Michael I Page

List of Publications by Year
in descending order

128 papers	3,375 citations	147801 31 h-index	182427 51 g-index
141 all docs	141 docs citations	141 times ranked	2444 citing authors

#	Article	IF	Citations
1	The mechanisms of reactions of .beta.-lactam antibiotics. Accounts of Chemical Research, 1984, 17, 144-151.	15.6	200
2	The mechanism of catalysis and the inhibition of the Bacillus cereus zinc-dependent Î²-lactamase. Biochemical Journal, 1998, 331, 703-711.	3.7	168
3	Chemoenzymatic dynamic kinetic resolution of secondary amines. Tetrahedron Letters, 2007, 48, 1247-1250.	1.4	116
4	Catalytic Racemisation of Chiral Amines and Application in Dynamic Kinetic Resolution. Organic Process Research and Development, 2007, 11, 642-648.	2.7	112
5	The mechanism of catalysis and the inhibition of Î²-lactamases. Chemical Communications, 1998, , 1609-1617.	4.1	108
6	Reactivity and Mechanism in the Hydrolysis of Î²-Sultams. Journal of the American Chemical Society, 2000, 122, 3375-3385.	13.7	84
7	The Mechanisms of Catalysis by Metallo -Lactamases. Bioinorganic Chemistry and Applications, 2008, 2008, 1-14.	4.1	79
8	Copper(I)-Catalyzed Amination of Aryl Halides in Liquid Ammonia. Journal of Organic Chemistry, 2012, 77, 7471-7478.	3.2	74
9	Metal-ion catalysed hydrolysis of some Î²-lactam antibiotics. Journal of the Chemical Society Perkin Transactions II, 1980, , 1725-1732.	0.9	67
10	The Mechanisms of Reactions of Î²-Lactam Antibiotics. Advances in Physical Organic Chemistry, 1987, , 165-270.	0.5	67
11	A facile and highly stereoselective approach to a polycyclic isoindolinone ring system via an N-acyliminium ion cyclization reaction. Tetrahedron Letters, 1998, 39, 4905-4908.	1.4	64
12	The chemical reactivity of penicillins and other Î²-lactam antibiotics. Journal of the Chemical Society Perkin Transactions II, 1982, , 1185-1192.	0.9	63
13	Mechanism of .beta.-lactam ring opening in cephalosporins. Journal of the American Chemical Society, 1984, 106, 3820-3825.	13.7	60
14	Cysteinyl peptide Inhibitors of Bacillus cereus Zinc Î²-Lactamase. Bioorganic and Medicinal Chemistry, 2001, 9, 503-510.	3.0	58
15	Î²-SultamsMechanism of Reactions and Use as Inhibitors of Serine Proteases. Accounts of Chemical Research, 2004, 37, 297-303.	15.6	57
16	The Chemical Reactivity of Î²-Lactams, Î²-Sultams and Î²-Phospholactams. Tetrahedron, 2000, 56, 5631-5638.	1.9	51
17	The Variation of Catalytic Efficiency of Bacillus cereus Metallo-Î²-lactamase with Different Active Site Metal Ions. Biochemistry, 2006, 45, 10654-10666.	2.5	50
18	Mutational analysis of the two zinc-binding sites of the Bacillus cereus 569/H/9 metallo-Î²-lactamase. Biochemical Journal, 2002, 363, 687-696.	3.7	48

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19	The Kinetics and Mechanisms of Aromatic Nucleophilic Substitution Reactions in Liquid Ammonia. Journal of Organic Chemistry, 2011, 76, 3286-3295.	3.2	47
20	Intramolecular general acid catalysis in the aminolysis of Î²-lactam antibiotics. Organic and Biomolecular Chemistry, 2004, 2, 651-654.	2.8	45
21	Approaches to the synthesis of non-racemic 3-substituted isoindolinone derivatives. Journal of the Chemical Society, Perkin Transactions 1, 2000, , 1715-1721.	1.3	43
22	A highly diastereoselective synthesis of tricyclic lactams and their application as novel N-acyl iminium ion precursors in the synthesis of isoindolinone derivatives. Tetrahedron Letters, 1997, 38, 3627-3630.	1.4	42
23	Acylation versus Sulfonylation in the Inhibition of Elastase by 3-Oxo-Î²-Sultams. Journal of the American Chemical Society, 2005, 127, 8946-8947.	13.7	42
24	A highly diastereoselective synthesis of 3-substituted isoindolin-1-one dericatives. Tetrahedron Letters, 1999, 40, 143-146.	1.4	38
25	Structureâ€"reactivity relationships in the inactivation of elastase by Î²-sultams. Organic and Biomolecular Chemistry, 2003, 1, 67-80.	2.8	38
26	The activity of the dinuclear cobalt-Î²-lactamase from Bacillus cereus in catalysing the hydrolysis of Î²-lactams. Biochemical Journal, 2007, 401, 197-203.	3.7	37
27	Mutational analysis of the two zinc-binding sites of the Bacillus cereus 569/H/9 metallo-Î²-lactamase. Biochemical Journal, 2002, 363, 687.	3.7	35
28	Metal ion catalysis in the aminolysis of penicillin. Journal of the Chemical Society Perkin Transactions II, 1978, , 335.	0.9	34
29	The effect of the carboxy group on the chemical and Î²-lactamase reactivity of Î²-lactam antibiotics. Journal of the Chemical Society Perkin Transactions II, 1989, , 1577-1581.	0.9	34
30	pH Dependence of and kinetic solvent isotope effects on the methanolysis and hydrolysis of .beta.-lactams catalyzed by class C .beta.-lactamase. Journal of the American Chemical Society, 1995, 117, 12092-12095.	13.7	34
31	Structureâ€"activity relationships in the esterase-catalysed hydrolysis and transesterification of esters and lactones. Journal of the Chemical Society Perkin Transactions II, 1994, , 2021-2029.	0.9	33
32	The synthesis of azabicyclo[4.2.1]nonenes by the addition of a cyclopropenone to 4-vinyl substituted 1-azetinesâ€"isomers of the homotropane nucleus. Tetrahedron Letters, 2006, 47, 425-428.	1.4	33
33	A new approach to the synthesis of non-racemic isoindolin-1-one derivatives. Tetrahedron Letters, 1999, 40, 141-142.	1.4	31
34	Azetidine-2,4-diones (4-Oxo-Î²-lactams) as Scaffolds for Designing Elastase Inhibitors. Journal of Medicinal Chemistry, 2008, 51, 1783-1790.	6.4	31
35	Inhibitors of Metallo-Î²-lactamase Generated from Î²-Lactam Antibioticsâ€. Biochemistry, 2005, 44, 8578-8589.	2.5	30
36	Inactivation of Bacterialdd-Peptidase by Î²-Sultamsâ€. Biochemistry, 2005, 44, 7738-7746.	2.5	30

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37	Novel mechanism of inhibiting Î²-Lactamases by sulfonylation using Î²-Sultams. Bioorganic and Medicinal Chemistry Letters, 2003, 13, 4489-4492.	2.2	29
38	Enzyme Deactivation Due to Metal-Ion Dissociation during Turnover of the Cobalt-Î²-Lactamase Catalyzed Hydrolysis of Î²-Lactamsâ€. Biochemistry, 2006, 45, 11012-11020.	2.5	29
39	Ground state and transition state effects in the acylation of Î±-chymotrypsin in organic solventâ€"water mixtures. Journal of the Chemical Society Perkin Transactions II, 1974, , 66-70.	0.9	28
40	Intra- and inter-molecular catalysis in the aminolysis of benzylpenicillin. Journal of the Chemical Society Perkin Transactions II, 1980, , 212.	0.9	28
41	The mechanisms of hydrolysis of the Î³-lactam isatin and its derivatives. Journal of the Chemical Society Perkin Transactions II, 1993, , 23-28.	0.9	28
42	Acylating Agents as Enzyme Inhibitors and Understanding Their Reactivity for Drug Design. Journal of Medicinal Chemistry, 2002, 45, 2850-2856.	6.4	28
43	Peptidase activity of Î²-lactamases. Biochemical Journal, 1999, 341, 409-413.	3.7	27
44	Different Transition-State Structures for the Reactions of Î²-Lactams and Analogous Î²-Sultams with Serine Î²-Lactamases. Journal of the American Chemical Society, 2005, 127, 17556-17564.	13.7	27
45	The kinetics and mechanism of the organo-iridium-catalysed enantioselective reduction of imines. Organic and Biomolecular Chemistry, 2016, 14, 3614-3622.	2.8	27
46	Enantioselective biotransformations using rhodococci. , 1998, 74, 99-106.		25
47	Loss of enzyme activity during turnover of the Bacillus cereus Î²-lactamase catalysed hydrolysis of Î²-lactams due to loss of zinc ion. Journal of Biological Inorganic Chemistry, 2008, 13, 919-928.	2.6	25
48	Alcohol-catalysed hydrolysis of benzylpenicillin. Journal of the Chemical Society Perkin Transactions II, 1991, , 1213.	0.9	23
49	Î²-Sultamsâ€"A novel class of serine protease inhibitors. Chemical Communications, 2001, , 497-498.	4.1	23
50	Reactivity and selectivity in the inhibition of elastase by 3-oxo-Î²-sultams and in their hydrolysis. Organic and Biomolecular Chemistry, 2007, 5, 3993.	2.8	23
51	Organic reactivity in liquid ammonia. Organic and Biomolecular Chemistry, 2012, 10, 5732.	2.8	23
52	The inhibition of metallo-Î²-lactamase by thioxo-cephalosporin derivatives. Bioorganic and Medicinal Chemistry Letters, 2004, 14, 1737-1739.	2.2	22
53	The resolution of racemic 1,2-diols by the esterase catalysed hydrolysis of the corresponding cyclic carbonate. Tetrahedron, 1992, 48, 7731-7734.	1.9	21
54	Chemical Reactivity of Penicillins and Cephalosporins. Intramolecular Involvement of the Acyl-Amido Side Chain. Journal of Organic Chemistry, 1998, 63, 9052-9060.	3.2	21

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55	The hydrolytic reactivity of Î²-sultams. Journal of the Chemical Society Perkin Transactions II, 1996, , 2245-2246.	0.9	20
56	The mechanism of the phosphoramidite synthesis of polynucleotides. Organic and Biomolecular Chemistry, 2008, 6, 3270.	2.8	20
57	Copper catalysed azideâ€"alkyne cycloaddition (CuAAC) in liquid ammonia. Organic and Biomolecular Chemistry, 2012, 10, 7965.	2.8	20
58	An esterase with Î²-lactamase activity. Journal of the Chemical Society Chemical Communications, 1991, , 316-317.	2.0	19
59	Thiazolidine ring opening in penicillin derivatives. Part 1. Imine formation. Journal of the Chemical Society Perkin Transactions II, 1991, , 1219.	0.9	19
60	The kinetics and mechanisms of organic reactions in liquid ammonia. Faraday Discussions, 0, 145, 15-25.	3.2	19
61	General acid catalysed hydrolysis of Î²-sultams involves nucleophilic catalysis. Chemical Communications, 1999, , 2401-2402.	4.1	18
62	Reactivity and the mechanisms of reactions of Î²-sultams with nucleophiles. Perkin Transactions II RSC, 2002, , 938-946.	1.1	18
63	Acyl vs Sulfonyl Transfer inN-Acyl Î²-Sultams and 3-Oxo-Î²-sultams. Organic Letters, 2004, 6, 201-203.	4.6	18
64	The aminolysis of N-aroyl Î²-lactams occurs by a concerted mechanism. Organic and Biomolecular Chemistry, 2007, 5, 485-493.	2.8	18
65	Transition states, standard states and enzymic catalysis. International Journal of Biochemistry & Cell Biology, 1980, 11, 331-335.	0.5	17
66	Thiol-catalysed hydrolysis of benzylpenicillin. Perkin Transactions II RSC, 2000, , 1521-1525.	1.1	17
67	Thiol-catalysed hydrolysis of cephalosporins and possible rate-limiting amine anion expulsion. Journal of Physical Organic Chemistry, 2004, 17, 521-528.	1.9	17
68	Liquid Ammonia as a Dipolar Aprotic Solvent for Aliphatic Nucleophilic Substitution Reactions. Journal of Organic Chemistry, 2011, 76, 1425-1435.	3.2	17
69	The aminolysis of penicillin derivatives. Rate constants for the formation and breakdown of the tetrahedral addition intermediate. Journal of the Chemical Society Perkin Transactions II, 1979, , 137.	0.9	16
70	Buffer catalysis in the hydrazinolysis of benzylpenicillin. Journal of the Chemical Society Perkin Transactions II, 1980, , 220.	0.9	16
71	Peptide biomarkers for identifying the species origin of gelatin using coupled UPLC-MS/MS. Journal of Food Composition and Analysis, 2018, 73, 83-90.	3.9	16
72	The kinetics and mechanism of the acid-catalysed detritylation of nucleotides in non-aqueous solution. Organic and Biomolecular Chemistry, 2009, 7, 52-57.	2.8	15

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73	Ionization of Carbon Acids in Liquid Ammonia. Organic Letters, 2011, 13, 6118-6121.	4.6	15
74	Catalysis, kinetics and mechanisms of organo-iridium enantioselective hydrogenation-reduction. Catalysis Science and Technology, 2020, 10, 590-612.	4.1	15
75	Intramolecular general acid catalysis in the aminolysis of benzylpenicillin. A preferred direction of nucleophilic attack. Journal of the Chemical Society Chemical Communications, 1979, , 298.	2.0	14
76	The hydrolysis of azetidinyl amidinium salts. Part 1. The unimportance of strain release in the four-membered ring. Journal of the Chemical Society Perkin Transactions II, 1990, , 805.	0.9	14
77	An Activated Sulfonylating Agent That Undergoes General Base-Catalyzed Hydrolysis by Amines in Preference to Aminolysis. Journal of Organic Chemistry, 2008, 73, 4504-4512.	3.2	14
78	The micelle-catalysed hydrolysis of benzylpenicillin. Journal of the Chemical Society Perkin Transactions II, 1982, , 147.	0.9	13
79	Chapter 1 The energetics and specificity of enzymeâ€"substrate interactions. New Comprehensive Biochemistry, 1984, , 1-54.	0.1	13
80	Kinetics and Mechanisms of Hydrolysis and Aminolysis of Thioxocephalosporins. Journal of Organic Chemistry, 2004, 69, 339-344.	3.2	13
81	Uncatalyzed aminolysis of acetylimidazole. Limiting product-like transition state for acyl transfer. Journal of the American Chemical Society, 1972, 94, 3263-3264.	13.7	12
82	Intramolecular nucleophilic and general acid catalysis in the hydrolysis of an amide. Journal of the Chemical Society Chemical Communications, 1978, , 591.	2.0	12
83	Opening of the thiazolidine ring of penicillin derivatives. Journal of the Chemical Society Chemical Communications, 1985, , 1702.	2.0	12
84	The mechanism of reactions catalysed by the serine Î²-lactamases. Bioorganic and Medicinal Chemistry Letters, 1993, 3, 2317-2322.	2.2	12
85	Highly diastereoselective synthesis and template manipulation of the thiazolo[2,3-a]isoindolin-1-one ring system. Tetrahedron Letters, 2000, 41, 2219-2222.	1.4	12
86	Comparison of the mechanisms of reactions of Î²-lactams and Î²-sultams, including their reactions with some serine enzymes. Journal of Physical Organic Chemistry, 2006, 19, 446-451.	1.9	12
87	Mechanism of the sulfurisation of phosphines and phosphites using 3-amino-1,2,4-dithiazole-5-thione (xanthane hydride). Organic and Biomolecular Chemistry, 2007, 5, 478-484.	2.8	12
88	The effect of increasing the hydrophobicity of penicillin on its micelle-catalysed hydrolysis. Journal of the Chemical Society Perkin Transactions II, 1982, , 155.	0.9	11
89	Peptidase activity of Î²-lactamases. Biochemical Journal, 1999, 341, 409.	3.7	11
90	Hydroxy-group participation in the hydrolysis of amides and its effective concentration in the absence of strain effects. Journal of the Chemical Society Perkin Transactions II, 1980, , 679.	0.9	10

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91	Thiazolidine ring opening in penicillin derivatives. Part 2. Enamine formation. Journal of the Chemical Society Perkin Transactions II, 1991, , 1225.	0.9	10
92	An unexpected Mitsunobu reaction. A direct route to the 2,5-diazabicyclo[2.2.1]heptan-3-one skeleton as a Î³-lactam mimic of Î²-lactam antibiotics. Journal of the Chemical Society Perkin Transactions 1, 1997, , 503-510.	0.9	10
93	Reactive intermediates in the H-phosphonate synthesis of oligonucleotides. Organic and Biomolecular Chemistry, 2012, 10, 5940.	2.8	10
94	Hydrolysis of 6-alkyl penicillins catalysed by Î²-lactamase I from Bacillus cereus and by hydroxide ion. Journal of the Chemical Society Perkin Transactions II, 1988, , 1809-1813.	0.9	9
95	The Relative Catalytic Efficiency of Î²-Lactamase Catalyzed Acyl and Phosphyl Transfer. Bioorganic Chemistry, 2001, 29, 77-95.	4.1	9
96	Stereochemistry and ring opening of a carbocyclic analogue of a 1-oxapenam. Tetrahedron Letters, 1986, 27, 1631-1634.	1.4	8
97	The roles of the carboxy group in Î²-lactam antibiotics and lysine 234 in Î²-lactamase I. Journal of the Chemical Society Perkin Transactions II, 1993, , 17-21.	0.9	8
98	pH and basicity of ligands control the binding of metal-ions to B. cereus B1 Î²-lactamase. Chemical Science, 2014, 5, 3120-3129.	7.4	8
99	The kinetics and mechanism of the organo-iridium catalysed racemisation of amines. Organic and Biomolecular Chemistry, 2016, 14, 7092-7098.	2.8	8
100	The principles of enzymatic catalysis. International Journal of Biochemistry & Cell Biology, 1979, 10, 471-476.	0.5	7
101	Equilibria between enamine and Î±,Î²-unsaturated imine in cephalosporin hydrolysis. Journal of the Chemical Society Chemical Communications, 1986, , 1039-1040.	2.0	7
102	Stereochemical studies. Part 112. Geometrical dependence of intramolecular catalysis in the hydrolysis and aminolysis of aryl esters. Journal of the Chemical Society Perkin Transactions II, 1986, , 867-871.	0.9	7
103	Unusual steric effects in sulfonyl transfer reactions. Perkin Transactions II RSC, 2001, , 1503-1505.	1.1	7
104	The ammonolysis of esters in liquid ammonia. Journal of Physical Organic Chemistry, 2013, 26, 1032-1037.	1.9	7
105	Structureâ€“reactivity relationships and the mechanism of general base catalysis in the hydrolysis of a hydroxy-amide. Concerted breakdown of a tetrahedral intermediate. Journal of the Chemical Society Perkin Transactions II, 1980, , 685-692.	0.9	6
106	Reaction kinetics in liquid ammonia up to 120Â°C: techniques and some solvolysis and substitution reactions. Journal of Physical Organic Chemistry, 2013, 26, 1038-1043.	1.9	6
107	Kinetics of the conversion of methyl benzoate to benzamide by the alumina catalysed reaction with liquid ammonia at 120 Â°C. Catalysis Science and Technology, 2014, 4, 3870-3878.	4.1	6
108	Changing the kinetic order of enantiomer formation and distinguishing between iminium ion and imine as the reactive species in the asymmetric transfer hydrogenation of substituted imines using a cyclopentadienyl iridium (III) complex. Pure and Applied Chemistry, 2020, 92, 107-121.	1.9	6

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109	Evidence for a trigonal bipyramidal intermediate during nucleophilic substitution at a sulfonyl centre and for a sulfonylium cation in the acid catalysed reaction. Chemical Communications, 1997, , 2037-2038.	4.1	5
110	Competitive endo- and exo-cyclic CÂ–N fission in the hydrolysis of N-aroyl Î²-lactams. Canadian Journal of Chemistry, 2005, 83, 1432-1439.	1.1	5
111	Micelle Formation in Liquid Ammonia. Journal of Organic Chemistry, 2015, 80, 7033-7039.	3.2	5
112	Phosphorothioate anti-sense oligonucleotides: the kinetics and mechanism of the generation of the sulfurising agent from phenylacetyl disulfide (PADS). Organic and Biomolecular Chemistry, 2016, 14, 8301-8308.	2.8	5
113	A tetrahedral intermediate in the aminolysis of benzylpenicillin. Journal of the Chemical Society Chemical Communications, 1978, , 374.	2.0	4
114	Nonlinear broensted relation for general acid-base catalysis of aminolysis reactions. Journal of the American Chemical Society, 1972, 94, 4729-4731.	13.7	3
115	Large rate enhancement for the hydrolysis of a four-membered ring phosphonamidate. Journal of the Chemical Society Chemical Communications, 1994, , 1223.	2.0	3
116	Evidence for the formation of isothiocyanate during sulfurisation of phosphines and phosphites using xanthane hydride. Tetrahedron Letters, 2007, 48, 417-419.	1.4	3
117	Phosphorothioate anti-sense oligonucleotides: the kinetics and mechanism of the sulfurisation of phosphites by phenylacetyl disulfide (PADS). Organic and Biomolecular Chemistry, 2016, 14, 10840-10847.	2.8	3
118	Energy differences and their relevance to enzyme and intramolecular catalysis. Journal of Molecular Catalysis, 1988, 47, 241-253.	1.2	2
119	Corrigendum to â€œHighly diastereoselective synthesis and template manipulation of the thiazolo[2,3-a]isoindolin-1-one ring systemâ€. Tetrahedron Letters, 2002, 43, 175.	1.4	2
120	Unusual Stability and Carbon Acidity of a Dicationic Carbon Species. Journal of Organic Chemistry, 2013, 78, 10732-10736.	3.2	2
121	Sphingosine and dihydrosphingosine as biomarkers for multiple sclerosis identified by metabolomic profiling using coupled UPLC-MS. Analytical Methods, 2017, 9, 5929-5934.	2.7	2
122	Both the mono- and di-anions of ellagic acid are effective inhibitors of the serine Î²-lactamase CTX-M-15. RSC Advances, 2019, 9, 30637-30640.	3.6	2
123	Penicillin 3-aldehyde is a good substrate and not an inhibitor of Î²-lactamases A and C. Journal of the Chemical Society Perkin Transactions II, 1995, , 869-870.	0.9	1
124	Structure and Reactivity of Î²-Lactams. , 2011, , 169-200.		1
125	Lipase catalysed conversion of triglycerides to amides in liquid ammonia. Journal of Physical Organic Chemistry, 2016, 29, 768-772.	1.9	1
126	Chapter 7 The mechanisms of chemical catalysis used by enzymes. New Comprehensive Biochemistry, 1984, , 229-269.	0.1	0

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127	Î²-Sultams â€" Mechanism of Reactions and Use as Inhibitors of Serine Proteases. ChemInform, 2004, 35, no.	0.0	0
128	Carboxamide substituted tetramethylcyclopentadiene â€" synthesis, characterisation and its iridium(<scp>iii</scp>) complex catalysed reduction of imines. Dalton Transactions, 2022, 51, 2696-2707.	3.3	0