Beate Koksch

List of Publications by Year
in descending order

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Version: 2024-02-01

95 papers	4,632 citations	136950 32 h-index	102487 66 g-index
101 all docs	101 docs citations	101 times ranked	5666 citing authors

#	Article	IF	Citations
1	pH-induced insertion of pHLIP into a lipid bilayer: In-situ SEIRAS characterization of a folding intermediate at neutral pH. Biochimica Et Biophysica Acta - Biomembranes, 2022, 1864, 183873.	2.6	13
2	Fluorine-induced polarity increases inhibitory activity of BPTI towards chymotrypsin. RSC Chemical Biology, 2022, 3, 773-782.	4.1	8
3	Functionalized peptide hydrogels as tunable extracellular matrix mimics for biological applications. Peptide Science, 2021, 113, e24201.	1.8	10
4	Multiomics Analysis Provides Insight into the Laboratory Evolution of Escherichia coli toward the Metabolic Usage of Fluorinated Indoles. ACS Central Science, 2021, 7, 81-92.	11.3	27
5	Enhancing Antimicrobial Peptide Potency through Multivalent Presentation on Coiled-Coil Nanofibrils. ACS Medicinal Chemistry Letters, 2021, 12, 67-73.	2.8	5
6	Investigations from the Belly of the Beast: N-Terminally Labeled Incretin Peptides That Are Both Potent Receptor Agonists and Stable to Protease Digestion. ACS Central Science, 2021, 7, 400-402.	11.3	2
7	Exploring the locking stage of NFGAILS amyloid fibrillation via transition manifold analysis. European Physical Journal B, 2021, 94, 1.	1.5	3
8	Systematic Evaluation of Fluorination as Modification for Peptideâ€Based Fusion Inhibitors against HIVâ€1 Infection. ChemBioChem, 2021, 22, 3443-3451.	2.6	4
9	Short selfâ€assembling cationic antimicrobial peptide mimetics based on a 3,5â€diaminobenzoic acid scaffold. Peptide Science, 2020, 112, e24130.	1.8	13
10	Mechanism of discrimination of isoleucylâ€tRNA synthetase against nonproteinogenic Î±â€aminobutyrate and its fluorinated analogues. FEBS Journal, 2020, 287, 800-813.	4.7	10
11	Catalytically Active Peptideâ€“Gold Nanoparticle Conjugates: Prospecting for Artificial Enzymes. Angewandte Chemie - International Edition, 2020, 59, 8776-8785.	13.8	43
12	Catalytically Active Peptideâ€“Gold Nanoparticle Conjugates: Prospecting for Artificial Enzymes. Angewandte Chemie, 2020, 132, 8858-8867.	2.0	1
13	The Impact of Halogenated Phenylalanine Derivatives on NFGAIL Amyloid Formation. ChemBioChem, 2020, 21, 3544-3554.	2.6	13
14	Breast cancer: insights in disease and influence of drug methotrexate. RSC Medicinal Chemistry, 2020, 11, 646-664.	3.9	33
15	Peptide Engineering Meeting 8. Peptide Science, 2020, 112, e24146.	1.8	0
16	Improved enantioselective gram scale synthesis route to N-Fmoc-protected monofluoroethylglycine. Journal of Fluorine Chemistry, 2020, 232, 109453.	1.7	8
17	Coassembly Generates Peptide Hydrogel with Wound Dressing Material Properties. ACS Omega, 2020, 5, 8557-8563.	3.5	20
18	Fluorinated Protease Substrates Show Position-Dependent Degradation. , 2020, , 519-559.		0

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19	Approaches to Obtaining Fluorinated Î±-Amino Acids. Chemical Reviews, 2019, 119, 10718-10801.	47.7	192
20	Self-Assembling Peptides as Extracellular Matrix Mimics to Influence Stem Cell's Fate. Frontiers in Chemistry, 2019, 7, 172.	3.6	52
21	An Intrinsic Hydrophobicity Scale for Amino Acids and Its Application to Fluorinated Compounds. Angewandte Chemie - International Edition, 2019, 58, 8216-8220.	13.8	30
22	Eine intrinsische Hydrophobieskala fÃ¼r AminosÃuren und ihre Anwendung auf fluorierte Verbindungen. Angewandte Chemie, 2019, 131, 8300-8304.	2.0	2
23	Peptideâ€“Gold Nanoparticle Conjugates as Artificial Carbonic Anhydrase Mimics. Catalysts, 2019, 9, 903.	3.5	12
24	NFGAIL Amyloid Oligomers: The Onset of Beta-Sheet Formation and the Mechanism for Fibril Formation. Journal of the American Chemical Society, 2018, 140, 244-249.	13.7	47
25	Tuning the Catalytic Activity and Substrate Specificity of Peptideâ€Nanoparticle Conjugates. ChemCatChem, 2018, 10, 5665-5668.	3.7	11
26	The protofilament architecture of a de novo designed coiled coil-based amyloidogenic peptide. Journal of Structural Biology, 2018, 203, 263-272.	2.8	6
27	Fineâ€Tuning the Proteolytic Stability of Peptides with Fluorinated Amino Acids. European Journal of Organic Chemistry, 2018, 2018, 3667-3679.	2.4	58
28	Peptideâ€Gold Nanoparticle Conjugates as Sequential Cascade Catalysts. ChemCatChem, 2018, 10, 4324-4328.	3.7	17
29	Biocatalysis with Unnatural Amino Acids: Enzymology Meets Xenobiology. Angewandte Chemie - International Edition, 2017, 56, 9680-9703.	13.8	164
30	Discovery and Investigation of Natural Editing Function against Artificial Amino Acids in Protein Translation. ACS Central Science, 2017, 3, 73-80.	11.3	25
31	<scp>S</scp>ubstrate specificity of an actively assembling amyloid catalyst. Biopolymers, 2017, 108, e23003.	2.4	16
32	The Multiple Origins of the Hydrophobicity of Fluorinated Apolar Amino Acids. CheM, 2017, 3, 881-897.	11.7	39
33	Catalytic Activity of Peptideâ€“Nanoparticle Conjugates Regulated by a Conformational Change. Biomacromolecules, 2017, 18, 3557-3562.	5.4	31
34	Deciphering the Fluorine Codeâ€”The Many Hats Fluorine Wears in a Protein Environment. Accounts of Chemical Research, 2017, 50, 2093-2103.	15.6	125
35	Editorial overview: Synthetic biomolecules: Biopolymers. Current Opinion in Chemical Biology, 2017, 40, A4-A5.	6.1	1
36	Global substitution of hemeproteins with noncanonical amino acids in Escherichia coli with intact cofactor maturation machinery. Enzyme and Microbial Technology, 2017, 106, 55-59.	3.2	3

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37	Position-dependent impact of hexafluoroleucine and trifluoroisoleucine on protease digestion. Beilstein Journal of Organic Chemistry, 2017, 13, 2869-2882.	2.2	20
38	Inhibition of peptide aggregation by means of enzymatic phosphorylation. Beilstein Journal of Organic Chemistry, 2016, 12, 2462-2470.	2.2	1
39	A Sustainable, Semiâ€Continuous Flow Synthesis of Hydantoins. Chemistry - A European Journal, 2016, 22, 13451-13454.	3.3	19
40	Klaus Burger. Journal of Fluorine Chemistry, 2016, 191, 42-43.	1.7	0
41	Exploiting Oligo(amido amine) Backbones for the Multivalent Presentation of Coiled-Coil Peptides. Biomacromolecules, 2015, 16, 2394-2402.	5.4	13
42	Impact of multivalent charge presentation on peptideâ€“nanoparticle aggregation. Beilstein Journal of Organic Chemistry, 2015, 11, 792-803.	2.2	8
43	A Self-Assembling Peptide Scaffold for the Multivalent Presentation of Antigens. Biomacromolecules, 2015, 16, 2188-2197.	5.4	31
44	Fluorine teams up with water to restore inhibitor activity to mutant BPTI. Chemical Science, 2015, 6, 5246-5254.	7.4	32
45	Coiled-Coils in Phage Display Screening: Insight into Exceptional Selectivity Provided by Molecular Dynamics. Journal of Chemical Information and Modeling, 2015, 55, 495-500.	5.4	2
46	Concluding the Amyloid Formation Pathway of a Coiledâ€Coilâ€Based Peptide from the Size of the Critical Nucleus. ChemPhysChem, 2015, 16, 108-114.	2.1	2
47	Tailored Presentation of Carbohydrates on a Coiled Coil-Based Scaffold for Asialoglycoprotein Receptor Targeting. ACS Chemical Biology, 2015, 10, 2065-2072.	3.4	21
48	Effects of single substitutions with hexafluoroleucine and trifluorovaline on the hydrophobic core formation of a heterodimeric coiled coil. Journal of Fluorine Chemistry, 2015, 175, 32-35.	1.7	21
49	Flow Synthesis of Fluorinated Î±â€Amino Acids. European Journal of Organic Chemistry, 2015, 2015, 3036-3039.	2.4	31
50	Î²- and Î³-Amino Acids at Î±-Helical Interfaces: Toward the Formation of Highly Stable Foldameric Coiled Coils. ACS Medicinal Chemistry Letters, 2014, 5, 1300-1303.	2.8	8
51	Proline-glutamate chimeraâ€™s side chain conformation directs the type of Î²-hairpin structure. Amino Acids, 2014, 46, 177-186.	2.7	2
52	Fluorinated amino acids in amyloid formation: a symphony of size, hydrophobicity and Î±-helix propensity. Chemical Science, 2014, 5, 819-830.	7.4	67
53	Coreâ€multishell nanotransporters enhance skin penetration of the cellâ€penetrating peptide low molecular weight protamine. Polymers for Advanced Technologies, 2014, 25, 1337-1341.	3.2	3
54	Impact of fluorination on proteolytic stability of peptides: a case study with Î±-chymotrypsin and pepsin. Amino Acids, 2014, 46, 2733-2744.	2.7	36

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55	Balancing selectivity vs stability using molecular dynamics and umbrella sampling. Journal of Cheminformatics, 2014, 6, O22.	6.1	0
56	Cationic membraneâ€active peptides â€“ anticancer and antifungal activity as well as penetration into human skin. Experimental Dermatology, 2014, 23, 326-331.	2.9	78
57	Accommodating fluorinated amino acids in a helical peptide environment. RSC Advances, 2013, 3, 6319.	3.6	22
58	Impact of fluorination on proteolytic stability of peptides in human blood plasma. Bioorganic and Medicinal Chemistry, 2013, 21, 3542-3546.	3.0	22
59	Nanoscale imaging reveals laterally expanding antimicrobial pores in lipid bilayers. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 8918-8923.	7.1	112
60	Synthesis of enantiomerically pure (2S,3S)-5,5,5-trifluoroisoleucine and (2R,3S)-5,5,5-trifluoro-allo-isoleucine. Beilstein Journal of Organic Chemistry, 2013, 9, 2009-2014.	2.2	17
61	An Approach for Simultaneous Synthesis of cis- and trans-3-Substituted Proline-Glutamic Acid Chimeras. Synthesis, 2012, 44, 3063-3070.	2.3	3
62	Specific in situ discrimination of amyloid fibrilsversus Î±-helical fibres by the fluorophore NIAD-4. Molecular BioSystems, 2012, 8, 557-564.	2.9	17
63	Multivalency as a Chemical Organization and Action Principle. Angewandte Chemie - International Edition, 2012, 51, 10472-10498.	13.8	854
64	Fluorinated amino acids: compatibility with native protein structures and effects on proteinâ€“protein interactions. Chemical Society Reviews, 2012, 41, 2135-2171.	38.1	365
65	Conjugate hydrotrifluoromethylation of Î±,Î²-unsaturated acyl-oxazolidinones: synthesis of chiral fluorinated amino acids. Organic and Biomolecular Chemistry, 2012, 10, 8583.	2.8	54
66	Structure Analysis of an Amyloid-Forming Model Peptide by a Systematic Glycine and Proline Scan. Biomacromolecules, 2011, 12, 2988-2996.	5.4	20
67	A systematic study of fundamentals in Î±-helical coiled coil mimicry by alternating sequences of Î²- and Î³-amino acids. Amino Acids, 2011, 41, 733-742.	2.7	12
68	Inhibition of Amyloid Aggregation by Formation of Helical Assemblies. Chemistry - A European Journal, 2011, 17, 10651-10661.	3.3	21
69	Compatibility of the conformationally rigid CF3-Bpg side chain with the hydrophobic coiled-coil interface. Amino Acids, 2010, 39, 1589-1593.	2.7	15
70	Multiple glycosylation of de novo designed Î±-helical coiled coil peptides. Bioorganic and Medicinal Chemistry, 2010, 18, 3703-3706.	3.0	13
71	Nanoparticleâ€Induced Folding and Fibril Formation of Coiledâ€Coilâ€Based Model Peptides. Small, 2010, 6, 1321-1328.	10.0	59
72	Amide-I and -II Vibrations of the Cyclic Î²-Sheet Model Peptide Gramicidin S in the Gas Phase. Journal of the American Chemical Society, 2010, 132, 2085-2093.	13.7	62

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73	Towards identifying preferred interaction partners of fluorinated amino acids within the hydrophobic environment of a dimeric coiled coil peptide. Organic and Biomolecular Chemistry, 2010, 8, 1382.	2.8	26
74	Positionâ€Ðependent Effects of Fluorinated Amino Acids on the Hydrophobic Core Formation of a Heterodimeric Coiled Coil. Chemistry - A European Journal, 2009, 15, 7628-7636.	3.3	44
75	Effects of Fluorination on the Folding Kinetics of a Heterodimeric Coiled Coil. ChemBioChem, 2009, 10, 2867-2870.	2.6	20
76	Chemical Labeling Strategy with (R)- and (S)-Trifluoromethylalanine for Solid State ¹⁹F NMR Analysis of Peptaibols in Membranes. Journal of the American Chemical Society, 2009, 131, 15596-15597.	13.7	65
77	Fluorine in Protein Environments: A QM and MD Study. Journal of Physical Chemistry B, 2009, 113, 16400-16408.	2.6	37
78	Direct One-Step¹⁸F-Labeling of Peptides via Nucleophilic Aromatic Substitution. Bioconjugate Chemistry, 2009, 20, 2254-2261.	3.6	87
79	How Metal Ions Affect Amyloid Formation: Cu²⁺â€•and Zn²⁺â€Sensitive Peptides. ChemBioChem, 2008, 9, 531-536.	2.6	53
80	Intramolecular Charge Interactions as a Tool to Control the Coiledâ€Coilâ€toâ€Amyloid Transformation. Chemistry - A European Journal, 2008, 14, 11442-11451.	3.3	31
81	Following polypeptide folding and assembly with conformational switches. Current Opinion in Chemical Biology, 2008, 12, 730-739.	6.1	51
82	Synthetic strategies to Î±-trifluoromethyl and Î±-difluoromethyl substituted Î±-amino acids. Chemical Society Reviews, 2008, 37, 1727.	38.1	247
83	Random Coils, Î²-Sheet Ribbons, and Î±-Helical Fibers:Â One Peptide Adopting Three Different Secondary Structures at Will. Journal of the American Chemical Society, 2006, 128, 2196-2197.	13.7	109
84	Fluorine in a Native Protein Environmentâ€"How the Spatial Demand and Polarity of Fluoroalkyl Groups Affect Protein Folding. Angewandte Chemie - International Edition, 2006, 45, 4198-4203.	13.8	134
85	How Cα-Fluoroalkyl Amino Acids and Peptides Interact with Enzymes:Studies Concerning the Influence on Proteolytic Stability, Enzymatic Resolution and Peptide Coupling. Current Topics in Medicinal Chemistry, 2006, 6, 1483-1498.	2.1	50
86	Advanced approaches for the characterization of a de novo designed antiparallel coiled coil peptide. Organic and Biomolecular Chemistry, 2005, 3, 1189.	2.8	24
87	Fluorine in Peptide Design and Protein Engineering. European Journal of Organic Chemistry, 2005, 2005, 4483-4503.	2.4	151
88	Development of Zinc Finger Domains for Recognition of the 5â€²-CNN-3â€² Family DNA Sequences and Their Use in the Construction of Artificial Transcription Factors. Journal of Biological Chemistry, 2005, 280, 35588-35597.	3.4	166
89	From Î±-helix to Î²-sheet â€“ a reversible metal ion induced peptide secondary structure switch. Organic and Biomolecular Chemistry, 2005, 3, 2500.	2.8	42
90	Hexafluoroacetone as a Protecting and Activating Reagent: Synthesis of New Types of Fluoro-Substituted Î±-Amino, Î±-Hydroxy and Î±-Mercapto Acids. Synthesis, 2004, 2004, 1821-1829.	2.3	6

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91	Evaluation of the Molecular Interactions of Fluorinated Amino Acids with Native Polypeptides. ChemBioChem, 2004, 5, 717-720.	2.6	54
92	Proteolytically stable peptides by incorporation of Î±-Tfm amino acids. Journal of Peptide Science, 1997, 3, 157-167.	1.4	76
93	Synthesis and Incorporation of Î±-Trifluoromethyl-Substituted Amino Acids into Peptides. ACS Symposium Series, 1996, , 42-58.	0.5	16
94	Application of Artificial Model Systems to Study the Interactions of Fluorinated Amino Acids within the Native Environment of Coiled Coil Proteins. , 0, , 389-409.		1
95	Rational Design of Amphiphilic Fluorinated Peptides: Evaluation of Self-Assembly Properties and Hydrogel Formation. Nanoscale, 0, , .	5.6	9