Kai Hilpert

List of Publications by Year
in descending order

71	8,925	147801 31	91884 69
papers	citations	h-index	g-index

78	78	78	12928
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	In silico identification of two peptides with antibacterial activity against multidrug-resistant Staphylococcus aureus. Npj Biofilms and Microbiomes, 2022, 8, .	6.4	11
2	Antimicrobial Activity Of A Histone Derived Peptide In The Airway Surface Liquid. FASEB Journal, 2021, 35, .	0.5	0
3	Comparison of a Short Linear Antimicrobial Peptide with Its Disulfide-Cyclized and Cyclotide-Grafted Variants against Clinically Relevant Pathogens. Microorganisms, 2021, 9, 1249.	3.6	13
4	Rapid Assembly of Infection-Resistant Coatings: Screening and Identification of Antimicrobial Peptides Works in Cooperation with an Antifouling Background. ACS Applied Materials & Interfaces, 2021, 13, 36784-36799.	8.0	21
5	Is There a Connection Between Gut Microbiome Dysbiosis Occurring in COVID-19 Patients and Post-COVID-19 Symptoms?. Frontiers in Microbiology, 2021, 12, 732838.	3.5	15
6	Is the Gut Microbiome a Target for Adjuvant Treatment of COVID-19?. Biologics, 2021, 1, 285-299.	4.1	2
7	Peptides in COVID-19 Clinical Trialsâ€"A Snapshot. Biologics, 2021, 1, 300-311.	4.1	3
8	Rational Designed Hybrid Peptides Show up to a 6-Fold Increase in Antimicrobial Activity and Demonstrate Different Ultrastructural Changes as the Parental Peptides Measured by BioSAXS. Frontiers in Pharmacology, 2021, 12, 769739.	3.5	6
9	Peptide Inhibitors of Bacterial Protein Synthesis with Broad Spectrum and SbmA-Independent Bactericidal Activity against Clinical Pathogens. Journal of Medicinal Chemistry, 2020, 63, 9590-9602.	6.4	24
10	The effect of lipidation and glycosylation on short cationic antimicrobial peptides. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183195.	2.6	56
11	Identification Of A Novel Histone Derived Antimicrobial Peptide In Airway Surface Liquid.. FASEB Journal, 2020, 34, 1-1.	0.5	0
12	BioSAXS Measurements Reveal That Two Antimicrobial Peptides Induce Similar Molecular Changes in Gram-Negative and Gram-Positive Bacteria. Frontiers in Pharmacology, 2019, 10, 1127.	3.5	14
13	Poster Session. Pediatric Pulmonology, 2019, 54, S155-S480.	2.0	5
14	Prolineâ€Rich Peptides with Improved Antimicrobial Activity against E. coli, K. pneumoniae, and A. baumannii. ChemMedChem, 2019, 14, 2025-2033.	3.2	35
15	Synergy Pattern of Short Cationic Antimicrobial Peptides Against Multidrug-Resistant Pseudomonas aeruginosa. Frontiers in Microbiology, 2019, 10, 2740.	3.5	48
16	In silico identification of two novel antimicrobial peptides with antibacterial activity against multi-drug resistant Staphylococcus aureus. Access Microbiology, 2019, 1, .	0.5	1
17	The Savage Dawn Peptide: an antibiotic woven from 12th century Welsh poetry. Access Microbiology, 2019, 1, .	0.5	0
18	The Dolphin Proline-Rich Antimicrobial Peptide Tur1A Inhibits Protein Synthesis by Targeting the Bacterial Ribosome. Cell Chemical Biology, 2018, 25, 530-539.e7.	5.2	90

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19	A short artificial antimicrobial peptide shows potential to prevent or treat bone infections. Scientific Reports, 2017, 7, 1506.	3.3	28
20	The rumen microbiome: an underexplored resource for novel antimicrobial discovery. Npj Biofilms and Microbiomes, 2017, 3, 33.	6.4	51
21	Screening and Optimizing Antimicrobial Peptides by Using SPOT-Synthesis. Frontiers in Chemistry, 2017, 5, 25.	3.6	36
22	Buwchitin: A Ruminal Peptide with Antimicrobial Potential against Enterococcus faecalis. Frontiers in Chemistry, 2017, 5, 51.	3.6	19
23	Use of small-angle X-ray scattering to resolve intracellular structure changes of Escherichia coli cells induced by antibiotic treatment. Journal of Applied Crystallography, 2016, 49, 2210-2216.	4.5	18
24	Alternatives to antibioticsâ€"a pipeline portfolio review. Lancet Infectious Diseases, The, 2016, 16, 239-251.	9.1	720
25	Improving short antimicrobial peptides despite elusive rules for activity. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 1024-1033.	2.6	57
26	Small angle X-ray scattering as a high-throughput method to classify antimicrobial modes of action. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 918-925.	2.6	33
27	Antimicrobial peptides: Cell Membrane and Microbial Surface Interactions. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 915-917.	2.6	17
28	Optimization of oncocin for antibacterial activity using a SPOT synthesis approach: extending the pathogen spectrum to Staphylococcus aureus. Amino Acids, 2016, 48, 269-280.	2.7	34
29	Improved Culture Medium (TiKa) for Mycobacterium avium Subspecies Paratuberculosis (MAP) Matches qPCR Sensitivity and Reveals Significant Proportions of Non-viable MAP in Lymphoid Tissue of Vaccinated MAP Challenged Animals. Frontiers in Microbiology, 2016, 7, 2112.	3.5	17
30	Use of Peptide Libraries for Identification and Optimization of Novel Antimicrobial Peptides. Current Topics in Medicinal Chemistry, 2016, 17, 537-553.	2.1	38
31	Interaction of blood components with cathelicidins and their modified versions. Biomaterials, 2015, 69, 201-211.	11.4	20
32	Cationic antimicrobial peptides as potential new therapeutic agents in neonates and children. Current Opinion in Infectious Diseases, 2014, 27, 258-267.	3.1	36
33	Targeting Mycobacterium tuberculosis and Other Microbial Pathogens Using Improved Synthetic Antibacterial Peptides. Antimicrobial Agents and Chemotherapy, 2013, 57, 2295-2303.	3.2	72
34	A Novel Monoclonal Antibody Against the C-terminus of β-Tubulin Recognizes Endocytic Organelles in Trypanosoma cruzi. Protein and Peptide Letters, 2012, 19, 636-643.	0.9	5
35	SPOT Synthesis as a Tool to Study Proteinâ€"Protein Interactions. Methods in Molecular Biology, 2011, 723, 105-127.	0.9	12
36	Identifying Novel Antimicrobial Peptides with Therapeutic Potential Against Multidrug-Resistant Bacteria by Using the SPOT Synthesis. Mini-Reviews in Organic Chemistry, 2011, 8, 157-163.	1.3	8

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37	The biocompatibility and biofilm resistance of implant coatings based on hydrophilic polymer brushes conjugated with antimicrobial peptides. Biomaterials, 2011, 32, 3899-3909.	11.4	351
38	Structural Studies of a Peptide with Immune Modulating and Direct Antimicrobial Activity. Chemistry and Biology, 2010, 17, 970-980.	6.0	143
39	Screening for Antifungal Peptides and Their Modes of Action in Aspergillus nidulans. Applied and Environmental Microbiology, 2010, 76, 7102-7108.	3.1	52
40	Structural Studies of An Immune Modulating and Direct Antimicrobial Peptide. Biophysical Journal, 2010, 98, 84a.	0.5	1
41	Easy Strategy To Protect Antimicrobial Peptides from Fast Degradation in Serum. Antimicrobial Agents and Chemotherapy, 2010, 54, 4003-4005.	3.2	86
42	Synthesis of Antimicrobial Peptides Using the SPOT Technique. Methods in Molecular Biology, 2010, 618, 111-124.	0.9	8
43	Short Cationic Antimicrobial Peptides Interact with ATP. Antimicrobial Agents and Chemotherapy, 2010, 54, 4480-4483.	3.2	70
44	High-Throughput Screening for Antimicrobial Peptides Using the SPOT Technique. Methods in Molecular Biology, 2010, 618, 125-133.	0.9	6
45	Synergistic Interaction between Silver Nanoparticles and Membrane-Permeabilizing Antimicrobial Peptides. Antimicrobial Agents and Chemotherapy, 2009, 53, 3538-3540.	3.2	189
46	Interpretable Features for the Activity Prediction of Short Antimicrobial Peptides Using Fuzzy Logic. International Journal of Peptide Research and Therapeutics, 2009, 15, 129-137.	1.9	17
47	Screening and Characterization of Surface-Tethered Cationic Peptides for Antimicrobial Activity. Chemistry and Biology, 2009, 16, 58-69.	6.0	197
48	Use of Artificial Intelligence in the Design of Small Peptide Antibiotics Effective against a Broad Spectrum of Highly Antibiotic-Resistant Superbugs. ACS Chemical Biology, 2009, 4, 65-74.	3.4	303
49	Identification of Novel Antibacterial Peptides by Chemoinformatics and Machine Learning. Journal of Medicinal Chemistry, 2009, 52, 2006-2015.	6.4	250
50	Synthesis of Peptide Arrays Using SPOT-Technology and the CelluSpots-Method. Methods in Molecular Biology, 2009, 570, 157-174.	0.9	63
51	Identification of novel host defense peptides and the absence of Î±â€defensins in the bovine genome. Proteins: Structure, Function and Bioinformatics, 2008, 73, 420-430.	2.6	53
52	Agar and broth dilution methods to determine the minimal inhibitory concentration (MIC) of antimicrobial substances. Nature Protocols, 2008, 3, 163-175.	12.0	4,289
53	X-ray spectromicroscopy study of competitive adsorption of protein and peptide onto polystyrene-poly(methyl methacrylate). Biointerphases, 2008, 3, FB27-FB35.	1.6	14
54	Short Linear Cationic Antimicrobial Peptides: Screening, Optimizing, and Prediction. Methods in Molecular Biology, 2008, 494, 127-159.	0.9	31

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55	Cellulose-bound Peptide Arrays: Preparation and Applications. Biotechnology and Genetic Engineering Reviews, 2007, 24, 31-106.	6.2	31
56	Using Intrinsic X-ray Absorption Spectral Differences To Identify and Map Peptides and Proteins. Journal of Physical Chemistry B, 2007, 111, 7691-7699.	2.6	83
57	Peptide arrays on cellulose support: SPOT synthesis, a time and cost efficient method for synthesis of large numbers of peptides in a parallel and addressable fashion. Nature Protocols, 2007, 2, 1333-1349.	12.0	255
58	Use of luminescent bacteria for rapid screening and characterization of short cationic antimicrobial peptides synthesized on cellulose using peptide array technology. Nature Protocols, 2007, 2, 1652-1660.	12.0	71
59	Evaluating Different Descriptors for Model Design of Antimicrobial Peptides with Enhanced Activity Toward P. aeruginosa. Chemical Biology and Drug Design, 2007, 70, 134-142.	3.2	60
60	Sequence Requirements and an Optimization Strategy for Short Antimicrobial Peptides. Chemistry and Biology, 2006, 13, 1101-1107.	6.0	158
61	High-throughput generation of small antibacterial peptides with improved activity. Nature Biotechnology, 2005, 23, 1008-1012.	17.5	351
62	Unraveling Sub-Site Specificities of Peptidic Serine Protease Inhibitors by Substitutional and Structural Analysis. Protein and Peptide Letters, 2005, 12, 449-456.	0.9	6
63	Complete Substitutional Analysis of a Sunflower Trypsin Inhibitor with Different Serine Proteases. Journal of Biochemistry, 2005, 138, 383-390.	1.7	28
64	Crystallization and Preliminary X-ray Analysis of Complexes of Porcine Pancreatic Elastase with two Natural Inhibitors. Protein and Peptide Letters, 2004, 11, 393-399.	0.9	2
65	Structure of a hybrid squash inhibitor in complex with porcine pancreatic elastase at 1.8â€…Ã… resolution. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 247-254.	2.5	15
66	Design and Characterization of a Hybrid Miniprotein That Specifically Inhibits Porcine Pancreatic Elastase. Journal of Biological Chemistry, 2003, 278, 24986-24993.	3.4	32
67	Crystallization and preliminary X-ray analysis of the complex of porcine pancreatic elastase and a hybrid squash inhibitor. Acta Crystallographica Section D: Biological Crystallography, 2002, 58, 672-674.	2.5	4
68	Anti-c-myc antibody 9E10: epitope key positions and variability characterized using peptide spot synthesis on cellulose. Protein Engineering, Design and Selection, 2001, 14, 803-806.	2.1	56
69	Atomic resolution structure of native porcine pancreatic elastase at 1.1â€…Ã…. Acta Crystallographica Section D: Biological Crystallography, 2000, 56, 520-523.	2.5	39
70	Characterizing and Optimizing Protease/Peptide Inhibitor Interactions, a New Application for Spot Synthesis. Journal of Biochemistry, 2000, 128, 1051-1057.	1.7	24
71	Interaction of the Capsid Protein p24 (HIV-1) with Sequence-Derived Peptides: Influence on p24 Dimerization. Virology, 1999, 254, 6-10.	2.4	19