

Bradley L Pentelute

List of Publications by Year in descending order

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111
papers

5,962
citations

94269

37
h-index

85405

71
g-index

131
all docs

131
docs citations

131
times ranked

6440
citing authors

#	ARTICLE	IF	CITATIONS
1	A Perfluoroaryl-Cysteine S _N Ar Chemistry Approach to Unprotected Peptide Stapling. <i>Journal of the American Chemical Society</i> , 2013, 135, 5946-5949.	6.6	389
2	Organometallic palladium reagents for cysteine bioconjugation. <i>Nature</i> , 2015, 526, 687-691.	13.7	377
3	Personal neoantigen vaccines induce persistent memory T cell responses and epitope spreading in patients with melanoma. <i>Nature Medicine</i> , 2021, 27, 515-525.	15.2	248
4	Ë-Clamp-mediated cysteine conjugation. <i>Nature Chemistry</i> , 2016, 8, 120-128.	6.6	236
5	A fully automated flow-based approach for accelerated peptide synthesis. <i>Nature Chemical Biology</i> , 2017, 13, 464-466.	3.9	235
6	Blood-brain-barrier spheroids as an in vitro screening platform for brain-penetrating agents. <i>Nature Communications</i> , 2017, 8, 15623.	5.8	224
7	Atomic structure of anthrax protective antigen pore elucidates toxin translocation. <i>Nature</i> , 2015, 521, 545-549.	13.7	217
8	Synthesis of proteins by automated flow chemistry. <i>Science</i> , 2020, 368, 980-987.	6.0	191
9	Blood-brain-barrier organoids for investigating the permeability of CNS therapeutics. <i>Nature Protocols</i> , 2018, 13, 2827-2843.	5.5	185
10	Arylation Chemistry for Bioconjugation. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 4810-4839.	7.2	169
11	Affinity-based capture and identification of protein effectors of the growth regulator ppGpp. <i>Nature Chemical Biology</i> , 2019, 15, 141-150.	3.9	159
12	Rapid Flow-Based Peptide Synthesis. <i>ChemBioChem</i> , 2014, 15, 713-720.	1.3	136
13	Palladium-Mediated Arylation of Lysine in Unprotected Peptides. <i>Angewandte Chemie - International Edition</i> , 2017, 56, 3177-3181.	7.2	109
14	Nitrogen Arylation for Macrocyclization of Unprotected Peptides. <i>Journal of the American Chemical Society</i> , 2016, 138, 8340-8343.	6.6	104
15	Divergent unprotected peptide macrocyclisation by palladium-mediated cysteine arylation. <i>Chemical Science</i> , 2017, 8, 4257-4263.	3.7	98
16	Palladium Oxidative Addition Complexes for Peptide and Protein Cross-linking. <i>Journal of the American Chemical Society</i> , 2018, 140, 3128-3133.	6.6	93
17	Cholesterol-binding site of the influenza M2 protein in lipid bilayers from solid-state NMR. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, 12946-12951.	3.3	85
18	Water-Soluble Palladium Reagents for Cysteine <i>S</i> -Arylation under Ambient Aqueous Conditions. <i>Organic Letters</i> , 2017, 19, 4263-4266.	2.4	76

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19	Delivery of Antibody Mimics into Mammalian Cells via Anthrax Toxin Protective Antigen. <i>ChemBioChem</i> , 2014, 15, 2458-2466.	1.3	75
20	A chemoselective strategy for late-stage functionalization of complex small molecules with polypeptides and proteins. <i>Nature Chemistry</i> , 2019, 11, 78-85.	6.6	75
21	Convergent diversity-oriented side-chain macrocyclization scan for unprotected polypeptides. <i>Organic and Biomolecular Chemistry</i> , 2014, 12, 566-573.	1.5	73
22	Ultra-large chemical libraries for the discovery of high-affinity peptide binders. <i>Nature Communications</i> , 2020, 11, 3183.	5.8	73
23	Protein Thioester Synthesis Enabled by Sortase. <i>Journal of the American Chemical Society</i> , 2012, 134, 10749-10752.	6.6	72
24	Systematic Investigation of EDC/sNHS-Mediated Bioconjugation Reactions for Carboxylated Peptide Substrates. <i>Bioconjugate Chemistry</i> , 2016, 27, 994-1004.	1.8	72
25	<i>De Novo</i> Discovery of High-Affinity Peptide Binders for the SARS-CoV-2 Spike Protein. <i>ACS Central Science</i> , 2021, 7, 156-163.	5.3	69
26	Site-Selective Cysteine-Cyclooctyne Conjugation. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 6459-6463.	7.2	67
27	Risk of rapid evolutionary escape from biomedical interventions targeting SARS-CoV-2 spike protein. <i>PLoS ONE</i> , 2021, 16, e0250780.	1.1	66
28	An Umpolung Approach for the Chemoselective Arylation of Selenocysteine in Unprotected Peptides. <i>Journal of the American Chemical Society</i> , 2015, 137, 9784-9787.	6.6	65
29	Machine Learning To Predict Cell-Penetrating Peptides for Antisense Delivery. <i>ACS Central Science</i> , 2018, 4, 512-520.	5.3	65
30	Flow-Based Enzymatic Ligation by Sortase...A. <i>Angewandte Chemie - International Edition</i> , 2014, 53, 9203-9208.	7.2	64
31	Perfluoroarene-Based Peptide Macrocycles to Enhance Penetration Across the Blood-Brain Barrier. <i>Journal of the American Chemical Society</i> , 2017, 139, 15628-15631.	6.6	60
32	Perfluoroaryl Bicyclic Cell-Penetrating Peptides for Delivery of Antisense Oligonucleotides. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 4756-4759.	7.2	58
33	Enhancement of Peptide Vaccine Immunogenicity by Increasing Lymphatic Drainage and Boosting Serum Stability. <i>Cancer Immunology Research</i> , 2018, 6, 1025-1038.	1.6	58
34	In-solution enrichment identifies peptide inhibitors of protein-protein interactions. <i>Nature Chemical Biology</i> , 2019, 15, 410-418.	3.9	58
35	Enzymatic Click-Ligation: Selective Cysteine Modification in Polypeptides Enabled by Promiscuous Glutathione S-transferase. <i>Angewandte Chemie - International Edition</i> , 2013, 52, 14001-14005.	7.2	57
36	Atomic structures of closed and open influenza B M2 proton channel reveal the conduction mechanism. <i>Nature Structural and Molecular Biology</i> , 2020, 27, 160-167.	3.6	52

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37	Protein-Protein Cross-Coupling via Palladium-Protein Oxidative Addition Complexes from Cysteine Residues. <i>Journal of the American Chemical Society</i> , 2020, 142, 9124-9129.	6.6	47
38	Enzyme-Catalyzed Macrocyclization of Long Unprotected Peptides. <i>Organic Letters</i> , 2014, 16, 3652-3655.	2.4	39
39	Arylierungschemie für die Biokonjugation. <i>Angewandte Chemie</i> , 2019, 131, 4860-4892.	1.6	39
40	Palladium-Mediated Arylation of Lysine in Unprotected Peptides. <i>Angewandte Chemie</i> , 2017, 129, 3225-3229.	1.6	38
41	Rapid Total Synthesis of DARPin pE59 and Barnase. <i>ChemBioChem</i> , 2014, 15, 721-733.	1.3	36
42	Salt Effect Accelerates Site-Selective Cysteine Bioconjugation. <i>ACS Central Science</i> , 2016, 2, 637-646.	5.3	36
43	Xenoprotein engineering via synthetic libraries. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E5298-E5306.	3.3	36
44	Deep learning to design nuclear-targeting abiotic miniproteins. <i>Nature Chemistry</i> , 2021, 13, 992-1000.	6.6	36
45	A <i>d</i> -Amino Acid at the N-Terminus of a Protein Abrogates Its Degradation by the N-End Rule Pathway. <i>ACS Central Science</i> , 2015, 1, 423-430.	5.3	35
46	A perfluoroaromatic abiotic analog of H2 relaxin enabled by rapid flow-based peptide synthesis. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 3345-3349.	1.5	31
47	Library Design-Facilitated High-Throughput Sequencing of Synthetic Peptide Libraries. <i>ACS Combinatorial Science</i> , 2017, 19, 694-701.	3.8	31
48	Deep Learning for Prediction and Optimization of Fast-Flow Peptide Synthesis. <i>ACS Central Science</i> , 2020, 6, 2277-2286.	5.3	31
49	<i>d</i> -Amino Acid Scan of Two Small Proteins. <i>Journal of the American Chemical Society</i> , 2016, 138, 12099-12111.	6.6	30
50	Three dimensional structure of the anthrax toxin translocon-lethal factor complex by cryo-electron microscopy. <i>Protein Science</i> , 2013, 22, 586-594.	3.1	29
51	Structure of HIV TAR in complex with a Lab-Evolved RRM provides insight into duplex RNA recognition and synthesis of a constrained peptide that impairs transcription. <i>Nucleic Acids Research</i> , 2018, 46, 6401-6415.	6.5	27
52	Mutations in <i>pmrB</i> Confer Cross-Resistance between the LptD Inhibitor POL7080 and Colistin in <i>Pseudomonas aeruginosa</i> . <i>Antimicrobial Agents and Chemotherapy</i> , 2019, 63, .	1.4	26
53	Monitoring the Kinetics of the pH-Driven Transition of the Anthrax Toxin Prepore to the Pore by Biolayer Interferometry and Surface Plasmon Resonance. <i>Biochemistry</i> , 2013, 52, 6335-6347.	1.2	25
54	Fully automated fast-flow synthesis of antisense phosphorodiamidate morpholino oligomers. <i>Nature Communications</i> , 2021, 12, 4396.	5.8	24

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55	Translocation of Non-Canonical Polypeptides into Cells Using Protective Antigen. <i>Scientific Reports</i> , 2015, 5, 11944.	1.6	23
56	Total synthesis and biochemical characterization of mirror image barnase. <i>Chemical Science</i> , 2015, 6, 2997-3002.	3.7	23
57	Substrate Recognition of MARTX Ras/Rap1-Specific Endopeptidase. <i>Biochemistry</i> , 2017, 56, 2747-2757.	1.2	22
58	Discovery of Nucleic Acid Binding Molecules from Combinatorial Biohybrid Nucleobase Peptide Libraries. <i>Journal of the American Chemical Society</i> , 2020, 142, 19642-19651.	6.6	22
59	Delivery of mirror image polypeptides into cells. <i>Chemical Science</i> , 2015, 6, 648-653.	3.7	21
60	Automated Flow Synthesis of Tumor Neoantigen Peptides for Personalized Immunotherapy. <i>Scientific Reports</i> , 2020, 10, 723.	1.6	21
61	C-Terminal Modification of Fully Unprotected Peptide Hydrazides via in Situ Generation of Isocyanates. <i>Organic Letters</i> , 2016, 18, 1222-1225.	2.4	20
62	Macrocyclization of Unprotected Peptide Isocyanates. <i>Organic Letters</i> , 2016, 18, 1226-1229.	2.4	20
63	A structural and mechanistic study of i€-clamp-mediated cysteine perfluoroarylation. <i>Scientific Reports</i> , 2017, 7, 7954.	1.6	20
64	Designing Well-Structured Cyclic Pentapeptides Based on Sequenceâ€“Structure Relationships. <i>Journal of Physical Chemistry B</i> , 2018, 122, 3908-3919.	1.2	20
65	Antibodyâ€“Bactericidal Macrocyclic Peptide Conjugates To Target Gramâ€“Negative Bacteria. <i>ChemBioChem</i> , 2018, 19, 2039-2044.	1.3	20
66	A novel, safe, fast and efficient treatment for Her2â€“positive and negative bladder cancer utilizing an EGFâ€“anthrax toxin chimera. <i>International Journal of Cancer</i> , 2020, 146, 449-460.	2.3	20
67	A Platinum(IV) Prodrugâ€“Perfluoroaryl Macrocyclic Peptide Conjugate Enhances Platinum Uptake in the Brain. <i>Journal of Medicinal Chemistry</i> , 2020, 63, 6741-6747.	2.9	20
68	Anthrax toxins regulate pain signaling and can deliver molecular cargoes into ANTXR2+ DRG sensory neurons. <i>Nature Neuroscience</i> , 2022, 25, 168-179.	7.1	20
69	Amide-forming chemical ligation via <i>O</i> -acyl hydroxamic acids. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, 3752-3757.	3.3	19
70	Discovery of a 29-Amino-Acid Reactive Abiotic Peptide for Selective Cysteine Arylation. <i>ACS Chemical Biology</i> , 2018, 13, 527-532.	1.6	18
71	Oligonucleotide Bioconjugation with Bifunctional Palladium Reagents. <i>Angewandte Chemie - International Edition</i> , 2021, 60, 12109-12115.	7.2	18
72	Engineering Bioactive Dimeric Transcription Factor Analogs via Palladium Rebound Reagents. <i>Journal of the American Chemical Society</i> , 2021, 143, 11788-11798.	6.6	18

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73	Parallel Automated Flow Synthesis of Covalent Protein Complexes That Can Inhibit MYC-Driven Transcription. ACS Central Science, 2021, 7, 1408-1418.	5.3	17
74	Deep Learning Enables Discovery of a Short Nuclear Targeting Peptide for Efficient Delivery of Antisense Oligomers. JACS Au, 2021, 1, 2009-2020.	3.6	17
75	Automated Flow Synthesis of Peptide-PNA Conjugates. ACS Central Science, 2022, 8, 205-213.	5.3	17
76	Site-Selective Cysteine-Cyclooctyne Conjugation. Angewandte Chemie, 2018, 130, 6569-6573.	1.6	16
77	Palladium-Protein Oxidative Addition Complexes by Amine-Selective Acylation. Journal of the American Chemical Society, 2020, 142, 21237-21242.	6.6	16
78	Total synthesis of himastatin. Science, 2022, 375, 894-899.	6.0	16
79	Mucosal absorption of therapeutic peptides by harnessing the endogenous sorting of glycosphingolipids. ELife, 2018, 7, .	2.8	15
80	Anthrax Protective Antigen Retargeted with Single-Chain Variable Fragments Delivers Enzymes to Pancreatic Cancer Cells. ChemBioChem, 2020, 21, 2772-2776.	1.3	14
81	Perfluoroaryl Bicyclic Cell-Penetrating Peptides for Delivery of Antisense Oligonucleotides. Angewandte Chemie, 2018, 130, 4846-4849.	1.6	13
82	Chimeras of Cell-Penetrating Peptides Demonstrate Synergistic Improvement in Antisense Efficacy. Biochemistry, 2019, 58, 3980-3989.	1.2	12
83	Targeting Cancer Gene Dependencies with Anthrax-Mediated Delivery of Peptide Nucleic Acids. ACS Chemical Biology, 2020, 15, 1358-1369.	1.6	12
84	Targeting Glioblastoma Using a Novel Peptide Specific to a Deglycosylated Isoform of Brevican. Advanced Therapeutics, 2021, 4, 2000244.	1.6	11
85	Heterochiral Knottin Protein: Folding and Solution Structure. Biochemistry, 2017, 56, 5720-5725.	1.2	10
86	Automated affinity selection for rapid discovery of peptide binders. Chemical Science, 2021, 12, 10817-10824.	3.7	10
87	Palladium-Mediated Incorporation of Carboranes into Small Molecules, Peptides, and Proteins. Journal of the American Chemical Society, 2022, 144, 7852-7860.	6.6	10
88	Secondary Amino Alcohols: Traceless Cleavable Linkers for Use in Affinity Capture and Release. Angewandte Chemie - International Edition, 2020, 59, 11566-11572.	7.2	9
89	Selective N-Arylation of <i>p</i> -Aminophenylalanine in Unprotected Peptides with Organometallic Palladium Reagents. Angewandte Chemie - International Edition, 2021, 60, 16928-16931.	7.2	9
90	IgG-Engineered Protective Antigen for Cytosolic Delivery of Proteins into Cancer Cells. ACS Central Science, 2021, 7, 365-378.	5.3	8

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91	Studies on a landscape of perfluoroaromatic-reactive peptides. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 1862-1868.	1.5	7
92	Conformational Stabilization and Rapid Labeling of a 29-Residue Peptide by a Small Molecule Reaction Partner. <i>Biochemistry</i> , 2019, 58, 1343-1353.	1.2	7
93	Conformational Dynamics in Extended RGD-Containing Peptides. <i>Biomacromolecules</i> , 2020, 21, 2786-2794.	2.6	7
94	Rapid de novo discovery of peptidomimetic affinity reagents for human angiotensin converting enzyme 2. <i>Communications Chemistry</i> , 2022, 5, .	2.0	7
95	Quantifying residue-specific conformational dynamics of a highly reactive 29-mer peptide. <i>Scientific Reports</i> , 2020, 10, 2597.	1.6	6
96	An in vivo selection-derived <sc>d</sc>-peptide for engineering erythrocyte-binding antigens that promote immune tolerance. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	6
97	Characterization of Novel Piperidine-Based Inhibitor of Cathepsin B-Dependent Bacterial Toxins and Viruses. <i>ACS Infectious Diseases</i> , 2018, 4, 1235-1245.	1.8	5
98	Efficient Flow Synthesis of Human Antimicrobial Peptides. <i>Australian Journal of Chemistry</i> , 2020, 73, 380.	0.5	5
99	Identification of N-Terminally Diversified GLP-1R Agonists Using Saturation Mutagenesis and Chemical Design. <i>ACS Chemical Biology</i> , 2021, 16, 58-66.	1.6	5
100	A reactive peptide interface for site-selective cysteine bioconjugation. <i>Chemical Communications</i> , 2021, 57, 3227-3230.	2.2	5
101	Cell-Penetrating <sc>d</sc>-Peptides Retain Antisense Morpholino Oligomer Delivery Activity. <i>ACS Bio & Med Chem Au</i> , 2022, 2, 150-160.	1.7	5
102	Analyzing Dynamic Protein Complexes Assembled On and Released From Biolayer Interferometry Biosensor Using Mass Spectrometry and Electron Microscopy. <i>Journal of Visualized Experiments</i> , 2018, , .	0.2	4
103	Oligonucleotide Bioconjugation with Bifunctional Palladium Reagents. <i>Angewandte Chemie</i> , 2021, 133, 12216-12222.	1.6	4
104	Palladium Mediated Synthesis of Proteinâ€“Polyarene Conjugates. <i>Journal of the American Chemical Society</i> , 2022, 144, 11706-11712.	6.6	4
105	12 Pushing the Limits of Solid-Phase Peptide Synthesis with Continuous Flow. , 2018, , .		3
106	Selective Nâ€“Arylation of p â€“Aminophenylalanine in Unprotected Peptides with Organometallic Palladium Reagents. <i>Angewandte Chemie</i> , 2021, 133, 17065-17068.	1.6	3
107	Introduction: Peptide Chemistry. <i>Chemical Reviews</i> , 2020, 120, 3049-3050.	23.0	2
108	Editorial overview: Chemistry for biopolymers to investigate and even move beyond nature. <i>Current Opinion in Chemical Biology</i> , 2016, 34, v-vi.	2.8	1

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109	DDIS-36. BTP-7, A NOVEL PEPTIDE FOR THERAPEUTIC TARGETING OF MALIGNANT BRAIN TUMORS. <i>Neuro-Oncology</i> , 2019, 21, vi71-vi71.	0.6	1
110	Secondary Amino Alcohols: Traceless Cleavable Linkers for Use in Affinity Capture and Release. <i>Angewandte Chemie</i> , 2020, 132, 11663-11669.	1.6	0
111	DDRE-47. ASSESSMENT OF BRAIN PENETRANCE, BIODISTRIBUTION, AND EFFICACY OF PLATINUM (IV)-CONJUGATED FLUORINATED MACROCYCLIC CELL-PENETRATING PEPTIDES IN A MURINE GLIOBLASTOMA MODEL. <i>Neuro-Oncology</i> , 2021, 23, vi84-vi85.	0.6	0