## **Didier Fournier**

List of Publications by Year in descending order

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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	Development of a colorimetric inhibition assay for microcystin-LR detection: Comparison of the sensitivity of different protein phosphatases. Talanta, 2011, 85, 2498-2503.	5.5	61
2	Accumulation of Tetrahedral Intermediates in Cholinesterase Catalysis: A Secondary Isotope Effect Study. Journal of the American Chemical Society, 2010, 132, 17751-17759.	13.7	23
3	Biosensor-controlled degradation of chlorpyrifos and chlorfenvinfos using a phosphotriesterase-based detoxification column. Chemosphere, 2010, 78, 1-6.	8.2	22
4	Kinetic insight into the mechanism of cholinesterasterase inhibition by aflatoxin B1 to develop biosensors. Biosensors and Bioelectronics, 2009, 24, 2119-2124.	10.1	33
5	Phosphotriesterase: A complementary tool for the selective detection of two organophosphate insecticides: Chlorpyrifos and chlorfenvinfos. Talanta, 2009, 77, 1627-1631.	5.5	37
6	Insights into substrate and product traffic in the <i>Drosophilaâ€∫melanogaster</i> acetylcholinesterase active site gorge by enlarging a back channel. FEBS Journal, 2008, 275, 2659-2664.	4.7	20
7	Does mercury interact with the inhibitory effect of dichlorvos on Palaemon serratus (Crustacea:) Tj ETQq1 1 0.784	4314 rgBT 8.0	/Overlock 10
8	Chapter 2 Functionalized Liposomes. Behavior Research Methods, 2008, 7, 39-58.	4.0	2
9	Sensitive amperometric biosensor for dichlorovos quantification: Application to detection of residues on apple skin. Talanta, 2008, 74, 741-746.	<b>5.</b> 5	73
10	Evidence for Subdomain Flexibility in Drosophila melanogaster Acetylcholinesterase. Biochemistry, 2008, 47, 5599-5607.	2.5	4
11	Shoot-and-Trap: Use of specific x-ray damage to study structural protein dynamics by temperature-controlled cryo-crystallography. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 11742-11747.	7.1	52
12	Chapter 15 Ultra-sensitive determination of pesticides via cholinesterase-based sensors for environmental analysis. Comprehensive Analytical Chemistry, 2007, 49, 311-330.	1.3	5
13	Protein expression from synthetic genes: Selection of clones using GFP. Journal of Biotechnology, 2007, 131, 223-230.	3.8	12
14	Inhibition and protection of cholinesterases by methanol and ethanol. Journal of Enzyme Inhibition and Medicinal Chemistry, 2007, 22, 407-415.	5.2	16
15	Mechanisms of cholinesterase inhibition by inorganic mercury. FEBS Journal, 2007, 274, 1849-1861.	4.7	72
16	Microstructured Liposome Array. Bioconjugate Chemistry, 2006, 17, 245-247.	3.6	38
17	Stable Polymethacrylate Nanocapsules from Ultraviolet Light-Induced Template Radical Polymerization of Unilamellar Liposomes. Langmuir, 2006, 22, 7755-7759.	3.5	48
18	Stabilization of Liposomes through Enzymatic Polymerization of DNA. Nano Letters, 2006, 6, 2755-2757.	9.1	23

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19	Cholinesterase from the common prawn (Palaemon serratus) eyes: Catalytic properties and sensitivity to organophosphate and carbamate compounds. Aquatic Toxicology, 2006, 77, 412-421.	4.0	52
20	The effect of engineered disulfide bonds on the stability of Drosophila melanogaster acetylcholinesterase. BMC Biochemistry, 2006, 7, 12.	4.4	49
21	Structural insights into substrate traffic and inhibition in acetylcholinesterase. EMBO Journal, 2006, 25, 2746-2756.	7.8	160
22	Biosensors based on highly sensitive acetylcholinesterases for enhanced carbamate insecticides detection. Analytica Chimica Acta, 2006, 562, 115-121.	5.4	99
23	Protection of mammalian cell used in biosensors by coating with a polyelectrolyte shell. Biosensors and Bioelectronics, 2006, 21, 1566-1573.	10.1	79
24	Genetically engineered acetylcholinesterase-based biosensor for attomolar detection of dichlorvos. Biosensors and Bioelectronics, 2005, 20, 2347-2352.	10.1	94
25	Fluorescence detection of enzymatic activity within a liposome based nano-biosensor. Biosensors and Bioelectronics, 2005, 21, 384-388.	10.1	66
26	Controlling an insecticide-resistant bollworm in West Africa. Agriculture, Ecosystems and Environment, 2005, 107, 409-411.	5.3	45
27	Novel immobilized liposomal glucose oxidase system using the channel protein OmpF and catalase. Biotechnology and Bioengineering, 2005, 90, 231-238.	3.3	52
28	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
29	Hybrid Nanocapsules:Â Interactions of ABA Block Copolymers with Liposomes. Journal of the American Chemical Society, 2005, 127, 6242-6247.	13.7	117
30	Inhibition of Drosophila melanogaster acetylcholinesterase by high concentrations of substrate. FEBS Journal, 2004, 271, 1364-1371.	0.2	41
31	Mutations of acetylcholinesterase which confer insecticide resistance in Drosophila melanogaster populations. BMC Evolutionary Biology, 2004, 4, 4.	3.2	158
32	Acetylcholinesterase alterations reveal the fitness cost of mutations conferring insecticide resistance. BMC Evolutionary Biology, 2004, 4, 5.	3.2	72
33	Inhibitory action of a new lectin from Xerocomus chrysenteron on cell-substrate adhesion. Molecular and Cellular Biochemistry, 2004, 258, 49-55.	3.1	19
34	Sorting out molecules reacting with acetylcholinesterase by enzyme encapsulation in liposome. Biosensors and Bioelectronics, 2004, 20, 628-632.	10.1	14
35	Mutation of exposed hydrophobic amino acids to arginine to increase protein stability. BMC Biochemistry, 2004, 5, 9.	4.4	104
36	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

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37	Liposome-Based Nanocapsules. IEEE Transactions on Nanobioscience, 2004, 3, 49-55.	3.3	67
38	Encapsulation of Enzymes in Liposomes: High Encapsulation Efficiency and Control of Substrate Permeability. Artificial Cells, Blood Substitutes, and Biotechnology, 2004, 32, 67-75.	0.9	66
39	A New Lectin Family with Structure Similarity to Actinoporins Revealed by the Crystal Structure of Xerocomus chrysenteron Lectin XCL. Journal of Molecular Biology, 2004, 344, 1409-1420.	4.2	64
40	Fungal lectin, XCL, is internalized via clathrin-dependent endocytosis and facilitates uptake of other molecules. European Journal of Cell Biology, 2003, 82, 515-522.	3.6	22
41	Xerocomus chrysenteron lectin: identification of a new pesticidal protein. Biochimica Et Biophysica Acta - General Subjects, 2003, 1621, 292-298.	2.4	76
42	Oxidases responsible for resistance to pyrethroids sensitize Helicoverpa armigera (H $\tilde{A}\frac{1}{4}$ bner) to triazophos in West Africa. Insect Biochemistry and Molecular Biology, 2003, 33, 883-887.	2.7	27
43	Organophosphorus Insecticides Synergize Pyrethroids in the Resistant Strain of Cotton Bollworm, <l>Helicoverpa armigera</l> (Hübner) (Lepidoptera: Noctuidae) from West Africa. Journal of Economic Entomology, 2003, 96, 468-474.	1.8	61
44	Development of Highly Sensitive Sensor Based on Bioengineered Acetylcholinesterase Immobilized by Affinity Method. Analytical Letters, 2003, 36, 1865-1885.	1.8	22
45	Encapsulation of Acetylcholinesterase in Preformed Liposomes. BioTechniques, 2003, 34, 1158-1162.	1.8	14
46	Detection of Anatoxin-a(s) in Environmental Samples of Cyanobacteria by Using a Biosensor with Engineered Acetylcholinesterases. Applied and Environmental Microbiology, 2002, 68, 4102-4106.	3.1	82
47	Acetylcholinesterase engineering for detection of insecticide residues. Protein Engineering, Design and Selection, 2002, 15, 43-50.	2.1	92
48	Proteins as Active Compounds Involved in Insecticidal Activity of Mushroom Fruitbodies. Journal of Economic Entomology, 2002, 95, 603-607.	1.8	46
49	Acceleration of Drosophila melanogaster acetylcholinesterase methanesulfonylation: peripheral ligand d-tubocurarine enhances the affinity for small methanesulfonylfluoride. Chemico-Biological Interactions, 2002, 139, 145-157.	4.0	6
50	Protein encapsulation in liposomes: efficiency depends on interactions between protein and phospholipid bilayer. BMC Biotechnology, 2002, 2, 9.	3.3	236
51	Improvement of Drosophila acetylcholinesterase stability by elimination of a free cysteine. BMC Biochemistry, 2002, 3, 21.	4.4	26
52	Interaction ofDrosophilaAcetylcholinesterases withd-Tubocurarine: An Explanation of the Activation by an Inhibitorâ€. Biochemistry, 2001, 40, 1214-1219.	2.5	22
53	Substrate-permeable encapsulation of enzymes maintains effective activity, stabilizes against denaturation, and protects against proteolytic degradation. Biotechnology and Bioengineering, 2001, 75, 615-618.	3.3	71
54	Acetylcholine enzyme sensor for determining methamidophos insecticide. Analytica Chimica Acta, 2001, 434, 1-8.	5.4	52

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55	Levels of Total Acetylcholinesterase in Drosophila melanogaster in Relation to Insecticide Resistance. Pesticide Biochemistry and Physiology, 2001, 70, 100-107.	3.6	57
56	Involvement of Deacylation in Activation of Substrate Hydrolysis by Drosophila Acetylcholinesterase. Journal of Biological Chemistry, 2001, 276, 18296-18302.	3.4	23
57	A Method to Estimate Acetylcholinesterase-Active Sites and Turnover in Insects. Analytical Biochemistry, 2000, 285, 76-81.	2.4	31
58	Is acetyl/butyrylcholine specificity a marker for insecticide-resistance mutations in insect acetylcholinesterase?. Pest Management Science, 2000, 56, 1023-1028.	3.4	7
59	Improved multianalyte detection of organophosphates and carbamates with disposable multielectrode biosensors using recombinant mutants of Drosophila acetylcholinesterase and artificial neural networks. Biosensors and Bioelectronics, 2000, 15, 193-201.	10.1	167
60	A High Number of Mutations in Insect Acetylcholinesterase May Provide Insecticide Resistance. Pesticide Biochemistry and Physiology, 2000, 67, 95-102.	3.6	70
61	Exploration of the Drosophila Acetylcholinesterase Substrate Activation Site Using a Reversible Inhibitor (Triton X-100) and Mutated Enzymes. Journal of Biological Chemistry, 2000, 275, 11603-11609.	3.4	36
62	Negative Cross-Insensitivity in Insecticide-Resistant Cotton Aphid Aphis gossypii Glover. Pesticide Biochemistry and Physiology, 1999, 65, 55-61.	3.6	24
63	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
64	Cholinesterases from the marine mussels Mytilus galloprovincialis Lmk. and M. edulis L. and from the freshwater bivalve Corbicula fluminea Mýller. Comparative Biochemistry and Physiology C, Comparative Pharmacology and Toxicology, 1999, 122, 353-361.	0.5	40
65	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
66	Engineering sensitive acetylcholinesterase for detection of organophosphate and carbamate insecticides. Biosensors and Bioelectronics, 1998, 13, 157-164.	10.1	101
67	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
68	A putative kinetic model for substrate metabolisation by Drosophila acetylcholine sterase. FEBS Letters, 1998, 440, 85-88.	2.8	39
69	Stabilization of RecombinantDrosophilaAcetylcholinesterase. Protein Expression and Purification, 1998, 12, 166-172.	1.3	50
70	Two invertebrate acetylcholinesterases show activation followed by inhibition with substrate concentration. Biochemical Journal, 1998, 329, 329-334.	3.7	70
71	Acetylcholinesterase Increase in Drosophila as a Mechanism of Resistance to Insecticide., 1998,, 503-507.		0
72	Acetylcholinesterase and Insecticide Resistance in the Mosquito Culex Pipiens., 1998,, 483-489.		0

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73	Cholinesterases from the common oyster (Crassostrea gigas). FEBS Letters, 1997, 407, 261-266.	2.8	92
74	Interaction between acetylcholinesterase and choline acetyltransferase: an hypothesis to explain unusual toxicological responses., 1997, 51, 276-282.		15
75	Cloning and detection of insecticide resistance genes. , 1997, , 399-419.		6
76	Variation of Dominance of Newly Arisen Adaptive Genes. Genetics, 1997, 147, 1225-1234.	2.9	74
77	Insecticidal properties of mushroom and toadstool carpophores. Phytochemistry, 1996, 41, 1293-1299.	2.9	42
78	Existence of Two Acetylcholinesterases in the Mosquito <i>Culex pipiens</i> (Diptera: Culicidae). Journal of Neurochemistry, 1996, 67, 2115-2123.	3.9	98
79	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
80	Drosophila acetylcholinesterase: Mechanisms of resistance to organophosphates. Chemico-Biological Interactions, 1993, 87, 233-238.	4.0	81
81	Catalytic properties of cholinesterases. NeuroReport, 1992, 3, 39-42.	1.2	21
82	Minigene rescues acetylcholinesterase lethal mutations in Drosophila melanogaster. Journal of Molecular Biology, 1992, 223, 17-22.	4.2	56
83	Drosophila acetylcholinesterase. Expression of a functional precursor in Xenopus oocytes. FEBS Journal, 1992, 203, 513-519.	0.2	31
84	Drosophila melanogaster acetylcholinesterase gene. Journal of Molecular Biology, 1989, 210, 15-22.	4.2	98
85	Acetylcholinesterases from Musca domestica and Drosophila melanogaster Brain Are Linked to Membranes by a Glycophospholipid Anchor Sensitive to an Endogenous Phospholipase. Journal of Neurochemistry, 1988, 50, 1158-1163.	3.9	97
86	Native Molecular Forms of Head Acetylcholinesterase from Adult Drosophila melanogaster: Quaternary Structure and Hydrophobic Character. Journal of Neurochemistry, 1988, 50, 209-218.	3.9	69
87	Analysis of acetylcholinesterase molecular forms during the development of Drosophila melanogaster. Evidence for the existence of an amphiphilic monomer. Insect Biochemistry, 1988, 18, 539-549.	1.8	21
88	Acetylcholinesterase fromDrosophila melanogasterIdentification of two subunits encoded by the same gene. FEBS Letters, 1988, 238, 333-337.	2.8	43
89	Esterase metabolism and reduced penetration are causes of resistance to deltamethrin in Spodoptera exigua HUB (Noctuidea; lepidoptera). Pesticide Biochemistry and Physiology, 1988, 32, 240-246.	3.6	50
90	Biochemical characterization of the esterases A1 and B1 associated with organophosphate resistance in the Culex pipiens L. Complex. Pesticide Biochemistry and Physiology, 1987, 27, 211-217.	3.6	57

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91	Identification of Resistance Mechanisms in Culex pipiens (Diptera: Culicidae) from Southern France: Insensitive Acetylcholinesterase and Detoxifying Oxidases. Journal of Economic Entomology, 1986, 79, 1452-1458.	1.8	117