

# Peter C Tyler

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/3904635/publications.pdf>

Version: 2024-02-01

112  
papers

4,620  
citations

66234

42  
h-index

114278

63  
g-index

115  
all docs

115  
docs citations

115  
times ranked

3068  
citing authors

#	ARTICLE	IF	CITATIONS
1	One-Third-the-Sites Transition-State Inhibitors for Purine Nucleoside Phosphorylase. <i>Biochemistry</i> , 1998, 37, 8615-8621.	1.2	254
2	The 2.0 A structure of human hypoxanthine-guanine phosphoribosyltransferase in complex with a transition-state analog inhibitor. <i>Nature Structural Biology</i> , 1999, 6, 588-593.	9.7	148
3	Femtomolar Transition State Analogue Inhibitors of 5-Methylthioadenosine/S-Adenosylhomocysteine Nucleosidase from <i>Escherichia coli</i> . <i>Journal of Biological Chemistry</i> , 2005, 280, 18265-18273.	1.6	122
4	Achieving the Ultimate Physiological Goal in Transition State Analogue Inhibitors for Purine Nucleoside Phosphorylase. <i>Journal of Biological Chemistry</i> , 2003, 278, 31465-31468.	1.6	113
5	Targeting a Novel <i>Plasmodium falciparum</i> Purine Recycling Pathway with Specific Immucillins. <i>Journal of Biological Chemistry</i> , 2005, 280, 9547-9554.	1.6	105
6	<i>Plasmodium falciparum</i> Purine Nucleoside Phosphorylase. <i>Journal of Biological Chemistry</i> , 2004, 279, 18103-18106.	1.6	104
7	Purine-less Death in <i>Plasmodium falciparum</i> Induced by Immucillin-H, a Transition State Analogue of Purine Nucleoside Phosphorylase. <i>Journal of Biological Chemistry</i> , 2002, 277, 3226-3231.	1.6	101
8	Synthesis of Second-Generation Transition State Analogues of Human Purine Nucleoside Phosphorylase. <i>Journal of Medicinal Chemistry</i> , 2003, 46, 5271-5276.	2.9	100
9	Transition-state analogs as inhibitors of human and malarial hypoxanthine-guanine phosphoribosyltransferases. <i>Nature Structural Biology</i> , 1999, 6, 582-587.	9.7	92
10	Addition of Lithiated 9-Deazapurine Derivatives to a Carbohydrate Cyclic Imine: A Convergent Synthesis of the Aza-C-nucleoside Immucillins. <i>Journal of Organic Chemistry</i> , 2001, 66, 5723-5730.	1.7	90
11	Transition State Analogue Inhibitors of Purine Nucleoside Phosphorylase from <i>Plasmodium falciparum</i> . <i>Journal of Biological Chemistry</i> , 2002, 277, 3219-3225.	1.6	89
12	Prostaglandin E2-bisphosphonate conjugates: potential agents for treatment of osteoporosis. <i>Bioorganic and Medicinal Chemistry</i> , 1999, 7, 901-919.	1.4	86
13	Synthesis of Transition State Analogue Inhibitors for Purine Nucleoside Phosphorylase and N-Riboside Hydrolases. <i>Tetrahedron</i> , 2000, 56, 3053-3062.	1.0	86
14	Exploring Structure-Activity Relationships of Transition State Analogues of Human Purine Nucleoside Phosphorylase. <i>Journal of Medicinal Chemistry</i> , 2003, 46, 3412-3423.	2.9	80
15	Synthesis of a Targeted Library of Heparan Sulfate Hexa- to Dodecasaccharides as Inhibitors of $\beta$ -Secretase: Potential Therapeutics for Alzheimer's Disease. <i>Chemistry - A European Journal</i> , 2013, 19, 6817-6823.	1.7	80
16	Iminoribitol Transition State Analogue Inhibitors of Protozoan Nucleoside Hydrolases. <i>Biochemistry</i> , 1999, 38, 13147-13154.	1.2	78
17	Azetidine Based Transition State Analogue Inhibitors of N-Ribosyl Hydrolases and Phosphorylases. <i>Journal of Medicinal Chemistry</i> , 2008, 51, 948-956.	2.9	78
18	Synthesis of transition state inhibitors for N-riboside hydrolases and transferases. <i>Tetrahedron</i> , 1997, 53, 2915-2930.	1.0	77

#	ARTICLE	IF	CITATIONS
19	Synthesis of a Transition State Analogue Inhibitor of Purine Nucleoside Phosphorylase via the Mannich Reaction. <i>Organic Letters</i> , 2003, 5, 3639-3640.	2.4	77
20	Syntheses and bio-activities of the l-enantiomers of two potent transition state analogue inhibitors of purine nucleoside phosphorylases. <i>Organic and Biomolecular Chemistry</i> , 2006, 4, 1131.	1.5	75
21	Structural Rationale for the Affinity of Pico- and Femtomolar Transition State Analogues of <i>Escherichia coli</i> 5â€²-Methylthioadenosine/S-Adenosylhomocysteine Nucleosidase. <i>Journal of Biological Chemistry</i> , 2005, 280, 18274-18282.	1.6	71
22	Four generations of transition-state analogues for human purine nucleoside phosphorylase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2010, 107, 4805-4812.	3.3	71
23	Third-Generation Immucillins: Syntheses and Bioactivities of Acyclic Immucillin Inhibitors of Human Purine Nucleoside Phosphorylase. <i>Journal of Medicinal Chemistry</i> , 2009, 52, 1126-1143.	2.9	68
24	The chemistry of castanospermine, part I: synthetic modifications at C-6. <i>Tetrahedron</i> , 1994, 50, 2131-2160.	1.0	66
25	Picomolar Transition State Analogue Inhibitors of Human 5â€²-Methylthioadenosine Phosphorylase and X-ray Structure with MT-Immucillin-Aâ€². <i>Biochemistry</i> , 2004, 43, 9-18.	1.2	65
26	Improved Syntheses of 3H,5H-Pyrrolo[3,2-d]pyrimidines. <i>Journal of Organic Chemistry</i> , 1999, 64, 8411-8412.	1.7	64
27	Picomolar Inhibitors as Transition-State Probes of 5â€²-Methylthioadenosine Nucleosidases. <i>ACS Chemical Biology</i> , 2007, 2, 725-734.	1.6	62
28	Atomic Dissection of the Hydrogen Bond Network for Transition-State Analogue Binding to Purine Nucleoside Phosphorylase. <i>Biochemistry</i> , 2002, 41, 14489-14498.	1.2	61
29	Structure and Inhibition of a Quorum Sensing Target from <i>Streptococcus pneumoniae</i> . <i>Biochemistry</i> , 2006, 45, 12929-12941.	1.2	61
30	Synthesis of 5â€²-Methylthio Coformycins: A Specific Inhibitors for Malarial Adenosine Deaminase. <i>Journal of the American Chemical Society</i> , 2007, 129, 6872-6879.	6.6	60
31	Mechanistic Diagnoses of N-Ribohydrolases and Purine Nucleoside Phosphorylase. <i>Journal of the American Chemical Society</i> , 1996, 118, 2111-2112.	6.6	59
32	Acyclic Immucillin Phosphonates: Second-Generation Inhibitors of <i>Plasmodium falciparum</i> Hypoxanthine-Guanine-Xanthine Phosphoribosyltransferase. <i>Chemistry and Biology</i> , 2012, 19, 721-730.	6.2	59
33	Second Generation Transition State Analogue Inhibitors of Human 5â€²-Methylthioadenosine Phosphorylase. <i>Journal of Medicinal Chemistry</i> , 2005, 48, 4679-4689.	2.9	58
34	Purine Nucleoside Phosphorylase from <i>Mycobacterium tuberculosis</i> . Analysis of Inhibition by a Transition-State Analogue and Dissection by Parts. <i>Biochemistry</i> , 2001, 40, 8196-8203.	1.2	57
35	8-Aza-immucillins as Transition-State Analogue Inhibitors of Purine Nucleoside Phosphorylase and Nucleoside Hydrolases. <i>Journal of Medicinal Chemistry</i> , 2003, 46, 155-160.	2.9	54
36	Targeting the Polyamine Pathway with Transition-State Analogue Inhibitors of 5â€²-Methylthioadenosine Phosphorylase. <i>Journal of Medicinal Chemistry</i> , 2004, 47, 3275-3281.	2.9	53

#	ARTICLE	IF	CITATIONS
37	Energetic Mapping of Transition State Analogue Interactions with Human and Plasmodium falciparum Purine Nucleoside Phosphorylases. <i>Journal of Biological Chemistry</i> , 2005, 280, 30320-30328.	1.6	51
38	A Picomolar Transition State Analogue Inhibitor of MTAN as a Specific Antibiotic for <i>Helicobacter pylori</i> . <i>Biochemistry</i> , 2012, 51, 6892-6894.	1.2	51
39	Imino-Sugar-Based Nucleosides. <i>Current Topics in Medicinal Chemistry</i> , 2003, 3, 525-540.	1.0	51
40	Total synthesis of (+)-thielocin A1.β: a novel inhibitor of phospholipase A2. <i>Journal of the American Chemical Society</i> , 1994, 116, 759-760.	6.6	50
41	Immucillins in Infectious Diseases. <i>ACS Infectious Diseases</i> , 2018, 4, 107-117.	1.8	49
42	Inhibitors of ADP-Ribosylating Bacterial Toxins Based on Oxacarbenium Ion Character at Their Transition States. <i>Journal of the American Chemical Society</i> , 2004, 126, 5690-5698.	6.6	45
43	The chemistry of castanospermine, part V: synthetic modifications at C-1 and C-7. <i>Tetrahedron</i> , 1997, 53, 245-268.	1.0	41
44	New Antibiotic Candidates against <i>Helicobacter pylori</i> . <i>Journal of the American Chemical Society</i> , 2015, 137, 14275-14280.	6.6	41
45	Transition state analogue inhibitors of protozoan nucleoside hydrolases. <i>Bioorganic and Medicinal Chemistry</i> , 1999, 7, 2599-2606.	1.4	40
46	Acyclic Ribooxacarbenium Ion Mimics as Transition State Analogues of Human and Malarial Purine Nucleoside Phosphorylases. <i>Journal of the American Chemical Society</i> , 2007, 129, 6984-6985.	6.6	40
47	Total synthesis and stereochemical identity of the C <sub>18</sub> H <sub>32</sub> O <sub>5</sub> degradation product from boromycin. <i>Journal of the American Chemical Society</i> , 1981, 103, 6243-6246.	6.6	39
48	Inhibition and Structure of <i>Trichomonas vaginalis</i> Purine Nucleoside Phosphorylase with Picomolar Transition State Analogues. <i>Biochemistry</i> , 2007, 46, 659-668.	1.2	39
49	Design and Synthesis of Potent Sulfur-Free Transition State Analogue Inhibitors of 5-Methylthioadenosine Nucleosidase and 5-Methylthioadenosine Phosphorylase. <i>Journal of Medicinal Chemistry</i> , 2010, 53, 6730-6746.	2.9	39
50	Shotgun ion mobility mass spectrometry sequencing of heparan sulfate saccharides. <i>Nature Communications</i> , 2020, 11, 1481.	5.8	39
51	Ricin A-Chain Inhibitors Resembling the Oxacarbenium Ion Transition State. <i>Biochemistry</i> , 2001, 40, 6845-6851.	1.2	38
52	Imino-C-nucleoside Synthesis: Heteroaryl Lithium Carbanion Additions to a Carbohydrate Cyclic Imine and Nitron. <i>Journal of Organic Chemistry</i> , 2004, 69, 2217-2220.	1.7	37
53	Observations on the possible application of glycosyl disulphides, sulphenic esters, and sulphones in the synthesis of glycosides. <i>Carbohydrate Research</i> , 1977, 58, 397-404.	1.1	36
54	Transition State Analogue Discrimination by Related Purine Nucleoside Phosphorylases. <i>Journal of the American Chemical Society</i> , 2006, 128, 7126-7127.	6.6	36

#	ARTICLE	IF	CITATIONS
55	Acyclic phosph(on)ate inhibitors of Plasmodium falciparum hypoxanthine-guanine-xanthine phosphoribosyltransferase. Bioorganic and Medicinal Chemistry, 2013, 21, 5629-5646.	1.4	34
56	Single-Entity Heparan Sulfate Glycomimetic Clusters for Therapeutic Applications. Angewandte Chemie - International Edition, 2015, 54, 2718-2723.	7.2	34
57	New syntheses of 1d- and 1l-1,2-anhydro-myo-inositol and assessment of their glycosidase inhibitory activities. Carbohydrate Research, 2000, 329, 301-308.	1.1	32
58	Mechanism-based inactivator of isocitrate lyases 1 and 2 from <i>Mycobacterium tuberculosis</i> . Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, 7617-7622.	3.3	32
59	Reaction of lithium dimethylcuprate with conformationally biased $\beta^2$ -acyloxy enol esters - regio and stereocontrolled access to functionalized six-carbon chiral synthons. Tetrahedron Letters, 1981, 22, 4583-4586.	0.7	31
60	Synthesis of 1,5-dideoxy-1,5-imino-d-galactitol from l-sorbose. Tetrahedron Letters, 1993, 34, 3609-3612.	0.7	28
61	The Chemistry of Castanospermine, Part IV1: Synthetic Modifications at C-8. Tetrahedron, 1995, 51, 12611-12630.	1.0	28
62	Dendrimer Heparan Sulfate Glycomimetics: Potent Heparanase Inhibitors for Anticancer Therapy. ACS Chemical Biology, 2018, 13, 3236-3242.	1.6	28
63	Stereoselective Total Synthesis of ( $\Delta^{\pm}$ )-Thielocin A1 $^2$ . Journal of the American Chemical Society, 2001, 123, 11381-11387.	6.6	26
64	A short practical synthesis of deoxymannojirimycin from d-fructose. Tetrahedron Letters, 1993, 34, 3613-3616.	0.7	24
65	$\Delta^{\pm}$ -Enantiomers of Transition State Analogue Inhibitors Bound to Human Purine Nucleoside Phosphorylase. Journal of the American Chemical Society, 2008, 130, 842-844.	6.6	23
66	The chemistry of castanospermine, part II: Synthesis of deoxyfluoro analogues of castanospermine. Tetrahedron Letters, 1994, 35, 3143-3146.	0.7	21
67	Synthesis and utility of sulfated chromogenic carbohydrate model substrates for measuring activities of mucin-desulfating enzymes. Carbohydrate Research, 2002, 337, 1095-1111.	1.1	21
68	Transition-State Interactions Revealed in Purine Nucleoside Phosphorylase by Binding Isotope Effects. Journal of the American Chemical Society, 2008, 130, 2166-2167.	6.6	21
69	Entropy-Driven Binding of Picomolar Transition State Analogue Inhibitors to Human $\Delta^{\pm}$ -Methylthioadenosine Phosphorylase. Biochemistry, 2011, 50, 10408-10417.	1.2	21
70	Immucillins ImmA and ImmH Are Effective and Non-toxic in the Treatment of Experimental Visceral Leishmaniasis. PLoS Neglected Tropical Diseases, 2015, 9, e0004297.	1.3	21
71	A practical synthesis of (3R,4R)-N-tert-butoxycarbonyl-4-hydroxymethylpyrrolidin-3-ol. Organic and Biomolecular Chemistry, 2007, 5, 2800.	1.5	20
72	Composition, Sequencing and Ion Mobility Mass Spectrometry of Heparan Sulfate-like Octasaccharide Isomers Differing in Glucuronic and Iduronic Acid Content. European Journal of Mass Spectrometry, 2015, 21, 245-254.	0.5	20

#	ARTICLE	IF	CITATIONS
73	Stereoselective Total Synthesis of Aminoiminoheptitols via Carbamate Annulation. <i>Journal of Organic Chemistry</i> , 2011, 76, 9611-9621.	1.7	19
74	Total synthesis of the C-3 to C-17 segment of boromycin. <i>Canadian Journal of Chemistry</i> , 1983, 61, 634-637.	0.6	18
75	Transition State Analogues of Plasmodium falciparum and Human Orotate Phosphoribosyltransferases. <i>Journal of Biological Chemistry</i> , 2013, 288, 34746-34754.	1.6	18
76	The chemistry of castanospermine, part III: 1,2 Castanospermine-6-phosphate, an unusual route to a novel compound. <i>Tetrahedron Letters</i> , 1995, 36, 3055-3058.	0.7	17
77	Salmonella enterica MTAN at 1.36 Å Resolution: A Structure-Based Design of Tailored Transition State Analogs. <i>Structure</i> , 2013, 21, 963-974.	1.6	17
78	Inhibition and Structure of Toxoplasma gondii Purine Nucleoside Phosphorylase. <i>Eukaryotic Cell</i> , 2014, 13, 572-579.	3.4	16
79	Using automated glycan assembly (AGA) for the practical synthesis of heparan sulfate oligosaccharide precursors. <i>Organic and Biomolecular Chemistry</i> , 2019, 17, 1817-1821.	1.5	15
80	The Immucillins: Design, Synthesis and Application of Transition- State Analogues. <i>Current Medicinal Chemistry</i> , 2015, 22, 3897-3909.	1.2	15
81	Immucillins in custom catalytic-site cavities. <i>Bioorganic and Medicinal Chemistry Letters</i> , 2008, 18, 5900-5903.	1.0	14
82	Methylthioadenosine Deaminase in an Alternative Quorum Sensing Pathway in Pseudomonas aeruginosa. <i>Biochemistry</i> , 2012, 51, 9094-9103.	1.2	14
83	Transition State Analogue Inhibitors of 5'-Deoxyadenosine/5'-Methylthioadenosine Nucleosidase from Mycobacterium tuberculosis. <i>Biochemistry</i> , 2017, 56, 5090-5098.	1.2	14
84	The transition to magic bullets – transition state analogue drug design. <i>MedChemComm</i> , 2018, 9, 1983-1993.	3.5	14
85	Immucillins Impair Leishmania (L.) infantum chagasi and Leishmania (L.) amazonensis Multiplication In Vitro. <i>PLoS ONE</i> , 2015, 10, e0124183.	1.1	14
86	New mannotrioses and trimannosides as potential ligands for mannose-specific binding proteins. <i>Canadian Journal of Chemistry</i> , 2002, 80, 964-972.	0.6	13
87	Transition state analogue inhibitors of human methylthioadenosine phosphorylase and bacterial methylthioadenosine/S-adenosylhomocysteine nucleosidase incorporating acyclic ribooxacarbenium ion mimics. <i>Bioorganic and Medicinal Chemistry</i> , 2012, 20, 5181-5187.	1.4	12
88	Transition State Analysis of Adenosine Triphosphate Phosphoribosyltransferase. <i>ACS Chemical Biology</i> , 2017, 12, 2662-2670.	1.6	12
89	Synthesis and photolysis of some carbohydrate 1,6-dienes. <i>Carbohydrate Research</i> , 1985, 136, 249-258.	1.1	11
90	Syntheses of novel azasugar-containing mimics of heparan sulfate fragments as potential heparanase inhibitors. <i>Carbohydrate Research</i> , 2010, 345, 1831-1841.	1.1	11

#	ARTICLE	IF	CITATIONS
91	Tight binding enantiomers of pre-clinical drug candidates. <i>Bioorganic and Medicinal Chemistry</i> , 2015, 23, 5326-5333.	1.4	11
92	Transition-State Analogues of <i>Campylobacter jejuni</i> 5'-Methylthioadenosine Nucleosidase. <i>ACS Chemical Biology</i> , 2018, 13, 3173-3183.	1.6	11
93	Inhibition of <i>Clostridium difficile</i> TcdA and TcdB toxins with transition state analogues. <i>Nature Communications</i> , 2021, 12, 6285.	5.8	11
94	Selective Inhibitors of <i>Helicobacter pylori</i> Methylthioadenosine Nucleosidase and Human Methylthioadenosine Phosphorylase. <i>Journal of Medicinal Chemistry</i> , 2019, 62, 3286-3296.	2.9	10
95	2-Benzyloxy-6,8-Dioxabicyclo[3.2.1]Octanes: New carbohydrate-derived herbicides. <i>Pest Management Science</i> , 1991, 31, 419-435.	0.7	9
96	Continuous Fluorescence Assays for Reactions Involving Adenine. <i>Analytical Chemistry</i> , 2016, 88, 11860-11867.	3.2	9
97	An evaluation of the herbicidal and plant growth regulatory activity of a novel class of carbohydrate-derived 6,8-dioxabicyclo[3.2.1]octanes. <i>Pest Management Science</i> , 1990, 30, 59-66.	0.7	8
98	The chemistry of castanospermine. Direct oxidation of the tetraacetate to the corresponding $\beta$ -lactam. <i>Carbohydrate Research</i> , 2004, 339, 1747-1751.	1.1	6
99	Aspects of the tautomerism of 2-(d-galacto-1,2,3,4,5-pentahydroxypentyl)benzothiazoline. <i>Carbohydrate Research</i> , 1977, 54, 199-208.	1.1	4
100	Transition State Analogues Enhanced by Fragment-Based Structural Analysis: Bacterial Methylthioadenosine Nucleosidases. <i>Biochemistry</i> , 2020, 59, 831-835.	1.2	4
101	Comparison of disaccharide donors for heparan sulfate synthesis: uronic acids vs. their pyranose equivalents. <i>Organic and Biomolecular Chemistry</i> , 2020, 18, 4728-4733.	1.5	3
102	Translationally related nearly identical molecules: 4-methoxyphenyl 4-O-[6-O-acetyl-2-azido-3-O-benzyl-2-deoxy-4-O-(fluoren-9-ylmethoxycarbonyl)- $\beta$ -D-glucopyranosyl]-2-O-benzoyl-3-O-benzyl-6-O-chloro- $\alpha$ -D-galactopyranoside. <i>Acta Crystallographica Section C: Crystal Structure Communications</i> , 2013, 69, 679-682.	0.9	1
103	Oligonucleotide transition state analogues of saporin L3. <i>European Journal of Medicinal Chemistry</i> , 2017, 127, 793-809.	2.6	2
104	Diastereoselective Carbamate Annulation for the Synthesis of 2,5-Dideoxy-2,5-Aminoglycitols. <i>ChemistrySelect</i> , 2017, 2, 8028-8032.	0.7	2
105	Synthesis and Characterization of Transition-State Analogue Inhibitors against Human DNA Methyltransferase 1. <i>Journal of Medicinal Chemistry</i> , 2022, 65, 5462-5494.	2.9	2
106	Synthesis of deuterated-BCX-1777, a potent inhibitor of purine nucleoside phosphorylase. <i>Journal of Labelled Compounds and Radiopharmaceuticals</i> , 2002, 45, 71-78.	0.5	1
107	(1R,2R,3S,5R,6R,7S,9aR,10aR)-4a,8a-Diazaperhydroanthracene-1,2,3,5,6,7-hexaol. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2003, 59, o1370-o1371.	0.2	1
108	tert-Butyl 6-O-benzyl-2,2-dichloro-2,5-dideoxy-4-O-methyl- $\beta$ -D-ribo-oct-3-pyranulosonate. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2003, 59, o1514-o1516.	0.2	1

#	ARTICLE	IF	CITATIONS
109	The synthesis of possible transition state analogue inhibitors of thymidine phosphorylase. <i>Tetrahedron Letters</i> , 2015, 56, 406-409.	0.7	1
110	Aminofutalosine Deaminase in the Menaquinone Pathway of <i>Helicobacter pylori</i> . <i>Biochemistry</i> , 2021, 60, 1933-1946.	1.2	1
111	Crystal packing in three related disaccharides: precursors to heparan sulfate oligosaccharides. <i>Acta Crystallographica Section E: Crystallographic Communications</i> , 2015, 71, 582-587.	0.2	1
112	p-Tolyl 2-O-benzoyl-3-O-benzyl-4,6-O-benzylidene-1-thio- $\beta$ -L-idopyranoside. <i>Acta Crystallographica Section E: Structure Reports Online</i> , 2010, 66, o1598-o1599.	0.2	0