Hans J Vogel

List of Publications by Year in descending order

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10389 8396 26,241 362 72 147 citations h-index g-index papers 370 370 370 30430 docs citations times ranked citing authors all docs

#	Article	IF	CITATIONS
1	HMDB: the Human Metabolome Database. Nucleic Acids Research, 2007, 35, D521-D526.	14.5	2,563
2	HMDB: a knowledgebase for the human metabolome. Nucleic Acids Research, 2009, 37, D603-D610.	14.5	1,649
3	The expanding scope of antimicrobial peptide structures and their modes of action. Trends in Biotechnology, 2011, 29, 464-472.	9.3	1,255
4	Diversity of antimicrobial peptides and their mechanisms of action. Biochimica Et Biophysica Acta - Biomembranes, 1999, 1462, 11-28.	2.6	1,143
5	Tryptophan- and arginine-rich antimicrobial peptides: Structures and mechanisms of action. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 1184-1202.	2.6	831
6	Structures and metal-ion-binding properties of the Ca2+-binding helix–loop–helix EF-hand motifs. Biochemical Journal, 2007, 405, 199-221.	3.7	753
7	Structural biology of bacterial iron uptake. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 1781-1804.	2.6	422
8	Tryptophan Fluorescence Quenching by Methionine and Selenomethionine Residues of Calmodulin:Â Orientation of Peptide and Protein Bindingâ€. Biochemistry, 1998, 37, 3187-3195.	2.5	359
9	The Solution Structure of Human Hepcidin, a Peptide Hormone with Antimicrobial Activity That Is Involved in Iron Uptake and Hereditary Hemochromatosis. Journal of Biological Chemistry, 2002, 277, 37597-37603.	3.4	339
10	The Solution Structures of the Human \hat{l}^2 -Defensins Lead to a Better Understanding of the Potent Bactericidal Activity of HBD3 against Staphylococcus aureus. Journal of Biological Chemistry, 2002, 277, 8279-8289.	3.4	320
11	Towards a structure-function analysis of bovine lactoferricin and related tryptophan- and arginine-containing peptides. Biochemistry and Cell Biology, 2002, 80, 49-63.	2.0	310
12	Bacterial ferrous iron transport: the Feo system. FEMS Microbiology Reviews, 2016, 40, 273-298.	8.6	301
13	Siderophore uptake in bacteria and the battle for iron with the host; a bird's eye view. BioMetals, 2010, 23, 601-611.	4.1	294
14	Structure-function relationships of antimicrobial peptides. Biochemistry and Cell Biology, 1998, 76, 235-246.	2.0	287
15	Serum Stabilities of Short Tryptophan- and Arginine-Rich Antimicrobial Peptide Analogs. PLoS ONE, 2010, 5, e12684.	2.5	276
16	Current understanding of fatty acid biosynthesis and the acyl carrier protein. Biochemical Journal, 2010, 430, 1-19.	3.7	275
17	Calmodulin's Flexibility Allows for Promiscuity in Its Interactions with Target Proteins and Peptides. Molecular Biotechnology, 2004, 27, 33-58.	2.4	274
18	Targeting Aquaporin-4 Subcellular Localization to Treat Central Nervous System Edema. Cell, 2020, 181, 784-799.e19.	28.9	271

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19	Low-Dose Aspartame Consumption Differentially Affects Gut Microbiota-Host Metabolic Interactions in the Diet-Induced Obese Rat. PLoS ONE, 2014, 9, e109841.	2.5	240
20	Three-Dimensional Solution Structure of Lactoferricin B, an Antimicrobial Peptide Derived from Bovine Lactoferrinâ€. Biochemistry, 1998, 37, 4288-4298.	2.5	233
21	Calmodulin: a versatile calcium mediator protein. Biochemistry and Cell Biology, 1994, 72, 357-376.	2.0	221
22	Lactoferrin, a bird's eye view. Biochemistry and Cell Biology, 2012, 90, 233-244.	2.0	216
23	Quantitative Metabolomic Profiling of Serum, Plasma, and Urine by ¹ H NMR Spectroscopy Discriminates between Patients with Inflammatory Bowel Disease and Healthy Individuals. Journal of Proteome Research, 2012, 11, 3344-3357.	3.7	200
24	Tryptophan-rich antimicrobial peptides: comparative properties and membrane interactions. Biochemistry and Cell Biology, 2002, 80, 667-677.	2.0	180
25	Diet-induced changes in maternal gut microbiota and metabolomic profiles influence programming of offspring obesity risk in rats. Scientific Reports, 2016, 6, 20683.	3.3	175
26	TonB or not TonB: is that the question?This paper is one of a selection of papers published in a Special Issue entitled CSBMCB 53rd Annual Meeting — Membrane Proteins in Health and Disease, and has undergone the Journal's usual peer review process Biochemistry and Cell Biology, 2011, 89, 87-97.	2.0	174
27	The Membrane-Proximal Tryptophan-Rich Region of the HIV Glycoprotein, gp41, Forms a Well-Defined Helix in Dodecylphosphocholine Micellesâ€,‡. Biochemistry, 2001, 40, 9570-9578.	2.5	168
28	Metabolomics as a Novel Approach for Early Diagnosis of Pediatric Septic Shock and Its Mortality. American Journal of Respiratory and Critical Care Medicine, 2013, 187, 967-976.	5. 6	159
29	Structure of the Antimicrobial Peptide Tritrpticin Bound to Micelles:  A Distinct Membrane-Bound Peptide Fold,. Biochemistry, 1999, 38, 16749-16755.	2.5	147
30	Feasibility of Identifying Pancreatic Cancer Based on Serum Metabolomics. Cancer Epidemiology Biomarkers and Prevention, 2011, 20, 140-147.	2.5	144
31	Solution NMR studies of amphibian antimicrobial peptides: Linking structure to function?. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 1639-1655.	2.6	140
32	Differences in Metabolism between the Biofilm and Planktonic Response to Metal Stress. Journal of Proteome Research, 2011, 10, 3190-3199.	3.7	136
33	Metal ion and drug binding to proteolytic fragments of calmodulin: proteolytic cadmium-113 and proton nuclear magnetic resonance studies. Biochemistry, 1984, 23, 1862-1870.	2.5	135
34	An Inflammatory Arthritis-Associated Metabolite Biomarker Pattern Revealed by ¹ H NMR Spectroscopy. Journal of Proteome Research, 2007, 6, 3456-3464.	3.7	134
35	X-ray Crystallographic Structures of the Escherichia coli Periplasmic Protein FhuD Bound to Hydroxamate-type Siderophores and the Antibiotic Albomycin. Journal of Biological Chemistry, 2002, 277, 13966-13972.	3.4	128
36	Chronic coffee consumption in the diet-induced obese rat: impact on gut microbiota and serum metabolomics. Journal of Nutritional Biochemistry, 2014, 25, 489-495.	4.2	120

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37	The structure of the ferric siderophore binding protein FhuD complexed with gallichrome. Nature Structural Biology, 2000, 7, 287-291.	9.7	119
38	Laminar flow downregulates Notch activity to promote lymphatic sprouting. Journal of Clinical Investigation, 2017, 127, 1225-1240.	8.2	113
39	Metal-ion-dependent hydrophobic-interaction chromatography of α-lactalbumins. Analytical Biochemistry, 1984, 140, 394-402.	2.4	111
40	Conformation of a Bactericidal Domain of Puroindoline a: Structure and Mechanism of Action of a 13-Residue Antimicrobial Peptide. Journal of Bacteriology, 2003, 185, 4938-4947.	2.2	111
41	Nuclear magnetic resonance studies of cellular metabolism. Analytical Biochemistry, 1990, 191, 193-222.	2.4	110
42	Metabolomic Investigation of the Bacterial Response to a Metal Challenge. Applied and Environmental Microbiology, 2009, 75, 719-728.	3.1	110
43	A validated metabolomic signature for colorectal cancer: exploration of the clinical value of metabolomics. British Journal of Cancer, 2016, 115, 848-857.	6.4	108
44	Energetics of Target Peptide Binding by Calmodulin Reveals Different Modes of Binding. Journal of Biological Chemistry, 2001, 276, 14083-14091.	3.4	107
45	The structure of the antimicrobial active center of lactoferricin B bound to sodium dodecyl sulfate micelles. FEBS Letters, 1999, 446, 213-217.	2.8	104
46	Induction of non-lamellar lipid phases by antimicrobial peptides: a potential link to mode of action. Chemistry and Physics of Lipids, 2010, 163, 82-93.	3.2	102
47	Solution structures of the cytoplasmic tail complex from platelet integrin Âllb- and Â3-subunits. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 5878-5883.	7.1	101
48	Protein-Peptide Interaction Studies Demonstrate the Versatility of Calmodulin Target Protein Binding. Protein and Peptide Letters, 2006, 13, 455-465.	0.9	101
49	Quality Assessment of Ginseng by ¹ H NMR Metabolite Fingerprinting and Profiling Analysis. Journal of Agricultural and Food Chemistry, 2009, 57, 7513-7522.	5.2	101
50	Structural Basis for Simultaneous Binding of Two Carboxy-terminal Peptides of Plant Glutamate Decarboxylase to Calmodulin. Journal of Molecular Biology, 2003, 328, 193-204.	4.2	100
51	The Solution Structure of the C-terminal Domain of TonB and Interaction Studies with TonB Box Peptides. Journal of Molecular Biology, 2005, 345, 1185-1197.	4.2	99
52	Serum metabolomic profile as a means to distinguish stage of colorectal cancer. Genome Medicine, 2012, 4, 42.	8.2	97
53	Sarcopenia and myosteatosis are accompanied by distinct biological profiles in patients with pancreatic and periampullary adenocarcinomas. PLoS ONE, 2018, 13, e0196235.	2.5	97
54	Quantitative 1H NMR metabolomics reveals extensive metabolic reprogramming of primary and secondary metabolism in elicitor-treated opium poppy cell cultures. BMC Plant Biology, 2008, 8, 5.	3.6	96

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55	Optimization of the hydrochloric acid concentration used for trifluoroacetate removal from synthetic peptides. Journal of Peptide Science, 2007, 13, 37-43.	1.4	95
56	Mechanism of action of puroindoline derived tryptophan-rich antimicrobial peptides. Biochimica Et Biophysica Acta - Biomembranes, 2013, 1828, 1802-1813.	2.6	95
57	Metabolic Profiling of Serum Samples by 1H Nuclear Magnetic Resonance Spectroscopy as a Potential Diagnostic Approach for Septic Shock*. Critical Care Medicine, 2014, 42, 1140-1149.	0.9	91
58	Characterization and prediction of the mechanism of action of antibiotics through NMR metabolomics. BMC Microbiology, 2016, 16, 82.	3.3	91
59	Structural differences in the two calcium binding sites of the porcine intestinal calcium binding protein: a multinuclear NMR study. Biochemistry, 1985, 24, 3870-3876.	2.5	89
60	Interactions of the designed antimicrobial peptide MB21 and truncated dermaseptin S3 with lipid bilayers: molecular-dynamics simulations. Biochemical Journal, 2003, 370, 233-243.	3.7	89
61	Calcium-dependent hydrophobic interaction chromatography of calmodulin, troponin C and their proteolytic fragments. FEBS Letters, 1983, 157, 241-246.	2.8	88
62	Impact of dietary fiber supplementation on modulating microbiota–host–metabolic axes in obesity. Journal of Nutritional Biochemistry, 2019, 64, 228-236.	4.2	88
63	Human Lactoferricin Is Partially Folded in Aqueous Solution and Is Better Stabilized in a Membrane Mimetic Solvent. Antimicrobial Agents and Chemotherapy, 2005, 49, 3387-3395.	3.2	87
64	Quantitative Metabolomic Profiling of Serum and Urine in DSS-Induced Ulcerative Colitis of Mice by ¹ H NMR Spectroscopy. Journal of Proteome Research, 2010, 9, 6265-6273.	3.7	87
65	Improving the Activity of Trp-Rich Antimicrobial Peptides by Arg/Lys Substitutions and Changing the Length of Cationic Residues. Biomolecules, 2018, 8, 19.	4.0	85
66	The interactions of antimicrobial peptides derived from lysozyme with model membrane systems. Biochimica Et Biophysica Acta - Biomembranes, 2005, 1668, 175-189.	2.6	83
67	Structure-Function Analysis of Tritrpticin Analogs: Potential Relationships between Antimicrobial Activities, Model Membrane Interactions, and Their Micelle-Bound NMR Structures. Biophysical Journal, 2006, 91, 4413-4426.	0.5	83
68	Sortase A as a tool for highâ€yield histatin cyclization. FASEB Journal, 2011, 25, 2650-2658.	0.5	83
69	Metal Ion Binding Properties and Conformational States of Calcium- and Integrin-Binding Proteinâ€. Biochemistry, 2004, 43, 2558-2568.	2.5	81
70	Metabolic analysis of knee synovial fluid as a potential diagnostic approach for osteoarthritis. Journal of Orthopaedic Research, 2015, 33, 1631-1638.	2.3	80
71	Surface Exposure of the Methionine Side Chains of Calmodulin in Solution. Journal of Biological Chemistry, 1999, 274, 8411-8420.	3.4	79
72	Solution structures and model membrane interactions of lactoferrampin, an antimicrobial peptide derived from bovine lactoferrin. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 2355-2364.	2.6	79

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73	Integration of metabolic and inflammatory mediator profiles as a potential prognostic approach for septic shock in the intensive care unit. Critical Care, 2015, 19, 11.	5.8	79
74	A Novel Extracytoplasmic Function (ECF) Sigma Factor Regulates Virulence in Pseudomonas aeruginosa. PLoS Pathogens, 2009, 5, e1000572.	4.7	77
75	Thermodynamics of the interactions of tryptophan-rich cathelicidin antimicrobial peptides with model and natural membranes. Biochimica Et Biophysica Acta - Biomembranes, 2008, 1778, 1004-1014.	2.6	76
76	Calcium-Dependent and -Independent Interactions of the Calmodulin-Binding Domain of Cyclic Nucleotide Phosphodiesterase with Calmodulin. Biochemistry, 1999, 38, 1446-1455.	2.5	73
77	Phosphorus-31 and Nitrogen- 14 NMR Studies of the Uptake of Phosphorus and Nitrogen Compounds in the Marine Macroalgae <i>Ulva lactuca</i> . Plant Physiology, 1989, 89, 1380-1387.	4.8	72
78	Isotope-Edited Fourier Transform Infrared Spectroscopy Studies of Calmodulin's Interaction with Its Target Peptides. Biochemistry, 1994, 33, 10883-10888.	2.5	72
79	Structural studies and model membrane interactions of two peptides derived from bovine lactoferricin. Journal of Peptide Science, 2005, 11, 379-389.	1.4	72
80	Calmodulin as a protein linker and a regulator of adaptor/scaffold proteins. Biochimica Et Biophysica Acta - Molecular Cell Research, 2018, 1865, 507-521.	4.1	72
81	Bending of the calmodulin central helix: A theoretical study. Protein Science, 1996, 5, 2044-2053.	7.6	71
82	Novel lactoferrampin antimicrobial peptides derived from human lactoferrin. Biochimie, 2009, 91, 141-154.	2.6	71
83	Anticancer activities of bovine and human lactoferricin-derived peptides. Biochemistry and Cell Biology, 2017, 95, 91-98.	2.0	70
84	Solvent-dependent structure of two tryptophan-rich antimicrobial peptides and their analogs studied by FTIR and CD spectroscopy. Biochimica Et Biophysica Acta - Biomembranes, 2006, 1758, 1596-1608.	2.6	67
85	Bioinformatic analysis of the TonB protein family. BioMetals, 2007, 20, 467-483.	4.1	67
86	Overexpression of Antimicrobial, Anticancer, and Transmembrane Peptides in <i>Escherichia coli</i> through a Calmodulin-Peptide Fusion System. Journal of the American Chemical Society, 2016, 138, 11318-11326.	13.7	67
87	A Salt-Bridge Motif Involved in Ligand Binding and Large-Scale Domain Motions of the Maltose-Binding Protein. Biophysical Journal, 2005, 89, 3362-3371.	0.5	65
88	The solution structure of the periplasmic domain of the TonB system ExbD protein reveals an unexpected structural homology with siderophoreâ€binding proteins. Molecular Microbiology, 2007, 66, 872-889.	2.5	65
89	Comprehensive and Cost-Effective NMR Spectroscopy of Methyl Groups in Large Proteins. Journal of the American Chemical Society, 2010, 132, 2952-2960.	13.7	63
90	Metal ion binding to calmodulin: NMR and fluorescence studies. BioMetals, 1998, 11, 213-222.	4.1	62

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91	Phosphorus-31 NMR studies of maltose and glucose metabolism in Streptococcus lactis. Applied Microbiology and Biotechnology, 1986, 25, 43-51.	3.6	61
92	Aluminum-27 and carbon-13 NMR studies of aluminum(3+) binding to ovotransferrin and its half-molecules. Journal of the American Chemical Society, 1993, 115, 245-252.	13.7	61
93	Lentivirus-derived antimicrobial peptides: increased potency by sequence engineering and dimerization. Journal of Antimicrobial Chemotherapy, 1999, 44, 33-41.	3.0	60
94	Calcium-43 NMR studies of calcium-binding lysozymes and .alphalactalbumins. Biochemistry, 1992, 31, 6761-6768.	2.5	59
95	Gram-negative and Gram-Positive Bacterial Infections Give Rise to a Different Metabolic Response in a Mouse Model. Journal of Proteome Research, 2012, 11, 3231-3245.	3.7	59
96	Plasma metabolomics for the diagnosis and prognosis of H1N1 influenza pneumonia. Critical Care, 2017, 21, 97.	5.8	59
97	Protein engineering and NMR studies of calmodulin. Molecular and Cellular Biochemistry, 1995, 149-150, 3-15.	3.1	58
98	A structural and functional analysis of type III periplasmic and substrate binding proteins: their role in bacterial siderophore and heme transport. Biological Chemistry, 2011, 392, 39-52.	2.5	58
99	A peptide analog of the calmodulinâ€binding domain of myosin light chain kinase adopts an aLâ€helical structure in aqueous trifluoroethanol. Protein Science, 1993, 2, 1931-1937.	7.6	57
100	The Calmodulin-Binding Domain of Caldesmon Binds to Calmodulin in an .alphaHelical Conformation. Biochemistry, 1994, 33, 1163-1171.	2.5	56
101	Calcium-Calmodulin-induced Dimerization of the Carboxyl-terminal Domain from Petunia Glutamate Decarboxylase. Journal of Biological Chemistry, 1998, 273, 30328-30335.	3.4	56
102	Interactions of tryptophan-rich cathelicidin antimicrobial peptides with model membranes studied by differential scanning calorimetry. Biochimica Et Biophysica Acta - Biomembranes, 2007, 1768, 2447-2458.	2.6	56
103	Distribution of Pentachlorophenol in Phospholipid Bilayers: A Molecular Dynamics Study. Biophysical Journal, 2004, 86, 337-345.	0.5	55
104	Investigating the cationic side chains of the antimicrobial peptide tritrpticin: Hydrogen bonding properties govern its membrane-disruptive activities. Biochimica Et Biophysica Acta - Biomembranes, 2011, 1808, 2297-2303.	2.6	55
105	Metabolic profiling of synovial fluid in a unilateral ovine model of anterior cruciate ligament reconstruction of the knee suggests biomarkers for early osteoarthritis. Journal of Orthopaedic Research, 2015, 33, 71-77.	2.3	55
106	A ¹⁴ N and ¹⁵ N Nuclear Magnetic Resonance Study of Nitrogen Metabolism in Shoot-Forming Cultures of White Spruce (<i>Picea glauca</i>) Buds. Plant Physiology, 1989, 91, 193-202.	4.8	54
107	Protein conformational changes studied by diffusion NMR spectroscopy: Application to helix-loop-helix calcium binding proteins. Protein Science, 2003, 12, 228-236.	7.6	54
108	A Molecular Dynamics Study of Ca2+-Calmodulin: Evidence of Interdomain Coupling and Structural Collapse on the Nanosecond Timescale. Biophysical Journal, 2004, 87, 780-791.	0.5	54

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109	NMR studies of the methionine methyl groups in calmodulin. FEBS Letters, 1995, 366, 104-108.	2.8	53
110	Phenotypic and metabolic profiling of colony morphology variants evolved from <i>Pseudomonas fluorescens</i> biofilms. Environmental Microbiology, 2010, 12, 1565-1577.	3.8	53
111	Structural and biophysical characterization of an antimicrobial peptide chimera comprised of lactoferricin and lactoferrampin. Biochimica Et Biophysica Acta - Biomembranes, 2012, 1818, 762-775.	2.6	53
112	Two-dimensional NMR Studies of Selenomethionyl Calmodulin. Journal of Molecular Biology, 1994, 239, 545-554.	4.2	52
113	Molecular Dynamics Study of Peptide-Bilayer Adsorption. Biophysical Journal, 2001, 80, 579-596.	0.5	51
114	Thermodynamic characterization of the interactions between the immunoregulatory proteins osteopontin and lactoferrin. Molecular Immunology, 2009, 46, 2395-2402.	2.2	50
115	Satiety Hormone and Metabolomic Response to an Intermittent High Energy Diet Differs in Rats Consuming Long-Term Diets High in Protein or Prebiotic Fiber. Journal of Proteome Research, 2012, 11, 4065-4074.	3.7	50
116	Structural basis for the regulation of L-type voltage-gated calcium channels: interactions between the N-terminal cytoplasmic domain and Ca2+-calmodulin. Frontiers in Molecular Neuroscience, 2012, 5, 38.	2.9	50
117	Solution Structure of Escherichia coli FeoA and Its Potential Role in Bacterial Ferrous Iron Transport. Journal of Bacteriology, 2013, 195, 46-55.	2.2	50
118	Biophysical Studies of Calmodulin. , 1986, , 113-157.		50
119	Quantitative 1H Nuclear Magnetic Resonance Metabolite Profiling as a Functional Genomics Platform to Investigate Alkaloid Biosynthesis in Opium Poppy Â. Plant Physiology, 2008, 147, 1805-1821.	4.8	49
120	Metabolomic Profiling in Cattle Experimentally Infected with Mycobacterium avium subsp. paratuberculosis. PLoS ONE, 2014, 9, e111872.	2.5	49
121	Molecular Dynamics Simulations of the Apo-, Holo-, and Acyl-forms of Escherichia coli Acyl Carrier Protein. Journal of Biological Chemistry, 2008, 283, 33620-33629.	3.4	48
122	Quantitative analysis of metabolite concentrations in human urine samples using $13C\{1H\}$ NMR spectroscopy. Metabolomics, 2009 , 5 , $307-317$.	3.0	48
123	Metabolomic response to exercise training in lean and diet-induced obese mice. Journal of Applied Physiology, 2011, 110, 1311-1318.	2.5	48
124	Metabolomics. Current Opinion in Gastroenterology, 2013, 29, 378-383.	2.3	48
125	Relative Spatial Positions of Tryptophan and Cationic Residues in Helical Membrane-active Peptides Determine Their Cytotoxicity. Journal of Biological Chemistry, 2012, 287, 233-244.	3.4	47
126	Interaction of Calmodulin with Its Binding Domain of Rat Cerebellar Nitric Oxide Synthase. Journal of Biological Chemistry, 1995, 270, 20901-20907.	3.4	45

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127	Characterization of the Calmodulin Binding Domain of SIV Transmembrane Glycoprotein by NMR and CD Spectroscopy. Biochemistry, 1995, 34, 10690-10696.	2.5	45
128	Metal-ion binding properties of the transferrins: A vanadium-51 NMR study. Journal of Inorganic Biochemistry, 1996, 62, 253-270.	3.5	45
129	Urine and Serum Metabolomics Analyses May Distinguish between Stages of Renal Cell Carcinoma. Metabolites, 2017, 7, 6.	2.9	45
130	Phosphorus-31 nuclear magnetic resonance studies of the methylene and fluoro analogs of adenine nucleotides. Effects of pH and magnesium ion binding. Biochemistry, 1982, 21, 394-401.	2.5	43
131	A Scandium-45 NMR Study of Ovotransferrin and Its Half-Molecules. Journal of the American Chemical Society, 1994, 116, 1988-1993.	13.7	43
132	Melatonin and serotonin interactions with calmodulin: NMR, spectroscopic and biochemical studies. BBA - Proteins and Proteomics, 1998, 1383, 37-47.	2.1	43
133	Metabolomic Modeling To Monitor Host Responsiveness to Gut Microbiota Manipulation in the BTBR ^{T+tf/j} Mouse. Journal of Proteome Research, 2016, 15, 1143-1150.	3.7	43
134	Calcium-dependent and -independent Binding of Soybean Calmodulin Isoforms to the Calmodulin Binding Domain of Tobacco MAPK Phosphatase-1. Journal of Biological Chemistry, 2007, 282, 6031-6042.	3.4	42
135	Calcium- and magnesium-dependent interactions between calcium- and integrin-binding protein and the integrin αIIb cytoplasmic domain. Protein Science, 2009, 14, 1429-1437.	7.6	42
136	Structure of hen phosvitin: a phosphorus-31 NMR, proton NMR, and laser photochemically induced dynamic nuclear polarization proton NMR study. Biochemistry, 1983, 22, 668-674.	2.5	41
137	The Future of NMR Metabolomics in Cancer Therapy: Towards Personalizing Treatment and Developing Targeted Drugs?. Metabolites, 2013, 3, 373-396.	2.9	41
138	Development of metabolic and inflammatory mediator biomarker phenotyping for early diagnosis and triage of pediatric sepsis. Critical Care, 2015, 19, 320.	5.8	41
139	Phosphorus-31 nuclear magnetic resonance studies of the two phosphoserine residues of hen egg white ovalbumin. Biochemistry, 1982, 21, 5825-5831.	2.5	40
140	One-Dimensional Nuclear Magnetic Resonance Studies of Starch and Starch Products. Starch/Staerke, 1990, 42, 260-267.	2.1	40
141	Perturbation of DNA hairpins containing the EcoRI recognition site by hairpin loops of varying size and composition: physical (NMR and UV) and enzymatic (EcoRI) studies. Nucleic Acids Research, 1990, 18, 1489-1498.	14.5	40
142	Activation of calcineurin and smooth muscle myosin light chain kinase by Met-to-Leu mutants of calmodulin. Biochemical Journal, 1998, 331, 149-152.	3.7	40
143	Structural and Functional Characterization of the Conserved Salt Bridge in Mammalian Paneth Cell α-Defensins. Journal of Biological Chemistry, 2006, 281, 28068-28078.	3.4	40
144	An in vivo $31P$ NMR comparison of freely suspended and immobilized Catharanthus roseus plant cells. Journal of Biotechnology, 1984 , 1 , 159 - 170 .	3.8	39

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145	Carbon-13 and proton NMR studies of post-mortem metabolism in bovine muscles. Meat Science, 1986, 18, 133-160.	5 . 5	39
146	Characterization of the Ca2+-dependent and -independent interactions between calmodulin and its binding domain of inducible nitric oxide synthase. FEBS Letters, 1998, 431, 210-214.	2.8	39
147	Nuclear magnetic resonance solution structure of the periplasmic signalling domain of the TonB-dependent outer membrane transporter FecA from Escherichia coli. Molecular Microbiology, 2005, 58, 1226-1237.	2.5	39
148	The periplasmic domain of Escherichia coli outer membrane protein A can undergo a localized temperature dependent structural transition. Biochimica Et Biophysica Acta - Biomembranes, 2014, 1838, 3014-3024.	2.6	39
149	Maternal prebiotic supplementation reduces fatty liver development in offspring through altered microbial and metabolomic profiles in rats. FASEB Journal, 2019, 33, 5153-5167.	0.5	39
150	Thallium-205 and Carbon-13 NMR Studies of Human Sero- and Chicken Ovotransferrin. Biochemistry, 1994, 33, 3304-3311.	2.5	38
151	Gallium(3+) Binding to Ovotransferrin and Its Half-Molecules: A Multinuclear NMR Study. Journal of the American Chemical Society, 1994, 116, 11506-11511.	13.7	38
152	Calculating Acid-Dissociation Constants of Proteins Using the Boundary Element Method. Journal of Physical Chemistry B, 1997, 101, 7664-7673.	2.6	38
153	Inorganic nitrogen metabolism in embryogenie white spruce cultures: A nitrogen 14/15 NMR study. Journal of Plant Physiology, 1997, 151, 306-315.	3.5	38
154	Tryptophan fluorescence of calmodulin binding domain peptides interacting with calmodulin containing unnatural methionine analogues. Protein Engineering, Design and Selection, 2000, 13, 59-66.	2.1	38
155	Nuclear magnetic resonance studies of the structure of B50/neuromodulin and its interaction with calmodulin. Biochemistry and Cell Biology, 1994, 72, 109-116.	2.0	37
156	Dynamic Light Scattering Study of Calmodulin–Target Peptide Complexes. Biophysical Journal, 2002, 83, 1455-1464.	0.5	37
157	Solution Structure of Cryptdin-4, a Mouse Paneth Cell α-Defensin [,] . Biochemistry, 2004, 43, 15759-15766.	2.5	37
158	Serum Metabolomics of Activity Energy Expenditure and its Relation to Metabolic Syndrome and Obesity. Scientific Reports, 2018, 8, 3308.	3.3	37
159	Comparison of NMR structures and model-membrane interactions of 15-residue antimicrobial peptides derived from bovine lactoferricinThis paper is one of a selection of papers published in this Special Issue, entitled 7th International Conference on Lactoferrin: Structure, Function, and Applications, and has undergone the Journal's usual peer review process Biochemistry and Cell Biology, 2006, 84,	2.0	36
160	FecB, a periplasmic ferric-citrate transporter from E. coli, can bind different forms of ferric-citrate as well as a wide variety of metal-free and metal-loaded tricarboxylic acids. Metallomics, 2016, 8, 125-133.	2.4	36
161	Detection of adulteration in Iranian saffron samples by 1H NMR spectroscopy and multivariate data analysis techniques. Metabolomics, 2017, 13, 1.	3.0	36
162	Frequency-dependent phosphorus-31 nuclear magnetic resonance studies of the phosphohistidine residue of succinyl-CoA synthetase and the phosphoserine residue of glycogen phosphorylase a. Biochemistry, 1982, 21, 1126-1132.	2.5	35

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