Assocâ€profâ€dr Peter J Rutledge

List of Publications by Year
in descending order

86 papers	3,179 citations	236925 25 h-index	161849 54 g-index
98 all docs	98 docs citations	98 times ranked	4450 citing authors

#	Article	IF	Citations
1	Discovery of microbial natural products by activation of silent biosynthetic gene clusters. Nature Reviews Microbiology, 2015, 13, 509-523.	28.6	762
2	Chemical sensors that incorporate click-derived triazoles. Chemical Society Reviews, 2011, 40, 2848.	38.1	366
3	Metal complexes as a promising source for new antibiotics. Chemical Science, 2020, 11, 2627-2639.	7.4	290
4	The reaction cycle of isopenicillin N synthase observed by X-ray diffraction. Nature, 1999, 401, 721-724.	27.8	212
5	Combined â€œdualâ€•absorption and fluorescence smartphone spectrometers. Optics Letters, 2015, 40, 1737.	3.3	94
6	Lab-in-a-Phone: Smartphone-Based Portable Fluorometer for pH Measurements of Environmental Water. IEEE Sensors Journal, 2015, 15, 5095-5102.	4.7	86
7	A Click Fluorophore Sensor that Can Distinguish Cu^{II} and Hg^{II} via Selective Anionâ€‘Induced Demetallation. Chemistry - A European Journal, 2011, 17, 2850-2858.	3.3	65
8	Recent Advances in Macrocyclic Fluorescent Probes for Ion Sensing. Molecules, 2017, 22, 200.	3.8	54
9	Inhibition Studies of Mycobacterium tuberculosis Salicylate Synthase (MbtI). ChemMedChem, 2010, 5, 1067-1079.	3.2	50
10	Alternative oxidation by isopenicillin N synthase observed by X-ray diffraction. Chemistry and Biology, 2001, 8, 1231-1237.	6.0	47
11	Nontoxic Metalâ€“Cyclam Complexes, a New Class of Compounds with Potency against Drug-Resistant Mycobacterium tuberculosis. Journal of Medicinal Chemistry, 2016, 59, 5917-5921.	6.4	42
12	Reversing the Triazole Topology in a Cyclamâ€‘Triazoleâ€‘Dye Ligand Gives a 10â€‘Fold Brighter Signal Response to Zn²⁺ in Aqueous Solution. European Journal of Inorganic Chemistry, 2012, 2012, 5611-5615.	2.0	41
13	Structural Studies on the Reaction of Isopenicillin N Synthase with the Truncated Substrate Analogues Î´-(l-Î±-aminoadipoyl)-l-cysteinyl-glycine and Î´-(l-Î±-aminoadipoyl)-l-cysteinyl-d-alanineâ€¡. Biochemistry, 2005, 44, 6619-6628.	2.5	39
14	Recently Discovered Secondary Metabolites from Streptomyces Species. Molecules, 2022, 27, 887.	3.8	37
15	Isopenicillin N Synthase Mediates Thiolate Oxidation to Sulfenate in a Depsipeptide Substrate Analogue: Implications for Oxygen Binding and a Link to Nitrile Hydratase?. Journal of the American Chemical Society, 2008, 130, 10096-10102.	13.7	35
16	Copper, Nickel, and Zinc Cyclamâ€“Amino Acid and Cyclamâ€“Peptide Complexes May Be Synthesized with â€œClickâ€•Chemistry and Are Noncytotoxic. Inorganic Chemistry, 2011, 50, 12823-12835.	4.0	35
17	Structural studies on the reaction of isopenicillin N synthase with the substrate analogue delta-(l-alpha-aminoadipoyl)-l-cysteinyl-d-alpha-aminobutyrate. Biochemical Journal, 2003, 372, 687-693.	3.7	34
18	Crystallographic studies on the reaction of isopenicillin N synthase with an unsaturated substrate analogue. Organic and Biomolecular Chemistry, 2003, 1, 1455-1460.	2.8	33

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19	Antitubercular Bis-Substituted Cyclam Derivatives: Structureâ€“Activity Relationships and in Vivo Studies. Journal of Medicinal Chemistry, 2018, 61, 3595-3608.	6.4	33
20	Interactions of Isopenicillin N Synthase with Cyclopropyl-Containing Substrate Analogues Reveal New Mechanistic Insight,. Biochemistry, 2007, 46, 4755-4762.	2.5	31
21	Early warning smartphone diagnostics for water security and analysis using real-time pH mapping. Photonic Sensors, 2015, 5, 289-297.	5.0	29
22	Total synthesis of a novel 2-thiabicyclo[3.2.0]heptan-6-one analogue of penicillin N. Tetrahedron, 2003, 59, 8233-8243.	1.9	27
23	Efficient deprotection of F-BODIPY derivatives: removal of BF₂ using BrÃ¸nsted acids. Beilstein Journal of Organic Chemistry, 2015, 11, 37-41.	2.2	26
24	Time-resolved and temperature tuneable measurements of fluorescent intensity using a smartphone fluorimeter. Analyst, The, 2017, 142, 1953-1961.	3.5	26
25	Active-site-mediated elimination of hydrogen fluoride from a fluorinated substrate analogue by isopenicillin N synthase. Biochemical Journal, 2004, 382, 659-666.	3.7	25
26	A Fluorescent â€œAllosteric Scorpionandâ€•Complex Visualizes a Biological Recognition Event. ChemBioChem, 2013, 14, 224-229.	2.6	24
27	Unexpected Oxidation of a Depsipeptide Substrate Analogue in Crystalline Isopenicillin N Synthase. ChemBioChem, 2006, 7, 351-358.	2.6	22
28	Easy-To-Synthesize Spirocyclic Compounds Possess Remarkable in Vivo Activity against Mycobacterium tuberculosis. Journal of Medicinal Chemistry, 2018, 61, 11327-11340.	6.4	22
29	Nanangenines: drimane sesquiterpenoids as the dominant metabolite cohort of a novel Australian fungus, Aspergillus nanangensis. Beilstein Journal of Organic Chemistry, 2019, 15, 2631-2643.	2.2	22
30	A device for the high-pressure oxygenation of protein crystals. Analytical Biochemistry, 2002, 308, 265-268.	2.4	21
31	Unique binding of a non-natural l,l,l-substrate by isopenicillin N synthase. Biochemical and Biophysical Research Communications, 2005, 336, 702-708.	2.1	21
32	A Cyclobutanone Analogue Mimics Penicillin in Binding to Isopenicillin N Synthase. ChemBioChem, 2007, 8, 2003-2007.	2.6	21
33	Boronated phosphonium salts containing arylboronic acid, closo-carborane, or nido-carborane: synthesis, X-ray diffraction, in vitro cytotoxicity, and cellular uptake. Journal of Biological Inorganic Chemistry, 2010, 15, 1305-1318.	2.6	21
34	Neuroprotective peptideâ€“macrocycle conjugates reveal complex structureâ€“activity relationships in their interactions with amyloid Î². Metallomics, 2014, 6, 1931-1940.	2.4	20
35	Structural Studies on the Reaction of Isopenicillin N Synthase with a Sterically Demanding Depsipeptide Substrate Analogue. ChemBioChem, 2009, 10, 2025-2031.	2.6	19
36	Investigating the oxidation of alkenes by non-heme iron enzyme mimics. Organic and Biomolecular Chemistry, 2012, 10, 7372.	2.8	19

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37	Diketoacid Inhibitors of HIV-1 Integrase: From L-708,906 to Raltegravir and Beyond. Current Medicinal Chemistry, 2012, 19, 1177-1192.	2.4	18
38	l-Proline-derived ligands to mimic the â€˜2-His-1-carboxylateâ€™ triad of the non-haem iron oxidase active site. Tetrahedron, 2012, 68, 3231-3236.	1.9	18
39	Synthesis and Evaluation of 1,8â€Disubstitutedâ€Cyclam/Naphthalimide Conjugates as Probes for Metal Ions. ChemistryOpen, 2016, 5, 375-385.	1.9	18
40	Cyclobutanone Analogues of Î²â€Lactam Antibiotics: Î²â€Lactamase Inhibitors with Untapped Potential?. ChemBioChem, 2017, 18, 338-351.	2.6	17
41	pH-Responsive quantum dots (RQDs) that combine a fluorescent nanoparticle with a pH-sensitive dye. Physical Chemistry Chemical Physics, 2014, 16, 25255-25257.	2.8	16
42	Synthesis and structural characterisation of amides from picolinic acid and pyridine-2,6-dicarboxylic acid. Scientific Reports, 2015, 5, 9950.	3.3	16
43	Synthesis, carbohydrate- and DNA-binding studies of cationic 2,2â€²:6â€²,2â€²â€²-terpyridineplatinum(ii) complexes containing N- and S-donor boronic acid ligands. Dalton Transactions, 2011, 40, 506-513.	3.3	15
44	Mercury binding by ferrocenoyl peptides with sulfur-containing side chains: Electrochemical, spectroscopic and structural studies. Journal of Organometallic Chemistry, 2008, 693, 2869-2876.	1.8	14
45	Terminally Truncated Isopenicillin N Synthase Generates a Dithioester Product: Evidence for a Thioaldehyde Intermediate during Catalysis and a New Mode of Reaction for Nonâ€Heme Iron Oxidases. Chemistry - A European Journal, 2017, 23, 12815-12824.	3.3	14
46	Substrate range and enantioselectivity of epoxidation reactions mediated by the ethene-oxidising Mycobacterium strain NBB4. Applied Microbiology and Biotechnology, 2013, 97, 1131-1140.	3.6	13
47	Synthesis and electrochemical studies of disubstituted ferrocene/dipeptide conjugates with sulfur-containing side chains. Tetrahedron, 2010, 66, 5653-5659.	1.9	12
48	Design and synthesis of a tetradentate â€˜3-amine-1-carboxylateâ€™ ligand to mimic the metal binding environment at the non-heme iron(ii) oxidase active site. Organic and Biomolecular Chemistry, 2010, 8, 1666.	2.8	12
49	Incorporation of Bulky and Cationic Cyclamâ€Triazole Moieties into Marimastat Can Generate Potent MMP Inhibitory Activity without Inducing Cytotoxicity. ChemistryOpen, 2013, 2, 99-105.	1.9	12
50	Bend and twist intramolecular charge transfer and emission for selective metal ion sensing. Optical Materials Express, 2015, 5, 2675.	3.0	12
51	Chemistry in the Time of COVID-19: Reflections on a Very Unusual Semester. Journal of Chemical Education, 2020, 97, 2928-2934.	2.3	12
52	Using Click Chemistry to Tune the Properties and the Fluorescence Response Mechanism of Structurally Similar Probes for Metal Ions. European Journal of Inorganic Chemistry, 2015, 2015, 58-66.	2.0	11
53	Molecular Switches for any pH: A Systematic Study of the Versatile Coordination Behaviour of Cyclam Scorpionands. Chemistry - A European Journal, 2018, 24, 1573-1585.	3.3	11
54	Incorporating a Piperidinyl Group in the Fluorophore Extends the Fluorescence Lifetime of Click-Derived Cyclam-Naphthalimide Conjugates. PLoS ONE, 2014, 9, e100761.	2.5	11

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55	Bengamides display potent activity against drug-resistant Mycobacterium tuberculosis. Scientific Reports, 2019, 9, 14396.	3.3	10
56	Design and synthesis of an isopenicillin N synthase mimic. Tetrahedron, 2005, 61, 137-143.	1.9	9
57	Polyamide-Scorpion Cyclam Lexitropsins Selectively Bind AT-Rich DNA Independently of the Nature of the Coordinated Metal. PLoS ONE, 2011, 6, e17446.	2.5	9
58	Crystallographic studies on the binding of selectively deuterated LLD- and LLL-substrate epimers by isopenicillin N synthase. Biochemical and Biophysical Research Communications, 2010, 398, 659-664.	2.1	8
59	The crystal structure of isopenicillin N synthase with Î´-(l-Î±-aminoadipoyl)-l-cysteinyl-d-methionine reveals thioether coordination to iron. Archives of Biochemistry and Biophysics, 2011, 516, 103-107.	3.0	8
60	Isopenicillin N Synthase Binds Î´â€(<scp>L</scp>â€Î±â€Aminoadipoyl)â€<scp>L</scp>â€Cysteinylâ€<scp>D</scp>â€Thiaâ€alloâ€Isoleucine through both Sulfur Atoms. ChemBioChem, 2011, 12, 1881-1885.	2.6	8
61	A direct method for the N-tetraalkylation of azamacrocycles. Beilstein Journal of Organic Chemistry, 2016, 12, 2457-2461.	2.2	8
62	Conglobatins Bâ€“E: cytotoxic analogues of the C2-symmetric macrodiolide conglobatin. Journal of Antibiotics, 2020, 73, 756-765.	2.0	8
63	Isopenicillinâ€…N Synthase: Crystallographic Studies. ChemBioChem, 2021, 22, 1687-1705.	2.6	8
64	Isopenicillin N Synthase. 2-Oxoglutarate-Dependent Oxygenases, 2015, , 414-424.	0.8	8
65	The crystal structure of anIll-configured depsipeptide substrate analogue bound to isopenicillin N synthase. Organic and Biomolecular Chemistry, 2010, 8, 122-127.	2.8	7
66	Synthesis, electrochemistry and metal binding properties of monosubstituted ferrocenoyl peptides with thioether-containing sidechains. Journal of Organometallic Chemistry, 2011, 696, 715-721.	1.8	7
67	l-Proline derived mimics of the non-haem iron active site catalyse allylic oxidation in acetonitrile solutions. Tetrahedron Letters, 2013, 54, 1236-1238.	1.4	7
68	Bio-Inspired Nitrile Hydration by Peptidic Ligands Based on L-Cysteine, L-Methionine or L-Penicillamine and Pyridine-2,6-dicarboxylic Acid. Molecules, 2014, 19, 20751-20767.	3.8	7
69	cis-Dihydroxylation of Alkenes by a Non-Heme Iron Enzyme Mimic. Synlett, 2008, 2008, 2172-2174.	1.8	6
70	The crystal structure of isopenicillin N synthase with a dipeptide substrate analogue. Archives of Biochemistry and Biophysics, 2013, 530, 48-53.	3.0	6
71	The crystal structure of an isopenicillin N synthase complex with an ethereal substrate analogue reveals water in the oxygen binding site. FEBS Letters, 2013, 587, 2705-2709.	2.8	6
72	Contrasting fates for 6-Î±-methylpenicillin N upon oxidation by deacetoxycephalosporin C synthase (DAOCS) and deacetoxy/deacetylcephalosporin C synthase (DAOC/DACS). Bioorganic and Medicinal Chemistry Letters, 2001, 11, 2511-2514.	2.2	5

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73	The Interaction of Isopenicillin N Synthase with Homologated Substrate Analogues Îâ€(<scp>L</scp>â€Î±â€Aminoadipoyl)â€<scp>L</scp>â€homocysteinylâ€<scp>D</scp>â€Xaa Characterised by Protein Crystallography. ChemBioChem, 2013, 14, 599-606.	2.6	5
74	Centralised and portable “network forensics” using smartphone-based diagnostics: Case study — The mapping of tap water pH across Sydney, Australia. , 2014, , .		4
75	Iron complexes of tetramine ligands catalyse allylic hydroxyamination via a nitrosoâ€“ene mechanism. Beilstein Journal of Organic Chemistry, 2015, 11, 2549-2556.	2.2	4
76	Selective Displacement of a Scorpionand Triazole Ligand from Metallocyclam Complexes Visualised with NMR Spectroscopy. European Journal of Inorganic Chemistry, 2017, 2017, 1075-1086.	2.0	4
77	tele-Substitution Reactions in the Synthesis of a Promising Class of 1,2,4-Triazolo[4,3-a]pyrazine-Based Antimalarials. Journal of Organic Chemistry, 2020, 85, 13438-13452.	3.2	4
78	Temperature Controlled Portable Smartphone Fluorimeter. , 2016, , .		4
79	The properties and performance of a pH-responsive functionalised nanoparticle. Faraday Discussions, 2014, 175, 171-187.	3.2	3
80	Yeppoonic acids A â€“ D: 1,2,4-trisubstituted arene carboxylic acid co-metabolites of conglobatin from an Australian Streptomyces sp.. Journal of Antibiotics, 2022, 75, 108-112.	2.0	3
81	tert-Butyldimethylsilanol hemihydrate. Acta Crystallographica Section E: Structure Reports Online, 2008, 64, o1174-o1174.	0.2	1
82	Absorption and fluorescence spectroscopy on a smartphone. , 2015, , .		1
83	A Treasure Hunt for Chemistry. Journal of Chemical Education, 2011, 88, 437-439.	2.3	0
84	(2S,4S)-3-Benzoyl-4-benzyl-2-tert-butyl-1,3-oxazolidin-5-one. Acta Crystallographica Section E: Structure Reports Online, 2012, 68, o2747-o2747.	0.2	0
85	Fluorescent measurements of Zn2+on a smartphone. , 2015, , .		0
86	Copper(<scp>ii</scp>) complexes of N-propargyl cyclam ligands reveal a range of coordination modes and colours, and unexpected reactivity. Dalton Transactions, 2021, 50, 3931-3942.	3.3	0