte Chemie</i> , 2020, 132, 7447-7453.	2.0	9
75	Conformational Heterogeneity and DNA Recognition by the Morphogen Bicoid. <i>Biochemistry</i> , 2017, 56, 2787-2793.	2.5	8
76	Modern Peptide and Protein Chemistry: Reaching New Heights. <i>Journal of Organic Chemistry</i> , 2020, 85, 1328-1330.	3.2	8
77	Efficient Assembly of Quantum Dots with Homogenous Glycans Derived from Natural <i>N</i> -Linked Glycoproteins. <i>Bioconjugate Chemistry</i> , 2018, 29, 3144-3153.	3.6	7
78	Adapting the Glaser Reaction for Bioconjugation: Robust Access to Structurally Simple, Rigid Linkers. <i>Angewandte Chemie</i> , 2017, 129, 10574-10578.	2.0	6
79	Post-translational Backbone Engineering through Selenomethionine-Mediated Incorporation of Freidinger Lactams. <i>Angewandte Chemie</i> , 2018, 130, 8833-8837.	2.0	4
80	Selenomethionine as an expressible handle for bioconjugations. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	4
81	A shelf stable Fmoc hydrazine resin for the synthesis of peptide hydrazides. <i>Peptide Science</i> , 2022, 114, .	1.8	3
82	Base-catalyzed diastereoselective trimerization of trifluoroacetone. <i>Organic and Biomolecular Chemistry</i> , 2017, 15, 5131-5134.	2.8	1
83	Scandium(III) Triflate as a Lewis Acid Catalyst of Oxime Ligation. <i>Australian Journal of Chemistry</i> , 2020, 73, 377.	0.9	1
84	Chemical synthesis of human protein S thrombin-sensitive module and first epidermal growth factor module. <i>Biopolymers</i> , 1998, 46, 53-63.	2.4	1
85	Synthesis of a three zinc finger protein, Zif268, by native chemical ligation. <i>Biopolymers</i> , 1999, 51, 363.	2.4	1
86	Exosite-Specific Inhibition of Thrombin Using Photo-Crosslinked Fluorescent Reporter Peptides. <i>Blood</i> , 2005, 106, 1954-1954.	1.4	0
87	In Situ Neutralization Protocols for Boc-SPPS. <i>Methods in Molecular Biology</i> , 2020, 2103, 29-40.	0.9	0