Charles M Thompson

List of Publications by Year
in descending order

66 papers	1,573 citations	257101 24 h-index	329751 37 g-index
67 all docs	67 docs citations	67 times ranked	1340 citing authors

#	Article	IF	Citations
1	Albumin, a New Biomarker of Organophosphorus Toxicant Exposure, Identified by Mass Spectrometry. Toxicological Sciences, 2004, 83, 303-312.	1.4	149
2	The synaptic vesicle proteome: A comparative study in membrane protein identification. Proteomics, 2004, 4, 3141-3155.	1.3	91
3	Mass spectrometry identifies covalent binding of soman, sarin, chlorpyrifos oxon, diisopropyl fluorophosphate, and FP-biotin to tyrosines on tubulin: A potential mechanism of long term toxicity by organophosphorus agents. Chemico-Biological Interactions, 2008, 175, 180-186.	1.7	71
4	Synthesis and in Vitro Pharmacology of Substituted Quinoline-2,4-dicarboxylic Acids as Inhibitors of Vesicular Glutamate Transport. Journal of Medicinal Chemistry, 2002, 45, 2260-2276.	2.9	66
5	Inhibitors of the Glutamate Vesicular Transporter (VGLUT). Current Medicinal Chemistry, 2005, 12, 2041-2056.	1.2	66
6	Five Tyrosines and Two Serines in Human Albumin Are Labeled by the Organophosphorus Agent FP-Biotin. Chemical Research in Toxicology, 2008, 21, 1787-1794.	1.7	60
7	Preparation, analysis and anticholinesterase properties of O,O-dimethyl phosphorothioate isomerides. Chemical Research in Toxicology, 1989, 2, 386-391.	1.7	48
8	Mass spectrometry identifies multiple organophosphorylated sites on tubulin. Toxicology and Applied Pharmacology, 2009, 240, 149-158.	1.3	43
9	Synthesis, absolute configuration, and analysis of malathion, malaoxon, and isomalathion enantiomers. Chemical Research in Toxicology, 1993, 6, 718-723.	1.7	40
10	Organophosphorus Pesticides Decrease M2 Muscarinic Receptor Function in Guinea Pig Airway Nerves via Indirect Mechanisms. PLoS ONE, 2010, 5, e10562.	1.1	40
11	Mass Spectrometric Analyses of Organophosphate Insecticide Oxon Protein Adducts. Environmental Health Perspectives, 2010, 118, 11-19.	2.8	40
12	Characteristic mass spectral fragments of the organophosphorus agent FP-biotin and FP-biotinylated peptides from trypsin and bovine albumin (Tyr410). Analytical Biochemistry, 2005, 345, 122-132.	1.1	39
13	Quinoline-2,4-dicarboxylic acids: Synthesis and evaluation as inhibitors of the glutamate vesicular transport system. Bioorganic and Medicinal Chemistry Letters, 1999, 9, 2607-2612.	1.0	38
14	Functional and pharmacological properties of triheteromeric GluN1/2B/2D NMDA receptors. Journal of Physiology, 2019, 597, 5495-5514.	1.3	38
15	Structural determinants of substrates and inhibitors: probing glutamate transporters with 2,4-methanopyrroldidine-2,4-dicarboxylate. Bioorganic and Medicinal Chemistry Letters, 1998, 8, 3101-3106.	1.0	36
16	Consequence of phosphorus stereochemistry upon the postinhibitory reaction kinetics of acetylcholinesterase poisoned by phosphorothiolates. Journal of the American Chemical Society, 1992, 114, 10710-10715.	6.6	35
17	Identification of Butyrylcholinesterase Adducts after Inhibition with Isomalathion Using Mass Spectrometry: Difference in Mechanism between (1R)- and (1S)-Stereoisomers. Toxicology and Applied Pharmacology, 2001, 176, 73-80.	1.3	35
18	Inhibition of Acetylcholinesterase by (1S,3S)-Isomalathion Proceeds with Loss of Thiomethyl:Â Kinetic and Mass Spectral Evidence for an Unexpected Primary Leaving Group. Chemical Research in Toxicology, 2000, 13, 1313-1320.	1.7	34

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19	Probing the Active Sites of Butyrylcholinesterase and Cholesterol Esterase with Isomalathion:â€‰Conserved Stereoselective Inactivation of Serine Hydrolases Structurally Related to Acetylcholinesterase. Chemical Research in Toxicology, 2001, 14, 807-813.	1.7	33
20	Interaction of acetylcholinesterase with the enantiomers of malaoxon and isomalathion. Chemical Research in Toxicology, 1993, 6, 724-730.	1.7	31
21	Tyrosines of Human and Mouse Transferrin Covalently Labeled by Organophosphorus Agents: A New Motif for Binding to Proteins that Have No Active Site Serine. Toxicological Sciences, 2009, 107, 144-155.	1.4	30
22	Reaction Kinetics of Biotinylated Organophosphorus Toxicant, FP-biotin, with Human Acetylcholinesterase and Human Butyrylcholinesterase. Chemical Research in Toxicology, 2005, 18, 747-754.	1.7	29
23	Bisquaternary pyridinium oximes: Comparison of in vitro reactivation potency of compounds bearing aliphatic linkers and heteroaromatic linkers for paraoxon-inhibited electric eel and recombinant human acetylcholinesterase. Bioorganic and Medicinal Chemistry, 2010, 18, 787-794.	1.4	26
24	Mechanism of cholinesterase inhibition by methamidophos. Journal of Agricultural and Food Chemistry, 1982, 30, 282-284.	2.4	25
25	Relative Potencies of the Four Stereoisomers of Isomalathion for Inhibition of Hen Brain Acetylcholinesterase and Neurotoxic Esterasein Vitro. Toxicology and Applied Pharmacology, 1996, 139, 342-348.	1.3	24
26	Differentiation between Acetylcholinesterase and the Organophosphate-inhibited Form Using Antibodies and the Correlation of Antibody Recognition with Reactivation Mechanism and Rate. Journal of Biological Chemistry, 2003, 278, 45512-45518.	1.6	23
27	Kinetics of the postinhibitory reactions of acetylcholinesterase poisoned by chiral isomalathion: a surprising nonreactivation induced by the RP stereoisomers. Chemical Research in Toxicology, 1993, 6, 28-32.	1.7	22
28	Comparative anticholinesterase potency of chiral isoparathion methyl. Chemical Research in Toxicology, 1991, 4, 517-520.	1.7	21
29	Thionate versus Oxon: Comparison of Stability, Uptake, and Cell Toxicity of (¹⁴CH₃O)₂-Labeled Methyl Parathion and Methyl Paraoxon with SH-SY5Y Cells. Journal of Agricultural and Food Chemistry, 2010, 58, 8460-8466.	2.4	21
30	New series of monoquaternary pyridinium oximes: Synthesis and reactivation potency for paraoxon-inhibited electric eel and recombinant human acetylcholinesterase. Bioorganic and Medicinal Chemistry Letters, 2009, 19, 5101-5104.	1.0	19
31	Antimicrobial, Antimalarial, and Antileishmanial Activities of Monoâ€•and Bisâ€‘quaternary Pyridinium Compounds. Chemical Biology and Drug Design, 2010, 76, 546-551.	1.5	18
32	A Novel Fluorine-18 Î²-Fluoroethoxy Organophosphate Positron Emission Tomography Imaging Tracer Targeted to Central Nervous System Acetylcholinesterase. ACS Chemical Neuroscience, 2014, 5, 519-524.	1.7	18
33	Cleavage of a 23S rRNA pseudoknot by phenanthroline-Cu(II). Nucleic Acids Research, 1999, 27, 1906-1911.	6.5	17
34	Stereoselective Inactivation of Torpedo californica Acetylcholinesterase by Isomalathion:â€‰ Inhibitory Reactions with (1R)- and (1S)-Isomers Proceed by Different Mechanisms. Chemical Research in Toxicology, 2003, 16, 958-965.	1.7	17
35	Synthesis and anti-acetylcholinesterase properties of novel Î²- and Î³-substituted alkoxy organophosphonates. Bioorganic and Medicinal Chemistry Letters, 2013, 23, 2048-2051.	1.0	16
36	Tetrapeptide inhibitors of the glutamate vesicular transporter (VGLUT). Bioorganic and Medicinal Chemistry Letters, 2007, 17, 5125-5128.	1.0	15

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37	The inhibition, reactivation and mechanism of VX-, sarin-, fluoro-VX and fluoro-sarin surrogates following their interaction with HuAChE and HuBuChE. Chemico-Biological Interactions, 2018, 291, 220-227.	1.7	15
38	Conformationally-restricted amino acid analogues bearing a distal sulfonic acid show selective inhibition of system over the vesicular glutamate transporter. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 2680-2683.	1.0	14
39	Synthesis of chiral malathion and isomalathion. Tetrahedron Letters, 1992, 33, 1415-1418.	0.7	12
40	Synthesis and31P Chemical Shift Identification of Tripeptide Active Site Models That Represent Human Serum Acetylcholinesterase Covalently Modified at Serine by Certain Organophosphates. Chemical Research in Toxicology, 1996, 9, 1325-1332.	1.7	12
41	Synthesis of fluorescent probes directed to the active site gorge of acetylcholinesterase. Bioorganic and Medicinal Chemistry Letters, 2000, 10, 1523-1526.	1.0	12
42	Novel Organophosphate Ligand O-(2-Fluoroethyl)-O-(p-Nitrophenyl)Methylphosphonate: Synthesis, Hydrolytic Stability and Analysis of the Inhibition and Reactivation of Cholinesterases. Chemical Research in Toxicology, 2016, 29, 1810-1817.	1.7	12
43	Analysis and sequencing of the active-site peptide from native and organophosphate-inactivated acetylcholinesterase by electrospray ionization, quadrupole/time-of-flight (QTOF) mass spectrometry. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2006, 830, 105-113.	1.2	11
44	Use of the hydantoin isostere to produce inhibitors showing selectivity toward the vesicular glutamate transporter versus the obligate exchange transporter system. Bioorganic and Medicinal Chemistry Letters, 2011, 21, 4358-4362.	1.0	10
45	The development of benzo- and naphtho-fused quinoline-2,4-dicarboxylic acids as vesicular glutamate transporter (VGLUT) inhibitors reveals a possible role for neuroactive steroids. Bioorganic and Medicinal Chemistry Letters, 2014, 24, 850-854.	1.0	10
46	Synthesis and Preliminary Evaluation of trans-3,4-Conformationally-Restricted Glutamate and Pyroglutamate Analogues as Novel EAAT2 Inhibitors. Bioorganic and Medicinal Chemistry Letters, 2002, 12, 3209-3213.	1.0	9
47	Efficient Digestion and Mass Spectral Analysis of Vesicular Glutamate Transporter 1: A Recombinant Membrane Protein Expressed in Yeast. Journal of Proteome Research, 2008, 7, 570-578.	1.8	9
48	Oxidative stress resulting from exposure of a human salivary gland cells to paraoxon: An in vitro model for organophosphate oral exposure. Toxicology in Vitro, 2014, 28, 715-721.	1.1	9
49	Positron emission tomography studies of organophosphate chemical threats and oxime countermeasures. Neurobiology of Disease, 2020, 133, 104455.	2.1	9
50	Paraoxon-Induced Protein Expression Changes to SH-SY5Y Cells. Chemical Research in Toxicology, 2010, 23, 1656-1662.	1.7	7
51	An improved radiosynthesis of O-(2-[¹⁸ F]fluoroethyl)-O-(p) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf 50 187 Td (Compounds and Radiopharmaceuticals, 2017, 60, 337-342.	0.5	7
52	Inhibition of acetylcholinesterase by chromophore-linked fluorophosphonates. Bioorganic and Medicinal Chemistry Letters, 2010, 20, 1194-1197.	1.0	6
53	SYNTHESIS OF STERICALLY HINDERED PHOSPHONAMIDOTHIOLATES AND PHOSPHONAMIDODITHIOATES. Phosphorus, Sulfur and Silicon and the Related Elements, 1996, 117, 101-110.	0.8	4
54	Preparation and characterization of diethoxy- and monoethoxy phosphylated (â€˜agedâ€™) serine haptens and use in the production of monoclonal antibodies. Chemico-Biological Interactions, 2014, 223, 134-140.	1.7	4

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55	Radiosynthesis of Oâ€(1â€[¹⁸F]fluoropropanâ€2â€yl)â€Oâ€(4â€nitrophenyl)methylphosphonate: A novel PET tracer surrogate of sarin. Journal of Labelled Compounds and Radiopharmaceuticals, 2018, 61, 1089-1094.	0.5	4
56	Comparison of the reactivation rates of acetylcholinesterase modified by structurally different organophosphates using novel pyridinium oximes. Environmental Toxicology and Pharmacology, 2019, 71, 103218.	2.0	4
57	VGLUT substrates and inhibitors: A computational viewpoint. Biochimica Et Biophysica Acta - Biomembranes, 2020, 1862, 183175.	1.4	4
58	Food dyes as P-glycoprotein modulators. Food and Chemical Toxicology, 2020, 146, 111785.	1.8	4
59	Purification and Proteomic Analysis of Synaptic Vesicles. Methods in Molecular Biology, 2008, 432, 259-274.	0.4	3
60	Divergent synthesis of organophosphate [11C]VX- and [11C]Sarin-surrogates from a common set of starting materials. Applied Radiation and Isotopes, 2019, 151, 182-186.	0.7	2
61	Inhibition of Acetylcholinesterases by Stereoisomeric Organophosphorus Compounds Containing Both Thioester andp-Nitrophenyl Leaving Groups. Chemical Research in Toxicology, 2020, 33, 2455-2466.	1.7	2
62	Inhibition of the Vesicular Glutamate Transporter (VGLUT) with Congo Red Analogs: New Binding Insights. Neurochemical Research, 2021, 46, 494-503.	1.6	2
63	Positron emission tomography evaluation of oxime countermeasures in live rats using the tracer Oâ€(2â€[¹⁸F]fluoroethyl)â€Oâ€(pâ€nitrophenyl)methylphosphonate [¹⁸F]â€VXS. Annals of the New York Academy of Sciences, 2020, 1479, 180-195.	1.8	1
64	Biological Distribution and Metabolic Profiles of Carbon-11 and Fluorine-18 Tracers of VX- and Sarin-Analogs in Sprague–Dawley Rats. Chemical Research in Toxicology, 2021, 34, 63-69.	1.7	1
65	Dose Formulation, Biodistribution and PET Imaging Studies of a First-in-Class Fluorine-18 Organophosphorus Cholinesterase Inhibitor Tracer in Rat. Current Chemical Biology, 2021, 14, 289-303.	0.2	0
66	Chemical Cleavage as a Probe of Ribosomal Structure. , 0, , 257-269.		0