## Jaume Farrés

## List of Publications by Year in descending order

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93 papers 3,959 citations

147801 31 h-index 61 g-index

96 all docs 96
docs citations

96 times ranked 3206 citing authors

#	Article	IF	CITATIONS
1	Genetic polymorphism of alcohol dehydrogenase in europeans: TheADH2*2 allele decreases the risk for alcoholism and is associated withADH3*1. Hepatology, 2000, 31, 984-989.	7.3	230
2	Recommended nomenclature for the vertebrate alcohol dehydrogenase gene family. Biochemical Pharmacology, 1999, 58, 389-395.	4.4	222
3	Physiological Substrates for Rat Alcohol Dehydrogenase Classes: Aldehydes of Lipid Peroxidation, ï‰-Hydroxyfatty Acids, and Retinoids. Archives of Biochemistry and Biophysics, 1993, 307, 85-90.	3.0	193
4	Characterization of three isoenzymes of rat alcohol dehydrogenase. Tissue distribution and physical and enzymatic properties. FEBS Journal, 1987, 162, 179-189.	0.2	177
5	Structural basis for the high <i>all-trans</i> -retinaldehyde reductase activity of the tumor marker AKR1B10. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 20764-20769.	7.1	172
6	Lower Somatostatin Expression Is an Early Event in Diabetic Retinopathy and Is Associated With Retinal Neurodegeneration. Diabetes Care, 2007, 30, 2902-2908.	8.6	170
7	Differential Th1/Th2 cytokine patterns in chronic arthritis: interferon gamma is highly expressed in synovium of rheumatoid arthritis compared with seronegative spondyloarthropathies. Annals of the Rheumatic Diseases, 2000, 59, 263-268.	0.9	159
8	Investigation of the Active Site Cysteine Residue of Rat Liver Mitochondrial Aldehyde Dehydrogenase by Site-Directed Mutagenesis. Biochemistry, 1995, 34, 2592-2598.	2.5	156
9	Human aldose reductase and human small intestine aldose reductase are efficient retinal reductases: consequences for retinoid metabolism. Biochemical Journal, 2003, 373, 973-979.	3.7	152
10	Medium- and short-chain dehydrogenase/reductase gene and protein families. Cellular and Molecular Life Sciences, 2008, 65, 3936-3949.	5.4	144
11	Stimulation of retinoic acid production and growth by ubiquitously expressed alcohol dehydrogenase Adh3. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 5337-5342.	7.1	127
12	Comparative functional analysis of human medium-chain dehydrogenases, short-chain dehydrogenases/reductases and aldo-keto reductases with retinoids. Biochemical Journal, 2006, 399, 101-109.	3.7	114
13	Primary structures of rat and bovine liver mitochondrial aldehyde dehydrogenases deduced from cDNA sequences. FEBS Journal, 1989, 180, 67-74.	0.2	92
14	Arabidopsis Formaldehyde Dehydrogenase. Molecular Properties of Plant Class III Alcohol Dehydrogenase Provide Further Insights into the Origins, Structure and Function of Plant Class P and Liver Class I Alcohol Dehydrogenases. FEBS Journal, 1996, 241, 849-857.	0.2	81
15	Aldo-keto reductases from the AKR1B subfamily: Retinoid specificity and control of cellular retinoic acid levels. Chemico-Biological Interactions, 2009, 178, 171-177.	4.0	70
16	Retinoids, ω-hydroxyfatty acids and cytotoxic aldehydes as physiological substrates, and H2-receptor antagonists as pharmacological inhibitors, of human class IV alcohol dehydrogenase. FEBS Letters, 1998, 426, 362-366.	2.8	69
17	Biological Role of Aldo–Keto Reductases in Retinoic Acid Biosynthesis and Signaling. Frontiers in Pharmacology, 2012, 3, 58.	3.5	66
18	Ocular alcohol dehydrogenase in the rat: Regional distribution and kinetics of the ADH-1 isoenzyme with retinol and retinal. Experimental Eye Research, 1986, 42, 305-314.	2.6	65

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19	Alcohol Dehydrogenase of Class IV (sigmasigma-ADH) from Human Stomach. cDNA Sequence and Structure/Function Relationships. FEBS Journal, 1994, 224, 549-557.	0.2	65
20	Mammalian class IV alcohol dehydrogenase (stomach alcohol dehydrogenase): structure, origin, and correlation with enzymology Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 1893-1897.	7.1	59
21	Influence of liver disease on hepatic alcohol and aldehyde dehydrogenases. Gastroenterology, 1989, 97, 708-714.	1.3	57
22	Lowered cortistatin expression is an early event in the human diabetic retina and is associated with apoptosis and glial activation. Molecular Vision, 2008, 14, 1496-502.	1.1	57
23	Purification and characterization of a DNA-binding heterodimer of 52 and 100 kDa from HeLa cells. Biochemical Journal, 1993, 290, 267-272.	3.7	51
24	Alcohol dehydrogenase of human and rat blood vessels. FEBS Letters, 1997, 405, 26-30.	2.8	50
25	Expression, localization and potential physiological significance of alcohol dehydrogenase in the gastrointestinal tract. FEBS Journal, 2003, 270, 2652-2662.	0.2	48
26	Three-dimensional Structure and Enzymatic Function of Proapoptotic Human p53-inducible Quinone Oxidoreductase PIG3. Journal of Biological Chemistry, 2009, 284, 17194-17205.	3.4	48
27	Complete Reversal of Coenzyme Specificity by Concerted Mutation of Three Consecutive Residues in Alcohol Dehydrogenase. Journal of Biological Chemistry, 2003, 278, 40573-40580.	3.4	44
28	Organ specific alcohol metabolism: Placental χ-ADH. Biochemical and Biophysical Research Communications, 1984, 119, 1047-1055.	2.1	42
29	Molecular cloning of the mitochondrial aldehyde dehydrogenase gene of Saccharomyces cerevisiae by genetic complementation. Journal of Bacteriology, 1991, 173, 3199-3208.	2.2	40
30	Human and yeast $\hat{I}_{q}$ -crystallins bind AU-rich elements in RNA. Cellular and Molecular Life Sciences, 2007, 64, 1419-1427.	5.4	36
31	Molecular Basis for Differential Substrate Specificity in Class IV Alcohol Dehydrogenases. Journal of Biological Chemistry, 2000, 275, 25180-25187.	3.4	35
32	Structural and Enzymatic Properties of a Gastric NADP(H)- dependent and Retinal-active Alcohol Dehydrogenase. Journal of Biological Chemistry, 1999, 274, 26021-26026.	3.4	31
33	Retinaldehyde is a substrate for human aldo–keto reductases of the 1C subfamily. Biochemical Journal, 2011, 440, 335-347.	3.7	31
34	Aldo–keto reductases in retinoid metabolism: Search for substrate specificity and inhibitor selectivity. Chemico-Biological Interactions, 2013, 202, 186-194.	4.0	31
35	A Vertebrate Aldo-keto Reductase Active with Retinoids and Ethanol. Journal of Biological Chemistry, 2001, 276, 19132-19140.	3.4	29
36	Human and rodent aldo–keto reductases from the AKR1B subfamily and their specificity with retinaldehyde. Chemico-Biological Interactions, 2011, 191, 199-205.	4.0	29

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37	Experimental Design: A Useful Tool for PCR Optimization. BioTechniques, 1996, 21, 134-140.	1.8	29
38	Identification of a novel polyfluorinated compound as a lead to inhibit the human enzymes aldose reductase and AKR1B10: structure determination of both ternary complexes and implications for drug design. Acta Crystallographica Section D: Biological Crystallography, 2014, 70, 889-903.	2.5	28
39	Alcohol dehydrogenase isoenzymes in rat development. Biochemical Pharmacology, 1992, 43, 1555-1561.	4.4	27
40	Liver mitochondrial aldehyde dehydrogenase: In vitro expression, in vitro import, and effect of alcohols on import. Archives of Biochemistry and Biophysics, 1989, 272, 440-449.	3.0	26
41	Design, synthesis, structure-activity relationships and X-ray structural studies of novel 1-oxopyrimido[4,5-c]quinoline-2-acetic acid derivatives as selective and potent inhibitors of human aldose reductase. European Journal of Medicinal Chemistry, 2018, 152, 160-174.	5.5	26
42	The specificity of alcohol dehydrogenase with cis-retinoids. Activity with 11-cis-retinol and localization in retina. FEBS Journal, 2004, 271, 1660-1670.	0.2	24
43	Human prostaglandin reductase 1 (PGR1): Substrate specificity, inhibitor analysis and site-directed mutagenesis. Chemico-Biological Interactions, 2015, 234, 105-113.	4.0	24
44	Properties of rat retina alcohol dehydrogenase. Alcohol, 1985, 2, 43-46.	1.7	23
45	Structural analysis of sulindac as an inhibitor of aldose reductase and AKR1B10. Chemico-Biological Interactions, 2015, 234, 290-296.	4.0	22
46	Structural and kinetic features of aldehyde dehydrogenase 1A (ALDH1A) subfamily members, cancer stem cell markers active in retinoic acid biosynthesis. Archives of Biochemistry and Biophysics, 2020, 681, 108256.	3.0	22
47	Molecular modelling of human gastric alcohol dehydrogenase (class IV) and substrate docking: differences towards the classical liver enzyme (class I). FEBS Letters, 1996, 395, 99-102.	2.8	21
48	Crystal Structure of the Vertebrate NADP(H)-dependent Alcohol Dehydrogenase (ADH8). Journal of Molecular Biology, 2003, 330, 75-85.	4.2	20
49	Purification and partial characterization of a rat retina alcohol dehydrogenase active with ethanol and retinol. Biochemical Journal, 1983, 213, 547-550.	3.7	19
50	A missense mutation in ALDH1A3 causes isolated microphthalmia/anophthalmia in nine individuals from an inbred Muslim kindred. European Journal of Human Genetics, 2014, 22, 419-422.	2.8	19
51	IDD388 Polyhalogenated Derivatives as Probes for an Improved Structure-Based Selectivity of AKR1B10 Inhibitors. ACS Chemical Biology, 2016, 11, 2693-2705.	3.4	19
52	Sequence of the signal peptide for rat liver mitochondrial aldehyde dehydrogenase. Biochemical and Biophysical Research Communications, 1988, 150, 1083-1087.	2.1	18
53	Alcohol dehydrogenase 2 is a major hepatic enzyme for human retinol metabolism. Cellular and Molecular Life Sciences, 2007, 64, 498-505.	5.4	18
54	Kinetics of human alcohol dehydrogenase with ring-oxidized retinoids: effect of Tween 80. Archives of Biochemistry and Biophysics, 2004, 430, 210-217.	3.0	17

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55	MDR quinone oxidoreductases: The human and yeast ζ-crystallins. Chemico-Biological Interactions, 2009, 178, 288-294.	4.0	17
56	Kinetic and structural evidence of the alkenal/one reductase specificity of human $\hat{I}_{q}$ -crystallin. Cellular and Molecular Life Sciences, 2011, 68, 1065-1077.	5.4	17
57	Substrate Specificity, Inhibitor Selectivity and Structure-Function Relationships of Aldo-Keto Reductase 1B15: A Novel Human Retinaldehyde Reductase. PLoS ONE, 2015, 10, e0134506.	2.5	17
58	Inhibitors of aldehyde dehydrogenases of the 1A subfamily as putative anticancer agents: Kinetic characterization and effect on human cancer cells. Chemico-Biological Interactions, 2019, 306, 123-130.	4.0	17
59	Biocatalytic production of alpha-hydroxy ketones and vicinal diols by yeast and human aldo–keto reductases. Chemico-Biological Interactions, 2013, 202, 195-203.	4.0	16
60	Aldehyde oxidation in human placenta. Purification and properties of 1-pyrroline-5-carboxylate dehydrogenase. Biochemical Journal, 1988, 256, 461-467.	3.7	14
61	Distribution of alcohol dehydrogenase mRNA in the rat central nervous system FEBS Journal, 2001, 268, 5045-5056.	0.2	14
62	X-ray structure of the V301L aldoâ€"keto reductase 1B10 complexed with NADP+ and the potent aldose reductase inhibitor fidarestat: Implications for inhibitor binding and selectivity. Chemico-Biological Interactions, 2013, 202, 178-185.	4.0	14
63	Alcoholic Myopathy and Acetaldehyde. Novartis Foundation Symposium, 2007, 285, 158-182.	1.1	14
64	Site Directed Mutagenesis to Probe for Active Site Components of Liver Mitochondrial Aldehyde Dehydrogenase. Advances in Experimental Medicine and Biology, 1995, 372, 1-7.	1.6	14
65	Synthesis of ring-oxidized retinoids as substrates of mouse class I alcohol dehydrogenase (ADH1). Organic and Biomolecular Chemistry, 2004, 2, 3368-3373.	2.8	13
66	Structural Determinants of the Selectivity of 3â€Benzyluracilâ€1â€acetic Acids toward Human Enzymes Aldose Reductase and AKR1B10. ChemMedChem, 2015, 10, 1989-2003.	3.2	13
67	Novel alkenal/one reductase activity of yeast NADPH:quinone reductase Zta1p. Prospect of the functional role for the ζ-crystallin family. Chemico-Biological Interactions, 2011, 191, 32-37.	4.0	12
68	Efficacy of aldose reductase inhibitors is affected by oxidative stress induced under X-ray irradiation. Scientific Reports, 2019, 9, 3177.	3.3	11
69	Synthesis of enantiopure C3- and C4-hydroxyretinals and their enzymatic reduction by ADH8 from Xenopus laevis. Organic and Biomolecular Chemistry, 2006, 4, 155-164.	2.8	10
70	Distribution of alcohol dehydrogenase mRNA in the rat central nervous system Consequences for brain ethanol and retinoid metabolism. FEBS Journal, 2001, 268, 5045-5056.	0.2	9
71	Crystallization and preliminary X-ray analysis of NADP(H)-dependent alcohol dehydrogenases fromSaccharomyces cerevisiaeandRana perezi. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 334-337.	2.5	9
72	Design, Synthesis, Biological Evaluation and In Silico Study of Benzyloxybenzaldehyde Derivatives as Selective ALDH1A3 Inhibitors. Molecules, 2021, 26, 5770.	3.8	8

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73	Engineering aldo-keto reductase 1B10 to mimic the distinct 1B15 topology and specificity towards inhibitors and substrates, including retinoids and steroids. Chemico-Biological Interactions, 2019, 307, 186-194.	4.0	7
74	Expansion of the 4-(Diethylamino)benzaldehyde Scaffold to Explore the Impact on Aldehyde Dehydrogenase Activity and Antiproliferative Activity in Prostate Cancer. Journal of Medicinal Chemistry, 2022, 65, 3833-3848.	6.4	7
75	Retinoic acid-induced differentiation into astrocytes and glutamatergic neurons is associated with expression of functional and activable phospholipase D. Biochemical and Biophysical Research Communications, 2004, 316, 387-392.	2.1	6
76	The yeast ζâ€crystallin/NADPH:quinone oxidoreductase (Zta1p) is under nutritional control by the target of rapamycin pathway and is involved in the regulation of argininosuccinate lyase <scp>mRNA</scp> halfâ€ife. FEBS Journal, 2015, 282, 1953-1964.	4.7	6
77	Synthesis of apocarotenoids by acyclic cross metathesis and characterization as substrates for human retinaldehyde dehydrogenases. Tetrahedron, 2018, 74, 2567-2574.	1.9	6
78	Structural and biochemical evidence that ATP inhibits the cancer biomarker human aldehyde dehydrogenase 1A3. Communications Biology, 2022, 5, 354.	4.4	6
79	Purification of a novel 55 kDA HeLa cell nuclear DNA-binding protein. Biochemical and Biophysical Research Communications, 1991, 174, 542-548.	2.1	5
80	The Xenopus alcohol dehydrogenase gene family: characterization and comparative analysis incorporating amphibian and reptilian genomes. BMC Genomics, 2014, 15, 216.	2.8	5
81	Characterization of AKR1B16, a novel mouse aldo-keto reductase. Chemico-Biological Interactions, 2017, 276, 182-193.	4.0	4
82	Formaldehyde Dehydrogenase from Yeast and Plant. Advances in Experimental Medicine and Biology, 1996, , 373-381.	1.6	4
83	Structural basis for the inhibition of AKR1B10 by the C3 brominated TTNPB derivative UVI2008. Chemico-Biological Interactions, 2017, 276, 174-181.	4.0	3
84	Human and Rat Class IV Alcohol Dehydrogenases. Advances in Experimental Medicine and Biology, 1995, , 331-339.	1.6	3
85	N-terminal acetylation in a third protein family of vertebrate alcohol dehydrogenase/retinal reductase found through a 'proteomics' approach in enzyme characterization. Cellular and Molecular Life Sciences, 2001, 58, 1323-1326.	5.4	2
86	Class IV Alcohol Dehydrogenase: Structure and Function. Advances in Experimental Medicine and Biology, 1993, 328, 475-480.	1.6	2
87	Amphibian Alcohol Dehydrogenase. Advances in Experimental Medicine and Biology, 1999, , 343-350.	1.6	2
88	Probing the Active Site of Aldehyde Dehydrogenase by Site Directed Mutagenesis. Advances in Experimental Medicine and Biology, 1990, 284, 13-17.	1.6	2
89	Distribution of Alcohol Dehydrogenase in Human Organs. , 2001, , 87-102.		2
90	Kinetic effects of a single-amino acid mutation in a highly variable loop (residues 114–120) of class IV ADH. Chemico-Biological Interactions, 2001, 130-132, 435-444.	4.0	1

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91	Synthesis of C11-to-C14 methyl-shifted all-trans-retinal analogues and their activities on human aldo-keto reductases. Organic and Biomolecular Chemistry, 2020, 18, 4788-4801.	2.8	1
92	Perspective on the Structural Basis for Human Aldo-Keto Reductase 1B10 Inhibition. Metabolites, 2021, 11, 865.	2.9	1
93	X-ray structures of Aldose Reductase and AKR1B10 with the lead inhibitor JF0064. Acta Crystallographica Section A: Foundations and Advances, 2014, 70, C699-C699.	0.1	O