## Patrick Ym Masson

### List of Publications by Citations

Source: https://exaly.com/author-pdf/6146018/patrick-ym-masson-publications-by-citations.pdf

Version: 2024-04-17

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

296 papers

10,267 citations

52 h-index

87 g-index

321 ext. papers

11,075 ext. citations

4.5 avg, IF

6.08 L-index

#	Paper	IF	Citations
296	High pressure effects on protein structure and function. <i>Proteins: Structure, Function and Bioinformatics</i> , <b>1996</b> , 24, 81-91	4.2	574
295	Crystal structure of human butyrylcholinesterase and of its complexes with substrate and products. Journal of Biological Chemistry, <b>2003</b> , 278, 41141-7	5.4	567
294	Butyrylcholinesterase, paraoxonase, and albumin esterase, but not carboxylesterase, are present in human plasma. <i>Biochemical Pharmacology</i> , <b>2005</b> , 70, 1673-84	6	416
293	Effects of high pressure on proteins. Food Reviews International, 1993, 9, 611-628	5.5	304
292	Exploiting the effects of high hydrostatic pressure in biotechnological applications. <i>Trends in Biotechnology</i> , <b>1994</b> , 12, 493-501	15.1	252
291	ViralZone: a knowledge resource to understand virus diversity. <i>Nucleic Acids Research</i> , <b>2011</b> , 39, D576-8	8220.1	216
290	High pressure effects on biological macromolecules: from structural changes to alteration of cellular processes. <i>BBA - Proteins and Proteomics</i> , <b>2002</b> , 1595, 3-10		201
289	Butyrylcholinesterase for protection from organophosphorus poisons: catalytic complexities and hysteretic behavior. <i>Archives of Biochemistry and Biophysics</i> , <b>2010</b> , 494, 107-20	4.1	161
288	A single amino acid substitution, Gly117His, confers phosphotriesterase (organophosphorus acid anhydride hydrolase) activity on human butyrylcholinesterase. <i>Biochemistry</i> , <b>1997</b> , 36, 786-95	3.2	154
287	Structural basis for natural lactonase and promiscuous phosphotriesterase activities. <i>Journal of Molecular Biology</i> , <b>2008</b> , 379, 1017-28	6.5	135
286	Role of aspartate 70 and tryptophan 82 in binding of succinyldithiocholine to human butyrylcholinesterase. <i>Biochemistry</i> , <b>1997</b> , 36, 2266-77	3.2	127
285	Microfluidic droplet platform for ultrahigh-throughput single-cell screening of biodiversity. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2017</b> , 114, 2550-2555	11.5	124
284	Human paraoxonase: a promising approach for pre-treatment and therapy of organophosphorus poisoning. <i>Toxicology</i> , <b>2007</b> , 233, 47-59	4.4	123
283	Progress in the development of enzyme-based nerve agent bioscavengers. <i>Chemico-Biological Interactions</i> , <b>2013</b> , 206, 536-44	5	122
282	Asp7O in the peripheral anionic site of human butyrylcholinesterase. FEBS Journal, 1996, 235, 36-48		107
281	Engineering of a monomeric and low-glycosylated form of human butyrylcholinesterase: expression, purification, characterization and crystallization. <i>FEBS Journal</i> , <b>2002</b> , 269, 630-7		103
280	Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry assay for organophosphorus toxicants bound to human albumin at Tyr411. <i>Analytical Biochemistry</i> , <b>2007</b> , 361, 263-72	3.1	99

### (2008-1989)

279	Some recent aspects of the use of high-pressure for protein investigations in solution. <i>High Pressure Research</i> , <b>1989</b> , 2, 1-28	1.6	97
278	Cholinesterase reactivators and bioscavengers for pre- and post-exposure treatments of organophosphorus poisoning. <i>Journal of Neurochemistry</i> , <b>2017</b> , 142 Suppl 2, 26-40	6	96
277	Aging of cholinesterases phosphylated by tabun proceeds through O-dealkylation. <i>Journal of the American Chemical Society</i> , <b>2008</b> , 130, 16011-20	16.4	96
276	Binding and hydrolysis of soman by human serum albumin. <i>Chemical Research in Toxicology</i> , <b>2008</b> , 21, 421-31	4	94
275	Role of water in aging of human butyrylcholinesterase inhibited by echothiophate: the crystal structure suggests two alternative mechanisms of aging. <i>Biochemistry</i> , <b>2005</b> , 44, 1154-62	3.2	88
274	Identification of residues essential for human paraoxonase (PON1) arylesterase/organophosphatase activities. <i>Biochemistry</i> , <b>1999</b> , 38, 2816-25	3.2	88
273	Pseudo-esterase activity of human albumin: slow turnover on tyrosine 411 and stable acetylation of 82 residues including 59 lysines. <i>Journal of Biological Chemistry</i> , <b>2008</b> , 283, 22582-90	5.4	86
272	High-Pressure Biotechnology in Medicine and Pharmaceutical Science. <i>Journal of Biomedicine and Biotechnology</i> , <b>2001</b> , 1, 85-88		86
271	Lamellipodin proline rich peptides associated with native plasma butyrylcholinesterase tetramers. <i>Biochemical Journal</i> , <b>2008</b> , 411, 425-32	3.8	82
270	Structural evidence that human acetylcholinesterase inhibited by tabun ages through O-dealkylation. <i>Journal of Medicinal Chemistry</i> , <b>2010</b> , 53, 4002-8	8.3	80
269	Tandem purification of two HDL-associated partner proteins in human plasma, paraoxonase (PON1) and phosphate binding protein (HPBP) using hydroxyapatite chromatography. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , <b>2006</b> , 836, 15-21	3.2	75
268	Evolution of and perspectives on therapeutic approaches to nerve agent poisoning. <i>Toxicology Letters</i> , <b>2011</b> , 206, 5-13	4.4	73
267	Crystallographic snapshots of nonaged and aged conjugates of soman with acetylcholinesterase, and of a ternary complex of the aged conjugate with pralidoxime. <i>Journal of Medicinal Chemistry</i> , <b>2009</b> , 52, 7593-603	8.3	73
266	The active site of human paraoxonase (PON1). <i>Journal of Applied Toxicology</i> , <b>2001</b> , 21 Suppl 1, S7-11	4.1	71
265	Polarity effects on the photophysics of dendrimers with an oligophenylenevinylene core and peripheral fullerene units. <i>Chemistry - A European Journal</i> , <b>2004</b> , 10, 5076-86	4.8	70
264	Chemical polysialylation of human recombinant butyrylcholinesterase delivers a long-acting bioscavenger for nerve agents in vivo. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2013</b> , 110, 1243-8	11.5	69
263	Serendipitous discovery and X-ray structure of a human phosphate binding apolipoprotein. <i>Structure</i> , <b>2006</b> , 14, 601-9	5.2	69
262	The dual control of TFIIB recruitment by NC2 is gene specific. <i>Nucleic Acids Research</i> , <b>2008</b> , 36, 539-49	20.1	64

261	Oligomeric states of the detergent-solubilized human serum paraoxonase (PON1). <i>Journal of Biological Chemistry</i> , <b>2002</b> , 277, 33386-97	5.4	64	
260	Interaction between the peripheral site residues of human butyrylcholinesterase, D70 and Y332, in binding and hydrolysis of substrates. <i>BBA - Proteins and Proteomics</i> , <b>1999</b> , 1433, 281-93		64	
259	Two invertebrate acetylcholinesterases show activation followed by inhibition with substrate concentration. <i>Biochemical Journal</i> , <b>1998</b> , 329 ( Pt 2), 329-34	3.8	62	
258	Current and emerging strategies for organophosphate decontamination: special focus on hyperstable enzymes. <i>Environmental Science and Pollution Research</i> , <b>2016</b> , 23, 8200-18	5.1	61	
257	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. <i>Chemico-Biological Interactions</i> , <b>2008</b> , 175, 180-6	5	61	
256	Importance of aspartate-70 in organophosphate inhibition, oxime re-activation and aging of human butyrylcholinesterase. <i>Biochemical Journal</i> , <b>1997</b> , 325 ( Pt 1), 53-61	3.8	60	
255	Combined effects of high hydrostatic pressure and temperature for inactivation of Bacillus anthracis spores. <i>Applied and Environmental Microbiology</i> , <b>2004</b> , 70, 635-7	4.8	60	
254	Aging of di-isopropyl-phosphorylated human butyrylcholinesterase. <i>Biochemical Journal</i> , <b>1997</b> , 327 (Pt 2), 601-7	3.8	59	
253	Structure, activities and biomedical applications of human butyrylcholinesterase. <i>Protein and Peptide Letters</i> , <b>2009</b> , 16, 1215-24	1.9	57	
252	Structural approach to the aging of phosphylated cholinesterases. <i>Chemico-Biological Interactions</i> , <b>2010</b> , 187, 157-62	5	57	
251	Structure-activity analysis of aging and reactivation of human butyrylcholinesterase inhibited by analogues of tabun. <i>Biochemical Journal</i> , <b>2009</b> , 421, 97-106	3.8	56	
250	A collaborative endeavor to design cholinesterase-based catalytic scavengers against toxic organophosphorus esters. <i>Chemico-Biological Interactions</i> , <b>2008</b> , 175, 273-80	5	56	
249	Butyrylcholinesterase-catalysed hydrolysis of aspirin, a negatively charged ester, and aspirin-related neutral esters. <i>BBA - Proteins and Proteomics</i> , <b>1998</b> , 1387, 41-52		55	
248	Reaction of cresyl saligenin phosphate, the organophosphorus agent implicated in aerotoxic syndrome, with human cholinesterases: mechanistic studies employing kinetics, mass spectrometry, and X-ray structure analysis. <i>Chemical Research in Toxicology</i> , <b>2011</b> , 24, 797-808	4	53	
247	Aging pathways for organophosphate-inhibited human butyrylcholinesterase, including novel pathways for isomalathion, resolved by mass spectrometry. <i>Toxicological Sciences</i> , <b>2007</b> , 100, 136-45	4.4	53	
246	Optimization of Cholinesterase-Based Catalytic Bioscavengers Against Organophosphorus Agents. <i>Frontiers in Pharmacology</i> , <b>2018</b> , 9, 211	5.6	52	
245	Five tyrosines and two serines in human albumin are labeled by the organophosphorus agent FP-biotin. <i>Chemical Research in Toxicology</i> , <b>2008</b> , 21, 1787-94	4	52	
244	Pressure-induced molten globule state of cholinesterase. <i>FEBS Letters</i> , <b>1995</b> , 370, 212-4	3.8	52	

243	Exposure to tri-o-cresyl phosphate detected in jet airplane passengers. <i>Toxicology and Applied Pharmacology</i> , <b>2011</b> , 256, 337-47	4.6	51
242	Mass spectral characterization of organophosphate-labeled, tyrosine-containing peptides: characteristic mass fragments and a new binding motif for organophosphates. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , <b>2010</b> , 878, 1297-311	3.2	51
241	Dendronized Polymers with Peripheral Oligo(ethylene oxide) Chains: Thermoresponsive Behavior and Shape Anisotropy in Solution. <i>Macromolecules</i> , <b>2011</b> , 44, 8925-8935	5.5	50
240	Structural determinants of the high thermal stability of SsoPox from the hyperthermophilic archaeon Sulfolobus solfataricus. <i>Extremophiles</i> , <b>2009</b> , 13, 461-70	3	50
239	Synthesis of polyethylene oxide macromers. <i>Polymer Bulletin</i> , <b>1982</b> , 7, 17	2.4	48
238	Organophosphate hydrolases as catalytic bioscavengers of organophosphorus nerve agents. <i>Toxicology Letters</i> , <b>2011</b> , 206, 14-23	4.4	47
237	New evidence for dual binding site inhibitors of acetylcholinesterase as improved drugs for treatment of Alzheimer's disease. <i>Neuropharmacology</i> , <b>2019</b> , 155, 131-141	5.5	46
236	Enzymes hydrolyzing organophosphates as potential catalytic scavengers against organophosphate poisoning. <i>Journal of Physiology (Paris)</i> , <b>1998</b> , 92, 357-62		44
235	Synthesis of 2-substituted beta-cyclodextrin derivatives with a hydrolytic activity against the organophosphorylester paraoxon. <i>European Journal of Medicinal Chemistry</i> , <b>2005</b> , 40, 615-23	6.8	43
234	Effects of viscosity and osmotic stress on the reaction of human butyrylcholinesterase with cresyl saligenin phosphate, a toxicant related to aerotoxic syndrome: kinetic and molecular dynamics studies. <i>Biochemical Journal</i> , <b>2013</b> , 454, 387-99	3.8	42
233	Detection of adduct on tyrosine 411 of albumin in humans poisoned by dichlorvos. <i>Toxicological Sciences</i> , <b>2010</b> , 116, 23-31	4.4	42
232	Contribution of the active-site metal cation to the catalytic activity and to the conformational stability of phosphotriesterase: temperature- and pH-dependence. <i>Biochemical Journal</i> , <b>2004</b> , 380, 627-	3 <sup>3</sup> 3 <sup>8</sup>	42
231	Hydration change during the aging of phosphorylated human butyrylcholinesterase: importance of residues aspartate-70 and glutamate-197 in the water network as probed by hydrostatic and osmotic pressures. <i>Biochemical Journal</i> , <b>1999</b> , 343, 361-369	3.8	42
230	A naturally occurring molecular form of human plasma cholinesterase is an albumin conjugate. <i>BBA - Proteins and Proteomics</i> , <b>1989</b> , 998, 258-66		42
229	Mixed cationic liposomes for brain delivery of drugs by the intranasal route: The acetylcholinesterase reactivator 2-PAM as encapsulated drug model. <i>Colloids and Surfaces B: Biointerfaces</i> , <b>2018</b> , 171, 358-367	6	39
228	X-ray crystallographic snapshots of reaction intermediates in the G117H mutant of human butyrylcholinesterase, a nerve agent target engineered into a catalytic bioscavenger. <i>Biochemical Journal</i> , <b>2011</b> , 434, 73-82	3.8	39
227	Reactibodies generated by kinetic selection couple chemical reactivity with favorable protein dynamics. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , <b>2011</b> , 108, 15954-9	11.5	39
226	Use of a 'caged' analogue to study the traffic of choline within acetylcholinesterase by kinetic crystallography. <i>Acta Crystallographica Section D: Biological Crystallography</i> , <b>2007</b> , 63, 1115-28		38

225	Identification and characterization of a Drosophila nuclear proteasome regulator. A homolog of human 11 S REGgamma (PA28gamma). <i>Journal of Biological Chemistry</i> , <b>2001</b> , 276, 1383-90	5.4	38
224	Capillary zone electrophoresis with optimized temperature control for studying thermal denaturation of proteins at various pH. <i>Electrophoresis</i> , <b>1999</b> , 20, 1586-94	3.6	38
223	Photoreversible inhibition of cholinesterases: catalytic serine-labeled caged butyrylcholinesterase. <i>ChemBioChem</i> , <b>2003</b> , 4, 762-7	3.8	37
222	ViralZone: recent updates to the virus knowledge resource. <i>Nucleic Acids Research</i> , <b>2013</b> , 41, D579-83	20.1	36
221	Fullerene-functionalized polyesters: synthesis, characterization and incorporation in photovoltaic cells. <i>New Journal of Chemistry</i> , <b>2002</b> , 26, 1584-1589	3.6	36
220	Structural study of the complex stereoselectivity of human butyrylcholinesterase for the neurotoxic V-agents. <i>Journal of Biological Chemistry</i> , <b>2011</b> , 286, 16783-9	5.4	35
219	A putative kinetic model for substrate metabolisation by Drosophila acetylcholinesterase. <i>FEBS Letters</i> , <b>1998</b> , 440, 85-8	3.8	35
218	Nanoparticle-Delivered 2-PAM for Rat Brain Protection against Paraoxon Central Toxicity. <i>ACS Applied Materials &amp; Description of the Materials &amp; Descriptio</i>	9.5	34
217	Carbofuran poisoning detected by mass spectrometry of butyrylcholinesterase adduct in human serum. <i>Journal of Applied Toxicology</i> , <b>2009</b> , 29, 149-55	4.1	34
216	Stability of highly purified human paraoxonase (PON1): association with human phosphate binding protein (HPBP) is essential for preserving its active conformation(s). <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2007</b> , 1774, 874-83	4	34
215	Substrate activation in acetylcholinesterase induced by low pH or mutation in the pi-cation subsite. <i>BBA - Proteins and Proteomics</i> , <b>2002</b> , 1594, 313-24		33
214	Effects of mutations of active site residues and amino acids interacting with the Omega loop on substrate activation of butyrylcholinesterase. <i>BBA - Proteins and Proteomics</i> , <b>2001</b> , 1544, 166-76		33
213	Synthesis and characterization of polyalkylmethacrylate macromonomers. <i>Polymer Bulletin</i> , <b>1984</b> , 12, 79-85	2.4	33
212	Slow-binding inhibition of acetylcholinesterase by an alkylammonium derivative of 6-methyluracil: mechanism and possible advantages for myasthenia gravis treatment. <i>Biochemical Journal</i> , <b>2016</b> , 473, 1225-36	3.8	33
211	Linear and non-linear pressure dependence of enzyme catalytic parameters. <i>Biochimica Et Biophysica Acta - General Subjects</i> , <b>2005</b> , 1724, 440-50	4	32
210	SynthBe et homopolymEisation de macromEes de polystyrEie. <i>Die Makromolekulare Chemie Rapid Communications</i> , <b>1982</b> , 3, 499-504		32
209	Computer-designed active human butyrylcholinesterase double mutant with a new catalytic triad. <i>Chemico-Biological Interactions</i> , <b>2019</b> , 306, 138-146	5	30
208	Emergence of catalytic bioscavengers against organophosphorus agents. <i>Chemico-Biological Interactions</i> , <b>2016</b> , 259, 319-326	5	30

## (2015-2008)

207	An unexpected plasma cholinesterase activity rebound after challenge with a high dose of the nerve agent VX. <i>Toxicology</i> , <b>2008</b> , 248, 151-7	4.4	30	
206	Butyrylcholinesterase-catalyzed hydrolysis of N-methylindoxyl acetate: analysis of volume changes upon reaction and hysteretic behavior. <i>BBA - Proteins and Proteomics</i> , <b>2002</b> , 1597, 229-43		30	
205	Damped oscillatory hysteretic behaviour of butyrylcholinesterase with benzoylcholine as substrate. <i>FEBS Journal</i> , <b>2004</b> , 271, 220-34		30	
204	Evidence that the conformational stability of 'aged' organophosphate-inhibited cholinesterase is altered. <i>BBA - Proteins and Proteomics</i> , <b>1986</b> , 869, 304-13		30	
203	Inhibition pathways of the potent organophosphate CBDP with cholinesterases revealed by X-ray crystallographic snapshots and mass spectrometry. <i>Chemical Research in Toxicology</i> , <b>2013</b> , 26, 280-9	4	29	
202	Drosophila proteasome regulator REGgamma: transcriptional activation by DNA replication-related factor DREF and evidence for a role in cell cycle progression. <i>Journal of Molecular Biology</i> , <b>2003</b> , 327, 1001-12	6.5	29	
201	Pressure and propylene carbonate denaturation of native and "aged" phosphorylated cholinesterase. <i>Journal of Molecular Biology</i> , <b>1994</b> , 238, 466-78	6.5	29	
200	Stability of butyrylcholinesterase: thermal inactivation in water and deuterium oxide. <i>BBA - Proteins and Proteomics</i> , <b>1988</b> , 957, 111-21		29	
199	Tyrosines of human and mouse transferrin covalently labeled by organophosphorus agents: a new motif for binding to proteins that have no active site serine. <i>Toxicological Sciences</i> , <b>2009</b> , 107, 144-55	4.4	28	
198	Dichlorvos, chlorpyrifos oxon and Aldicarb adducts of butyrylcholinesterase, detected by mass spectrometry in human plasma following deliberate overdose. <i>Journal of Applied Toxicology</i> , <b>2010</b> , 30, 559-65	4.1	28	
197	Measuring conformational stability of proteins using an optimized temperature-controlled capillary electrophoresis approach. <i>Journal of Chromatography A</i> , <b>1999</b> , 838, 157-65	4.5	28	
196	Conformational plasticity of butyrylcholinesterase as revealed by high pressure experiments. <i>BBA - Proteins and Proteomics</i> , <b>1990</b> , 1041, 223-31		28	
195	Mutant of Bungarus fasciatus acetylcholinesterase with low affinity and low hydrolase activity toward organophosphorus esters. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2006</b> , 1764, 1470-8	4	27	
194	Hydrophobic interaction electrophoresis under high hydrostatic pressure: study of the effects of pressure upon the interaction of serum albumin with a long-chain aliphatic ligand. <i>Electrophoresis</i> , <b>1988</b> , 9, 157-61	3.6	27	
193	Catalytic Bioscavengers Against Toxic Esters, an Alternative Approach for Prophylaxis and Treatments of Poisonings. <i>Acta Naturae</i> , <b>2009</b> , 1, 68-79	2.1	27	
192	Regioselective access to 3I-O-substituted-beta-cyclodextrin derivatives. <i>Chemical Communications</i> , <b>2009</b> , 589-91	5.8	26	
191	Characterization of a novel BCHE "silent" allele: point mutation (p.Val204Asp) causes loss of activity and prolonged apnea with suxamethonium. <i>PLoS ONE</i> , <b>2014</b> , 9, e101552	3.7	26	
190	6-Methyluracil Derivatives as Bifunctional Acetylcholinesterase Inhibitors for the Treatment of Alzheimer's Disease. <i>ChemMedChem</i> , <b>2015</b> , 10, 1863-74	3.7	25	

189	Differential sensitivity of plasma carboxylesterase-null mice to parathion, chlorpyrifos and chlorpyrifos oxon, but not to diazinon, dichlorvos, diisopropylfluorophosphate, cresyl saligenin phosphate, cyclosarin thiocholine, tabun thiocholine, and carbofuran. <i>Chemico-Biological</i>	5	25
188	Interactions, 2012, 195, 189-98 Stabilization of the active form(s) of human paraoxonase by human phosphate-binding protein. Biochemical Society Transactions, 2007, 35, 1616-20	5.1	25
187	Dual effect of high electric field in capillary electrophoresis study of the conformational stability of Bungarus fasciatus acetylcholinesterase. <i>Journal of Chromatography A</i> , <b>2001</b> , 910, 347-57	4.5	25
186	Electrophoresis at elevated hydrostatic pressure of the multiheme hydroxylamine oxidoreductase. <i>Electrophoresis</i> , <b>1990</b> , 11, 128-33	3.6	25
185	Macromonomers - a new class of polymeric intermediates in macromolecular synthesis. I - synthesis and characterization. <i>Die Makromolekulare Chemie</i> , <b>1984</b> , 8, 3-15		25
184	Dynamics of human acetylcholinesterase bound to non-covalent and covalent inhibitors shedding light on changes to the water network structure. <i>Physical Chemistry Chemical Physics</i> , <b>2016</b> , 18, 12992-3	660	25
183	A structured annotation frame for the transposable phages: a new proposed family "Saltoviridae" within the Caudovirales. <i>Virology</i> , <b>2015</b> , 477, 155-163	3.6	24
182	High activity of human butyrylcholinesterase at low pH in the presence of excess butyrylthiocholine. <i>FEBS Journal</i> , <b>2003</b> , 270, 315-24		24
181	The reactant state for substrate-activated turnover of acetylthiocholine by butyrylcholinesterase is a tetrahedral intermediate. <i>Journal of the American Chemical Society</i> , <b>2005</b> , 127, 14538-9	16.4	24
180	A novel expression cassette delivers efficient production of exclusively tetrameric human butyrylcholinesterase with improved pharmacokinetics for protection against organophosphate poisoning. <i>Biochimie</i> , <b>2015</b> , 118, 51-9	4.6	23
179	Pressure-induced molten globule state of human acetylcholinesterase: structural and dynamical changes monitored by neutron scattering. <i>Physical Chemistry Chemical Physics</i> , <b>2015</b> , 17, 3157-63	3.6	23
178	Slow-binding inhibition of cholinesterases, pharmacological and toxicological relevance. <i>Archives of Biochemistry and Biophysics</i> , <b>2016</b> , 593, 60-8	4.1	23
177	Characterization of a novel butyrylcholinesterase point mutation (p.Ala34Val), "silent" with mivacurium. <i>Biochemical Pharmacology</i> , <b>2014</b> , 92, 476-83	6	23
176	The influence of solvent composition on global dynamics of human butyrylcholinesterase powders: a neutron-scattering study. <i>Biophysical Journal</i> , <b>2004</b> , 86, 3152-65	2.9	23
175	The powerful high pressure tool for protein conformational studies. <i>Brazilian Journal of Medical and Biological Research</i> , <b>2005</b> , 38, 1175-83	2.8	23
174	Effects of hydrostatic pressure on the quaternary structure and enzymatic activity of a large peptidase complex from Pyrococcus horikoshii. <i>Archives of Biochemistry and Biophysics</i> , <b>2012</b> , 517, 104-	1 <b>đ</b> .1	22
173	Accumulation of tetrahedral intermediates in cholinesterase catalysis: a secondary isotope effect study. <i>Journal of the American Chemical Society</i> , <b>2010</b> , 132, 17751-9	16.4	22
172	Multiple advantages of capillary zone electrophoresis for exploring protein conformational stability. <i>Electrophoresis</i> , <b>2002</b> , 23, 189-202	3.6	22

171	Thermodynamic arguments for temperature-induced cryptic conformational change of human plasma cholinesterase. <i>BBA - Proteins and Proteomics</i> , <b>1986</b> , 874, 90-8		22	
170	Combination delivery of two oxime-loaded lipid nanoparticles: Time-dependent additive action for prolonged rat brain protection. <i>Journal of Controlled Release</i> , <b>2018</b> , 290, 102-111	11.7	22	
169	Aryl acylamidase activity of human serum albumin with o-nitrotrifluoroacetanilide as the substrate. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , <b>2007</b> , 22, 463-9	5.6	21	
168	Kinetics of butyrylcholinesterase in reversed micelles under high pressure. <i>BBA - Proteins and Proteomics</i> , <b>1995</b> , 1253, 85-93		21	
167	Monoclonal antibodies allow precipitation of esterasic but not peptidasic activities associated with butyrylcholinesterase. <i>Journal of Neurochemistry</i> , <b>1990</b> , 55, 750-5	6	21	
166	Effects of high pressure on the single-turnover kinetics of the carbamylation of cholinesterase. <i>BBA - Proteins and Proteomics</i> , <b>1988</b> , 954, 208-15		21	
165	Strategies for the selection of catalytic antibodies against organophosphorus nerve agents. <i>Chemico-Biological Interactions</i> , <b>2013</b> , 203, 196-201	5	20	
164	Combined pressure/heat-induced inactivation of butyrylcholinesterase. <i>BBA - Proteins and Proteomics</i> , <b>1997</b> , 1340, 245-52		20	
163	Kinetic analysis of butyrylcholinesterase-catalyzed hydrolysis of acetanilides. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2007</b> , 1774, 1139-47	4	20	
162	The wild type bacterial Co(2+)/Co(2+)-phosphotriesterase shows a middle-range thermostability. <i>BBA - Proteins and Proteomics</i> , <b>2002</b> , 1594, 207-18		20	
161	Concentration-dependent reversible activation-inhibition of human butyrylcholinesterase by tetraethylammonium ion. <i>FEBS Journal</i> , <b>2002</b> , 269, 1154-61		20	
160	Update on biochemical properties of recombinant Pseudomonas diminuta phosphotriesterase. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , <b>2009</b> , 24, 1045-55	5.6	19	
159	Application of laccase-mediator system (LMS) for the degradation of organophosphorus compounds. <i>Chemico-Biological Interactions</i> , <b>2010</b> , 187, 393-6	5	19	
158	Rate-determining step of butyrylcholinesterase-catalyzed hydrolysis of benzoylcholine and benzoylthiocholine. Volumetric study of wild-type and D70G mutant behavior. <i>FEBS Journal</i> , <b>2004</b> , 271, 1980-90		19	
157	Thermal stability of acetylcholinesterase from Bungarus fasciatus venom as investigated by capillary electrophoresis. <i>BBA - Proteins and Proteomics</i> , <b>2001</b> , 1545, 216-26		19	
156	Evidence for a single butyrylcholinesterase gene in individuals carrying the C5 plasma cholinesterase variant (CHE2). <i>FEBS Letters</i> , <b>1990</b> , 262, 115-8	3.8	19	
155	Activity and molecular dynamics relationship within the family of human cholinesterases. <i>Physical Chemistry Chemical Physics</i> , <b>2012</b> , 14, 6764-70	3.6	18	
154	Matrix-assisted laser desorption/ionization time-of-flight mass spectrometry of titanium oxide-enriched peptides for detection of aged organophosphorus adducts on human butyrylcholinesterase. <i>Analytical Biochemistry.</i> <b>2013</b> , 439, 132-41	3.1	18	

153	Insights into the regenerative property of plant cells and their receptivity to transgenesis: wheat as a research case study. <i>Plant Signaling and Behavior</i> , <b>2012</b> , 7, 1608-20	2.5	18
152	Preparation and characterization of methoxy polyethylene glycol-conjugated phosphotriesterase as a potential catalytic bioscavenger against organophosphate poisoning. <i>Chemico-Biological Interactions</i> , <b>2010</b> , 187, 380-3	5	18
151	Aging mechanism of butyrylcholinesterase inhibited by an N-methyl analogue of tabun: implications of the trigonal-bipyramidal transition state rearrangement for the phosphylation or reactivation of cholinesterases. <i>Chemico-Biological Interactions</i> , <b>2010</b> , 187, 44-8	5	18
150	Fast affinity purification coupled with mass spectrometry for identifying organophosphate labeled plasma butyrylcholinesterase. <i>Chemico-Biological Interactions</i> , <b>2008</b> , 175, 68-72	5	18
149	Hydrolysis of oxo- and thio-esters by human butyrylcholinesterase. <i>Biochimica Et Biophysica Acta-Proteins and Proteomics</i> , <b>2007</b> , 1774, 16-34	4	18
148	Hysteresis of butyrylcholinesterase in the approach to steady-state kinetics. <i>Chemico-Biological Interactions</i> , <b>2005</b> , 157-158, 143-52	5	18
147	Kinetic evidence for thermally induced conformational change of butyrylcholinesterase. <i>BBA - Proteins and Proteomics</i> , <b>1987</b> , 916, 193-9		18
146	Comparison of 5 monoclonal antibodies for immunopurification of human butyrylcholinesterase on Dynabeads: KD values, binding pairs, and amino acid sequences. <i>Chemico-Biological Interactions</i> , <b>2015</b> , 240, 336-45	5	17
145	Molecular modeling of butyrylcholinesterase inhibition by cresyl saligenin phosphate. <i>Russian Chemical Bulletin</i> , <b>2013</b> , 62, 2527-2537	1.7	17
144	Preparation of Multiallylic Dendronized Polymers via Anionic Polymerization. <i>Macromolecules</i> , <b>2007</b> , 40, 55-64	5.5	17
143	Study of the peptidasic site of cholinesterase: preliminary results. <i>FEBS Letters</i> , <b>1985</b> , 182, 493-8	3.8	17
142	Detection of cresyl phosphate-modified butyrylcholinesterase in human plasma for chemical exposure associated with aerotoxic syndrome. <i>Analytical Biochemistry</i> , <b>2014</b> , 461, 17-26	3.1	16
141	Role of Acetylcholinesterase in EAmyloid Aggregation Studied by Accelerated Molecular Dynamics. <i>BioNanoScience</i> , <b>2017</b> , 7, 396-402	3.4	16
140	Energy landscapes of human acetylcholinesterase and its Huperzine A-inhibited counterpart. <i>Journal of Physical Chemistry B</i> , <b>2012</b> , 116, 14744-53	3.4	16
139	Human-Phosphate-Binding-Protein inhibits HIV-1 gene transcription and replication. <i>Virology Journal</i> , <b>2011</b> , 8, 352	6.1	16
138	Kinetic analysis of effector modulation of butyrylcholinesterase-catalysed hydrolysis of acetanilides and homologous esters. <i>FEBS Journal</i> , <b>2008</b> , 275, 2617-31	5.7	16
137	Improved access to 2-O-monobenzyl ethers of beta-cyclodextrin as precursors of catalysts for organophosphoryl esters hydrolysis. <i>Carbohydrate Research</i> , <b>2006</b> , 341, 935-40	2.9	16
136	Polyol-induced activation by excess substrate of the D70G butyrylcholinesterase mutant. <i>BBA - Proteins and Proteomics</i> , <b>1999</b> , 1429, 422-30		16

135	Synthesis and characterization of polyvinylpyridine macromonomers. <i>Polymer Bulletin</i> , <b>1984</b> , 11, 115	2.4	16
134	Sensing activity of cholinesterases through a luminescence response of the hexarhenium cluster complex [{Re6S8}(OH)6](4.). <i>Analyst, The</i> , <b>2016</b> , 141, 4204-10	5	16
133	Characterization of butyrylcholinesterase in bovine serum. <i>Chemico-Biological Interactions</i> , <b>2017</b> , 266, 17-27	5	15
132	Correlation of the dynamics of native human acetylcholinesterase and its inhibited huperzine A counterpart from sub-picoseconds to nanoseconds. <i>Journal of the Royal Society Interface</i> , <b>2014</b> , 11, 201	14 <del>03</del> 72	15
131	Mass spectrometry method to identify aging pathways of Sp- and Rp-tabun adducts on human butyrylcholinesterase based on the acid labile P-N bond. <i>Toxicological Sciences</i> , <b>2013</b> , 132, 390-8	4.4	15
130	Time-dependent kinetic complexities in cholinesterase-catalyzed reactions. <i>Biochemistry (Moscow)</i> , <b>2012</b> , 77, 1147-61	2.9	15
129	Resistance of butyrylcholinesterase to inactivation by ultrasound: effects of ultrasound on catalytic activity and subunit association. <i>BBA - Proteins and Proteomics</i> , <b>1998</b> , 1387, 53-64		15
128	Is the peptidase activity of highly purified human plasma cholinesterase due to a specific cholinesterase isoenzyme or a contaminating dipeptidylaminopeptidase?. <i>Biochimie</i> , <b>1986</b> , 68, 657-67	4.6	15
127	Recombinant Human Butyrylcholinesterase As a New-Age Bioscavenger Drug: Development of the Expression System. <i>Acta Naturae</i> , <b>2013</b> , 5, 73-84	2.1	15
126	3D structure of the natural tetrameric form of human butyrylcholinesterase as revealed by cryoEM, SAXS and MD. <i>Biochimie</i> , <b>2019</b> , 156, 196-205	4.6	15
125	Novel approaches in prophylaxis/pretreatment and treatment of organophosphorus poisoning. <i>Phosphorus, Sulfur and Silicon and the Related Elements,</i> <b>2016</b> , 191, 1433-1443	1	14
124	Human serum paraoxonase (PON1): identification of essential amino acid residues by group-selective labelling and site-directed mutagenesis. <i>Chemico-Biological Interactions</i> , <b>1999</b> , 119-120, 71-8	5	14
123	Novel Alkali Activation of Titanium Substrates To Grow Thick and Covalently Bound PMMA Layers. <i>ACS Applied Materials &amp; Discourt Materi</i>	9.5	13
122	Luminescent silica nanoparticles for sensing acetylcholinesterase-catalyzed hydrolysis of acetylcholine. <i>Biosensors and Bioelectronics</i> , <b>2016</b> , 77, 871-8	11.8	13
121	Molecular modeling evidence for His438 flip in the mechanism of butyrylcholinesterase hysteretic behavior. <i>Journal of Molecular Neuroscience</i> , <b>2014</b> , 52, 434-45	3.3	13
120	The VASCULATURE COMPLEXITY AND CONNECTIVITY gene encodes a plant-specific protein required for embryo provasculature development. <i>Plant Physiology</i> , <b>2014</b> , 166, 889-902	6.6	13
119	Characterization of a REG/PA28 proteasome activator homolog in Dictyostelium discoideum indicates that the ubiquitin- and ATP-independent REGgamma proteasome is an ancient nuclear protease. <i>Eukaryotic Cell</i> , <b>2009</b> , 8, 844-51		13
118	Crystallization and preliminary X-ray diffraction analysis of the hyperthermophilic Sulfolobus solfataricus phosphotriesterase. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , 2007, 63, 553-5		13

117	Effects of soman inhibition and of structural differences on cholinesterase molecular dynamics: a neutron scattering study. <i>Biophysical Journal</i> , <b>2005</b> , 89, 3303-11	2.9	13
116	Potential applications of high pressures in pharmaceutical science and medicine. <i>High Pressure Research</i> , <b>2000</b> , 19, 223-231	1.6	13
115	Tryptophan residue(s) as major components of the human serum paraoxonase active site. <i>Chemico-Biological Interactions</i> , <b>1999</b> , 119-120, 79-84	5	13
114	Hydration change during the aging of phosphorylated human butyrylcholinesterase: importance of residues aspartate-70 and glutamate-197 in the water network as probed by hydrostatic and osmotic pressures. <i>Biochemical Journal</i> , <b>1999</b> , 343, 361	3.8	13
113	Effect of covalent grafting on mechanical properties of TiO2/polystyrene composites. <i>Materials Chemistry and Physics</i> , <b>2014</b> , 147, 261-267	4.4	12
112	The C5 Variant of the Butyrylcholinesterase Tetramer Includes a Noncovalently Bound 60 kDa Lamellipodin Fragment. <i>Molecules</i> , <b>2017</b> , 22,	4.8	12
111	Enhancement of styrene conversion in organic/inorganic hybrid materials by using malononitrile in controlled radical polymerization. <i>Polymer International</i> , <b>2013</b> , 62, 878-883	3.3	12
110	Integrative analytical approach by capillary electrophoresis and kinetics under high pressure optimized for deciphering intrinsic and extrinsic cofactors that modulate activity and stability of human paraoxonase (PON1). Journal of Chromatography B: Analytical Technologies in the Biomedical	3.2	12
109	An integrated ontology resource to explore and study host-virus relationships. <i>PLoS ONE</i> , <b>2014</b> , 9, e108	057.55	12
108	Absence of a protective effect of the oxime 2-PAM toward paraoxon-poisoned honey bees: acetylcholinesterase reactivation not at fault. <i>Toxicology and Applied Pharmacology</i> , <b>1998</b> , 152, 184-92	4.6	11
107	Purification, molecular characterization and catalytic properties of a Pseudomonas fluorescens enzyme having cholinesterase-like activity. <i>BBA - Proteins and Proteomics</i> , <b>1998</b> , 1385, 126-38		11
106	Capillary electrophoresis versus differential scanning calorimetry for the analysis of free enzyme versus enzyme-ligand complexes: in the search of the ligand-free status of cholinesterases. <i>Electrophoresis</i> , <b>2006</b> , 27, 442-51	3.6	11
105	Pressure- and heat-induced inactivation of butyrylcholinesterase: evidence for multiple intermediates and the remnant inactivation process. <i>Biochemical Journal</i> , <b>2001</b> , 356, 487-493	3.8	11
104	A comparative Raman spectroscopic study of cholinesterases. <i>Biochimie</i> , <b>1991</b> , 73, 1375-86	4.6	11
103	Chemical Polysialylation and In Vivo Tetramerization Improve Pharmacokinetic Characteristics of Recombinant Human Butyrylcholinesterase-Based Bioscavengers. <i>Acta Naturae</i> , <b>2015</b> , 7, 136-141	2.1	11
102	Monoclonal antibodies to human butyrylcholinesterase reactive with butyrylcholinesterase in animal plasma. <i>Chemico-Biological Interactions</i> , <b>2016</b> , 243, 82-90	5	10
101	Catalytic bioscavengers against organophosphorus agents: mechanistic issues of self-reactivating cholinesterases. <i>Toxicology</i> , <b>2018</b> , 409, 91-102	4.4	10
100	Research on cholinesterases in the Soviet Union and Russia: a historical perspective. <i>Chemico-Biological Interactions</i> , <b>2013</b> , 203, 3-9	5	10

### (2002-2009)

99	Exploring the structural and functional stabilities of different paraoxonase-1 formulations through electrophoretic mobilities and enzyme activity parameters under hydrostatic pressure. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2009</b> , 1794, 680-8	4	10
98	Crystallization and preliminary X-ray diffraction analysis of human phosphate-binding protein. <i>Acta Crystallographica Section F: Structural Biology Communications</i> , <b>2006</b> , 62, 67-9		10
97	Raman spectroscopic study of conjugates of butyrylcholinesterase with organophosphates. <i>BBA - Proteins and Proteomics</i> , <b>1995</b> , 1249, 37-44		10
96	Slow-binding inhibitors of acetylcholinesterase of medical interest. <i>Neuropharmacology</i> , <b>2020</b> , 177, 10	823.6	10
95	Macrocyclic derivatives of 6-methyluracil as ligands of the peripheral anionic site of acetylcholinesterase. <i>MedChemComm</i> , <b>2014</b> , 5, 1729-1735	5	9
94	PHOS-select iron affinity beads enrich peptides for the detection of organophosphorus adducts on albumin. <i>Chemical Research in Toxicology</i> , <b>2013</b> , 26, 1917-25	4	9
93	Polyclonal antibody to soman-tyrosine. Chemical Research in Toxicology, 2013, 26, 584-92	4	9
92	Versatile and efficient functionalisation of multiallylic dendronised polymers: can dense packing be reached?. <i>Chemical Communications</i> , <b>2008</b> , 1341-3	5.8	9
91	Screening assays for cholinesterases resistant to inhibition by organophosphorus toxicants. <i>Analytical Biochemistry</i> , <b>2004</b> , 329, 131-8	3.1	9
90	Synthesis of copolymers alternating oligophenylenevinylene subunits and fullerene moieties. <i>Tetrahedron Letters</i> , <b>2003</b> , 44, 4487-4490	2	9
89	Differential effect of pressure and temperature on the catalytic behaviour of wild-type human butyrylcholinesterase and its D70G mutant. <i>FEBS Journal</i> , <b>1999</b> , 264, 327-35		9
88	Interaction of cytochrome c L with methanol dehydrogenase from Methylophaga marina 42:. European Biophysics Journal, <b>1992</b> , 21, 241	1.9	9
87	Catalytic Bioscavengers: The Next Generation of Bioscavenger-Based Medical Countermeasures <b>2009</b> , 1053-1065		9
86	Pressure- and heat-induced inactivation of butyrylcholinesterase: evidence for multiple intermediates and the remnant inactivation process. <i>Biochemical Journal</i> , <b>2001</b> , 356, 487-93	3.8	9
85	Organophosphorus poisoning in animals and enzymatic antidotes. <i>Environmental Science and Pollution Research</i> , <b>2021</b> , 28, 25081-25106	5.1	9
84	Direct correlation between molecular dynamics and enzymatic stability: a comparative neutron scattering study of native human butyrylcholinesterase and its "aged" soman conjugate. <i>Biophysical Journal</i> , <b>2009</b> , 96, 1489-94	2.9	8
83	Hysteresis of insect acetylcholinesterase. <i>Chemico-Biological Interactions</i> , <b>2008</b> , 175, 410-2	5	8
82	Detection of unwanted protein-bound ligands by capillary zone electrophoresis: the case of hidden ligands that stabilize cholinesterase conformation. <i>Electrophoresis</i> , <b>2002</b> , 23, 930-7	3.6	8

81	Catalytic bioscavengers against toxic esters, an alternative approach for prophylaxis and treatments of poisonings. <i>Acta Naturae</i> , <b>2009</b> , 1, 68-79	2.1	8
80	Time-course of human cholinesterases-catalyzed competing substrate kinetics. <i>Chemico-Biological Interactions</i> , <b>2019</b> , 310, 108702	5	7
79	C-547, a 6-methyluracil derivative with long-lasting binding and rebinding on acetylcholinesterase: Pharmacokinetic and pharmacodynamic studies. <i>Neuropharmacology</i> , <b>2018</b> , 131, 304-315	5.5	7
78	Understanding the non-catalytic behavior of human butyrylcholinesterase silent variants: Comparison of wild-type enzyme, catalytically active Ala328Cys mutant, and silent Ala328Asp variant. <i>Chemico-Biological Interactions</i> , <b>2016</b> , 259, 223-232	5	7
77	Autoregulation of Acetylcholine Release and Micro-Pharmacodynamic Mechanisms at Neuromuscular Junction: Selective Acetylcholinesterase Inhibitors for Therapy of Myasthenic Syndromes. <i>Frontiers in Pharmacology</i> , <b>2018</b> , 9, 766	5.6	7
76	Relation between dynamics, activity and thermal stability within the cholinesterase family. <i>Chemico-Biological Interactions</i> , <b>2013</b> , 203, 14-8	5	7
75	Rat butyrylcholinesterase-catalysed hydrolysis of N-alkyl homologues of benzoylcholine. <i>FEBS Journal</i> , <b>2006</b> , 273, 1185-97	5.7	7
74	Determination of the free electrophoretic mobility of proteins by polyacrylamide gradient gel electrophoresis: A new approach. <i>Journal of Chromatography A</i> , <b>1980</b> , 192, 402-407	4.5	7
73	Pressure Effects on Structure and Activity of Cholinesterase <b>1995</b> , 113-121		7
72	Improving HIV proteome annotation: new features of BioAfrica HIV Proteomics Resource. <i>Database: the Journal of Biological Databases and Curation</i> , <b>2016</b> , 2016,	5	7
71	6-Methyluracil derivatives as acetylcholinesterase inhibitors for treatment of Alzheimer's disease. <i>International Journal of Risk and Safety in Medicine</i> , <b>2015</b> , 27 Suppl 1, S69-71	1.6	6
70	Substrate dependence of amiloride- and soman-induced conformation changes of butyrylcholinesterase as evidenced by high-pressure perturbation. <i>BBA - Proteins and Proteomics</i> , <b>1995</b> , 1250, 19-28		6
69	Cold-induced conformational changes of ribonuclease A as investigated by subzero transverse temperature gradient gel electrophoresis. <i>BBA - Proteins and Proteomics</i> , <b>1994</b> , 1208, 1-7		6
68	Endogenous butyrylcholinesterase in SV40 transformed cell lines: COS-1, COS-7, MRC-5 SV40, and WI-38 VA13. <i>In Vitro Cellular and Developmental Biology - Animal</i> , <b>1994</b> , 30A, 680-9	2.6	6
67	Possibilitil d'Eude des variantes de la cholinestEase plasmatique humaine par lectrophore d'affinitl Biomedical Applications, <b>1983</b> , 273, 289-299		6
66	Endogenous human plasma catalytic bioscavengers for organophosphorus compounds do not protect against the toxicity of chemicals implicated in aerotoxic syndrome: an in vitro study. <i>Journal of Biological Physics and Chemistry</i> , <b>2012</b> , 12, 89-97	2	6
65	Slow-binding reversible inhibitor of acetylcholinesterase with long-lasting action for prophylaxis of organophosphate poisoning. <i>Scientific Reports</i> , <b>2020</b> , 10, 16611	4.9	6
64	Molecular polymorphism of human enzymes as the basis of individual sensitivity to drugs. Supercomputer-assisted modeling as a tool for analysis of structural changes and enzymatic activity of proteins. <i>Russian Chemical Bulletin</i> , <b>2016</b> , 65, 1592-1607	1.7	6

### (2008-2020)

63	Steady-State Kinetics of Enzyme-Catalyzed Hydrolysis of Echothiophate, a P-S Bonded Organophosphorus as Monitored by Spectrofluorimetry. <i>Molecules</i> , <b>2020</b> , 25,	4.8	5	
62	Catalytic Bioscavengers <b>2015</b> , 1107-1123		5	
61	Pressure and heat inactivation of recombinant human acetylcholinesterase. Importance of residue E202 for enzyme stability. <i>FEBS Journal</i> , <b>2002</b> , 269, 4297-307		5	
60	Pressure-induced molten globule states of proteins. <i>Progress in Biotechnology</i> , <b>1996</b> , 117-126		5	
59	Structural and functional investigations of cholinesterases by means of affinity electrophoresis. <i>Cellular and Molecular Neurobiology</i> , <b>1991</b> , 11, 173-89	4.6	5	
58	Soman inhibition of butyrylcholinesterase in the presence of substrate: pressure and temperature perturbations. <i>BBA - Proteins and Proteomics</i> , <b>1992</b> , 1159, 295-302		5	
57	ORGANOPHOSPHORUS NEUROTOXINS <b>2020</b> ,		5	
56	CHAPTER 2:Nerve Agents: Catalytic Scavengers as an Alternative Approach for Medical Countermeasures. <i>Issues in Toxicology</i> , <b>2016</b> , 43-81	0.3	5	
55	A new sensitive spectrofluorimetric method for measurement of activity and kinetic study of cholinesterases. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2020</b> , 1868, 140270	4	5	
54	6-Methyluracil derivatives as peripheral site ligand-hydroxamic acid conjugates: Reactivation for paraoxon-inhibited acetylcholinesterase. <i>European Journal of Medicinal Chemistry</i> , <b>2020</b> , 185, 111787	6.8	5	
53	Purification of recombinant human butyrylcholinesterase on Hupresin <sup>®</sup> . <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , <b>2018</b> , 1102-1103, 109-115	; 3.2	5	
52	Therapeutic nanoreactors for detoxification of xenobiotics: Concepts, challenges and biotechnological trends with special emphasis to organophosphate bioscavenging. <i>Chemico-Biological Interactions</i> , <b>2021</b> , 346, 109577	5	5	
51	Expression and Refolding of Functional Human Butyrylcholinesterase from E. Coli <b>1992</b> , 49-52		5	
50	Time-course of enzyme-catalyzed competing substrate degradation for michaelian behavior and for enzymes showing activation/inhibition by excess substrate. <i>Chemico-Biological Interactions</i> , <b>2019</b> , 309, 108704	5	4	
49	The ins and outs of eukaryotic viruses: Knowledge base and ontology of a viral infection. <i>PLoS ONE</i> , <b>2017</b> , 12, e0171746	3.7	4	
48	Butyrylcholinesterase: Overview, Structure, and Function <b>2011</b> , 25-41		4	
47	Phosphotriesterase modified by poly[N-(2-hydroxypropyl)methacrylamide]. <i>Toxicology</i> , <b>2007</b> , 233, 235	4.4	4	
46	Mechanism of hydrolysis of dicholine esters with long polymethylene chain by human butyrylcholinesterase. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2008</b> , 1784, 1818-24	4	4	

45	Structural data on the aging of diethylphosphoryl-butyrylcholinesterase. <i>Chemico-Biological Interactions</i> , <b>2005</b> , 157-158, 408-9	5	4
44	Structural and hydration changes in the active site gorge of phosporhylated butyrylcholinesterase accompanying the aging process. <i>Chemico-Biological Interactions</i> , <b>1999</b> , 119-120, 17-27	5	4
43	Membrane acetylcholinesterase from Apis mellifera head solubilized by phosphatidylinositol-specific phospholipase C interacts with an anti-CRD antibody. <i>Comparative Biochemistry and Physiology Part B: Comparative Biochemistry</i> , <b>1990</b> , 95, 609-612		4
42	Mechanical Aspects of the Phosphotriesterase Activity of Human Butyrylcholinesterase G117H Mutant <b>1998</b> , 399-405		4
41	How alkali-activated Ti surfaces affect the growth of tethered PMMA chains: a close-up study on the PMMA thickness and surface morphology. <i>Pure and Applied Chemistry</i> , <b>2019</b> , 91, 1687-1694	2.1	3
40	Application of Tetrameric Recombinant Human Butyrylcholinesterase as a Biopharmaceutical for Amelioration of Symptoms of Acute Organophosphate Poisoning. <i>Bulletin of Experimental Biology and Medicine</i> , <b>2017</b> , 163, 430-435	0.8	3
39	Computational Exploration of Reactivity of 6-Methyluracil/Imidazole-2-Carbaldehyde Oxime Conjugate. <i>BioNanoScience</i> , <b>2017</b> , 7, 229-232	3.4	3
38	Biomarkers of Exposure to Organophosphorus Poisons <b>2009</b> , 847-858		3
37	PON1 Structure <b>2002</b> , 27-52		3
36	1-(3Butylphenyl)-2,2,2-Trifluoroethanone as a Potent Transition-State Analogue Slow-Binding Inhibitor of Human Acetylcholinesterase: Kinetic, MD and QM/MM Studies. <i>Biomolecules</i> , <b>2020</b> , 10,	5.9	3
35	Water structure changes in oxime-mediated reactivation process of phosphorylated human acetylcholinesterase. <i>Bioscience Reports</i> , <b>2018</b> , 38,	4.1	3
34	The four-helix bundle in cholinesterase dimers: Structural and energetic determinants of stability. <i>Chemico-Biological Interactions</i> , <b>2019</b> , 309, 108699	5	2
33	Bacterial Virus Ontology; Coordinating across Databases. Viruses, 2017, 9,	6.2	2
32	Human butyrylcholinesterase polymorphism: Molecular modeling. <i>International Journal of Risk and Safety in Medicine</i> , <b>2015</b> , 27 Suppl 1, S80-1	1.6	2
31	Structural stability of human butyrylcholinesterase under high hydrostatic pressure. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2019</b> , 1867, 107-113	4	2
30	Blockade of Metabotropic GABA-B Receptors as an Approach to Reduce Toxic Peripheral Effects of Cholinesterase Inhibitors. <i>BioNanoScience</i> , <b>2019</b> , 9, 38-43	3.4	2
29	Kinetic Processes in Enzymatic Nanoreactors for In Vivo Detoxification <i>Biomedicines</i> , <b>2022</b> , 10,	4.8	2
28	Enzyme Nanoreactor for Detoxification of Organophosphates ACS Applied Materials & amp; Interfaces, 2022,	9.5	2

# (2020-2019)

27	Preparation of multi-allylic dendronized polymers via atom-transfer radical polymerization. <i>European Polymer Journal</i> , <b>2019</b> , 118, 358-364	5.2	1
26	Biomarkers of Exposure to Organophosphorus Poisons: A New Motif for Covalent Binding to Tyrosine in Proteins That Have No Active Site Serine <b>2015</b> , 953-965		1
25	Pressure effects on catalytic properties and structural stability of human paraoxonase. <i>Journal of Physics: Conference Series</i> , <b>2008</b> , 121, 112001	0.3	1
24	Hydration and conformation changes during enzyme catalysis: from molecular enzymology to enzyme engineering and biotechnology. <i>Progress in Biotechnology</i> , <b>2002</b> , 19, 177-187		1
23	Insect Acetylcholinesterase and Resistance to Insecticides <b>1995</b> , 149-153		1
22	Structural Changes in the Active Site Gorge of Phosphylated Cholinesterase Accompanying the Aging Process <b>1998</b> , 419-424		1
21	Impact of Sucrose as Osmolyte on Molecular Dynamics of Mouse Acetylcholinesterase. <i>Biomolecules</i> , <b>2020</b> , 10,	5.9	1
20	Paraoxonase-1 and its Interactions with HDL: Molecular Structures of PON1 and HDL <b>2010</b> , 99-131		O
19	IngBierie dBnzymes pour la protection, la dBontamination et le traitement des agressions par les composB organophosphorB. <i>Bulletin De LiAcademie Nationale De Medecine</i> , <b>2007</b> , 191, 95-112	0.1	O
18	Steady-state kinetic analysis of human cholinesterases over wide concentration ranges of competing substrates. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , <b>2022</b> , 1870, 140733	4	Ο
17	Protective effects of m-(tert-butyl) trifluoroacetophenone, a transition state analogue of acetylcholine, against paraoxon toxicity and memory impairments. <i>Chemico-Biological Interactions</i> , <b>2021</b> , 345, 109558	5	O
16	Etocopherol, a slow-binding inhibitor of acetylcholinesterase. <i>Chemico-Biological Interactions</i> , <b>2021</b> , 348, 109646	5	O
15	Catalytic bioscavengers: the second generation of bioscavenger-based medical countermeasures <b>2020</b> , 1199-1229		
14	Analysis of Apparent Catalytic Parameters of Multiple Molecular Forms of Human Plasma Butyrylcholinesterase by Activity Gel-Scanning Following Non-denaturing Electrophoresis. BioNanoScience, <b>2018</b> , 8, 367-372	3.4	
13	Assessing Gravitropic Responses in Arabidopsis. <i>Methods in Molecular Biology</i> , <b>2016</b> , 1398, 11-20	1.4	
12	Molecular modeling of mechanism of action of anti-myasthenia gravis slow-binding inhibitor of acetylcholinesterase. <i>International Journal of Risk and Safety in Medicine</i> , <b>2015</b> , 27 Suppl 1, S74-5	1.6	
11	Effect of glycosylation on the mechanism of renaturation of carboxypeptidase Y. <i>Progress in Biotechnology</i> , <b>2002</b> , 19, 71-78		
10	Study and modeling of mechanisms of cholinesterasis reactions in order to improve their catalytic properties in the neutralization reactions of organophosphorous compounds <b>2020</b> , 134-174		

- 9 Research on cholinesterases in the Soviet Union and Russia **2020**, 35-43
- Study and modeling of mechanisms of cholinesterasis reactions in order to improve their catalytic properties in the neutralization reactions of organophosphorus compounds **2020**, 140-180
- 7 Research on cholinesterases in the Soviet Union and Russia **2020**, 29-37
- 6 Human cholinesterases **2020**, 69-126
- 5 Double-mutant Thermodynamic Cycles under High Hydrostatic Pressure **2003**, 61-68
- 4 X-Ray structures of native and soman-aged human butyrylcholinesterase **2004**, 165-169
- Capillary zone electrophoresis detects unwanted cholinesterase-bound hidden ligands that alter enzyme conformational stability **2004**, 675-677
- Stability of the Quaternary Structure of Butyrylcholinesterase Subjected to Ultrasound or Hydrostatic Pressure **1998**, 436-437
- Les protlhes DING : proprits biochimiques, structurales, et capacit nhiber la rilication du virus VIH-1. Bulletin De LiAcademie Nationale De Medecine, **2012**, 196, 693-704

0.1