

Kathrin Lang

List of Publications by Year in descending order

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Version: 2024-02-01

56
papers

5,377
citations

136950

32
h-index

161849

54
g-index

61
all docs

61
docs citations

61
times ranked

5080
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Substrate Profiling of Mitochondrial Caseolytic Protease P via a Site-Specific Photocrosslinking Approach. <i>Angewandte Chemie - International Edition</i> , 2022, 61, . | 13.8 | 15 |
| 2 | Site-Specific Protein Labeling and Generation of Defined Ubiquitin-Protein Conjugates Using an Asparaginyl Endopeptidase. <i>Journal of the American Chemical Society</i> , 2022, 144, 13118-13126. | 13.7 | 19 |
| 3 | Structural basis for VPS34 kinase activation by Rab1 and Rab5 on membranes. <i>Nature Communications</i> , 2021, 12, 1564. | 12.8 | 50 |
| 4 | Identification of permissive amber suppression sites for efficient non-canonical amino acid incorporation in mammalian cells. <i>Nucleic Acids Research</i> , 2021, 49, e62-e62. | 14.5 | 30 |
| 5 | Bioorthogonal chemistry. <i>Nature Reviews Methods Primers</i> , 2021, 1, . | 21.2 | 201 |
| 6 | Rab1-AMPylation by Legionella DrrA is allosterically activated by Rab1. <i>Nature Communications</i> , 2021, 12, 460. | 12.8 | 14 |
| 7 | A modular toolbox to generate complex polymeric ubiquitin architectures using orthogonal sortase enzymes. <i>Nature Communications</i> , 2021, 12, 6515. | 12.8 | 35 |
| 8 | Decorating proteins with LACE. <i>Nature Chemistry</i> , 2020, 12, 980-982. | 13.6 | 3 |
| 9 | Increasing the chemical space of proteins in living cells via genetic code expansion. <i>Current Opinion in Chemical Biology</i> , 2020, 58, 112-120. | 6.1 | 16 |
| 10 | A methylated lysine is a switch point for conformational communication in the chaperone Hsp90. <i>Nature Communications</i> , 2020, 11, 1219. | 12.8 | 24 |
| 11 | Site-Specific Protein Labeling with Fluorophores as a Tool To Monitor Protein Turnover. <i>ChemBioChem</i> , 2020, 21, 1861-1867. | 2.6 | 10 |
| 12 | Photo-Induced and Rapid Labeling of Tetrazine-Bearing Proteins via Cyclopropanone-Caged Bicyclononynes. <i>Angewandte Chemie - International Edition</i> , 2019, 58, 15876-15882. | 13.8 | 57 |
| 13 | Photo-Induced and Rapid Labeling of Tetrazine-Bearing Proteins via Cyclopropanone-Caged Bicyclononynes. <i>Angewandte Chemie</i> , 2019, 131, 16023-16029. | 2.0 | 13 |
| 14 | Installing Terminal-Alkyne Reactivity into Proteins in Engineered Bacteria. <i>Biochemistry</i> , 2019, 58, 2703-2705. | 2.5 | 2 |
| 15 | Genetically Encoded Biotin Analogues: Incorporation and Application in Bacterial and Mammalian Cells. <i>ChemBioChem</i> , 2019, 20, 1795-1798. | 2.6 | 1 |
| 16 | Expanding the genetic code with a lysine derivative bearing an enzymatically removable phenylacetyl group. <i>Chemical Communications</i> , 2019, 55, 4793-4796. | 4.1 | 8 |
| 17 | Site-specific ubiquitylation and SUMOylation using genetic-code expansion and sortase. <i>Nature Chemical Biology</i> , 2019, 15, 276-284. | 8.0 | 96 |
| 18 | Building Peptide Bonds in Haifa: The Seventh Chemical Protein Synthesis (CPS) Meeting. <i>ChemBioChem</i> , 2018, 19, 115-120. | 2.6 | 2 |

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|----|---|------|-----------|
| 19 | Expanding the Genetic Code to Study Protein-Protein Interactions. <i>Angewandte Chemie - International Edition</i> , 2018, 57, 14350-14361. | 13.8 | 84 |
| 20 | Expanding the Genetic Code to Study Protein-Protein Interactions. <i>Angewandte Chemie</i> , 2018, 130, 14548-14559. | 2.0 | 13 |
| 21 | CHAPTER 5.2. Genetic Code Expansion Approaches to Introduce Artificial Covalent Bonds into Proteins <i>In Vivo</i> . <i>Chemical Biology</i> , 2018, , 399-420. | 0.2 | 0 |
| 22 | Biochemie 2016: Chemie bringt Zellen im Innern zum Leuchten. <i>Nachrichten Aus Der Chemie</i> , 2017, 65, 305-309. | 0.0 | 0 |
| 23 | Tetrazines in Inverse-Electron-Demand Diels-Alder Cycloadditions and Their Use in Biology. <i>Synthesis</i> , 2017, 49, 830-848. | 2.3 | 62 |
| 24 | Proximity-Mediated Covalent Stabilization of Low-Affinity Protein Complexes <i>In Vitro</i> and <i>In Vivo</i> . <i>Angewandte Chemie</i> , 2017, 129, 15943-15947. | 2.0 | 14 |
| 25 | Proximity-Triggered Covalent Stabilization of Low-Affinity Protein Complexes <i>In Vitro</i> and <i>In Vivo</i> . <i>Angewandte Chemie - International Edition</i> , 2017, 56, 15737-15741. | 13.8 | 56 |
| 26 | Chemie in lebenden Systemen. <i>Nachrichten Aus Der Chemie</i> , 2016, 64, 301-305. | 0.0 | 1 |
| 27 | Selective, rapid and optically switchable regulation of protein function in live mammalian cells. <i>Nature Chemistry</i> , 2015, 7, 554-561. | 13.6 | 136 |
| 28 | Genetic Encoding of Unnatural Amino Acids for Labeling Proteins. <i>Methods in Molecular Biology</i> , 2015, 1266, 217-228. | 0.9 | 18 |
| 29 | Site-Specific Glycoconjugation of Protein via Bioorthogonal Tetrazine Cycloaddition with a Genetically Encoded <i>trans</i> -Cyclooctene or Bicyclononyne. <i>Bioconjugate Chemistry</i> , 2015, 26, 802-806. | 3.6 | 39 |
| 30 | Genetic Code Expansion Enables Live-Cell and Super-Resolution Imaging of Site-Specifically Labeled Cellular Proteins. <i>Journal of the American Chemical Society</i> , 2015, 137, 4602-4605. | 13.7 | 152 |
| 31 | Optimized orthogonal translation of unnatural amino acids enables spontaneous protein double-labelling and FRET. <i>Nature Chemistry</i> , 2014, 6, 393-403. | 13.6 | 233 |
| 32 | Cellular Incorporation of Unnatural Amino Acids and Bioorthogonal Labeling of Proteins. <i>Chemical Reviews</i> , 2014, 114, 4764-4806. | 47.7 | 861 |
| 33 | 4-O-substitutions determine selectivity of aminoglycoside antibiotics. <i>Nature Communications</i> , 2014, 5, 3112. | 12.8 | 68 |
| 34 | Bioorthogonal Reactions for Labeling Proteins. <i>ACS Chemical Biology</i> , 2014, 9, 16-20. | 3.4 | 467 |
| 35 | Proteome labeling and protein identification in specific tissues and at specific developmental stages in an animal. <i>Nature Biotechnology</i> , 2014, 32, 465-472. | 17.5 | 161 |
| 36 | Shining a light into live cells. <i>Nature Chemistry</i> , 2013, 5, 81-82. | 13.6 | 9 |

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|----|--|------|-----------|
| 37 | Dissociation of antibacterial activity and aminoglycoside ototoxicity in the 4-monosubstituted 2-deoxystreptamine apramycin. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 10984-10989. | 7.1 | 185 |
| 38 | Genetically encoded norbornene directs site-specific cellular protein labelling via a rapid bioorthogonal reaction. Nature Chemistry, 2012, 4, 298-304. | 13.6 | 424 |
| 39 | Expanding the genetic code of <i>Drosophila melanogaster</i> . Nature Chemical Biology, 2012, 8, 748-750. | 8.0 | 177 |
| 40 | Genetic Encoding of Bicyclononynes and <i>trans</i> -Cyclooctenes for Site-Specific Protein Labeling in Vitro and in Live Mammalian Cells via Rapid Fluorogenic Diels-Alder Reactions. Journal of the American Chemical Society, 2012, 134, 10317-10320. | 13.7 | 456 |
| 41 | Traceless and Site-Specific Ubiquitination of Recombinant Proteins. Journal of the American Chemical Society, 2011, 133, 10708-10711. | 13.7 | 161 |
| 42 | Structural basis for 16S ribosomal RNA cleavage by the cytotoxic domain of colicin E3. Nature Structural and Molecular Biology, 2010, 17, 1241-1246. | 8.2 | 44 |
| 43 | A fast selenium derivatization strategy for crystallization and phasing of RNA structures. Rna, 2009, 15, 707-715. | 3.5 | 47 |
| 44 | Evidence for Pseudoknot Formation of Class I preQ ₁ Riboswitch Aptamers. ChemBioChem, 2009, 10, 1141-1144. | 2.6 | 39 |
| 45 | Binding of Aminoglycoside Antibiotics to the Duplex Form of the HIV-1 Genomic RNA Dimerization Initiation Site. Angewandte Chemie - International Edition, 2008, 47, 4110-4113. | 13.8 | 40 |
| 46 | The Role of 23S Ribosomal RNA Residue A2451 in Peptide Bond Synthesis Revealed by Atomic Mutagenesis. Chemistry and Biology, 2008, 15, 485-492. | 6.0 | 88 |
| 47 | The preparation of site-specifically modified riboswitch domains as an example for enzymatic ligation of chemically synthesized RNA fragments. Nature Protocols, 2008, 3, 1457-1466. | 12.0 | 81 |
| 48 | Chemical synthesis in RNA research: from riboswitch to ribosome function. , 2008, , . | | 0 |
| 49 | Ligand-induced folding of the thiM TPP riboswitch investigated by a structure-based fluorescence spectroscopic approach. Nucleic Acids Research, 2007, 35, 5370-5378. | 14.5 | 146 |
| 50 | Ligand-Induced Folding of the Adenosine Deaminase A-Riboswitch and Implications on Riboswitch Translational Control. ChemBioChem, 2007, 8, 896-902. | 2.6 | 167 |
| 51 | Efficient Ribosomal Peptidyl Transfer Critically Relies on the Presence of the Ribose 2'-OH at A2451 of 23S rRNA. Journal of the American Chemical Society, 2006, 128, 4453-4459. | 13.7 | 83 |
| 52 | Synthesis, Oxidation Behavior, Crystallization and Structure of 2'-Methylseleno Guanosine Containing RNAs. Journal of the American Chemical Society, 2006, 128, 9909-9918. | 13.7 | 68 |
| 53 | Preparation of 2'-Deoxy-2'-Methylseleno-Modified Phosphoramidites and RNA. Current Protocols in Nucleic Acid Chemistry, 2006, 27, Unit 1.15. | 0.5 | 5 |
| 54 | Chemical engineering of the peptidyl transferase center reveals an important role of the 2'-hydroxyl group of A2451. Nucleic Acids Research, 2005, 33, 1618-1627. | 14.5 | 75 |

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|----|--|------|-----------|
| 55 | Syntheses of RNAs with up to 100 Nucleotides Containing Site-Specific 2â€³-Methylseleno Labels for Use in X-ray Crystallography. Journal of the American Chemical Society, 2005, 127, 12035-12045. | 13.7 | 98 |
| 56 | Substrate profiling of mitochondrial caseinolytic protease P via a siteâ€³-specific photocrosslinking approach. Angewandte Chemie, 0, , . | 2.0 | 2 |