

Christian F W Becker

List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

107
papers

2,480
citations

25
h-index

47
g-index

118
ext. papers

2,800
ext. citations

6.5
avg, IF

5.2
L-index

| # | Paper | IF | Citations |
|-----|---|------|-----------|
| 107 | Chemical Synthesis and Semisynthesis of Lipidated Proteins. <i>Angewandte Chemie - International Edition</i> , 2021 , e202111266 | 16.4 | 2 |
| 106 | Genome Mining-Based Discovery of Blenny Fish-Derived Peptides Targeting the Mouse μ Opioid Receptor. <i>Frontiers in Pharmacology</i> , 2021 , 12, 773029 | 5.6 | 0 |
| 105 | O-GlcNAc modification of small heat shock proteins enhances their anti-amyloid chaperone activity. <i>Nature Chemistry</i> , 2021 , 13, 441-450 | 17.6 | 18 |
| 104 | Biomimetic Silica Encapsulation of Lipid Nanodiscs and β Sheet-Stabilized Diacylglycerol Kinase. <i>Bioconjugate Chemistry</i> , 2021 , 32, 1742-1752 | 6.3 | 0 |
| 103 | Cytoskeleton-dependent clustering of membrane-bound prion protein on the cell surface. <i>Journal of Biological Chemistry</i> , 2021 , 296, 100359 | 5.4 | 1 |
| 102 | Segmental and site-specific isotope labelling strategies for structural analysis of posttranslationally modified proteins. <i>RSC Chemical Biology</i> , 2021 , 2, 1441-1461 | 3 | 3 |
| 101 | Site-specific modification and segmental isotope labelling of HMGN1 reveals long-range conformational perturbations caused by posttranslational modifications. <i>RSC Chemical Biology</i> , 2021 , 2, 537-550 | 3 | 5 |
| 100 | Chemical Synthesis of Membrane Proteins 2021 , 437-462 | | 1 |
| 99 | Biomimetic and biopolymer-based enzyme encapsulation. <i>Enzyme and Microbial Technology</i> , 2021 , 150, 109864 | 3.8 | 5 |
| 98 | Multi-scale microporous silica microcapsules from gas-in water-in oil emulsions. <i>Soft Matter</i> , 2020 , 16, 3082-3087 | 3.6 | 7 |
| 97 | Mannosylated hemagglutinin peptides bind cyanovirin-N independent of disulfide-bonds in complementary binding sites.. <i>RSC Advances</i> , 2020 , 10, 11079-11087 | 3.7 | 1 |
| 96 | Continuous Flow Reactors from Microfluidic Compartmentalization of Enzymes within Inorganic Microparticles. <i>ACS Applied Materials & Interfaces</i> , 2020 , 12, 32951-32960 | 9.5 | 9 |
| 95 | Recent Advances in Peptide-Based Approaches for Cancer Treatment. <i>Current Medicinal Chemistry</i> , 2020 , 27, 1174-1205 | 4.3 | 10 |
| 94 | Highly Precise Protein Semisynthesis through Ligation-Desulfurization Chemistry in Combination with Phenacyl Protection of Native Cysteines. <i>Methods in Molecular Biology</i> , 2020 , 2133, 343-358 | 1.4 | 2 |
| 93 | Alum triggers infiltration of human neutrophils ex vivo and causes lysosomal destabilization and mitochondrial membrane potential-dependent NET-formation. <i>FASEB Journal</i> , 2020 , 34, 14024-14041 | 0.9 | 4 |
| 92 | 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 | 16.4 | 25 |
| 91 | Tumor-Targeting Immune System Engagers (ISERs) Activate Human Neutrophils after Binding to Cancer Cells. <i>Biochemistry</i> , 2019 , 58, 2642-2652 | 3.2 | 0 |

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| 90 | Multifunctional Scaffolds for Assembling Cancer-Targeting Immune Stimulators Using Chemoselective Ligations. <i>Frontiers in Chemistry</i> , 2019 , 7, 113 | 5 | 3 |
| 89 | Just a spoonful of sugar: Short glycans affect protein properties and functions. <i>Journal of Peptide Science</i> , 2019 , 25, e3167 | 2.1 | |
| 88 | Silica particles with a quercetin-R5 peptide conjugate are taken up into HT-29 cells and translocate into the nucleus. <i>Chemical Communications</i> , 2019 , 55, 9649-9652 | 5.8 | 3 |
| 87 | Random coil shifts of posttranslationally modified amino acids. <i>Journal of Biomolecular NMR</i> , 2019 , 73, 587-599 | 3 | 13 |
| 86 | Protein Chemistry Looking Ahead: 8 Chemical Protein Synthesis Meeting 16-19 June 2019, Berlin, Germany. <i>Cell Chemical Biology</i> , 2019 , 26, 1349-1354 | 8.2 | |
| 85 | Prion protein-Semisynthetic prion protein (PrP) variants with posttranslational modifications. <i>Journal of Peptide Science</i> , 2019 , 25, e3216 | 2.1 | 5 |
| 84 | Ovalbumin Epitope SIINFEKL Self-Assembles into a Supramolecular Hydrogel. <i>Scientific Reports</i> , 2019 , 9, 2696 | 4.9 | 1 |
| 83 | Single Posttranslational Modifications in the Central Repeat Domains of Tau4 Impact its Aggregation and Tubulin Binding. <i>Angewandte Chemie</i> , 2019 , 131, 1630-1634 | 3.6 | 10 |
| 82 | 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 | 16.4 | 26 |
| 81 | Utility of the Phenacyl Protecting Group in Traceless Protein Semisynthesis through Ligation-Desulfurization Chemistry. <i>ChemistryOpen</i> , 2018 , 7, 106-110 | 2.3 | 10 |
| 80 | Synthetic Cancer-Targeting Innate Immune Stimulators Give Insights into Avidity Effects. <i>ChemBioChem</i> , 2018 , 19, 459-469 | 3.8 | 2 |
| 79 | N-terminal residues of silaffin peptides impact morphology of biomimetic silica particles. <i>Materials Letters</i> , 2018 , 212, 114-117 | 3.3 | 7 |
| 78 | Design, synthesis, and conformational studies of [DOTA]-Octreotide analogs containing [1,2,3]triazolyl as a disulfide mimetic. <i>Peptide Science</i> , 2018 , 110, e24071 | 3 | 4 |
| 77 | Native chemical ligation in protein synthesis and semi-synthesis. <i>Chemical Society Reviews</i> , 2018 , 47, 9046-9068 | 9.8 | 158 |
| 76 | Silaffin-Inspired Peptide Assemblies Template Silica Particles with Variable Morphologies. <i>ChemNanoMat</i> , 2018 , 4, 1209-1213 | 3.5 | 4 |
| 75 | Chemoselective Attachment of Lipids to Proteins 2017 , 391-415 | | |
| 74 | Synthetic Approach to Argpyrimidine as a Tool for Investigating Nonenzymatic Posttranslational Modification of Proteins. <i>Synlett</i> , 2017 , 28, 1950-1955 | 2.2 | 1 |
| 73 | 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 | 3.4 | 7 |

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| 72 | 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 | 11.5 | 12 |
| 71 | Peptide & protein ligation. <i>Bioorganic and Medicinal Chemistry</i> , 2017 , 25, 4925 | 3.4 | |
| 70 | 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 | 9.4 | 17 |
| 69 | Multifunctional Integrin-Specific Peptide-Pt(IV) Conjugates for Cancer Cell Targeting. <i>Bioconjugate Chemistry</i> , 2017 , 28, 2429-2439 | 6.3 | 9 |
| 68 | Synthetic integrin-binding immune stimulators target cancer cells and prevent tumor formation. <i>Scientific Reports</i> , 2017 , 7, 17592 | 4.9 | 5 |
| 67 | 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 | 2.1 | 3 |
| 66 | Semisynthesis of Membrane-Attached Proteins Using Split Inteins. <i>Methods in Molecular Biology</i> , 2017 , 1495, 93-109 | 1.4 | 2 |
| 65 | Protein engineering: Finding the best ligase. <i>Nature Chemical Biology</i> , 2017 , 14, 2-3 | 11.7 | 1 |
| 64 | Impaired Chaperone Activity of Human Heat Shock Protein Hsp27 Site-Specifically Modified with Argpyrimidine. <i>Angewandte Chemie</i> , 2016 , 128, 11569-11574 | 3.6 | 3 |
| 63 | 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, 6205-11 | 3.9 | 17 |
| 62 | MALDI TOF/TOF-Based Approach for the Identification of d- Amino Acids in Biologically Active Peptides and Proteins. <i>Journal of Proteome Research</i> , 2016 , 15, 1487-96 | 5.6 | 22 |
| 61 | Chemical synthesis and characterization of elastin-like polypeptides (ELPs) with variable guest residues. <i>Journal of Peptide Science</i> , 2016 , 22, 334-42 | 2.1 | 13 |
| 60 | Titelbild: Impaired Chaperone Activity of Human Heat Shock Protein Hsp27 Site-Specifically Modified with Argpyrimidine (Angew. Chem. 38/2016). <i>Angewandte Chemie</i> , 2016 , 128, 11473-11473 | 3.6 | |
| 59 | Atomic-Level Quality Assessment of Enzymes Encapsulated in Bioinspired Silica. <i>Chemistry - A European Journal</i> , 2016 , 22, 425-32 | 4.8 | 20 |
| 58 | Impaired Chaperone Activity of Human Heat Shock Protein Hsp27 Site-Specifically Modified with Argpyrimidine. <i>Angewandte Chemie - International Edition</i> , 2016 , 55, 11397-402 | 16.4 | 13 |
| 57 | Ein PEGyliertes, lichtspaltbares Auxiliar für die sequenzielle enzymatische Glykosylierung und native chemische Ligation von Peptiden. <i>Angewandte Chemie</i> , 2015 , 127, 7823-7828 | 3.6 | 14 |
| 56 | A PEGylated photocleavable auxiliary mediates the sequential enzymatic glycosylation and native chemical ligation of peptides. <i>Angewandte Chemie - International Edition</i> , 2015 , 54, 7711-5 | 16.4 | 42 |
| 55 | Silaffins in Silica Biomineralization and Biomimetic Silica Precipitation. <i>Marine Drugs</i> , 2015 , 13, 5297-3336 | | 75 |

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| 54 | Efficient generation of peptide hydrazides via direct hydrazinolysis of Peptidyl-Wang-TentaGel resins. <i>Journal of Peptide Science</i> , 2015 , 21, 201-7 | 2.1 | 11 |
| 53 | Immobilising proteins on silica with site-specifically attached modified silaffin peptides. <i>Biomaterials Science</i> , 2015 , 3, 288-97 | 7.4 | 21 |
| 52 | A sequence-function analysis of the silica precipitating silaffin R5 peptide. <i>Journal of Peptide Science</i> , 2014 , 20, 152-8 | 2.1 | 49 |
| 51 | A C-terminal membrane anchor affects the interactions of prion proteins with lipid membranes. <i>Journal of Biological Chemistry</i> , 2014 , 289, 30144-60 | 5.4 | 20 |
| 50 | A quantitative and site-specific chemoenzymatic glycosylation approach for PEGylated MUC1 peptides. <i>Chemical Science</i> , 2014 , 5, 1634 | 9.4 | 17 |
| 49 | Studying weak and dynamic interactions of posttranslationally modified proteins using expressed protein ligation. <i>ACS Chemical Biology</i> , 2014 , 9, 347-52 | 4.9 | 10 |
| 48 | An acetylome peptide microarray reveals specificities and deacetylation substrates for all human sirtuin isoforms. <i>Nature Communications</i> , 2013 , 4, 2327 | 17.4 | 145 |
| 47 | Recombinant expression of soluble murine prion protein for C-terminal modification. <i>FEBS Letters</i> , 2013 , 587, 430-5 | 3.8 | 4 |
| 46 | Protein-DNA arrays as tools for detection of protein-protein interactions by mass spectrometry. <i>ChemBioChem</i> , 2013 , 14, 92-9 | 3.8 | 11 |
| 45 | Modified silaffin R5 peptides enable encapsulation and release of cargo molecules from biomimetic silica particles. <i>Bioorganic and Medicinal Chemistry</i> , 2013 , 21, 3533-41 | 3.4 | 34 |
| 44 | Conformational selection in substrate recognition by Hsp70 chaperones. <i>Journal of Molecular Biology</i> , 2013 , 425, 466-74 | 6.5 | 32 |
| 43 | 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. <i>Molecular Membrane Biology</i> , 2012 , 29, 9-25 | 3.4 | 4 |
| 42 | Exploring the effect of native and artificial peptide modifications on silaffin induced silica precipitation. <i>Chemical Science</i> , 2012 , 3, 3500 | 9.4 | 27 |
| 41 | One-shot NMR analysis of microbial secretions identifies highly potent proteasome inhibitor. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2012 , 109, 18367-71 | 11.5 | 46 |
| 40 | SDS-facilitated in vitro formation of a transmembrane B-type cytochrome is mediated by changes in local pH. <i>Journal of Molecular Biology</i> , 2011 , 407, 594-606 | 6.5 | 16 |
| 39 | Chemical Synthesis of an Integral Membrane Enzyme – The Challenges of Diacylglycerol Kinase. <i>Israel Journal of Chemistry</i> , 2011 , 51, 930-939 | 3.4 | 1 |
| 38 | Total Chemical Synthesis of an Integral Membrane Enzyme: Diacylglycerol Kinase from <i>Escherichia coli</i> . <i>Angewandte Chemie</i> , 2011 , 123, 4074-4078 | 3.6 | 14 |
| 37 | Total chemical synthesis of an integral membrane enzyme: diacylglycerol kinase from <i>Escherichia coli</i> . <i>Angewandte Chemie - International Edition</i> , 2011 , 50, 3988-92 | 16.4 | 58 |

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| 36 | Ambiguous origin: two sides of an ephrin receptor tyrosine kinase. <i>Chemistry and Biology</i> , 2011 , 18, 279-81 | | |
| 35 | HIV-1 Nef membrane association depends on charge, curvature, composition and sequence. <i>Nature Chemical Biology</i> , 2010 , 6, 46-53 | 11.7 | 77 |
| 34 | Photocontrol of STAT6 dimerization and translocation. <i>Molecular BioSystems</i> , 2010 , 6, 2423-9 | | 9 |
| 33 | Synthesis of a GPI anchor module suitable for protein post-translational modification. <i>Biopolymers</i> , 2010 , 94, 457-64 | 2.2 | 11 |
| 32 | Semisynthesis of human thymidine monophosphate kinase. <i>Biopolymers</i> , 2010 , 94, 433-40 | 2.2 | 2 |
| 31 | Size matters: side chain length affects SH2 substrate binding. <i>Chemistry and Biology</i> , 2010 , 17, 211-2 | | |
| 30 | Protein immobilization on liposomes and lipid-coated nanoparticles by protein trans-splicing. <i>Journal of Peptide Science</i> , 2010 , 16, 582-8 | 2.1 | 20 |
| 29 | Semisynthesis of membrane-attached prion proteins. <i>Methods in Enzymology</i> , 2009 , 462, 177-93 | 1.7 | 12 |
| 28 | Green tea extracts interfere with the stress-protective activity of PrP and the formation of PrP. <i>Journal of Neurochemistry</i> , 2008 , 107, 218-29 | 6 | 58 |
| 27 | Surface immobilization of biomolecules by click sulfonamide reaction. <i>Chemical Communications</i> , 2008 , 3723-5 | 5.8 | 39 |
| 26 | Chemical synthesis and semisynthesis of membrane proteins. <i>Molecular BioSystems</i> , 2008 , 4, 733-40 | | 45 |
| 25 | Substrates and regulation mechanisms for the human mitochondrial sirtuins Sirt3 and Sirt5. <i>Journal of Molecular Biology</i> , 2008 , 382, 790-801 | 6.5 | 424 |
| 24 | Probing ras effector interactions on nanoparticle supported lipid bilayers. <i>Bioconjugate Chemistry</i> , 2008 , 19, 1938-44 | 6.3 | 3 |
| 23 | Semisynthesis of H-Ras with a glutamic acid methylester at position 61. <i>Biopolymers</i> , 2008 , 90, 399-405 | 2.2 | 6 |
| 22 | Semisynthesis of a glycosylphosphatidylinositol-anchored prion protein. <i>Angewandte Chemie - International Edition</i> , 2008 , 47, 8215-9 | 16.4 | 84 |
| 21 | 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. <i>ChemBioChem</i> , 2007 , 8, 32-6 | 3.8 | 23 |
| 20 | Generation of live-cell microarrays by means of DNA-Directed immobilization of specific cell-surface ligands. <i>Angewandte Chemie - International Edition</i> , 2007 , 46, 4180-3 | 16.4 | 51 |
| 19 | Semisynthetic murine prion protein equipped with a GPI anchor mimic incorporates into cellular membranes. <i>Chemistry and Biology</i> , 2007 , 14, 994-1006 | | 51 |

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|----|--|------|----|
| 18 | C-terminal fluorescence labeling of proteins for interaction studies on the single-molecule level. <i>ChemBioChem</i> , 2006 , 7, 891-5 | 3.8 | 21 |
| 17 | Site-specific attachment of polyethylene glycol-like oligomers to proteins and peptides. <i>Bioconjugate Chemistry</i> , 2006 , 17, 1492-8 | 6.3 | 35 |
| 16 | Rapid production of functionalized recombinant proteins: marrying ligation independent cloning and in vitro protein ligation. <i>Bioconjugate Chemistry</i> , 2006 , 17, 610-7 | 6.3 | 4 |
| 15 | Assembly of a transmembrane b-type cytochrome is mainly driven by transmembrane helix interactions. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2006 , 1758, 1815-22 | 3.8 | 19 |
| 14 | Protein Arrays as Tools for Detection of Protein-Protein Interactions by Mass Spectrometry 2006 , 725-727 | | |
| 13 | Protein semi-synthesis: new proteins for functional and structural studies. <i>New Biotechnology</i> , 2005 , 22, 153-72 | | 58 |
| 12 | Direct readout of protein-protein interactions by mass spectrometry from protein-DNA microarrays. <i>Angewandte Chemie - International Edition</i> , 2005 , 44, 7635-9 | 16.4 | 43 |
| 11 | Direkter Nachweis von Protein-Protein-Wechselwirkungen durch Massenspektrometrie an Protein-DNA-Mikroarrays. <i>Angewandte Chemie</i> , 2005 , 117, 7808-7812 | 3.6 | 14 |
| 10 | Incorporation of spin-labelled amino acids into proteins. <i>Magnetic Resonance in Chemistry</i> , 2005 , 43 Spec no., S34-9 | 2.1 | 31 |
| 9 | Chemical synthesis approaches to the engineering of ion channels. <i>Protein and Peptide Letters</i> , 2005 , 12, 737-41 | 1.9 | 9 |
| 8 | Monitoring the real-time kinetics of the hydrolysis reaction of guanine nucleotide-binding proteins. <i>Biological Chemistry</i> , 2005 , 386, 1105-14 | 4.5 | 25 |
| 7 | Chemical synthesis and single channel properties of tetrameric and pentameric TASP (template-assembled synthetic proteins) derived from the transmembrane domain of HIV virus protein u (Vpu). <i>Journal of Biological Chemistry</i> , 2004 , 279, 17483-9 | 5.4 | 44 |
| 6 | On-resin assembly of a linkerless lanthanide(III)-based luminescence label and its application to the total synthesis of site-specifically labeled mechanosensitive channels. <i>Bioconjugate Chemistry</i> , 2004 , 15, 1118-24 | 6.3 | 24 |
| 5 | Conversion of a mechanosensitive channel protein from a membrane-embedded to a water-soluble form by covalent modification with amphiphiles. <i>Journal of Molecular Biology</i> , 2004 , 343, 747-58 | 6.5 | 13 |
| 4 | Total chemical synthesis of a functional interacting protein pair: the protooncogene H-Ras and the Ras-binding domain of its effector c-Raf1. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003 , 100, 5075-80 | 11.5 | 57 |
| 3 | 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. <i>Chemistry and Biology</i> , 2001 , 8, 243-52 | | 19 |
| 2 | Synthesis of 2'-Iodo- and 2'-Bromo-ATP and GTP Analogues as Potential Phasing Tools for X-ray Crystallography. <i>Nucleosides & Nucleotides</i> , 1999 , 18, 137-151 | | 8 |
| 1 | O-GlcNAcylation of small heat shock proteins enhances their anti-amyloid chaperone activity | | 2 |

