Thomas Gutsmann

List of Publications by Year in descending order

79 papers	4,337 citations	101496 36 h-index	110317 64 g-index
80 all docs	80 docs citations	80 times ranked	5993 citing authors

#	Article	IF	Citations
1	The role of mycobacterial ESX-1 secretion systems in phagosome escape. Biophysical Journal, 2022, 121, 369a.	0.2	1
2	Encapsulation and release of As pidasept peptides in polysaccharide formulation for oral application. European Journal of Pharmaceutical Sciences, 2021, 158, 105687.	1.9	5
3	Flagellin lysine methyltransferase FliB catalyzes a [4Fe-4S] mediated methyl transfer reaction. PLoS Pathogens, 2021, 17, e1010052.	2.1	3
4	The Beauty of Asymmetric Membranes: Reconstitution of the Outer Membrane of Gram-Negative Bacteria. Frontiers in Cell and Developmental Biology, 2020, 8, 586.	1.8	21
5	Inactivation of Bacteria by Î³-Irradiation to Investigate the Interaction with Antimicrobial Peptides. Biophysical Journal, 2019, 117, 1805-1819.	0.2	8
6	The C-Terminal VPRTES Tail of LL-37 Influences the Mode of Attachment to a Lipid Bilayer and Antimicrobial Activity. Biochemistry, 2019, 58, 2447-2462.	1.2	18
7	Antibacterial action of synthetic antilipopolysaccharide peptides (SALP) involves neutralization of both membraneâ€bound and free toxins. FEBS Journal, 2019, 286, 1576-1593.	2.2	12
8	ADAM10 sheddase activation is controlled by cell membrane asymmetry. Journal of Molecular Cell Biology, 2019, 11, 979-993.	1.5	48
9	Virulenceâ€associated protein A fromRhodococcus equiis an intercompartmental pHâ€neutralising virulence factor. Cellular Microbiology, 2019, 21, e12958.	1.1	30
10	Peptide drug stability: The anti-inflammatory drugs Pep19-2.5 and Pep19-4LF in cream formulation. European Journal of Pharmaceutical Sciences, 2018, 115, 240-247.	1.9	8
11	Novel Synthetic, Host-defense Peptide Protects Against Organ Injury/Dysfunction in a Rat Model of Severe Hemorrhagic Shock. Annals of Surgery, 2018, 268, 348-356.	2.1	18
12	Antimicrobial endotoxinâ€neutralizing peptides promote keratinocyte migration via P2X7 receptor activation and accelerate wound healing in vivo. British Journal of Pharmacology, 2018, 175, 3581-3593.	2.7	26
13	Inhibition of Lipopolysaccharide- and Lipoprotein-Induced Inflammation by Antitoxin Peptide Pep19-2.5. Frontiers in Immunology, 2018, 9, 1704.	2.2	48
14	Effects of SecDF on the antimicrobial functions of cathelicidins against Staphylococcus aureus. Veterinary Microbiology, 2017, 200, 52-58.	0.8	8
15	Coupling killing to neutralization: combined therapy with ceftriaxone/Pep19-2.5 counteracts sepsis in rabbits. Experimental and Molecular Medicine, 2017, 49, e345-e345.	3.2	17
16	Testing cathelicidin susceptibility of bacterial mastitis isolates: Technical challenges and data output for clinical isolates. Veterinary Microbiology, 2017, 210, 107-115.	0.8	8
17	Neutrophil extracellular trap formation in theStreptococcus suis-infected cerebrospinal fluid compartment. Cellular Microbiology, 2017, 19, e12649.	1.1	79
18	Immunogenic properties of the human gut-associated archaeon Methanomassiliicoccus luminyensis and its susceptibility to antimicrobial peptides. PLoS ONE, 2017, 12, e0185919.	1.1	21

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19	Candidalysin is a fungal peptide toxin critical for mucosal infection. Nature, 2016, 532, 64-68.	13.7	628
20	In vitro activity of human and animal cathelicidins against livestock-associated methicillin-resistant Staphylococcus aureus. Veterinary Microbiology, 2016, 194, 107-111.	0.8	19
21	Biophysical Investigations on the Interaction between Antimicrobial Peptides and Bacteria Killed by Cs-137 Irradiation. Biophysical Journal, 2016, 110, 79a.	0.2	1
22	Enhancing actions of peptides derived from the Î³-chain of fetal human hemoglobin on the immunostimulant activities of monophosphoryl lipid A. Innate Immunity, 2016, 22, 168-180.	1.1	0
23	Protein reconstitution into freestanding planar lipid membranes for electrophysiological characterization. Nature Protocols, 2015, 10, 188-198.	5.5	134
24	Mechanism of HbÎ³-35-induced an increase in the activation of the human immune system by endotoxins. Innate Immunity, 2015, 21, 305-313.	1.1	11
25	Quantification of the Influence of Endotoxins on the Mechanics of Adult and Neonatal Red Blood Cells. Journal of Physical Chemistry B, 2015, 119, 7837-7845.	1.2	10
26	Bacterial lipopolysaccharides form physically cross-linked, two-dimensional gels in the presence of divalent cations. Soft Matter, 2015, 11, 6037-6044.	1.2	49
27	Therapeutical Administration of Peptide Pep19-2.5 and Ibuprofen Reduces Inflammation and Prevents Lethal Sepsis. PLoS ONE, 2015, 10, e0133291.	1.1	9
28	The Intestinal Archaea Methanosphaera stadtmanae and Methanobrevibacter smithii Activate Human Dendritic Cells. PLoS ONE, 2014, 9, e99411.	1.1	127
29	Biophysical analysis of the interaction of the serum protein human Î²₂GPI with bacterial lipopolysaccharide. FEBS Open Bio, 2014, 4, 432-440.	1.0	5
30	Interaction Between Host Defence Peptides and Mycobacterial Membranes. Biophysical Journal, 2014, 106, 507a.	0.2	0
31	Cellular distribution of lipid A and LPS R595 after inÂvitro application to isolated human monocytes by freeze-fracture replica immunogold-labelling. Innate Immunity, 2013, 19, 588-595.	1.1	1
32	Structure and function of a unique pore-forming protein from a pathogenic acanthamoeba. Nature Chemical Biology, 2013, 9, 37-42.	3.9	36
33	Surface activity and structures of two fragments of the human antimicrobial LL-37. Colloids and Surfaces B: Biointerfaces, 2013, 109, 129-135.	2.5	17
34	Preclinical Investigations Reveal the Broad-Spectrum Neutralizing Activity of Peptide Pep19-2.5 on Bacterial Pathogenicity Factors. Antimicrobial Agents and Chemotherapy, 2013, 57, 1480-1487.	1.4	78
35	Lipidâ€Labeling Facilitates a Novel Magnetic Isolation Procedure to Characterize Pathogenâ€Containing Phagosomes. Traffic, 2013, 14, 321-336.	1.3	23
36	Biophysical Mechanisms of the Neutralization of Endotoxins by Lipopolyamines. The Open Biochemistry Journal, 2013, 7, 82-93.	0.3	8

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37	Biophysical investigations into the interactions of endotoxins with bile acids. Innate Immunity, 2012, 18, 307-317.	1.1	3
38	Modulation of enrofloxacin binding in OmpF by Mg2+ as revealed by the analysis of fast flickering single-porin current. Journal of General Physiology, 2012, 140, 69-82.	0.9	23
39	Bacterial Cell Wall Compounds as Promising Targets of Antimicrobial Agents II. Immunological and Clinical Aspects. Current Drug Targets, 2012, 13, 1131-1137.	1.0	10
40	Structure-Activity Analysis of the Dermcidin-derived Peptide DCD-1L, an Anionic Antimicrobial Peptide Present in Human Sweat. Journal of Biological Chemistry, 2012, 287, 8434-8443.	1.6	85
41	Bacterial Cell Wall Compounds as Promising Targets of Antimicrobial Agents I. Antimicrobial Peptides and Lipopolyamines. Current Drug Targets, 2012, 13, 1121-1130.	1.0	62
42	Morphology, size distribution, and aggregate structure of lipopolysaccharide and lipid A dispersions from enterobacterial origin. Innate Immunity, 2011, 17, 427-438.	1.1	54
43	Biophysical Mechanisms of Endotoxin Neutralization by Cationic Amphiphilic Peptides. Biophysical Journal, 2011, 100, 2652-2661.	0.2	111
44	Peptide-based treatment of sepsis. Applied Microbiology and Biotechnology, 2011, 90, 799-808.	1.7	41
45	Multiple Peptide Resistance Factor (MprF)-mediated Resistance of Staphylococcus aureus against Antimicrobial Peptides Coincides with a Modulated Peptide Interaction with Artificial Membranes Comprising Lysyl-Phosphatidylglycerol. Journal of Biological Chemistry, 2011, 286, 18692-18700.	1.6	84
46	Impact of the glycostructure of amphiphilic membrane components on the function of the outer membrane of Gram-negative bacteria as a matrix for incorporated channels and a target for antimicrobial peptides or proteins. European Journal of Cell Biology, 2010, 89, 11-23.	1.6	37
47	Molecular basis for endotoxin neutralization by amphipathic peptides derived from the Î±-helical cationic core-region of NK-lysin. Biophysical Chemistry, 2010, 150, 80-87.	1.5	31
48	New Antiseptic Peptides To Protect against Endotoxin-Mediated Shock. Antimicrobial Agents and Chemotherapy, 2010, 54, 3817-3824.	1.4	111
49	Quantitative determination of ion distributions in bacterial lipopolysaccharide membranes by grazing-incidence X-ray fluorescence. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9147-9151.	3.3	112
50	Effect of Matrix Elasticity on the Maintenance of the Chondrogenic Phenotype. Tissue Engineering - Part A, 2010, 16, 1281-1290.	1.6	109
51	Physicochemical and Biological Characterization of Anti-Endotoxin Peptides and Their Influence on Lipid Properties. Protein and Peptide Letters, 2010, 17, 1328-1333.	0.4	10
52	Dermcidin-Derived Peptides Show a Different Mode of Action than the Cathelicidin LL-37 against Staphylococcus aureus. Antimicrobial Agents and Chemotherapy, 2009, 53, 2499-2509.	1.4	61
53	Membrane activity of a Câ€reactive protein. FEBS Letters, 2009, 583, 1001-1005.	1.3	6
54	Hydramacin-1, Structure and Antibacterial Activity of a Protein from the Basal Metazoan Hydra. Journal of Biological Chemistry, 2009, 284, 1896-1905.	1.6	107

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55	Structural polymorphism of hydrated ether-linked dimyristyl maltoside and melibioside. Chemistry and Physics of Lipids, 2008, 151, 18-29.	1.5	9
56	Surface Acoustic Wave Biosensor as a Tool to Study the Interaction of Antimicrobial Peptides with Phospholipid and Lipopolysaccharide Model Membranes. Langmuir, 2008, 24, 9148-9153.	1.6	54
57	Physicochemical and Biological Analysis of Synthetic Bacterial Lipopeptides. Journal of Biological Chemistry, 2007, 282, 11030-11037.	1.6	48
58	The physicochemistry of endotoxins in relation to bioactivity. International Journal of Medical Microbiology, 2007, 297, 341-352.	1.5	98
59	Thermodynamic Analysis of the Lipopolysaccharide-Dependent Resistance of Gram-Negative Bacteria against Polymyxin B. Biophysical Journal, 2007, 92, 2796-2805.	0.2	54
60	Structural preferences of dioleoyl glycolipids with mono- and disaccharide head groups. Chemistry and Physics of Lipids, 2007, 149, 52-58.	1.5	10
61	Sacrificial Bonds and Hidden Length: Unraveling Molecular Mesostructures in Tough Materials. Biophysical Journal, 2006, 90, 1411-1418.	0.2	273
62	The mode of action of the lantibiotic lacticin 3147 - a complex mechanism involving specific interaction of two peptides and the cell wall precursor lipid II. Molecular Microbiology, 2006, 61, 285-296.	1.2	202
63	Mechanisms of endotoxin neutralization by synthetic cationic compounds. Journal of Endotoxin Research, 2006, 12, 261-277.	2.5	48
64	Localization of the Lipopolysaccharide-binding Protein in Phospholipid Membranes by Atomic Force Microscopy. Journal of Biological Chemistry, 2006, 281, 2757-2763.	1.6	26
65	Probing the Properties of Lipopolysaccharide Monolayers and Their Interaction with the Antimicrobial Peptide Polymyxin B by Atomic Force Microscopy. Langmuir, 2005, 21, 6970-6978.	1.6	37
66	Sacrificial Bonds in Polymer Brushes from Rat Tail Tendon Functioning as Nanoscale Velcro. Biophysical Journal, 2005, 89, 536-542.	0.2	21
67	Giant Bent-Core Mesogens in the Thread Forming Process of Marine Mussels. Biomacromolecules, 2004, 5, 1351-1355.	2.6	57
68	Correlation of AFM and SFA Measurements Concerning the Stability of Supported Lipid Bilayers. Biophysical Journal, 2004, 86, 870-879.	0.2	68
69	Inner Field Compensation as a Tool for the Characterization of Asymmetric Membranes and Peptide-Membrane Interactions. Biophysical Journal, 2004, 86, 913-922.	0.2	23
70	Force Spectroscopy of Collagen Fibers to Investigate Their Mechanical Properties and Structural Organization. Biophysical Journal, 2004, 86, 3186-3193.	0.2	111
71	Investigations into the polymorphism of rat tail tendon fibrils using atomic force microscopy. Biochemical and Biophysical Research Communications, 2003, 303, 508-513.	1.0	38
72	Evidence that Collagen Fibrils in Tendons Are Inhomogeneously Structured in a Tubelike Manner. Biophysical Journal, 2003, 84, 2593-2598.	0.2	109

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73	Towards antibacterial strategies: studies on the mechanisms of interaction between antibacterial peptides and model membranes. Journal of Endotoxin Research, 2003, 9, 67-84.	2.5	34
74	Surfactant Protein A Inhibits Lipopolysaccharide-Induced Immune Cell Activation by Preventing the Interaction of Lipopolysaccharide with Lipopolysaccharide-Binding Protein. American Journal of Respiratory Cell and Molecular Biology, 2002, 27, 353-360.	1.4	55
75	Pore Formation and Function of Phosphoporin PhoE of Escherichia coli Are Determined by the Core Sugar Moiety of Lipopolysaccharide. Journal of Biological Chemistry, 2002, 277, 34247-34253.	1.6	26
76	Innate recognition of bacteria: engagement of multiple receptors. Critical Reviews in Immunology, 2002, 22, 251-68.	1.0	16
77	Interaction of CAP18-Derived Peptides with Membranes Made from Endotoxins or Phospholipids. Biophysical Journal, 2001, 80, 2935-2945.	0.2	62
78	Dual Role of Lipopolysaccharide (LPS)-Binding Protein in Neutralization of LPS and Enhancement of LPS-Induced Activation of Mononuclear Cells. Infection and Immunity, 2001, 69, 6942-6950.	1.0	187
79	Lipopolysaccharide-binding protein-mediated interaction of lipid A from different origin with phospholipid membranes. Physical Chemistry Chemical Physics, 2000, 2, 4521-4528.	1.3	46