Alessandro Tossi

List of Publications by Year
in descending order

126 papers	8,434 citations	50566 48 h-index	53065 89 g-index
131 all docs	131 docs citations	131 times ranked	9317 citing authors

#	Article	IF	Citations
1	Anisaxins, helical antimicrobial peptides from marine parasites, kill resistant bacteria by lipid extraction and membrane disruption. Acta Biomaterialia, 2022, 146, 131-144.	4.1	15
2	Natural and Synthetic Halogenated Amino Acidsâ€"Structural and Bioactive Features in Antimicrobial Peptides and Peptidomimetics. Molecules, 2021, 26, 7401.	1.7	16
3	Silver Nanoparticles Functionalized With Antimicrobial Polypeptides: Benefits and Possible Pitfalls of a Novel Anti-infective Tool. Frontiers in Microbiology, 2021, 12, 750556.	1.5	19
4	Identification and functional characterization of the astacidin family of proline-rich host defence peptides (PcAst) from the red swamp crayfish (Procambarus clarkii, Girard 1852). Developmental and Comparative Immunology, 2020, 105, 103574.	1.0	12
5	Caprine Bactenecins as Promising Tools for Developing New Antimicrobial and Antitumor Drugs. Frontiers in Cellular and Infection Microbiology, 2020, 10, 552905.	1.8	12
6	Characterization of Cetacean Proline-Rich Antimicrobial Peptides Displaying Activity against ESKAPE Pathogens. International Journal of Molecular Sciences, 2020, 21, 7367.	1.8	8
7	Selection and redesign for high selectivity of membrane-active antimicrobial peptides from a dedicated sequence/function database. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 827-834.	1.4	22
8	Redesigning Arenicin-1, an Antimicrobial Peptide from the Marine Polychaeta Arenicola marina, by Strand Rearrangement or Branching, Substitution of Specific Residues, and Backbone Linearization or Cyclization. Marine Drugs, 2019, 17, 376.	2.2	28
9	Mixed Fluorinated/Hydrogenated Selfâ€Assembled Monolayerâ€Protected Gold Nanoparticles: In Silico and In Vitro Behavior. Small, 2019, 15, e1900323.	5.2	18
10	Antimicrobial Peptides as Anti-Infective Agents in Pre-Post-Antibiotic Era?. International Journal of Molecular Sciences, 2019, 20, 5713.	1.8	92
11	Membrane-active antimicrobial peptide identified in Rana arvalis by targeted DNA sequencing. Biochimica Et Biophysica Acta - Biomembranes, 2019, 1861, 651-659.	1.4	11
12	The Dolphin Proline-Rich Antimicrobial Peptide Tur1A Inhibits Protein Synthesis by Targeting the Bacterial Ribosome. Cell Chemical Biology, 2018, 25, 530-539.e7.	2.5	90
13	Antibacterial Activity Affected by the Conformational Flexibility in Glycineâ€"Lysine Based Î±-Helical Antimicrobial Peptides. Journal of Medicinal Chemistry, 2018, 61, 2924-2936.	2.9	48
14	Parallel identification of novel antimicrobial peptide sequences from multiple anuran species by targeted DNA sequencing. BMC Genomics, 2018, 19, 827.	1.2	8
15	Effect of targeted minimal sequence variations on the structure and biological activities of the human cathelicidin LLâ€37. Peptide Science, 2018, 110, e24087.	1.0	5
16	Influence of Bacterial Biofilm Polysaccharide Structure on Interactions with Antimicrobial Peptides: A Study on Klebsiella pneumoniae. International Journal of Molecular Sciences, 2018, 19, 1685.	1.8	17
17	Tools for Designing Amphipathic Helical Antimicrobial Peptides. Methods in Molecular Biology, 2017, 1548, 23-34.	0.4	10
18	Gold nanoparticles with patterned surface monolayers for nanomedicine: current perspectives. European Biophysics Journal, 2017, 46, 749-771.	1.2	64

#	ARTICLE	IF	CITATIONS
19	Evaluation of free or anchored antimicrobial peptides as candidates for the prevention of orthopaedic deviceâ€related infections. Journal of Peptide Science, 2017, 23, 777-789.	0.8	12
20	PGLa-H tandem-repeat peptides active against multidrug resistant clinical bacterial isolates. Biochimica Et Biophysica Acta - Biomembranes, 2017, 1859, 228-237.	1.4	23
21	Myticalins: A Novel Multigenic Family of Linear, Cationic Antimicrobial Peptides from Marine Mussels (Mytilus spp.). Marine Drugs, 2017, 15, 261.	2.2	54
22	Biofilms from Klebsiella pneumoniae: Matrix Polysaccharide Structure and Interactions with Antimicrobial Peptides. Microorganisms, 2016, 4, 26.	1.6	14
23	Identification of antibacterial peptides from endophytic microbiome. Applied Microbiology and Biotechnology, 2016, 100, 9283-9293.	1.7	11
24	Antimicrobial and host cell-directed activities of Gly/Ser-rich peptides from salmonid cathelicidins. Fish and Shellfish Immunology, 2016, 59, 456-468.	1.6	22
25	The human cathelicidin LL-37 â€" A pore-forming antibacterial peptide and host-cell modulator. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 546-566.	1.4	263
26	New aspects of the structure and mode of action of the human cathelicidin LL-37 revealed by the intrinsic probe <i>p</i>-cyanophenylalanine. Biochemical Journal, 2015, 465, 443-457.	1.7	31
27	Lipopolysaccharide Phosphorylation by the WaaY Kinase Affects the Susceptibility of Escherichia coli to the Human Antimicrobial Peptide LL-37. Journal of Biological Chemistry, 2015, 290, 19933-19941.	1.6	18
28	Predicting the Minimal Inhibitory Concentration for Antimicrobial Peptides with Rana-Box Domain. Journal of Chemical Information and Modeling, 2015, 55, 2275-2287.	2.5	17
29	Effect of Size and N-Terminal Residue Characteristics on Bacterial Cell Penetration and Antibacterial Activity of the Proline-Rich Peptide Bac7. Journal of Medicinal Chemistry, 2015, 58, 1195-1204.	2.9	40
30	Native oligomerization determines the mode of action and biological activities of human cathelicidin LL-37. Biochemical Journal, 2014, 457, 263-275.	1.7	57
31	Cellular Internalization and Cytotoxicity of the Antimicrobial Proline-rich Peptide Bac7(1-35) in Monocytes/Macrophages, and its Activity Against Phagocytosed Salmonella typhimurium. Protein and Peptide Letters, 2014, 21, 382-390.	0.4	12
32	Insights into the mechanism of interaction between trehalose-conjugated beta-sheet breaker peptides and AÎ²(1â€"42) fibrils by molecular dynamics simulations. Molecular BioSystems, 2013, 9, 2835.	2.9	32
33	Selective antimicrobial activity and mode of action of adepantins, glycine-rich peptide antibiotics based on anuran antimicrobial peptide sequences. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 1004-1012.	1.4	67
34	Defensins. , 2013, , 101-118.		3
35	An Albumin-Derived Peptide Scaffold Capable of Binding and Catalysis. PLoS ONE, 2013, 8, e56469.	1.1	10
36	Synthesis and Biological Activity of Potent HIV-1 Protease Inhibitors Based on Phe-Pro Dihydroxyethylene Isosteres. Journal of Medicinal Chemistry, 2012, 55, 3900-3910.	2.9	10

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37	Use of Unnatural Amino Acids to Probe Structureâ€"Activity Relationships and Mode-of-Action of Antimicrobial Peptides. Methods in Molecular Biology, 2012, 794, 169-183.	0.4	5
38	DADP: the database of anuran defense peptides. Bioinformatics, 2012, 28, 1406-1407.	1.8	163
39	Comparative activity and mechanism of action of three types of bovine antimicrobial peptides against pathogenic <i>Prototheca</i> spp.. Journal of Peptide Science, 2012, 18, 105-113.	0.8	23
40	Designing Short Peptides with High Affinity for Organic Molecules: A Combined Docking, Molecular Dynamics, And Monte Carlo Approach. Journal of Chemical Theory and Computation, 2012, 8, 1121-1128.	2.3	24
41	Identification of antimicrobial peptides from teleosts and anurans in expressed sequence tag databases using conserved signal sequences. FEBS Journal, 2012, 279, 724-736.	2.2	23
42	Design and Engineering Strategies for Synthetic Antimicrobial Peptides. , 2011, , 81-98.		6
43	Effects on antigen-presenting cells of short-term interaction with the human host defence peptide Î²-defensin 2. Biochemical Journal, 2011, 436, 537-546.	1.7	14
44	Proline-rich antimicrobial peptides: converging to a non-lytic mechanism of action. Cellular and Molecular Life Sciences, 2011, 68, 2317-2330.	2.4	203
45	Knowledge-based computational methods for identifying or designing novel, non-homologous antimicrobial peptides. European Biophysics Journal, 2011, 40, 371-385.	1.2	50
46	Characterization of a New Defensin from Cowpea (Vigna unguiculata (L.) Walp.). Protein and Peptide Letters, 2010, 17, 297-304.	0.4	17
47	Techniques for Plant Defensin Production. Current Protein and Peptide Science, 2010, 11, 231-235.	0.7	5
48	Histatins In Non-Human Primates: Gene Variations and Functional Effects. Protein and Peptide Letters, 2010, 17, 909-918.	0.4	13
49	Role of Cathelicidin Peptides in Bovine Host Defense and Healing. Probiotics and Antimicrobial Proteins, 2010, 2, 12-20.	1.9	13
50	Human Î²-Defensin 3 Inhibits Cell Wall Biosynthesis in Staphylococci. Infection and Immunity, 2010, 78, 2793-2800.	1.0	231
51	Broad-Spectrum Activity against Bacterial Mastitis Pathogens and Activation of Mammary Epithelial Cells Support a Protective Role of Neutrophil Cathelicidins in Bovine Mastitis. Infection and Immunity, 2010, 78, 1781-1788.	1.0	73
52	Overview on Plant Antimicrobial Peptides. Current Protein and Peptide Science, 2010, 11, 181-188.	0.7	103
53	Structural Aspects of Plant Antimicrobial Peptides. Current Protein and Peptide Science, 2010, 11, 210-219.	0.7	65
54	Design of selective peptide antibiotics by using the sequence moment concept. Nature Precedings, 2009, , .	0.1	0

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55	Design of selective peptide antibiotics by using the sequence moment concept. Nature Precedings, 2009, , .	0.1	0
56	A Plant-Defensin from Sugarcane (Saccharum spp.). Protein and Peptide Letters, 2009, 16, 430-436.	0.4	12
57	ChBac3.4: A Novel Proline-Rich Antimicrobial Peptide from Goat Leukocytes. International Journal of Peptide Research and Therapeutics, 2009, 15, 31-42.	0.9	26
58	Structure dependence of biological activities for primate cathelicidins. Journal of Peptide Science, 2009, 15, 576-582.	0.8	20
59	Inhibition of cathelicidin activity by bacterial exopolysaccharides. Molecular Microbiology, 2009, 72, 1137-1146.	1.2	46
60	Computational Design of Highly Selective Antimicrobial Peptides. Journal of Chemical Information and Modeling, 2009, 49, 2873-2882.	2.5	79
61	Primate cathelicidin orthologues display different structures and membrane interactions. Biochemical Journal, 2009, 417, 727-735.	1.7	40
62	Artificial Î²-defensin based on a minimal defensin template. Biochemical Journal, 2009, 421, 435-447.	1.7	24
63	Structuring and interactions of human Î²â€defensins 2 and 3 with model membranes. Journal of Peptide Science, 2008, 14, 518-523.	0.8	39
64	Evolution of the hepcidin gene in primates. BMC Genomics, 2008, 9, 120.	1.2	18
65	Investigating the Mode of Action of Proline-Rich Antimicrobial Peptides Using a Genetic Approach: A Tool to Identify New Bacterial Targets Amenable to the Design of Novel Antibiotics. Methods in Molecular Biology, 2008, 494, 161-176.	0.4	14
66	Mode of action of human Î²-defensin 3 against Staphylococcus aureus and transcriptional analysis of responses to defensin challenge. International Journal of Medical Microbiology, 2008, 298, 619-633.	1.5	65
67	The Human Cathelicidin LL-37 Modulates the Activities of the P2X7 Receptor in a Structure-dependent Manner. Journal of Biological Chemistry, 2008, 283, 30471-30481.	1.6	121
68	Analysis of in vitro activities and modes of action of synthetic antimicrobial peptides derived from an Î±-helical â€˜sequence templateâ€™. Journal of Antimicrobial Chemotherapy, 2008, 61, 341-352.	1.3	73
69	Splitting the BLOSUM Score into Numbers of Biological Significance. Eurasip Journal on Bioinformatics and Systems Biology, 2007, 2007, 1-18.	1.4	2
70	Evolution of the Primate Cathelicidin. Journal of Biological Chemistry, 2006, 281, 19861-19871.	1.6	99
71	Alpha-helical antimicrobial peptidesâ€"Using a sequence template to guide structureâ€"activity relationship studies. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 1436-1449.	1.4	352
72	The Non-Peptidic HIV Protease Inhibitor Tipranavir and Two Synthetic Peptidomimetics (TS98 and TS102) Modulate Pneumocystis carinii Growth and Proteasome Activity of HEL299 Cell Line. Journal of Eukaryotic Microbiology, 2006, 53, S144-S146.	0.8	5

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73	Fungicidal activity of five cathelicidin peptides against clinically isolated yeasts. Journal of Antimicrobial Chemotherapy, 2006, 58, 950-959.	1.3	125
74	Human Î²-Defensin 2 Induces a Vigorous Cytokine Response in Peripheral Blood Mononuclear Cells. Antimicrobial Agents and Chemotherapy, 2006, 50, 1433-1441.	1.4	89
75	Cationic Antimicrobial Peptidesâ€"The Defensins. , 2006, , 55-66.		4
76	Structural aspects and biological properties of the cathelicidin PMAP-36. FEBS Journal, 2005, 272, 4398-4406.	2.2	51
77	Primate β-defensins - Structure, Function and Evolution. Current Protein and Peptide Science, 2005, 6, 7-21.	0.7	49
78	Editorial [Hot Topic: Host Defense Peptide: Roles and Application (Guest Editor: Alessandro Tossi)]. Current Protein and Peptide Science, 2005, 6, 1-3.	0.7	24
79	Structure Based Design of Inhibitors of Aspartic Protease of HIV-1. Letters in Drug Design and Discovery, 2005, 2, 638-646.	0.4	5
80	Mammalian defensins: structures and mechanism of antibiotic activity. Journal of Leukocyte Biology, 2005, 77, 466-475.	1.5	175
81	Controlled alteration of the shape and conformational stability of Î±-helical cell-lytic peptides: effect on mode of action and cell specificity. Biochemical Journal, 2005, 390, 177-188.	1.7	107
82	Tuning the biological properties of amphipathic Î±-helical antimicrobial peptides: Rational use of minimal amino acid substitutions. Peptides, 2005, 26, 2368-2376.	1.2	76
83	Identification and optimization of an antimicrobial peptide from the ant venom toxin pilosulin. Archives of Biochemistry and Biophysics, 2005, 434, 358-364.	1.4	60
84	Effects of Positively Selected Sequence Variations in Human and Macaca fascicularis Î²-Defensins 2 on Antimicrobial Activity. Antimicrobial Agents and Chemotherapy, 2004, 48, 685-688.	1.4	44
85	In vitro assembly of a complete, pentaglycine interpeptide bridge containing cell wall precursor (lipid) Tj ETQq1 1 0.784314 rgBT /Overlo	1.2	167
86	Small hydroxyethylene-based peptidomimetics inhibiting both HIV-1 and C. albicans aspartic proteases. Bioorganic and Medicinal Chemistry, 2003, 11, 4719-4727.	1.4	21
87	Evolution of the beta defensin 2 gene in primates. Genes and Immunity, 2003, 4, 251-257.	2.2	41
88	A study of host defence peptide Î²-defensin 3 in primates. Biochemical Journal, 2003, 374, 707-714.	1.7	69
89	Î²-Defensin 2 in the Rhesus Monkey (Macaca mulatta) and the Long-Tailed Macaque (M. fascicularis). Vaccine Journal, 2002, 9, 503-504.	3.2	1
90	Analysis of the cytotoxicity of synthetic antimicrobial peptides on mouse leucocytes: implications for systemic use. Journal of Antimicrobial Chemotherapy, 2002, 50, 339-348.	1.3	71

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91	Molecular Diversity in Gene-Encoded, Cationic Antimicrobial Polypeptides. Current Pharmaceutical Design, 2002, 8, 743-761.	0.9	131
92	Solid-Phase Synthesis of Fullerene-peptides. Journal of the American Chemical Society, 2002, 124, 12543-12549.	6.6	78
93	Computational studies of the resistance patterns of mutant HIV-1 aspartic proteases towards ABT-538 (ritonavir) and design of new derivatives. Journal of Molecular Graphics and Modelling, 2002, 21, 171-179.	1.3	12
94	A Novel [60]Fullerene Amino Acid for Use in Solid-Phase Peptide Synthesis. Organic Letters, 2001, 3, 1845-1848.	2.4	75
95	Amphipathic Î± helical antimicrobial peptides.. FEBS Journal, 2001, 268, 5589-5600.	0.2	419
96	Amphipathic Î± helical antimicrobial peptides.. , 2001, 268, 5589.		18
97	Editorial. Biopolymers, 2000, 55, 2-3.	1.2	3
98	Amphipathic, Î±-helical antimicrobial peptides. Biopolymers, 2000, 55, 4-30.	1.2	1,102
99	Aspartic protease inhibitors. FEBS Journal, 2000, 267, 1715-1722.	0.2	27
100	Amphipathic, Î±-helical antimicrobial peptides. , 2000, 55, 4.		17
101	Stereoselective synthesis of non symmetric dihydroxyethylene dipeptide isosteres via epoxyalcohols derived from Î±-amino acids. Bioorganic and Medicinal Chemistry Letters, 1999, 9, 3027-3030.	1.0	14
102	A Computational Study of the Resistance of HIV-1 Aspartic Protease to the Inhibitors ABT-538 and VX-478 and Design of New Analogues. Biochemical and Biophysical Research Communications, 1998, 242, 545-551.	1.0	22
103	Wide-Spectrum Antibiotic Activity of Synthetic, Amphipathic Peptides. Biochemical and Biophysical Research Communications, 1998, 249, 202-206.	1.0	53
104	An Approach Combining Rapid cDNA Amplification and Chemical Synthesis for the Identification of Novel, Cathelicidin-Derived, Antimicrobial Peptides. , 1997, 78, 133-150.		38
105	Versatile and Stereoselective Synthesis of Diamino Diol Dipeptide Isosteres, Core Units of Pseudopeptide HIV Protease Inhibitors. Journal of Organic Chemistry, 1997, 62, 9348-9353.	1.7	40
106	Design of Synthetic Antimicrobial Peptides Based on Sequence Analogy and Amphipathicity. FEBS Journal, 1997, 250, 549-558.	0.2	121
107	Purification and Structural Characterization of Bovine Cathelicidins, Precursors of Antimicrobial Peptides. FEBS Journal, 1996, 238, 769-776.	0.2	56
108	Design of new inhibitors of HIV-1 aspartic protease. Chemical Physics, 1996, 204, 173-180.	0.9	14

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109	PMAP-37, a Novel Antibacterial Peptide from Pig Myeloid Cells. cDNA Cloning, Chemical Synthesis and Activity. FEBS Journal, 1995, 228, 941-946.	0.2	2
110	Inhibition of OH Radical-induced Strand Break Formation of Poly(U) by Ru(bpy)²⁺₃or Ru(phen)²⁺₃Attached to the Polynucleotide. International Journal of Radiation Biology, 1995, 68, 525-533.	1.0	0
111	PMAP-37, a Novel Antibacterial Peptide from Pig Myeloid Cells. cDNA Cloning, Chemical Synthesis and Activity. FEBS Journal, 1995, 228, 941-946.	0.2	90
112	Photoaddition of ruthenium(II)-tris-1,4,5,8-tetraazaphenanthrene to DNA and mononucleotides. Journal of Photochemistry and Photobiology B: Biology, 1994, 23, 69-78.	1.7	64
113	Structural characterization of synthetic model peptides of the DNA-binding cI434 repressor by electrospray ionization and fast atom bombardment mass spectrometry. Biological Mass Spectrometry, 1994, 23, 727-733.	0.5	3
114	Substrate-Specificity of Cdc2 Kinase from Human HeLa-Cells as Determined with Synthetic Peptides and Molecular Modeling. Archives of Biochemistry and Biophysics, 1994, 315, 415-424.	1.4	22
115	Chemical synthesis and biological activity of a novel antibacterial peptide deduced from a pig myeloid cDNA. FEBS Letters, 1994, 337, 303-307.	1.3	105
116	Identification and characterization of a primary antibacterial domain in CAP18, a lipopolysaccharide binding protein from rabbit leukocytes. FEBS Letters, 1994, 339, 108-112.	1.3	94
117	Photoinduced interaction of Ru(bpy)32+ with nucleotides and nucleic acids in the presence of S2O82â^': A transient conductivity study. Journal of Photochemistry and Photobiology B: Biology, 1993, 17, 115-125.	1.7	13
118	PHOTOâ€INDUCED ELECTRON TRANSFER FROM NUCLEOTIDES TO RUTHENIUMâ€TRISâ€1,4,5,8TETRAAZAPHENANTHRENE: MODEL FOR PHOTOSENSITIZED DNA OXIDATION. Photochemistry and Photobiology, 1992, 55, 681-689.	1.3	109
119	Medium dependence of the spectroscopic and photophysical properties of Ru(bpy)2(HAT)2+. The effect of solvent, pH and binding to polyelectrolytes. Journal of Photochemistry and Photobiology A: Chemistry, 1991, 60, 27-45.	2.0	43
120	Site-specific photocleavage of DNA. Journal of Photochemistry and Photobiology B: Biology, 1990, 7, 97-100.	1.7	2
121	PHOTOSENSITIZED REACTIONS OF POLY(U) WITH TRIS(2,2' BIPYRIDYL)RUTHENIUM(II) AND PEROXYDISULFATE. Photochemistry and Photobiology, 1989, 50, 585-597.	1.3	14
122	A STUDY OF SOME POLYPYRIDYLRUTHENIUM(II) COMPLEXES AS DNA BINDERS AND PHOTOCLEAVAGE REAGENTS. Photochemistry and Photobiology, 1989, 49, 545-556.	1.3	176
123	Interaction of Ruthenium Complexes with Nucleic Acids. DNA Damage Via Photosensitized Radical Production. Free Radical Research Communications, 1989, 6, 171-173.	1.8	6
124	Binding of Ru(bpy)32+ and Ru(phen)32+ to polynucleotides and DNA: Effect of added salts on the absorption and luminescence properties. Journal of Photochemistry and Photobiology B: Biology, 1988, 2, 67-89.	1.7	54
125	Ruthenium polypyridyl complexes; their interaction with DNA and their role as sensitisers for its photocleavage. Journal of the Chemical Society Chemical Communications, 1987, , 1821.	2.0	100
126	A study of the interactions of some polypyridylruthenium(II) complexes with DNA using fluorescence spectroscopy, topoisomerisation and thermal denaturation. Nucleic Acids Research, 1985, 13, 6017-6034.	6.5	846