

Didier Fournier

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/10756695/publications.pdf>

Version: 2024-02-01

91
papers

4,697
citations

57758

44
h-index

102487

66
g-index

92
all docs

92
docs citations

92
times ranked

4766
citing authors

#	ARTICLE	IF	CITATIONS
1	Protein encapsulation in liposomes: efficiency depends on interactions between protein and phospholipid bilayer. <i>BMC Biotechnology</i> , 2002, 2, 9.	3.3	236
2	Improved multianalyte detection of organophosphates and carbamates with disposable multielectrode biosensors using recombinant mutants of <i>Drosophila acetylcholinesterase</i> and artificial neural networks. <i>Biosensors and Bioelectronics</i> , 2000, 15, 193-201.	10.1	167
3	Structural insights into substrate traffic and inhibition in acetylcholinesterase. <i>EMBO Journal</i> , 2006, 25, 2746-2756.	7.8	160
4	Mutations of acetylcholinesterase which confer insecticide resistance in <i>Drosophila melanogaster</i> populations. <i>BMC Evolutionary Biology</i> , 2004, 4, 4.	3.2	158
5	Identification of Resistance Mechanisms in <i>Culex pipiens</i> (Diptera: Culicidae) from Southern France: Insensitive Acetylcholinesterase and Detoxifying Oxidases. <i>Journal of Economic Entomology</i> , 1986, 79, 1452-1458.	1.8	117
6	Hybrid Nanocapsules: Interactions of ABA Block Copolymers with Liposomes. <i>Journal of the American Chemical Society</i> , 2005, 127, 6242-6247.	13.7	117
7	Mutation of exposed hydrophobic amino acids to arginine to increase protein stability. <i>BMC Biochemistry</i> , 2004, 5, 9.	4.4	104
8	Engineering sensitive acetylcholinesterase for detection of organophosphate and carbamate insecticides. <i>Biosensors and Bioelectronics</i> , 1998, 13, 157-164.	10.1	101
9	Biosensors based on highly sensitive acetylcholinesterases for enhanced carbamate insecticides detection. <i>Analytica Chimica Acta</i> , 2006, 562, 115-121.	5.4	99
10	<i>Drosophila melanogaster</i> acetylcholinesterase gene. <i>Journal of Molecular Biology</i> , 1989, 210, 15-22.	4.2	98
11	Existence of Two Acetylcholinesterases in the Mosquito <i>Culex pipiens</i> (Diptera: Culicidae). <i>Journal of Neurochemistry</i> , 1996, 67, 2115-2123.	3.9	98
12	Acetylcholinesterases from <i>Musca domestica</i> and <i>Drosophila melanogaster</i> Brain Are Linked to Membranes by a Glycophospholipid Anchor Sensitive to an Endogenous Phospholipase. <i>Journal of Neurochemistry</i> , 1988, 50, 1158-1163.	3.9	97
13	Genetically engineered acetylcholinesterase-based biosensor for attomolar detection of dichlorvos. <i>Biosensors and Bioelectronics</i> , 2005, 20, 2347-2352.	10.1	94
14	Cholinesterases from the common oyster (<i>Crassostrea gigas</i>). <i>FEBS Letters</i> , 1997, 407, 261-266.	2.8	92
15	Acetylcholinesterase engineering for detection of insecticide residues. <i>Protein Engineering, Design and Selection</i> , 2002, 15, 43-50.	2.1	92
16	Detection of Anatoxin-a(s) in Environmental Samples of Cyanobacteria by Using a Biosensor with Engineered Acetylcholinesterases. <i>Applied and Environmental Microbiology</i> , 2002, 68, 4102-4106.	3.1	82
17	<i>Drosophila acetylcholinesterase</i> : Mechanisms of resistance to organophosphates. <i>Chemico-Biological Interactions</i> , 1993, 87, 233-238.	4.0	81
18	Protection of mammalian cell used in biosensors by coating with a polyelectrolyte shell. <i>Biosensors and Bioelectronics</i> , 2006, 21, 1566-1573.	10.1	79

#	ARTICLE	IF	CITATIONS
19	Xerocomus chrysenteron lectin: identification of a new pesticidal protein. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2003, 1621, 292-298.	2.4	76
20	Variation of Dominance of Newly Arisen Adaptive Genes. <i>Genetics</i> , 1997, 147, 1225-1234.	2.9	74
21	Sensitive amperometric biosensor for dichlorovos quantification: Application to detection of residues on apple skin. <i>Talanta</i> , 2008, 74, 741-746.	5.5	73
22	Acetylcholinesterase alterations reveal the fitness cost of mutations conferring insecticide resistance. <i>BMC Evolutionary Biology</i> , 2004, 4, 5.	3.2	72
23	Mechanisms of cholinesterase inhibition by inorganic mercury. <i>FEBS Journal</i> , 2007, 274, 1849-1861.	4.7	72
24	Substrate-permeable encapsulation of enzymes maintains effective activity, stabilizes against denaturation, and protects against proteolytic degradation. <i>Biotechnology and Bioengineering</i> , 2001, 75, 615-618.	3.3	71
25	Two invertebrate acetylcholinesterases show activation followed by inhibition with substrate concentration. <i>Biochemical Journal</i> , 1998, 329, 329-334.	3.7	70
26	A High Number of Mutations in Insect Acetylcholinesterase May Provide Insecticide Resistance. <i>Pesticide Biochemistry and Physiology</i> , 2000, 67, 95-102.	3.6	70
27	Native Molecular Forms of Head Acetylcholinesterase from Adult <i>Drosophila melanogaster</i> : Quaternary Structure and Hydrophobic Character. <i>Journal of Neurochemistry</i> , 1988, 50, 209-218.	3.9	69
28	Liposome-Based Nanocapsules. <i>IEEE Transactions on Nanobioscience</i> , 2004, 3, 49-55.	3.3	67
29	Encapsulation of Enzymes in Liposomes: High Encapsulation Efficiency and Control of Substrate Permeability. <i>Artificial Cells, Blood Substitutes, and Biotechnology</i> , 2004, 32, 67-75.	0.9	66
30	Fluorescence detection of enzymatic activity within a liposome based nano-biosensor. <i>Biosensors and Bioelectronics</i> , 2005, 21, 384-388.	10.1	66
31	A New Lectin Family with Structure Similarity to Actinoporins Revealed by the Crystal Structure of <i>Xerocomus chrysenteron</i> Lectin XCL. <i>Journal of Molecular Biology</i> , 2004, 344, 1409-1420.	4.2	64
32	Organophosphorus Insecticides Synergize Pyrethroids in the Resistant Strain of Cotton Bollworm, <i>Helicoverpa armigera</i> (L.) (Lepidoptera: Noctuidae) from West Africa. <i>Journal of Economic Entomology</i> , 2003, 96, 468-474.	1.8	61
33	Development of a colorimetric inhibition assay for microcystin-LR detection: Comparison of the sensitivity of different protein phosphatases. <i>Talanta</i> , 2011, 85, 2498-2503.	5.5	61
34	Biochemical characterization of the esterases A1 and B1 associated with organophosphate resistance in the <i>Culex pipiens</i> L. Complex. <i>Pesticide Biochemistry and Physiology</i> , 1987, 27, 211-217.	3.6	57
35	Levels of Total Acetylcholinesterase in <i>Drosophila melanogaster</i> in Relation to Insecticide Resistance. <i>Pesticide Biochemistry and Physiology</i> , 2001, 70, 100-107.	3.6	57
36	Minigene rescues acetylcholinesterase lethal mutations in <i>Drosophila melanogaster</i> . <i>Journal of Molecular Biology</i> , 1992, 223, 17-22.	4.2	56

#	ARTICLE	IF	CITATIONS
37	Acetylcholine enzyme sensor for determining methamidophos insecticide. <i>Analytica Chimica Acta</i> , 2001, 434, 1-8.	5.4	52
38	Novel immobilized liposomal glucose oxidase system using the channel protein OmpF and catalase. <i>Biotechnology and Bioengineering</i> , 2005, 90, 231-238.	3.3	52
39	Cholinesterase from the common prawn (<i>Palaemon serratus</i>) eyes: Catalytic properties and sensitivity to organophosphate and carbamate compounds. <i>Aquatic Toxicology</i> , 2006, 77, 412-421.	4.0	52
40	Shoot-and-Trap: Use of specific x-ray damage to study structural protein dynamics by temperature-controlled cryo-crystallography. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2008, 105, 11742-11747.	7.1	52
41	Esterase metabolism and reduced penetration are causes of resistance to deltamethrin in <i>Spodoptera exigua</i> HUB (Noctuidae; lepidoptera). <i>Pesticide Biochemistry and Physiology</i> , 1988, 32, 240-246.	3.6	50
42	Stabilization of Recombinant <i>Drosophila</i> Acetylcholinesterase. <i>Protein Expression and Purification</i> , 1998, 12, 166-172.	1.3	50
43	The effect of engineered disulfide bonds on the stability of <i>Drosophila melanogaster</i> acetylcholinesterase. <i>BMC Biochemistry</i> , 2006, 7, 12.	4.4	49
44	Stable Polymethacrylate Nanocapsules from Ultraviolet Light-Induced Template Radical Polymerization of Unilamellar Liposomes. <i>Langmuir</i> , 2006, 22, 7755-7759.	3.5	48
45	Proteins as Active Compounds Involved in Insecticidal Activity of Mushroom Fruitbodies. <i>Journal of Economic Entomology</i> , 2002, 95, 603-607.	1.8	46
46	Controlling an insecticide-resistant bollworm in West Africa. <i>Agriculture, Ecosystems and Environment</i> , 2005, 107, 409-411.	5.3	45
47	Acetylcholinesterase from <i>Drosophila melanogaster</i> : Identification of two subunits encoded by the same gene. <i>FEBS Letters</i> , 1988, 238, 333-337.	2.8	43
48	Insecticidal properties of mushroom and toadstool carpophores. <i>Phytochemistry</i> , 1996, 41, 1293-1299.	2.9	42
49	Inhibition of <i>Drosophila melanogaster</i> acetylcholinesterase by high concentrations of substrate. <i>FEBS Journal</i> , 2004, 271, 1364-1371.	0.2	41
50	Cholinesterases from the marine mussels <i>Mytilus galloprovincialis</i> Lmk. and <i>M. edulis</i> L. and from the freshwater bivalve <i>Corbicula fluminea</i> Müller. <i>Comparative Biochemistry and Physiology C, Comparative Pharmacology and Toxicology</i> , 1999, 122, 353-361.	0.5	40
51	A putative kinetic model for substrate metabolism by <i>Drosophila</i> acetylcholinesterase. <i>FEBS Letters</i> , 1998, 440, 85-88.	2.8	39
52	Microstructured Liposome Array. <i>Bioconjugate Chemistry</i> , 2006, 17, 245-247.	3.6	38
53	Phosphotriesterase: A complementary tool for the selective detection of two organophosphate insecticides: Chlorpyrifos and chlorfenvinfos. <i>Talanta</i> , 2009, 77, 1627-1631.	5.5	37
54	Exploration of the <i>Drosophila</i> Acetylcholinesterase Substrate Activation Site Using a Reversible Inhibitor (Triton X-100) and Mutated Enzymes. <i>Journal of Biological Chemistry</i> , 2000, 275, 11603-11609.	3.4	36

#	ARTICLE	IF	CITATIONS
55	Kinetic insight into the mechanism of cholinesterase inhibition by aflatoxin B1 to develop biosensors. <i>Biosensors and Bioelectronics</i> , 2009, 24, 2119-2124.	10.1	33
56	<i>Drosophila</i> acetylcholinesterase. Expression of a functional precursor in <i>Xenopus</i> oocytes. <i>FEBS Journal</i> , 1992, 203, 513-519.	0.2	31
57	A Method to Estimate Acetylcholinesterase-Active Sites and Turnover in Insects. <i>Analytical Biochemistry</i> , 2000, 285, 76-81.	2.4	31
58	Oxidases responsible for resistance to pyrethroids sensitize <i>Helicoverpa armigera</i> to triazophos in West Africa. <i>Insect Biochemistry and Molecular Biology</i> , 2003, 33, 883-887.	2.7	27
59	Improvement of <i>Drosophila</i> acetylcholinesterase stability by elimination of a free cysteine. <i>BMC Biochemistry</i> , 2002, 3, 21.	4.4	26
60	Negative Cross-Insensitivity in Insecticide-Resistant Cotton Aphid <i>Aphis gossypii</i> Glover. <i>Pesticide Biochemistry and Physiology</i> , 1999, 65, 55-61.	3.6	24
61	Involvement of Deacylation in Activation of Substrate Hydrolysis by <i>Drosophila</i> Acetylcholinesterase. <i>Journal of Biological Chemistry</i> , 2001, 276, 18296-18302.	3.4	23
62	Stabilization of Liposomes through Enzymatic Polymerization of DNA. <i>Nano Letters</i> , 2006, 6, 2755-2757.	9.1	23
63	Accumulation of Tetrahedral Intermediates in Cholinesterase Catalysis: A Secondary Isotope Effect Study. <i>Journal of the American Chemical Society</i> , 2010, 132, 17751-17759.	13.7	23
64	Interaction of <i>Drosophila</i> Acetylcholinesterases with <i>D</i> -Tubocurarine: An Explanation of the Activation by an Inhibitor. <i>Biochemistry</i> , 2001, 40, 1214-1219.	2.5	22
65	Fungal lectin, XCL, is internalized via clathrin-dependent endocytosis and facilitates uptake of other molecules. <i>European Journal of Cell Biology</i> , 2003, 82, 515-522.	3.6	22
66	Development of Highly Sensitive Sensor Based on Bioengineered Acetylcholinesterase Immobilized by Affinity Method. <i>Analytical Letters</i> , 2003, 36, 1865-1885.	1.8	22
67	Biosensor-controlled degradation of chlorpyrifos and chlorfenvinfos using a phosphotriesterase-based detoxification column. <i>Chemosphere</i> , 2010, 78, 1-6.	8.2	22
68	Analysis of acetylcholinesterase molecular forms during the development of <i>Drosophila melanogaster</i> . Evidence for the existence of an amphiphilic monomer. <i>Insect Biochemistry</i> , 1988, 18, 539-549.	1.8	21
69	Catalytic properties of cholinesterases. <i>NeuroReport</i> , 1992, 3, 39-42.	1.2	21
70	Does mercury interact with the inhibitory effect of dichlorvos on <i>Palaemon serratus</i> (Crustacea)? <i>Trends in Biochemical Sciences</i> , 1990, 15, 10-11.	8.0	21
71	Insights into substrate and product traffic in the <i>Drosophila melanogaster</i> acetylcholinesterase active site gorge by enlarging a back channel. <i>FEBS Journal</i> , 2008, 275, 2659-2664.	4.7	20
72	Inhibitory action of a new lectin from <i>Xerocomus chrysenteron</i> on cell-substrate adhesion. <i>Molecular and Cellular Biochemistry</i> , 2004, 258, 49-55.	3.1	19

#	ARTICLE	IF	CITATIONS
73	Determination of thermodynamic parameters of Xerocomus chrysenteron lectin interactions with N-acetylgalactosamine and Thomsen-Friedenreich antigen by isothermal titration calorimetry. BMC Biochemistry, 2005, 6, 11.	4.4	16
74	Inhibition and protection of cholinesterases by methanol and ethanol. Journal of Enzyme Inhibition and Medicinal Chemistry, 2007, 22, 407-415.	5.2	16
75	Interaction between acetylcholinesterase and choline acetyltransferase: an hypothesis to explain unusual toxicological responses. , 1997, 51, 276-282.		15
76	Rational polynomial equation as an unbiased approach for the kinetic studies of Drosophila melanogaster acetylcholinesterase reaction mechanism. Biochimica Et Biophysica Acta - Proteins and Proteomics, 2004, 1703, 53-61.	2.3	15
77	Drosophila acetylcholinesterase: Effect of post-traductional modifications on the production in the baculovirus system and substrate metabolization. Archives of Insect Biochemistry and Physiology, 1998, 38, 84-90.	1.5	14
78	Encapsulation of Acetylcholinesterase in Preformed Liposomes. BioTechniques, 2003, 34, 1158-1162.	1.8	14
79	Sorting out molecules reacting with acetylcholinesterase by enzyme encapsulation in liposome. Biosensors and Bioelectronics, 2004, 20, 628-632.	10.1	14
80	Drosophila melanogaster acetylcholinesterase: Identification and expression of two mutations responsible for cold- and heat-sensitive phenotypes. Molecular Genetics and Genomics, 1994, 243, 699-705.	2.4	13
81	Protein expression from synthetic genes: Selection of clones using GFP. Journal of Biotechnology, 2007, 131, 223-230.	3.8	12
82	A New Attempt to Assess the Effect of Learning Processes on the Cholinergic System: Studies on Fruitflies and Honeybees. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 1998, 119, 349-353.	1.6	10
83	Effect of tetramethylammonium, choline and edrophonium on insect acetylcholinesterase: test of a kinetic model. Chemico-Biological Interactions, 1999, 119-120, 137-146.	4.0	9
84	Is acetyl/butyrylcholine specificity a marker for insecticide-resistance mutations in insect acetylcholinesterase?. Pest Management Science, 2000, 56, 1023-1028.	3.4	7
85	Acceleration of Drosophila melanogaster acetylcholinesterase methanesulfonylation: peripheral ligand d-tubocurarine enhances the affinity for small methanesulfonyl fluoride. Chemico-Biological Interactions, 2002, 139, 145-157.	4.0	6
86	Cloning and detection of insecticide resistance genes. , 1997, , 399-419.		6
87	Chapter 15 Ultra-sensitive determination of pesticides via cholinesterase-based sensors for environmental analysis. Comprehensive Analytical Chemistry, 2007, 49, 311-330.	1.3	5
88	Evidence for Subdomain Flexibility in Drosophila melanogaster Acetylcholinesterase. Biochemistry, 2008, 47, 5599-5607.	2.5	4
89	Chapter 2 Functionalized Liposomes. Behavior Research Methods, 2008, 7, 39-58.	4.0	2
90	Acetylcholinesterase Increase in Drosophila as a Mechanism of Resistance to Insecticide. , 1998, , 503-507.		0

#	ARTICLE	IF	CITATIONS
91	Acetylcholinesterase and Insecticide Resistance in the Mosquito <i>Culex Pipiens.</i> , 1998, , 483-489.		0