

Christian F W Becker

List of Publications by Year in descending order

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105
papers

3,106
citations

186265
28
h-index

175258
52
g-index

118
all docs

118
docs citations

118
times ranked

3961
citing authors

#	ARTICLE	IF	CITATIONS
1	Chemical Synthesis and Semisynthesis of Lipidated Proteins. Angewandte Chemie - International Edition, 2022, 61, e202111266.	13.8	19
2	Expressed Protein Selenoester Ligation. Angewandte Chemie - International Edition, 2022, 61, .	13.8	20
3	Cytoskeleton-dependent clustering of membrane-bound prion protein on the cell surface. Journal of Biological Chemistry, 2021, 296, 100359.	3.4	4
4	Segmental and site-specific isotope labelling strategies for structural analysis of posttranslationally modified proteins. RSC Chemical Biology, 2021, 2, 1441-1461.	4.1	9
5	Site-specific modification and segmental isotope labelling of HMGN1 reveals long-range conformational perturbations caused by posttranslational modifications. RSC Chemical Biology, 2021, 2, 537-550.	4.1	7
6	O-GlcNAc modification of small heat shock proteins enhances their anti-amyloid chaperone activity. Nature Chemistry, 2021, 13, 441-450.	13.6	54
7	Biomimetic Silica Encapsulation of Lipid Nanodiscs and Î²-Sheet-Stabilized Diacylglycerol Kinase. Bioconjugate Chemistry, 2021, 32, 1742-1752.	3.6	3
8	Biomimetic and biopolymer-based enzyme encapsulation. Enzyme and Microbial Technology, 2021, 150, 109864.	3.2	21
9	Genome Mining-Based Discovery of Blenny Fish-Derived Peptides Targeting the Mouse Î²-Opioid Receptor. Frontiers in Pharmacology, 2021, 12, 773029.	3.5	1
10	Alum triggers infiltration of human neutrophils ex vivo and causes lysosomal destabilization and mitochondrial membrane potentialâ€dependent NETâ€formation. FASEB Journal, 2020, 34, 14024-14041.	0.5	11
11	Multi-scale microporous silica microcapsules from gas-in water-in oil emulsions. Soft Matter, 2020, 16, 3082-3087.	2.7	11
12	Mannosylated hemagglutinin peptides bind cyanovirin-N independent of disulfide-bonds in complementary binding sites. RSC Advances, 2020, 10, 11079-11087.	3.6	2
13	Continuous Flow Reactors from Microfluidic Compartmentalization of Enzymes within Inorganic Microparticles. ACS Applied Materials & Interfaces, 2020, 12, 32951-32960.	8.0	15
14	Recent Advances in Peptide-Based Approaches for Cancer Treatment. Current Medicinal Chemistry, 2020, 27, 1174-1205.	2.4	30
15	Highly Precise Protein Semisynthesis through Ligationâ€Desulfurization Chemistry in Combination with Phenacyl Protection of Native Cysteines. Methods in Molecular Biology, 2020, 2133, 343-358.	0.9	3
16	Silica particles with a quercetinâ€R5 peptide conjugate are taken up into HT-29 cells and translocate into the nucleus. Chemical Communications, 2019, 55, 9649-9652.	4.1	8
17	Random coil shifts of posttranslationally modified amino acids. Journal of Biomolecular NMR, 2019, 73, 587-599.	2.8	24
18	Protein Chemistry Looking Ahead: 8th Chemical Protein Synthesis Meeting 16-19 June 2019, Berlin, Germany. Cell Chemical Biology, 2019, 26, 1349-1354.	5.2	0

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19	Prion proteinâ€”Semisynthetic prion protein (PrP) variants with posttranslational modifications. <i>Journal of Peptide Science</i> , 2019, 25, e3216.	1.4	7
20	Labeling and Natural Post-Translational Modification of Peptides and Proteins via Chemoselective Pd-Catalyzed Prenylation of Cysteine. <i>Journal of the American Chemical Society</i> , 2019, 141, 14931-14937.	13.7	48
21	Tumor-Targeting Immune System Engagers (ISERs) Activate Human Neutrophils after Binding to Cancer Cells. <i>Biochemistry</i> , 2019, 58, 2642-2652.	2.5	1
22	Multifunctional Scaffolds for Assembling Cancer-Targeting Immune Stimulators Using Chemoselective Ligations. <i>Frontiers in Chemistry</i> , 2019, 7, 113.	3.6	3
23	Just a spoonful of sugar: Short glycans affect protein properties and functions. <i>Journal of Peptide Science</i> , 2019, 25, e3167.	1.4	2
24	Ovalbumin Epitope SIINFELK Self-Assembles into a Supramolecular Hydrogel. <i>Scientific Reports</i> , 2019, 9, 2696.	3.3	9
25	Single Posttranslational Modifications in the Central Repeat Domains of Tau4 Impact its Aggregation and Tubulin Binding. <i>Angewandte Chemie</i> , 2019, 131, 1630-1634.	2.0	11
26	Single Posttranslational Modifications in the Central Repeat Domains of Tau4 Impact its Aggregation and Tubulin Binding. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 1616-1620.	13.8	38
27	Utility of the Phenacyl Protecting Group in Traceless Protein Semisynthesis through Ligationâ€”Desulfurization Chemistry. <i>ChemistryOpen</i> , 2018, 7, 106-110.	1.9	16
28	Synthetic Cancerâ€”Targeting Innate Immune Stimulators Give Insights into Avidity Effects. <i>ChemBioChem</i> , 2018, 19, 459-469.	2.6	5
29	N-terminal residues of silaffin peptides impact morphology of biomimetic silica particles. <i>Materials Letters</i> , 2018, 212, 114-117.	2.6	8
30	Finding the best ligase. <i>Nature Chemical Biology</i> , 2018, 14, 2-3.	8.0	1
31	Native chemical ligation in protein synthesis and semi-synthesis. <i>Chemical Society Reviews</i> , 2018, 47, 9046-9068.	38.1	232
32	Silaffinâ€”Inspired Peptide Assemblies Template Silica Particles with Variable Morphologies. <i>ChemNanoMat</i> , 2018, 4, 1209-1213.	2.8	6
33	Design, synthesis, and conformational studies of [DOTA]â€”Octreotide analogs containing [1,2,3]triazolyl as a disulfide mimetic. <i>Peptide Science</i> , 2018, 110, e24071.	1.8	7
34	Synthetic Approach to Argpyrimidine as a Tool for Investigating Nonenzymatic Posttranslational Modification of Proteins. <i>Synlett</i> , 2017, 28, 1950-1955.	1.8	4
35	A dual functional peptide-auxiliary conjugate for C-to-N and N-to-C sequential native chemical ligation of glycopeptides. <i>Bioorganic and Medicinal Chemistry</i> , 2017, 25, 5016-5021.	3.0	13
36	A peptide extension dictates IgM assembly. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2017, 114, E8575-E8584.	7.1	19

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37	Peptide & protein ligation. <i>Bioorganic and Medicinal Chemistry</i> , 2017, 25, 4925.	3.0	0
38	Semisynthetic prion protein (PrP) variants carrying glycan mimics at position 181 and 197 do not form fibrils. <i>Chemical Science</i> , 2017, 8, 6626-6632.	7.4	19
39	Multifunctional \pm Integrin-Specific Peptide-Pt(IV) Conjugates for Cancer Cell Targeting. <i>Bioconjugate Chemistry</i> , 2017, 28, 2429-2439.	3.6	18
40	Synthetic integrin-binding immune stimulators target cancer cells and prevent tumor formation. <i>Scientific Reports</i> , 2017, 7, 17592.	3.3	9
41	A comparative study of synthetic and semisynthetic approaches for ligating the epidermal growth factor to a bivalent scaffold. <i>Journal of Peptide Science</i> , 2017, 23, 871-879.	1.4	5
42	Semisynthesis of Membrane-Attached Proteins Using Split Inteins. <i>Methods in Molecular Biology</i> , 2017, 1495, 93-109.	0.9	2
43	Chemical synthesis and characterization of elastin-like polypeptides (ELPs) with variable guest residues. <i>Journal of Peptide Science</i> , 2016, 22, 334-342.	1.4	21
44	Titelbild: Impaired Chaperone Activity of Human Heat Shock Protein Hsp27 Site-Specifically Modified with Argpyrimidine (<i>Angew. Chem.</i> 38/2016). <i>Angewandte Chemie</i> , 2016, 128, 11473-11473.	2.0	0
45	Atomic-Level Quality Assessment of Enzymes Encapsulated in Bioinspired Silica. <i>Chemistry - A European Journal</i> , 2016, 22, 425-432.	3.3	25
46	Impaired Chaperone Activity of Human Heat Shock Protein Hsp27 Site-Specifically Modified with Argpyrimidine. <i>Angewandte Chemie - International Edition</i> , 2016, 55, 11397-11402.	13.8	19
47	Impaired Chaperone Activity of Human Heat Shock Protein Hsp27 Site-Specifically Modified with Argpyrimidine. <i>Angewandte Chemie</i> , 2016, 128, 11569-11574.	2.0	5
48	Arginine side-chain modification that occurs during copper-catalysed azide-alkyne click reactions resembles an advanced glycation end product. <i>Organic and Biomolecular Chemistry</i> , 2016, 14, 6205-6211.	2.8	21
49	MALDI TOF/TOF-Based Approach for the Identification of α -Amino Acids in Biologically Active Peptides and Proteins. <i>Journal of Proteome Research</i> , 2016, 15, 1487-1496.	3.7	29
50	A PEGylated Photocleavable Auxiliary Mediates the Sequential Enzymatic Glycosylation and Native Chemical Ligation of Peptides. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 7711-7715.	13.8	55
51	Silaffins in Silica Biomineralization and Biomimetic Silica Precipitation. <i>Marine Drugs</i> , 2015, 13, 5297-5333.	4.6	96
52	Efficient generation of peptide hydrazides via direct hydrazinolysis of Peptidyl Wang Tentagel resins. <i>Journal of Peptide Science</i> , 2015, 21, 201-207.	1.4	13
53	Immobilising proteins on silica with site-specifically attached modified silaffin peptides. <i>Biomaterials Science</i> , 2015, 3, 288-297.	5.4	26
54	Chemical protein synthesis. <i>Journal of Peptide Science</i> , 2014, 20, 63-63.	1.4	2

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55	A sequenceâ€function analysis of the silica precipitating silaffin R5 peptide. Journal of Peptide Science, 2014, 20, 152-158.	1.4	60
56	A C-terminal Membrane Anchor Affects the Interactions of Prion Proteins with Lipid Membranes. Journal of Biological Chemistry, 2014, 289, 30144-30160.	3.4	27
57	A quantitative and site-specific chemoenzymatic glycosylation approach for PEGylated MUC1 peptides. Chemical Science, 2014, 5, 1634.	7.4	23
58	Studying Weak and Dynamic Interactions of Posttranslationally Modified Proteins using Expressed Protein Ligation. ACS Chemical Biology, 2014, 9, 347-352.	3.4	10
59	An acetylome peptide microarray reveals specificities and deacetylation substrates for all human sirtuin isoforms. Nature Communications, 2013, 4, 2327.	12.8	179
60	Recombinant expression of soluble murine prion protein for Câ€terminal modification. FEBS Letters, 2013, 587, 430-435.	2.8	6
61	Proteinâ€DNA Arrays as Tools for Detection of Proteinâ€Protein Interactions by Mass Spectrometry. ChemBioChem, 2013, 14, 92-99.	2.6	11
62	Modified silaffin R5 peptides enable encapsulation and release of cargo molecules from biomimetic silica particles. Bioorganic and Medicinal Chemistry, 2013, 21, 3533-3541.	3.0	42
63	Conformational Selection in Substrate Recognition by Hsp70 Chaperones. Journal of Molecular Biology, 2013, 425, 466-474.	4.2	38
64	One-shot NMR analysis of microbial secretions identifies highly potent proteasome inhibitor. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18367-18371.	7.1	58
65	Molecular dynamics simulations and conductance studies of the interaction of VP1 N-terminus from Polio virus and gp41 fusion peptide from HIV-1 with lipid membranes. Molecular Membrane Biology, 2012, 29, 9-25.	2.0	5
66	Exploring the effect of native and artificial peptide modifications on silaffin induced silica precipitation. Chemical Science, 2012, 3, 3500.	7.4	31
67	SDS-Facilitated In vitro Formation of a Transmembrane B-Type Cytochrome Is Mediated by Changes in Local pH. Journal of Molecular Biology, 2011, 407, 594-606.	4.2	17
68	Chemical Synthesis of an Integral Membrane Enzyme â€” The Challenges of Diacylglycerol Kinase. Israel Journal of Chemistry, 2011, 51, 930-939.	2.3	1
69	Total Chemical Synthesis of an Integral Membrane Enzyme: Diacylglycerol Kinase from <i>Escherichia coli</i> . Angewandte Chemie - International Edition, 2011, 50, 3988-3992.	13.8	61
70	Ambiguous Origin: Two Sides of an Ephrin Receptor Tyrosine Kinase. Chemistry and Biology, 2011, 18, 279-281.	6.0	0
71	Synthesis of a GPI anchor module suitable for protein postâ€translational modification. Biopolymers, 2010, 94, 457-464.	2.4	12
72	Semisynthesis of human thymidine monophosphate kinase. Biopolymers, 2010, 94, 433-440.	2.4	2

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73	Size Matters: Side Chain Length Affects SH2 Substrate Binding. Chemistry and Biology, 2010, 17, 211-212.	6.0	0
74	Protein immobilization on liposomes and lipid-coated nanoparticles by protein trans-splicing. Journal of Peptide Science, 2010, 16, 582-588.	1.4	20
75	HIV-1 Nef membrane association depends on charge, curvature, composition and sequence. Nature Chemical Biology, 2010, 6, 46-53.	8.0	88
76	Photocontrol of STAT6 dimerization and translocation. Molecular BioSystems, 2010, 6, 2423.	2.9	10
77	Chapter 9 Semisynthesis of Membrane-Attached Prion Proteins. Methods in Enzymology, 2009, 462, 177-193.	1.0	13
78	Semisynthesis of H-Ras with a glutamic acid methylester at position 61. Biopolymers, 2008, 90, 399-405.	2.4	6
79	Semisynthesis of a Glycosylphosphatidylinositol-Anchored Prion Protein. Angewandte Chemie - International Edition, 2008, 47, 8215-8219.	13.8	93
80	Green tea extracts interfere with the stress-protective activity of PrP ^C and the formation of PrP ^{Sc} . Journal of Neurochemistry, 2008, 107, 218-229.	3.9	64
81	Surface immobilization of biomolecules by click sulfonamide reaction. Chemical Communications, 2008, , 3723.	4.1	42
82	Chemical synthesis and semisynthesis of membrane proteins. Molecular BioSystems, 2008, 4, 733.	2.9	47
83	Substrates and Regulation Mechanisms for the Human Mitochondrial Sirtuins Sirt3 and Sirt5. Journal of Molecular Biology, 2008, 382, 790-801.	4.2	474
84	Probing Ras Effector Interactions on Nanoparticle Supported Lipid Bilayers. Bioconjugate Chemistry, 2008, 19, 1938-1944.	3.6	3
85	Functional Immobilization of the Small GTPase Rab6A on DNA-Gold Nanoparticles by Using a Site-Specifically Attached Poly(ethylene glycol) Linker and Thiol Place-Exchange Reaction. ChemBioChem, 2007, 8, 32-36.	2.6	24
86	Generation of Live-Cell Microarrays by Means of DNA-Directed Immobilization of Specific Cell-Surface Ligands. Angewandte Chemie - International Edition, 2007, 46, 4180-4183.	13.8	53
87	Semisynthetic Murine Prion Protein Equipped with a GPI Anchor Mimic Incorporates into Cellular Membranes. Chemistry and Biology, 2007, 14, 994-1006.	6.0	56
88	Site-Specific Attachment of Polyethylene Glycol-like Oligomers to Proteins and Peptides. Bioconjugate Chemistry, 2006, 17, 1492-1498.	3.6	35
89	Rapid Production of Functionalized Recombinant Proteins: Marrying Ligation Independent Cloning and in Vitro Protein Ligation. Bioconjugate Chemistry, 2006, 17, 610-617.	3.6	5
90	Assembly of a transmembrane b-Type cytochrome is mainly driven by transmembrane helix interactions. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 1815-1822.	2.6	20

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91	Protein Arrays as Tools for Detection of Protein-Protein Interactions by Mass Spectrometry. , 2006, , 725-727.		0
92	C-Terminal Fluorescence Labeling of Proteins for Interaction Studies on the Single-Molecule Level. ChemBioChem, 2006, 7, 891-895.	2.6	22
93	Protein semi-synthesis: New proteins for functional and structural studies. New Biotechnology, 2005, 22, 153-172.	2.7	63
94	Direct Readout of Protein-Protein Interactions by Mass Spectrometry from Protein-DNA Microarrays. Angewandte Chemie - International Edition, 2005, 44, 7635-7639.	13.8	43
95	Incorporation of spin-labelled amino acids into proteins. Magnetic Resonance in Chemistry, 2005, 43, S34-S39.	1.9	37
96	Chemical Synthesis Approaches to the Engineering of Ion Channels. Protein and Peptide Letters, 2005, 12, 737-741.	0.9	10
97	Monitoring the real-time kinetics of the hydrolysis reaction of guanine nucleotide-binding proteins. Biological Chemistry, 2005, 386, 1105-14.	2.5	27
98	Chemical Synthesis and Single Channel Properties of Tetrameric and Pentameric TASP s (Template-assembled Synthetic Proteins) Derived from the Transmembrane Domain of HIV Virus Protein u (Vpu). Journal of Biological Chemistry, 2004, 279, 17483-17489.	3.4	46
99	On-Resin Assembly of a Linkerless Lanthanide(III)-Based Luminescence Label and Its Application to the Total Synthesis of Site-Specifically Labeled Mechanosensitive Channels. Bioconjugate Chemistry, 2004, 15, 1118-1124.	3.6	24
100	Conversion of a Mechanosensitive Channel Protein from a Membrane-embedded to a Water-soluble Form by Covalent Modification with Amphiphiles. Journal of Molecular Biology, 2004, 343, 747-758.	4.2	15
101	Total chemical synthesis of a functional interacting protein pair: The protooncogene H-Ras and the Ras-binding domain of its effector c-Raf1. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 5075-5080.	7.1	57
102	A sensitive fluorescence monitor for the detection of activated Ras: total chemical synthesis of site-specifically labeled Ras binding domain of c-Raf1 immobilized on a surface. Chemistry and Biology, 2001, 8, 243-252.	6.0	21
103	Synthesis of 2'-Iodo- and 2'-Bromo-ATP and GTP Analogues as Potential Phasing Tools for X-ray Crystallography. Nucleosides & Nucleotides, 1999, 18, 137-151.	0.5	8
104	Chemical Synthesis and Semisynthesis of Lipidated Proteins. Angewandte Chemie, 0, , .	2.0	2
105	Expressed Protein Selenoester Ligation. Angewandte Chemie, 0, , .	2.0	3