

# Klaus Brandenburg

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/11807868/publications.pdf>

Version: 2024-02-01

184  
papers

8,383  
citations

29994

54  
h-index

62479

80  
g-index

190  
all docs

190  
docs citations

190  
times ranked

7358  
citing authors

#	ARTICLE	IF	CITATIONS
1	Antimicrobial Peptides and Their Therapeutic Potential for Bacterial Skin Infections and Wounds. <i>Frontiers in Pharmacology</i> , 2018, 9, 281.	1.6	307
2	Biological activities of lipopolysaccharides are determined by the shape of their lipid A portion. <i>FEBS Journal</i> , 2000, 267, 2008-2013.	0.2	279
3	Interaction of quorum signals with outer membrane lipids: insights into prokaryotic membrane vesicle formation. <i>Molecular Microbiology</i> , 2008, 69, 491-502.	1.2	219
4	Intrinsic conformation of lipid A is responsible for agonistic and antagonistic activity. <i>FEBS Journal</i> , 2000, 267, 3032-3039.	0.2	164
5	Influence of the supramolecular structure of free lipid A on its biological activity. <i>FEBS Journal</i> , 1993, 218, 555-563.	0.2	160
6	The Lipopolysaccharide Core of <i>Brucella abortus</i> Acts as a Shield Against Innate Immunity Recognition. <i>PLoS Pathogens</i> , 2012, 8, e1002675.	2.1	140
7	The membrane-activity of Ibuprofen, Diclofenac, and Naproxen: A physico-chemical study with lecithin phospholipids. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2009, 1788, 1296-1303.	1.4	136
8	Combinational clustering of receptors following stimulation by bacterial products determines lipopolysaccharide responses. <i>Biochemical Journal</i> , 2004, 381, 527-536.	1.7	131
9	New Insights Into Endotoxin-Induced Activation of Macrophages: Involvement of a K <sup>+</sup> Channel in Transmembrane Signaling. <i>Journal of Immunology</i> , 2001, 166, 1009-1015.	0.4	129
10	Biophysical Characterization of Lipopolysaccharide and Lipid A Inactivation by Lactoferrin. <i>Biological Chemistry</i> , 2001, 382, 1215-25.	1.2	122
11	Lipopolysaccharide-binding protein mediates CD14-independent intercalation of lipopolysaccharide into phospholipid membranes. <i>FEBS Letters</i> , 1996, 399, 267-271.	1.3	116
12	Quantitative determination of ion distributions in bacterial lipopolysaccharide membranes by grazing-incidence X-ray fluorescence. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 9147-9151.	3.3	112
13	Endotoxins: Relationships between Structure, Function, and Activity. <i>Current Topics in Medicinal Chemistry</i> , 2004, 4, 1127-1146.	1.0	111
14	New Antiseptic Peptides To Protect against Endotoxin-Mediated Shock. <i>Antimicrobial Agents and Chemotherapy</i> , 2010, 54, 3817-3824.	1.4	111
15	Biophysical Mechanisms of Endotoxin Neutralization by Cationic Amphiphilic Peptides. <i>Biophysical Journal</i> , 2011, 100, 2652-2661.	0.2	111
16	Phase behavior, supramolecular structure, and molecular conformation of lipopolysaccharide. <i>Immunobiology</i> , 1993, 187, 191-211.	0.8	110
17	Physical aspects of structure and function of membranes made from lipopolysaccharides and free lipid A. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1984, 775, 225-238.	1.4	103
18	Enhancement of endotoxin neutralization by coupling of a C12-alkyl chain to a lactoferricin-derived peptide. <i>Biochemical Journal</i> , 2005, 385, 135-143.	1.7	101

#	ARTICLE	IF	CITATIONS
19	Biophysical Characterization of Endotoxin Inactivation by NK-2, an Antimicrobial Peptide Derived from Mammalian NK-Lysin. <i>Antimicrobial Agents and Chemotherapy</i> , 2004, 48, 1593-1599.	1.4	100
20	Investigation into the fluidity of lipopolysaccharide and free lipid A membrane systems by Fourier-transform infrared spectroscopy and differential scanning calorimetry. <i>FEBS Journal</i> , 1990, 191, 229-236.	0.2	98
21	The physicochemistry of endotoxins in relation to bioactivity. <i>International Journal of Medical Microbiology</i> , 2007, 297, 341-352.	1.5	98
22	Antimicrobial peptides and the enteric mucus layer act in concert to protect the intestinal mucosa. <i>Gut Microbes</i> , 2014, 5, 761-765.	4.3	94
23	Conformational studies of synthetic lipid A analogues and partial structures by infrared spectroscopy. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1997, 1329, 183-201.	1.4	91
24	The generalized endotoxic principle. <i>European Journal of Immunology</i> , 2003, 33, 1586-1592.	1.6	87
25	The Lipopolysaccharide of <i>Brucella abortus</i> BvrS/BvrR Mutants Contains Lipid A Modifications and Has Higher Affinity for Bactericidal Cationic Peptides. <i>Journal of Bacteriology</i> , 2005, 187, 5631-5639.	1.0	84
26	Structural Requirements of the <i>Pseudomonas</i> Quinolone Signal for Membrane Vesicle Stimulation. <i>Journal of Bacteriology</i> , 2009, 191, 3411-3414.	1.0	84
27	Physicochemical properties of bacterial glycopolymers in relation to bioactivity. <i>Carbohydrate Research</i> , 2003, 338, 2477-2489.	1.1	83
28	Divalent cations affect chain mobility and aggregate structure of lipopolysaccharide from <i>Salmonella minnesota</i> reflected in a decrease of its biological activity. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2005, 1715, 122-131.	1.4	81
29	Preclinical Investigations Reveal the Broad-Spectrum Neutralizing Activity of Peptide Pep19-2.5 on Bacterial Pathogenicity Factors. <i>Antimicrobial Agents and Chemotherapy</i> , 2013, 57, 1480-1487.	1.4	78
30	Endotoxin-like properties of a rhamnolipid exotoxin from <i>Burkholderia (Pseudomonas) plantarii</i> : immune cell stimulation and biophysical characterization. <i>Biological Chemistry</i> , 2006, 387, 301-10.	1.2	77
31	Non-lamellar Structure and Negative Charges of Lipopolysaccharides Required for Efficient Folding of Outer Membrane Protein PhoE of <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 1999, 274, 5114-5119.	1.6	75
32	A New Class of Synthetic Peptide Inhibitors Blocks Attachment and Entry of Human Pathogenic Viruses. <i>Journal of Infectious Diseases</i> , 2012, 205, 1654-1664.	1.9	75
33	Structural rearrangement of model membranes by the peptide antibiotic NK-2. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2005, 1669, 125-134.	1.4	74
34	Structural Polymorphisms of Rough Mutant Lipopolysaccharides Rd to Ra from <i>Salmonella minnesota</i> . <i>Journal of Structural Biology</i> , 1993, 110, 232-243.	1.3	72
35	Lipopolysaccharide regions involved in the activation of <i>Escherichia coli</i> outer membrane protease OmpT. <i>FEBS Journal</i> , 2002, 269, 1746-1752.	0.2	72
36	Rationale for the Design of Shortened Derivatives of the NK-lysin-derived Antimicrobial Peptide NK-2 with Improved Activity against Gram-negative Pathogens. <i>Journal of Biological Chemistry</i> , 2007, 282, 14719-14728.	1.6	72

#	ARTICLE	IF	CITATIONS
37	Antimicrobial peptides and their potential application in inflammation and sepsis. <i>Critical Care</i> , 2012, 16, 207.	2.5	71
38	Bacterial Endotoxin:Molecular Relationships Between Structure and Activity. <i>Infectious Disease Clinics of North America</i> , 1991, 5, 753-779.	1.9	69
39	Peptides with dual mode of action: Killing bacteria and preventing endotoxin-induced sepsis. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016, 1858, 971-979.	1.4	67
40	Biophysical characterization of the interaction of high-density lipoprotein (HDL) with endotoxins. <i>FEBS Journal</i> , 2002, 269, 5972-5981.	0.2	66
41	Phospholipids Inhibit Lipopolysaccharide (LPS)-Induced Cell Activation: A Role for LPS-Binding Protein. <i>Journal of Immunology</i> , 2005, 174, 1091-1096.	0.4	66
42	Temperature Dependence of the Binding of Endotoxins to the Polycationic Peptides Polymyxin B and Its Nonapeptide. <i>Biophysical Journal</i> , 2005, 88, 1845-1858.	0.2	65
43	Polymyxin B induces transient permeability fluctuations in asymmetric planar lipopolysaccharide/phospholipid bilayers. <i>Biochemistry</i> , 1992, 31, 631-638.	1.2	64
44	Bacterial Cell Wall Compounds as Promising Targets of Antimicrobial Agents I. Antimicrobial Peptides and Lipopolyamines. <i>Current Drug Targets</i> , 2012, 13, 1121-1130.	1.0	62
45	Cyclic antimicrobial peptides based on <i>Limulus</i> anti-lipopolysaccharide factor for neutralization of lipopolysaccharide. <i>Biochemical Pharmacology</i> , 2004, 68, 1297-1307.	2.0	61
46	Mechanism of interaction of optimized <i>Limulus</i> -derived cyclic peptides with endotoxins: thermodynamic, biophysical and microbiological analysis. <i>Biochemical Journal</i> , 2007, 406, 297-307.	1.7	61
47	Mechanisms of Action of Bactericidal/Permeability-Increasing Protein BPI on Reconstituted Outer Membranes of Gram-Negative Bacteria. <i>Biochemistry</i> , 1997, 36, 10311-10319.	1.2	60
48	Mechanisms of Action of the Bactericidal/Permeability-Increasing Protein BPI on Endotoxin and Phospholipid Monolayers and Aggregates. <i>Biochemistry</i> , 1997, 36, 10301-10310.	1.2	60
49	Infrared spectroscopy of glycolipids. <i>Chemistry and Physics of Lipids</i> , 1998, 96, 23-40.	1.5	60
50	Supramolecular structure of lipopolysaccharide and free lipid A under physiological conditions as determined by synchrotron small-angle X-ray diffraction. <i>FEBS Journal</i> , 1989, 186, 325-332.	0.2	59
51	Synthetic antimicrobial and LPS-neutralising peptides suppress inflammatory and immune responses in skin cells and promote keratinocyte migration. <i>Scientific Reports</i> , 2016, 6, 31577.	1.6	59
52	Biophysical characterisation of lysozyme binding to LPS Re and lipid A. <i>FEBS Journal</i> , 1998, 258, 686-695.	0.2	56
53	Effects of Specific versus Nonspecific Ionic Interactions on the Structure and Lateral Organization of Lipopolysaccharides. <i>Biophysical Journal</i> , 2011, 100, 2169-2177.	0.2	56
54	Chemical Synthesis of a Glycolipid Library by a Solid-Phase Strategy Allows Elucidation of the Structural Specificity of Immunostimulation by Rhamnolipids. <i>Chemistry - A European Journal</i> , 2006, 12, 7116-7124.	1.7	55

#	ARTICLE	IF	CITATIONS
55	Thermodynamic Analysis of the Lipopolysaccharide-Dependent Resistance of Gram-Negative Bacteria against Polymyxin B. <i>Biophysical Journal</i> , 2007, 92, 2796-2805.	0.2	54
56	Morphology, size distribution, and aggregate structure of lipopolysaccharide and lipid A dispersions from enterobacterial origin. <i>Innate Immunity</i> , 2011, 17, 427-438.	1.1	54
57	Investigations into the polymorphism of lipid A from lipopolysaccharides of <i>Escherichia coli</i> and <i>Salmonella minnesota</i> by Fourier-transform infrared spectroscopy. <i>FEBS Journal</i> , 1987, 164, 159-169.	0.2	52
58	Structural and physicochemical requirements of endotoxins for the activation of arachidonic acid metabolism in mouse peritoneal macrophages in vitro. <i>FEBS Journal</i> , 1989, 179, 11-16.	0.2	52
59	Interaction of hemoglobin with enterobacterial lipopolysaccharide and lipid A. <i>FEBS Journal</i> , 2001, 268, 4233-4242.	0.2	50
60	Physicochemical characterization of the endotoxins from <i>Coxiella burnetii</i> strain Priscilla in relation to their bioactivities. <i>BMC Biochemistry</i> , 2004, 5, 1.	4.4	50
61	Structural Features Governing the Activity of Lactoferricin-Derived Peptides That Act in Synergy with Antibiotics against <i>Pseudomonas aeruginosa</i> In Vitro and In Vivo. <i>Antimicrobial Agents and Chemotherapy</i> , 2011, 55, 218-228.	1.4	50
62	Physicochemical characteristics of triacyl lipid A partial structure OM-174 in relation to biological activity. <i>FEBS Journal</i> , 2000, 267, 3370-3377.	0.2	49
63	Lipoproteins/peptides are sepsis-inducing toxins from bacteria that can be neutralized by synthetic anti-endotoxin peptides. <i>Scientific Reports</i> , 2015, 5, 14292.	1.6	49
64	Bacterial lipopolysaccharides form physically cross-linked, two-dimensional gels in the presence of divalent cations. <i>Soft Matter</i> , 2015, 11, 6037-6044.	1.2	49
65	Mechanisms of endotoxin neutralization by synthetic cationic compounds. <i>Journal of Endotoxin Research</i> , 2006, 12, 261-277.	2.5	48
66	Physicochemical and Biological Analysis of Synthetic Bacterial Lipopeptides. <i>Journal of Biological Chemistry</i> , 2007, 282, 11030-11037.	1.6	48
67	Inhibition of Lipopolysaccharide- and Lipoprotein-Induced Inflammation by Antitoxin Peptide Pep19-2.5. <i>Frontiers in Immunology</i> , 2018, 9, 1704.	2.2	48
68	Synthetic anti-endotoxin peptides inhibit cytoplasmic LPS-mediated responses. <i>Biochemical Pharmacology</i> , 2017, 140, 64-72.	2.0	47
69	Lipopolysaccharide-binding protein-mediated interaction of lipid A from different origin with phospholipid membranes. <i>Physical Chemistry Chemical Physics</i> , 2000, 2, 4521-4528.	1.3	46
70	Molecular basis for membrane selectivity of NK-2, a potent peptide antibiotic derived from NK-lysin. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2003, 1612, 164-171.	1.4	46
71	Biophysical characterization of the interaction of <i>Limulus polyphemus</i> endotoxin neutralizing protein with lipopolysaccharide. <i>FEBS Journal</i> , 2004, 271, 2037-2046.	0.2	45
72	Biophysical study of the non-steroidal anti-inflammatory drugs (NSAID) ibuprofen, naproxen and diclofenac with phosphatidylserine bilayer membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2016, 1858, 2123-2131.	1.4	45

#	ARTICLE	IF	CITATIONS
73	<i>Yersinia pseudotuberculosis</i> and <i>Yersinia pestis</i> show increased outer membrane permeability to hydrophobic agents which correlates with lipopolysaccharide acyl-chain fluidity. <i>Microbiology (United Kingdom)</i> , 1998, 144, 1517-1526.	0.7	43
74	The Acyl Group as the Central Element of the Structural Organization of Antimicrobial Lipopeptide. <i>Journal of the American Chemical Society</i> , 2007, 129, 1022-1023.	6.6	43
75	Physical mechanisms of bacterial survival revealed by combined grazing-incidence X-ray scattering and Monte Carlo simulation. <i>Comptes Rendus Chimie</i> , 2009, 12, 209-217.	0.2	42
76	Peptide-based treatment of sepsis. <i>Applied Microbiology and Biotechnology</i> , 2011, 90, 799-808.	1.7	41
77	The anti-inflammatory effect of the synthetic antimicrobial peptide 19-2.5 in a murine sepsis model: a prospective randomized study. <i>Critical Care</i> , 2013, 17, R3.	2.5	41
78	Influence of the lipid matrix on incorporation and function of LPS-free porin from <i>Paracoccus denitrificans</i> . <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1994, 1190, 231-242.	1.4	40
79	Comparative analysis of selected methods for the assessment of antimicrobial and membrane-permeabilizing activity: a case study for lactoferricin derived peptides. <i>BMC Microbiology</i> , 2008, 8, 196.	1.3	40
80	Crucial roles of charged saccharide moieties in survival of gram negative bacteria against protamine revealed by combination of grazing incidence x-ray structural characterizations and Monte Carlo simulations. <i>Physical Review E</i> , 2010, 81, 041901.	0.8	39
81	The Synthetic Antimicrobial Peptide 19-2.5 Interacts with Heparanase and Heparan Sulfate in Murine and Human Sepsis. <i>PLoS ONE</i> , 2015, 10, e0143583.	1.1	39
82	<i>Bartonella quintana</i> lipopolysaccharide (LPS): structure and characteristics of a potent TLR4 antagonist for in-vitro and in-vivo applications. <i>Scientific Reports</i> , 2016, 6, 34221.	1.6	39
83	Reconstitution of the lipid matrix of the outer membrane of Gram-negative bacteria as asymmetric planar bilayer. <i>Journal of Membrane Biology</i> , 1989, 109, 95-103.	1.0	38
84	The Expression of Endotoxic Activity in the Limulus Test as Compared to Cytokine Production in Immune Cells. <i>Current Medicinal Chemistry</i> , 2009, 16, 2653-2660.	1.2	37
85	Physicochemical Interaction Study of Non-Steroidal Anti-Inflammatory Drugs with Dimyristoylphosphatidylethanolamine Liposomes. <i>Letters in Drug Design and Discovery</i> , 2010, 7, 50-56.	0.4	37
86	Physico-chemical analysis of lipid A fractions of lipopolysaccharide from <i>Erwinia carotovora</i> in relation to bioactivity. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2001, 1510, 185-197.	1.4	36
87	Biophysical Characterization of Triacyl Monosaccharide Lipid A Partial Structures in Relation to Bioactivity. <i>Biophysical Journal</i> , 2002, 83, 322-333.	0.2	36
88	Biophysical characterization of synthetic rhamnolipids. <i>FEBS Journal</i> , 2006, 273, 5101-5112.	2.2	36
89	Self-Organisation, Thermotropic and Lyotropic Properties of Glycolipids Related to their Biological Implications. <i>The Open Biochemistry Journal</i> , 2015, 9, 49-72.	0.3	35
90	Interaction of Lipopolysaccharide and Phospholipid in Mixed Membranes: Solid-State 31P-NMR Spectroscopic and Microscopic Investigations. <i>Biophysical Journal</i> , 2008, 95, 1226-1238.	0.2	34

#	ARTICLE	IF	CITATIONS
91	Interactions of an anionic antimicrobial peptide with <i>Staphylococcus aureus</i> membranes. <i>Biochemical and Biophysical Research Communications</i> , 2006, 347, 1006-1010.	1.0	33
92	Physical interactions of fish protamine and antiseptic peptide drugs with bacterial membranes revealed by combination of specular x-ray reflectivity and grazing-incidence x-ray fluorescence. <i>Physical Review E</i> , 2013, 88, 012705.	0.8	33
93	Mechanical properties of interacting lipopolysaccharide membranes from bacteria mutants studied by specular and off-specular neutron scattering. <i>Physical Review E</i> , 2009, 80, 041929.	0.8	32
94	Mechanical diagnosis of human erythrocytes by ultra-high speed manipulation unraveled critical time window for global cytoskeletal remodeling. <i>Scientific Reports</i> , 2017, 7, 43134.	1.6	32
95	Investigation into the interaction of recombinant human serum albumin with Re-lipopolysaccharide and lipid A. <i>Journal of Endotoxin Research</i> , 2002, 8, 115-126.	2.5	32
96	Molecular basis for endotoxin neutralization by amphipathic peptides derived from the $\alpha$ -helical cationic core-region of NK-lysin. <i>Biophysical Chemistry</i> , 2010, 150, 80-87.	1.5	31
97	LPS-neutralizing peptides reduce outer membrane vesicle-induced inflammatory responses. <i>Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids</i> , 2019, 1864, 1503-1513.	1.2	31
98	Peptide 19-2.5 Inhibits Heparan Sulfate-Triggered Inflammation in Murine Cardiomyocytes Stimulated with Human Sepsis Serum. <i>PLoS ONE</i> , 2015, 10, e0127584.	1.1	31
99	Domain V of m-calpain shows the potential to form an oblique-orientated $\alpha$ -helix, which may modulate the enzyme's activity via interactions with anionic lipid. <i>FEBS Journal</i> , 2002, 269, 5414-5422.	0.2	30
100	Investigations into the Membrane Interactions of m-Calpain Domain V. <i>Biophysical Journal</i> , 2005, 88, 3008-3017.	0.2	30
101	Temperature-Induced Changes in the Lipopolysaccharide of <i>Yersinia pestis</i> Affect Plasminogen Activation by the Pla Surface Protease. <i>Infection and Immunity</i> , 2010, 78, 2644-2652.	1.0	30
102	The synthetic antimicrobial peptide 19-2.5 attenuates septic cardiomyopathy and prevents down-regulation of SERCA2 in polymicrobial sepsis. <i>Scientific Reports</i> , 2016, 6, 37277.	1.6	29
103	Investigations into the mechanisms used by the C-terminal anchors of <i>Escherichia coli</i> penicillin-binding proteins 4, 5, 6 and 6b for membrane interaction. <i>FEBS Journal</i> , 2002, 269, 5821-5829.	0.2	28
104	Biophysical analysis of the interaction of granulysin-derived peptides with enterobacterial endotoxins. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2007, 1768, 2421-2431.	1.4	28
105	Current Understanding of Polymyxin B Applications in Bacteraemia/ Sepsis Therapy Prevention: Clinical, Pharmaceutical, Structural and Mechanistic Aspects. <i>Anti-Infective Agents in Medicinal Chemistry</i> , 2009, 8, 367-385.	0.6	28
106	Hypothermia enhances the biological activity of lipopolysaccharide by altering its fluidity state. <i>FEBS Journal</i> , 1998, 256, 325-333.	0.2	27
107	Physicochemical characterization of carboxymethyl lipid A derivatives in relation to biological activity. <i>FEBS Journal</i> , 2005, 272, 327-340.	2.2	27
108	Lack of new anti-infective agents: Passing into the pre-antibiotic age?. <i>World Journal of Biological Chemistry</i> , 2015, 6, 71.	1.7	27

#	ARTICLE	IF	CITATIONS
109	A new class of synthetic anti-lipopolysaccharide peptides inhibits influenza A virus replication by blocking cellular attachment. <i>Antiviral Research</i> , 2014, 104, 23-33.	1.9	26
110	Antimicrobial endotoxin-neutralizing peptides promote keratinocyte migration <i>via</i> P2X7 receptor activation and accelerate wound healing <i>in vivo</i> . <i>British Journal of Pharmacology</i> , 2018, 175, 3581-3593.	2.7	26
111	Cross-linked Hemoglobin Converts Endotoxically Inactive Pentaacyl Endotoxins into a Physiologically Active Conformation. <i>Journal of Biological Chemistry</i> , 2003, 278, 47660-47669.	1.6	25
112	Intestinal mucus affinity and biological activity of an orally administered antibacterial and anti-inflammatory peptide. <i>Gut</i> , 2015, 64, 222-232.	6.1	25
113	Novel integrated and portable endotoxin detection system based on an electrochemical biosensor. <i>Analyst</i> , 2015, 140, 654-660.	1.7	25
114	Cathelicidin and PMB neutralize endotoxins by multifactorial mechanisms including LPS interaction and targeting of host cell membranes. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	3.3	25
115	Orientation Measurements on Ordered Multibilayers of Phospholipids and Sphingolipids from Synthetic and Natural Origin by ATR Fourier Transform Infrared Spectroscopy. <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 1986, 41, 453-467.	0.6	24
116	Biologically active lipid A antagonist embedded in a multilayered polyelectrolyte architecture. <i>Biomaterials</i> , 2006, 27, 1771-1777.	5.7	24
117	Electrostatic Potential Barrier in Asymmetric Planar Lipopolysaccharide/ Phospholipid Bilayers Probed with the Valinomycin-K <sup>+</sup> Complex. <i>Zeitschrift Fur Naturforschung - Section C Journal of Biosciences</i> , 1992, 47, 757-761.	0.6	23
118	Innate Recognition of Bacteria: Engagement of Multiple Receptors. <i>Critical Reviews in Immunology</i> , 2002, 22, 18.	1.0	23
119	Investigations into the ability of an oblique $\alpha$ -helical template to provide the basis for design of an antimicrobial anionic amphiphilic peptide. <i>FEBS Journal</i> , 2006, 273, 3792-3803.	2.2	23
120	Hemoglobin Enhances the Biological Activity of Synthetic and Natural Bacterial (Endotoxic) Virulence Factors: A General Principle. <i>Medicinal Chemistry</i> , 2008, 4, 520-525.	0.7	22
121	MARCKS as a Negative Regulator of Lipopolysaccharide Signaling. <i>Journal of Immunology</i> , 2012, 188, 3893-3902.	0.4	22
122	Physicochemical characterization and biological activity of a glycoacylglycerolipid from <i>Mycoplasma fermentans</i> . <i>FEBS Journal</i> , 2003, 270, 3271-3279.	0.2	20
123	Pore formation by complement in the outer membrane of Gram-negative bacteria studied with asymmetric planar lipopolysaccharide/phospholipid bilayers. <i>Journal of Membrane Biology</i> , 1990, 118, 161-170.	1.0	19
124	Biophysical Analysis of Lipopolysaccharide Formulations for an Understanding of the Low Endotoxin Recovery (LER) Phenomenon. <i>International Journal of Molecular Sciences</i> , 2017, 18, 2737.	1.8	18
125	Novel Synthetic, Host-defense Peptide Protects Against Organ Injury/Dysfunction in a Rat Model of Severe Hemorrhagic Shock. <i>Annals of Surgery</i> , 2018, 268, 348-356.	2.1	18
126	Physicochemical characterization and biological activity of lipooligosaccharides and lipid A from <i>Neisseria meningitidis</i> . <i>Journal of Endotoxin Research</i> , 2007, 13, 343-357.	2.5	17



#	ARTICLE	IF	CITATIONS
127	Coupling killing to neutralization: combined therapy with ceftriaxone/Pep19-2.5 counteracts sepsis in rabbits. <i>Experimental and Molecular Medicine</i> , 2017, 49, e345-e345.	3.2	17
128	Investigation into the interaction of the bacterial protease OmpT with outer membrane lipids and biological activity of OmpT:lipopolysaccharide complexes. <i>European Biophysics Journal</i> , 2005, 34, 28-41.	1.2	16
129	Innate recognition of bacteria: engagement of multiple receptors. <i>Critical Reviews in Immunology</i> , 2002, 22, 251-68.	1.0	16
130	Biophysical Characterization of the Interaction of Endotoxins with Hemoglobins. <i>Medicinal Chemistry</i> , 2007, 3, 13-20.	0.7	15
131	Physico-chemical and biophysical study of the interaction of hexa- and heptaacyl lipid A from <i>Erwinia carotovora</i> with magainin 2-derived antimicrobial peptides. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2008, 1778, 2051-2057.	1.4	15
132	Structural investigations into the interaction of hemoglobin and part structures with bacterial endotoxins. <i>Innate Immunity</i> , 2008, 14, 39-49.	1.1	15
133	Pulmonary surfactant protein A-induced changes in the molecular conformation of bacterial deep-rough LPS lead to reduced activity on human macrophages. <i>Innate Immunity</i> , 2014, 20, 787-798.	1.1	15
134	Interaction between the movement protein of barley yellow dwarf virus and the cell nuclear envelope: Role of a putative amphiphilic $\alpha$ -helix at the N-terminus of the movement protein. <i>Biopolymers</i> , 2005, 79, 86-96.	1.2	13
135	interaction mechanisms with bacterial model membranes. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2014, 1838, 2728-2738.	1.4	13
136	A comment on the preparation of liposomes from and on the $\Delta$ acyl chain melting behaviour of rough mutant lipopolysaccharide. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 1991, 1069, 1-4.	1.4	12
137	Antibacterial action of synthetic antilipopolysaccharide peptides (SALP) involves neutralization of both membrane-bound and free toxins. <i>FEBS Journal</i> , 2019, 286, 1576-1593.	2.2	12
138	Fatty Acid Conjugation Leads to Length-Dependent Antimicrobial Activity of a Synthetic Antibacterial Peptide (Pep19-4LF). <i>Antibiotics</i> , 2020, 9, 844.	1.5	12
139	Conformation and Supramolecular Structure of Lipid A. <i>Advances in Experimental Medicine and Biology</i> , 2009, 667, 25-38.	0.8	12
140	Mechanism of Hb $\beta$ -35-induced an increase in the activation of the human immune system by endotoxins. <i>Innate Immunity</i> , 2015, 21, 305-313.	1.1	11
141	Antimicrobial peptides Pep19-2.5 and Pep19-4LF inhibit <i>Streptococcus mutans</i> growth and biofilm formation. <i>Microbial Pathogenesis</i> , 2019, 133, 103546.	1.3	11
142	Synthesis and mesomorphic properties of glycosyl dialkyl- and diacyl-glycerols bearing saturated, unsaturated and methyl branched fatty acid and fatty alcohol chains. <i>Chemistry and Physics of Lipids</i> , 2005, 135, 1-14.	1.5	10
143	Synthesis and mesomorphic properties of glycosyl dialkyl- and diacyl-glycerols bearing saturated, unsaturated and methyl branched fatty acid and fatty alcohol chains. <i>Chemistry and Physics of Lipids</i> , 2005, 135, 15-26.	1.5	10
144	Structural preferences of dioleoyl glycolipids with mono- and disaccharide head groups. <i>Chemistry and Physics of Lipids</i> , 2007, 149, 52-58.	1.5	10

#	ARTICLE	IF	CITATIONS
145	Bacterial Cell Wall Compounds as Promising Targets of Antimicrobial Agents II. Immunological and Clinical Aspects. <i>Current Drug Targets</i> , 2012, 13, 1131-1137.	1.0	10
146	effects. <i>Biochimica Et Biophysica Acta - Biomembranes</i> , 2014, 1838, 2739-2744.	1.4	10
147	Quantification of the Influence of Endotoxins on the Mechanics of Adult and Neonatal Red Blood Cells. <i>Journal of Physical Chemistry B</i> , 2015, 119, 7837-7845.	1.2	10
148	The synthetic antimicrobial peptide 19-2.5 attenuates mitochondrial dysfunction in cardiomyocytes stimulated with human sepsis serum. <i>Innate Immunity</i> , 2016, 22, 612-619.	1.1	10
149	An update on endotoxin neutralization strategies in Gram-negative bacterial infections. <i>Expert Review of Anti-Infective Therapy</i> , 2021, 19, 495-517.	2.0	10
150	Physicochemical and Biological Characterization of Anti-Endotoxin Peptides and Their Influence on Lipid Properties. <i>Protein and Peptide Letters</i> , 2010, 17, 1328-1333.	0.4	10
151	Structural polymorphism of hydrated ether-linked dimyristyl maltoside and melibioside. <i>Chemistry and Physics of Lipids</i> , 2008, 151, 18-29.	1.5	9
152	Effective Antimicrobial and Anti-Endotoxin Activity of Cationic Peptides Based on Lactoferricin: A Biophysical and Microbiological Study. <i>Anti-Infective Agents in Medicinal Chemistry</i> , 2010, 9, 9-22.	0.6	9
153	Therapeutical Administration of Peptide Pep19-2.5 and Ibuprofen Reduces Inflammation and Prevents Lethal Sepsis. <i>PLoS ONE</i> , 2015, 10, e0133291.	1.1	9
154	Calorimetric investigations of the effect of polymyxin B on different Gram-negative bacteria. <i>Thermochimica Acta</i> , 2007, 458, 34-37.	1.2	8
155	Influence of serum on the immune recognition of a synthetic lipopeptide mimetic of the 19-kDa lipoprotein from <i>Mycobacterium tuberculosis</i> . <i>Innate Immunity</i> , 2010, 16, 213-225.	1.1	8
156	Supramolecular structure of enterobacterial wild-type lipopolysaccharides (LPS), fractions thereof, and their neutralization by Pep19-2.5. <i>Journal of Structural Biology</i> , 2016, 194, 68-77.	1.3	8
157	Peptide drug stability: The anti-inflammatory drugs Pep19-2.5 and Pep19-4LF in cream formulation. <i>European Journal of Pharmaceutical Sciences</i> , 2018, 115, 240-247.	1.9	8
158	Inactivation of Bacteria by $\hat{\text{I}}^3$ -Irradiation to Investigate the Interaction with Antimicrobial Peptides. <i>Biophysical Journal</i> , 2019, 117, 1805-1819.	0.2	8
159	Synthetic Anti-lipopolysaccharide Peptides (SALPs) as Effective Inhibitors of Pathogen-Associated Molecular Patterns (PAMPs). <i>Advances in Experimental Medicine and Biology</i> , 2019, 1117, 111-129.	0.8	8
160	Anti-Infective and Anti-Inflammatory Mode of Action of Peptide 19-2.5. <i>International Journal of Molecular Sciences</i> , 2021, 22, 1465.	1.8	8
161	Biophysical Mechanisms of the Neutralization of Endotoxins by Lipopolyamines. <i>The Open Biochemistry Journal</i> , 2013, 7, 82-93.	0.3	8
162	Specific localisation of ions in bacterial membranes unravels physical mechanism of effective bacteria killing by sanitiser. <i>Scientific Reports</i> , 2020, 10, 12302.	1.6	7

#	ARTICLE	IF	CITATIONS
163	A Synthetic Peptide Designed to Neutralize Lipopolysaccharides Attenuates Metaflammation and Diet-Induced Metabolic Derangements in Mice. <i>Frontiers in Immunology</i> , 2021, 12, 701275.	2.2	7
164	Investigation into the Interaction of the Phosphoprotein PhoE with Outer Membrane Lipids: Physicochemical Characterization and Biological Activity. <i>Medicinal Chemistry</i> , 2005, 1, 537-546.	0.7	6
165	Invited review: Mechanisms of endotoxin neutralization by synthetic cationic compounds. <i>Journal of Endotoxin Research</i> , 2006, 12, 261-277.	2.5	6
166	Characterization of the N-terminal segment used by the barley yellow dwarf virus movement protein to promote interaction with the nuclear membrane of host plant cells. <i>Peptides</i> , 2007, 28, 2091-2097.	1.2	5
167	Structural polymorphism of hydrated monoacylated maltose glycolipids. <i>Chemistry and Physics of Lipids</i> , 2008, 155, 31-37.	1.5	5
168	Interaction of Melittin with Phospholipid- and Lipopolysaccharide- Containing Model Membranes. <i>Anti-Infective Agents in Medicinal Chemistry</i> , 2009, 8, 17-27.	0.6	5
169	Biophysical analysis of the interaction of the serum protein human $\beta_2$ GPI with bacterial lipopolysaccharide. <i>FEBS Open Bio</i> , 2014, 4, 432-440.	1.0	5
170	Encapsulation and release of Aspidasept peptides in polysaccharide formulation for oral application. <i>European Journal of Pharmaceutical Sciences</i> , 2021, 158, 105687.	1.9	5
171	Deuteration can affect the conformational behaviour of amphiphilic $\alpha$ -helical structures. <i>Biophysical Chemistry</i> , 2006, 119, 115-120.	1.5	4
172	Isothermal titration calorimetric investigations of endotoxin binding to macrophages and the inhibition by polymyxin B. <i>Thermochimica Acta</i> , 2004, 415, 63-67.	1.2	3
173	Biophysical investigations into the interactions of endotoxins with bile acids. <i>Innate Immunity</i> , 2012, 18, 307-317.	1.1	3
174	Intrinsic conformation of lipid A is responsible for agonistic and antagonistic activity. , 2000, 267, 3032.		2
175	In Vivo Evaluation of ECP Peptide Analogues for the Treatment of <i>Acinetobacter baumannii</i> Infection. <i>Biomedicines</i> , 2022, 10, 386.	1.4	2
176	Improvement of X-ray powder-diffraction patterns of <i>Salmonella minnesota</i> deep rough mutant bacterial lipopolysaccharide induced by heating plus hydration. <i>Thin Solid Films</i> , 1998, 312, 313-319.	0.8	1
177	Cellular distribution of lipid A and LPS R595 after <i>in vitro</i> application to isolated human monocytes by freeze-fracture replica immunogold-labelling. <i>Innate Immunity</i> , 2013, 19, 588-595.	1.1	1
178	Analysis of cytokine immune response profile in response to inflammatory stimuli in mice with genetic defects in fetal and adult hemoglobin chain expression. <i>Pharmacogenomics Journal</i> , 2018, 18, 546-555.	0.9	1
179	Physicochemical properties of microbial glycopolymers. , 2010, , 759-779.		0
180	Enhancing actions of peptides derived from the $\beta$ -chain of fetal human hemoglobin on the immunostimulant activities of monophosphoryl lipid A. <i>Innate Immunity</i> , 2016, 22, 168-180.	1.1	0

#	ARTICLE	IF	CITATIONS
181	Development of Antimicrobial Peptides Based on Limulus Anti-Lipopolysaccharide Factor (LALF). , 2019 , , 683-706.		0
182	Mass Spectrometric Quantification of the Antimicrobial Peptide Pep19-2.5 with Stable Isotope Labeling and Acidic Hydrolysis. Pharmaceutics, 2021, 13, 1342.	2.0	0
183	Physico-chemistry of Lipopolysaccharides. , 2020 , , 1-18.		0
184	TLR4 Ligands: Single Molecules and Aggregates. Agents and Actions Supplements, 2021 , , 39-56.	0.2	0