J P Malthouse

List of Publications by Year in descending order

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79 papers	1,223 citations	394421 19 h-index	414414 32 g-index
80 all docs	80 docs citations	80 times ranked	867 citing authors

#	Article	IF	Citations
1	A Nuclear Magnetic Resonance-Based Demonstration of Substantial Oxidative L-Alanine Metabolism and L-Alanine-Enhanced Glucose Metabolism in a Clonal Pancreatic Â-Cell Line : Metabolism of L-Alanine Is Important to the Regulation of Insulin Secretion. Diabetes, 2002, 51, 1714-1721.	0.6	124
2	Vinyl Sulfone-Based Peptidomimetics as Anti-Trypanosomal Agents: Design, Synthesis, Biological and Computational Evaluation. Journal of Medicinal Chemistry, 2013, 56, 6638-6650.	6.4	93
3	Structure and stereochemistry of tetrahedral inhibitor complexes of papain by direct NMR observation. Journal of the American Chemical Society, 1983, 105, 6324-6325.	13.7	55
4	Studying enzyme mechanism by 13C nuclear magnetic resonance. Science, 1984, 225, 883-889.	12.6	49
5	Carbon-13 NMR study of the ionizations within a trypsin-chloromethyl ketone inhibitor complex. Biochemistry, 1985, 24, 3478-3487.	2.5	49
6	Detection of a tetrahedral adduct in a trypsin-chloromethyl ketone specific inhibitor complex by carbon-13 NMR. Journal of the American Chemical Society, 1983, 105, 1685-1686.	13.7	47
7	Carbon-13 NMR study of the stereospecificity of the thiohemiacetals formed on inhibition of papain by specific enantiomeric aldehydes. Biochemistry, 1986, 25, 2293-2298.	2.5	45
8	A study of the stabilization of tetrahedral adducts by trypsin and Î´-chymotrypsin. Biochemical Journal, 1992, 286, 889-900.	3.7	41
9	A 13C-n.m.r. investigation of the ionizations within an inhibitorâ€“Î±-chymotrypsin complex. Evidence that both Î±-chymotrypsin and trypsin stabilize a hemiketal oxyanion by similar mechanisms. Biochemical Journal, 1989, 258, 853-859.	3.7	37
10	NMR and Alanine Scan Studies of Glucose-dependent Insulinotropic Polypeptide in Water. Journal of Biological Chemistry, 2006, 281, 16370-16376.	3.4	37
11	Cryoenzymology of proteases: NMR detection of a productive thioacyl derivative of papain at subzero temperatures. Journal of the American Chemical Society, 1982, 104, 6811-6813.	13.7	33
12	Characterization of the Electrostatic Perturbation of a Catalytic Site (Cys)-Sâ€“/(His)-Im+H Ion-pair in One Type of Serine Proteinase Architecture by Kinetic and Computational Studies on Chemically Mutated Subtilisin Variants. Journal of Molecular Biology, 1996, 257, 1088-1111.	4.2	32
13	The bioactive conformation of glucose-dependent insulinotropic polypeptide by NMR and CD spectroscopy. Proteins: Structure, Function and Bioinformatics, 2007, 68, 92-99.	2.6	32
14	The case for assigning a value of approximately 4 to pKaI of the essential histidine-cysteine interactive systems of papain, bromelain and ficin. FEBS Letters, 1975, 50, 365-368.	2.8	25
15	pH-Dependent Spectroscopic Changes Associated with the Hydroquinone of FMN in Flavodoxinsâ€. Biochemistry, 1999, 38, 3753-3762.	2.5	21
16	NMR structure of the glucose-dependent insulinotropic polypeptide fragment, GIP(1â€“30)amide. Biochemical and Biophysical Research Communications, 2004, 325, 281-286.	2.1	21
17	A comparative study of the kinetics and stereochemistry of the serine hydroxymethyltransferase- and tryptophan synthase-catalysed exchange of the pro-2R and pro-2S protons of glycine. Biochemical Journal, 1991, 274, 807-812.	3.7	20
18	Crystal structure of Î´-chymotrypsin bound to a peptidyl chloromethyl ketone inhibitor. Acta Crystallographica Section D: Biological Crystallography, 2000, 56, 280-286.	2.5	20

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19	Prolonged L-alanine exposure induces changes in metabolism, Ca2+ handling and desensitization of insulin secretion in clonal pancreatic Î²-cells. Clinical Science, 2009, 116, 341-351.	4.3	20
20	Carbon-13 NMR of cyanylated flavodoxin from Megasphaera elsdenii and of thiocyanate model compounds. Biochemistry, 1992, 31, 7922-7930.	2.5	19
21	Claisen-Type Addition of Glycine to Pyridoxal in Water. Journal of the American Chemical Society, 2004, 126, 10538-10539.	13.7	19
22	A 13C-n.m.r. investigation of ionizations within a trypsin-inhibitor complex. Evidence that the pKa of histidine-57 is raised by interaction with the hemiketal oxyanion. Biochemical Journal, 1985, 231, 677-682.	3.7	18
23	13C and 1H NMR Studies of Ionizations and Hydrogen Bonding in Chymotrypsin-Glyoxal Inhibitor Complexes. Journal of Biological Chemistry, 2007, 282, 7852-7861.	3.4	18
24	Cryoenzymology of trypsin. A detailed kinetic study of the trypsin-catalysed hydrolysis of N-Î±-benzyloxycarbonyl-<scp>l</scp>-lysine p-nitrophenyl ester at low temperatures. Biochemical Journal, 1983, 215, 555-563.	3.7	15
25	A study of the stabilization of the oxyanion of tetrahedral adducts by trypsin, chymotrypsin and subtilisin. Biochemical Journal, 1995, 307, 353-359.	3.7	15
26	13C NMR Study of How the Oxyanion pKaValues of Subtilisin and Chymotrypsin Tetrahedral Adducts Are Affected by Different Amino Acid Residues Binding in Enzyme Subsites S1â^'S4â€,â€¡. Biochemistry, 1999, 38, 6187-6194.	2.5	15
27	13C-NMR study of the inhibition of Î´-chymotrypsin by a tripeptide-glyoxal inhibitor. Biochemical Journal, 2002, 362, 339-347.	3.7	15
28	Chemical synthesis and papain-catalysed hydrolysis of N-Î±-benzyloxycarbonyl-l-lysine p-nitroanilide. Biochemical Journal, 1985, 226, 601-606.	3.7	14
29	The effect of different amino acid side chains on the stereospecificity and catalytic efficiency of the tryptophan synthase-catalysed exchange of the Î±-protons of amino acids. Biochemical Journal, 1996, 314, 787-791.	3.7	14
30	Importance of Tetrahedral Intermediate Formation in the Catalytic Mechanism of the Serine Proteases Chymotrypsin and Subtilisin. Biochemistry, 2012, 51, 6164-6170.	2.5	14
31	Ionisations within a subtilisinâ€“glyoxal inhibitor complex. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2005, 1749, 33-41.	2.3	13
32	A study of the relaxation parameters of a 13C-enriched methylene carbon and a 13C-enriched perdeuteromethylene carbon attached to chymotrypsin. Biochemical Journal, 1991, 280, 649-657.	3.7	12
33	Determination of the ionization state of the active-site histidine in a subtilisin-(chloromethane) Tj ETQq1 1 0.784314 rgBT /Overlock 10	3.7	12
34	A substrate-induced change in the stereospecificity of the serine-hydroxymethyltransferase-catalysed exchange of the alpha-protons of amino acids. Evidence for a second catalytic site. FEBS Journal, 1998, 252, 113-117.	0.2	12
35	The pyridoxal-5â€²-phosphate-dependent catalytic antibody 15A9: its efficiency and stereospecificity in catalysing the exchange of the Î±-protons of glycine. FEBS Letters, 1998, 427, 74-78.	2.8	10
36	13C-NMR study of the inhibition of Î´-chymotrypsin by a tripeptide-glyoxal inhibitor. Biochemical Journal, 2002, 362, 339.	3.7	10

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37	An NMR study of alterations in [1-13C]glucose metabolism in C6 glioma cells by gliotoxic amino acids. Neurochemistry International, 2003, 42, 441-448.	3.8	10
38	13C- and 1H-NMR studies of oxyanion and tetrahedral intermediate stabilization by the serine proteinases: optimizing inhibitor warhead specificity and potency by studying the inhibition of the serine proteinases by peptide-derived chloromethane and glyoxal inhibitors. Biochemical Society Transactions, 2007, 35, 566-570.	3.4	10
39	Determination of the Structure of Tetrahedral Transition State Analogues Bound at the Active Site of Chymotrypsin Using ¹⁸O and ²H Isotope Shifts in the ¹³C NMR Spectra of Glyoxal Inhibitors. Biochemistry, 2007, 46, 12868-12874.	2.5	10
40	Conformational, receptor interaction and alanine scan studies of glucose-dependent insulinotropic polypeptide. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 882-888.	2.3	10
41	Factors affecting the stereospecificity and catalytic efficiency of the tryptophan synthase-catalysed exchange of the pro-2R and pro-2S protons of glycine. Biochemical Journal, 1995, 311, 1015-1019.	3.7	9
42	Gliotoxins disrupt alanine metabolism and glutathione production in C6 glioma cells: a 13C NMR spectroscopic study. Neurochemistry International, 2004, 45, 1155-1165.	3.8	9
43	NMR Study of the Inhibition of Pepsin by Glyoxal Inhibitors:â€‰ Mechanism of Tetrahedral Intermediate Stabilization by the Aspartyl Proteases. Biochemistry, 2007, 46, 11205-11215.	2.5	9
44	Hemiacetal stabilization in a chymotrypsin inhibitor complex and the reactivity of the hydroxyl group of the catalytic serine residue of chymotrypsin. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2014, 1844, 1119-1127.	2.3	9
45	Quantifying tetrahedral adduct formation and stabilization in the cysteine and the serine proteases. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2015, 1854, 1382-1391.	2.3	8
46	Enzymatic synthesis of Î±-deuterated amino acids. Biochemical Society Transactions, 1996, 24, 133S-133S.	3.4	7
47	The aspartate aminotransferase-catalysed exchange of the Î±-protons of aspartate and glutamate: the effects of the R386A and R292V mutations on this exchange reaction. BBA - Proteins and Proteomics, 1999, 1434, 191-201.	2.1	7
48	A 13C-NMR study of the inhibition of papain by a dipeptide-glyoxal inhibitor. Biochemical Journal, 2002, 366, 983-987.	3.7	7
49	Kinetic Studies of the Effect of pH on the Trypsin-Catalyzed Hydrolysis of N-Î±-benzyloxycarbonyl-<scp>l</scp>-lysine-p-nitroanilide: Mechanism of Trypsin Catalysis. ACS Omega, 2020, 5, 4915-4923.	3.5	7
50	The synthesis and characterisation of a glyoxal inhibitor of chymotrypsin. Biochemical Society Transactions, 1996, 24, 129S-129S.	3.4	6
51	Enzymatic synthesis of isotopically labelled serine and tryptophan for application in peptide synthesis. , 1997, 3, 361-366.		6
52	Oxyanion and tetrahedral intermediate stabilisation by subtilisin: Detection of a new tetrahedral adduct. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2009, 1794, 1251-1258.	2.3	6
53	The stereospecificity and catalytic efficiency of the tryptophan synthase-catalysed exchange of the Î±-protons of amino acids. Biochemical Journal, 2004, 381, 847-852.	3.7	5
54	A 13C-NMR study of azacryptand complexes. Dalton Transactions, 2014, 43, 13557-13562.	3.3	5

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55	Kinetic analysis of the exchange of the Î±-protons of amino acids by pyridoxal-phosphate-dependent enzymes. Biochemical Society Transactions, 1996, 24, 134S-134S.	3.4	4
56	Proof that serine hydroxymethyltransferase retains its specificity for the pro-2S proton of glycine in the absence of tetrahydrofolate. Biochemical Society Transactions, 1996, 24, 132S-132S.	3.4	4
57	79 a comparison of some of the methods available for analysing the substrate dependence of the exchange of the Î±-protons of amino acids catalysed by pyridoxal-phosphate-dependent enzymes. Biochemical Society Transactions, 1998, 26, S66-S66.	3.4	4
58	Using NMR as a Probe of Protein Structure and Function. Biochemical Society Transactions, 1999, 27, 701-713.	3.4	4
59	Biosynthesis of isotopically enriched <scp>l</scp>-serine. Biochemical Society Transactions, 1988, 16, 179-180.	3.4	3
60	A study of the tryptophan synthase catalysed H/D exchange of the Î±-protons of amino acids. Biochemical Society Transactions, 1994, 22, 43S-43S.	3.4	3
61	The effect of histidine-228 on the catalytic efficiency and stereospecificity of the serine hydroxymethyltransferase catalysed exchange of the Î±-protons of amino acids. BBA - Proteins and Proteomics, 1998, 1386, 220-226.	2.1	3
62	Stereospecificity of Î±-proton exchange reactions catalysed by pyridoxal-5â€²-phosphate-dependent enzymes. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2003, 1647, 138-142.	2.3	3
63	Impact of the gliotoxin l-serine-O-sulphate on cellular metabolism in cultured rat astrocytes. Neurochemistry International, 2006, 48, 739-745.	3.8	2
64	pH stability of the stromelysin-1 catalytic domain and its mechanism of interaction with a glyoxal inhibitor. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2011, 1814, 1394-1403.	2.3	2
65	Mechanism of the binding of Zâ€“L-tryptophan and Zâ€“L-phenylalanine to thermolysin and stromelysin-1 in aqueous solutions. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2012, 1824, 303-310.	2.3	2
66	13C nuclear magnetic resonance as a probe of ionizations within a chymotrypsin-inhibitor complex. Biochemical Society Transactions, 1989, 17, 387-388.	3.4	1
67	The use of 13C n.m.r. and saturation transfer to detect tetrahedral intermediates in reactions catalysed by chymotrypsin and also in an amide inhibitor complex. Biochemical Society Transactions, 1994, 22, 30S-30S.	3.4	1
68	83 Effect of the bulk solvent on the pKa values of the oxyanions of serine protease derivatives. Biochemical Society Transactions, 1998, 26, S70-S70.	3.4	1
69	A 13C-n.m.r. study of cyanylated ÃŸ-lactoglobulins. Biochemical Society Transactions, 1994, 22, 31S-31S.	3.4	0
70	Effect of magnetic field strength on the linewidth and spin-lattice relaxation time of the thiocyanate carbon of cyanylated Î²-lactoglobulin B: optimization of the experimental parameters for observing thiocyanate carbons in proteins. Biochemical Journal, 1995, 306, 531-535.	3.7	0
71	Cyanylation of the thiol of the cysteine of flavodoxin from Anabaena PCC 7119. Biochemical Society Transactions, 1996, 24, 40S-40S.	3.4	0
72	1H-NMR spectroscopy of Î²-thiocyanatoalanine. Biochemical Society Transactions, 1996, 24, 130S-130S.	3.4	0

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73	A 1H-NMR study of the histidine resonance's of native subtilisin and of subtilisin inhibited by benzyloxycarbonylglycylglycylphenylalanyl-chloromethane. Biochemical Society Transactions, 1996, 24, 135S-135S.	3.4	0
74	A study of the pH dependence of the reaction of benzyloxycarbonyltryptophanylchloromethane with chymotrypsin. Biochemical Society Transactions, 1996, 24, 131S-131S.	3.4	0
75	80 Synthesis of benzyloxycarbonylglycylglycine-phenylalanine p -nitroanilide and an evaluation of its potential as a substrate for âˆ,-chymotrypsin and subtilisin B PN'. Biochemical Society Transactions, 1998, 26, S67-S67.	3.4	0
76	81 An attempt to cyanylate the the thiol group of Bovine Serum Albumin with 13C-enriched cyanide and to observe the thiocyanate carbon by 13C-NMR. Biochemical Society Transactions, 1998, 26, S68-S68.	3.4	0
77	82 Quenching of Î²-lactoglobulin fluorescence by 2-nitro-5-thiobenzoic acid. Biochemical Society Transactions, 1998, 26, S69-S69.	3.4	0
78	A new lysine derived glyoxal inhibitor of trypsin, its properties and utilization for studying the stabilization of tetrahedral adducts by trypsin. Biochemistry and Biophysics Reports, 2016, 5, 272-284.	1.3	0
79	Synthesis of 2-guanidinyl pyridines and their trypsin inhibition and docking. Bioorganic and Medicinal Chemistry, 2020, 28, 115612.	3.0	0