Joan CerdÃ

List of Publications by Year
in descending order

119 papers	5,320 citations	71061 41 h-index	102432 66 g-index
123 all docs	123 docs citations	123 times ranked	4225 citing authors

#	Article	IF	Citations
1	Oogenesis in teleosts: How fish eggs are formed. General and Comparative Endocrinology, 2010, 165, 367-389.	0.8	863
2	The zebrafish genome encodes the largest vertebrate repertoire of functional aquaporins with dual paralogy and substrate specificities similar to mammals. BMC Evolutionary Biology, 2010, 10, 38.	3.2	149
3	Evolution and Functional Diversity of Aquaporins. Biological Bulletin, 2015, 229, 6-23.	0.7	139
4	Marine Fish Egg Hydration Is Aquaporin-Mediated. Science, 2005, 307, 545-545.	6.0	132
5	The Lineage-Specific Evolution of Aquaporin Gene Clusters Facilitated Tetrapod Terrestrial Adaptation. PLoS ONE, 2014, 9, e113686.	1.1	129
6	Piscine aquaporins: an overview of recent advances. Journal of Experimental Zoology, 2010, 313A, 623-650.	1.2	126
7	Fish proteome analysis: Model organisms and nonâ€sequenced species. Proteomics, 2010, 10, 858-872.	1.3	113
8	Yolk proteolysis and aquaporin-1o play essential roles to regulate fish oocyte hydration during meiosis resumption. Developmental Biology, 2006, 295, 250-262.	0.9	89
9	Induction of spawning of captive-reared Senegal sole (Solea senegalensis) using different administration methods for gonadotropin-releasing hormone agonist. Aquaculture, 2006, 257, 511-524.	1.7	86
10	Influence of nutritional composition of diet on sea bass, Dicentrarchus labrax L., reproductive performance and egg and larval quality. Aquaculture, 1994, 128, 345-361.	1.7	84
11	Derivation of Major Yolk Proteins from Parental Vitellogenins and Alternative Processing During Oocyte Maturation in Fundulus heteroclitus1. Biology of Reproduction, 2005, 73, 815-824.	1.2	76
12	Ovarian cysteine proteinases in the teleostFundulus heteroclitus: Molecular cloning and gene expression during vitellogenesis and oocyte maturation. Molecular Reproduction and Development, 2004, 67, 282-294.	1.0	73
13	Mitochondrial aquaporin-8-mediated hydrogen peroxide transport is essential for teleost spermatozoon motility. Scientific Reports, 2015, 5, 7789.	1.6	73
14	Molecular Characterization and Expression Pattern of Zona Pellucida Proteins in Gilthead Seabream (Sparus aurata)1. Biology of Reproduction, 2006, 75, 717-725.	1.2	72
15	Genomic resources for a commercial flatfish, the Senegalese sole (Solea senegalensis): EST sequencing, oligo microarray design, and development of the bioinformatic platform Soleamold. BMC Genomics, 2008, 9, 508.	1.2	70
16	Functional Heterologous Gap Junctions in Fundulus Ovarian Follicles Maintain Meiotic Arrest and Permit Hydration during Oocyte Maturation. Developmental Biology, 1993, 160, 228-235.	0.9	69
17	Insect glycerol transporters evolved by functional co-option and gene replacement. Nature Communications, 2015, 6, 7814.	5.8	66
18	Phylogenetic relationships and gene expression pattern of three different cathepsin L (Ctsl) isoforms in zebrafish: Ctsla is the putative yolk processing enzyme. Gene, 2007, 386, 98-106.	1.0	64

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19	Follicle-Stimulating Hormone and Luteinizing Hormone Mediate the Androgenic Pathway in Leydig Cells of an Evolutionary Advanced Teleost1. Biology of Reproduction, 2012, 87, 35.	1.2	64
20	Evidence for the Involvement of Aquaporins in Sperm Motility Activation of the Teleost Gilthead Sea Bream (Sparus aurata)1. Biology of Reproduction, 2009, 81, 880-888.	1.2	63
21	High Transcript Level of Fatty Acid-Binding Protein 11 but Not of Very Low-Density Lipoprotein Receptor Is Correlated to Ovarian Follicle Atresia in a Teleost Fish (Solea senegalensis)1. Biology of Reproduction, 2007, 77, 504-516.	1.2	62
22	Germ-line activation of the luteinizing hormone receptor directly drives spermiogenesis in a nonmammalian vertebrate. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 1427-1432.	3.3	61
23	Zebrafish vimentin: molecular characterization, assembly properties and developmental expression. European Journal of Cell Biology, 1998, 77, 175-187.	1.6	60
24	New insights into molecular pathways associated with flatfish ovarian development and atresia revealed by transcriptional analysis. BMC Genomics, 2009, 10, 434.	1.2	60
25	Discovery of Novel Human Aquaporin-1 Blockers. ACS Chemical Biology, 2013, 8, 249-256.	1.6	58
26	Structural and functional divergence of two fish aquaporin-1 water channels following teleost-specific gene duplication. BMC Evolutionary Biology, 2008, 8, 259.	3.2	57
27	Aquaporin Evolution in Fishes. Frontiers in Physiology, 2011, 2, 44.	1.3	55
28	Use of vitellogenin mRNA as a biomarker for endocrine disruption in feral and cultured fish. Analytical and Bioanalytical Chemistry, 2004, 378, 670-675.	1.9	54
29	Sexually mature European eels (Anguilla anguilla L.) stimulate gonadal development of neighbouring males: Possible involvement of chemical communication. General and Comparative Endocrinology, 2006, 147, 304-313.	0.8	52
30	Advances in genomics for flatfish aquaculture. Genes and Nutrition, 2013, 8, 5-17.	1.2	52
31	Adaptive plasticity of killifish (Fundulus heteroclitus) embryos: dehydration-stimulated development and differential aquaporin-3 expression. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 296, R1041-R1052.	0.9	51
32	Isolation of a novel aquaglyceroporin from a marine teleost (Sparus auratus): function and tissue distribution. Journal of Experimental Biology, 2004, 207, 1217-1227.	0.8	50
33	Effect of food ration on estrogen and vitellogenin plasma levels, fecundity and larval survival in captive sea bass,Dicentrarchus labrax:preliminary observations. Aquatic Living Resources, 1994, 7, 255-266.	0.5	49
34	Functional and Evolutionary Analysis of Flatfish Gonadotropin Receptors Reveals Cladal- and Lineage-Level Divergence of the Teleost Glycoprotein Receptor Family1. Biology of Reproduction, 2010, 82, 1088-1102.	1.2	48
35	Neuropeptide Y in the forebrain and retina of the killifish, Fundulus heteroclitus. Cell and Tissue Research, 1996, 283, 313-323.	1.5	47
36	Bafilomycin A1 inhibits proteolytic cleavage and hydration but not yolk crystal disassembly or meiosis during maturation of sea bass oocytes. The Journal of Experimental Zoology, 2001, 290, 265-278.	1.4	47

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37	Differential localization and regulation of two aquaporin-1 homologs in the intestinal epithelia of the marine teleostSparus aurata. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2008, 294, R993-R1003.	0.9	47
38	Physiological and molecular basis of fish oocyte hydration. , 2007, , 349-396.		46
39	Molecular cloning of Senegalese sole (Solea senegalensis) follicle-stimulating hormone and luteinizing hormone subunits and expression pattern during spermatogenesis. General and Comparative Endocrinology, 2008, 156, 470-481.	0.8	44
40	Dietary modulation of arachidonic acid metabolism in senegalese sole (Solea Senegalensis) broodstock reared in captivity. Aquaculture, 2013, 372-375, 80-88.	1.7	44
41	Phylogenomic and functional analyses of salmon lice aquaporins uncover the molecular diversity of the superfamily in Arthropoda. BMC Genomics, 2015, 16, 618.	1.2	44
42	Pattern of Vitellogenesis and Follicle Maturational Competence during the Ovarian Follicular Cycle ofFundulus heteroclitus. General and Comparative Endocrinology, 1996, 103, 24-35.	0.8	42
43	Evolutionary structural and functional conservation of an ortholog of the GLUT2 glucose transporter gene (SLC2A2) in zebrafish. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2009, 297, R1570-R1581.	0.9	42
44	Dual Neofunctionalization of a Rapidly Evolving Aquaporin-1 Paralog Resulted in Constrained and Relaxed Traits Controlling Channel Function during Meiosis Resumption in Teleosts. Molecular Biology and Evolution, 2011, 28, 3151-3169.	3.5	42
45	An Enzyme Immunoassay for Salmon Gonadotropin-Releasing Hormone and Its Application to the Study of the Effects of Diet on Brain and Pituitary GnRH in the Sea Bass, Dicentrarchus labrax. General and Comparative Endocrinology, 1994, 95, 464-474.	0.8	40
46	Treatment of GnRHa-implanted Senegalese sole (Solea senegalensis) with 11-ketoandrostenedione stimulates spermatogenesis and increases sperm motility. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2007, 147, 885-892.	0.8	40
47	Cathepsin B-mediated yolk protein degradation during killifish oocyte maturation is blocked by an H+-ATPase inhibitor: effects on the hydration mechanism. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2006, 290, R456-R466.	0.9	38
48	Olfactory sensitivity to bile fluid and bile salts in the European eel (Anguilla anguilla), goldfish (Carassius auratus) and Mozambique tilapia (Oreochromis mossambicus) suggests a `broad range' sensitivity not confined to those produced by conspecifics alone. Journal of Experimental Biology, 2010, 213, 308-317.	0.8	38
49	Ultrastructural aspects of the ontogeny and differentiation of ray-finned fish ovarian follicles. , 2007, , 1-37.		38
50	Water homeostasis in the fish oocyte: new insights into the role and molecular regulation of a teleost-specific aquaporin. Fish Physiology and Biochemistry, 2013, 39, 19-27.	0.9	36
51	Oocyte Sensitivity to Serotonergic Regulation during the Follicular Cycle of the Teleost Fundulus heteroclitus1. Biology of Reproduction, 1998, 59, 53-61.	1.2	35
52	Molecular and functional characterization of catfish (Heteropneustes fossilis) aquaporin-1b: Changes in expression during ovarian development and hormone-induced follicular maturation. General and Comparative Endocrinology, 2011, 170, 162-171.	0.8	35
53	Subcellular Localization of Selectively Permeable Aquaporins in the Male Germ Line of a Marine Teleost Reveals Spatial Redistribution in Activated Spermatozoa1. Biology of Reproduction, 2013, 89, 37.	1.2	35
54	Cadherin-Catenin Complexes During Zebrafish Oogenesis: Heterotypic Junctions Between Oocytes and Follicle Cells1. Biology of Reproduction, 1999, 61, 692-704.	1.2	34

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55	Stocking Density at Early Developmental Stages Affects Growth and Sex Ratio in the European Eel (Anguilla anguilla). Biological Bulletin, 2006, 211, 286-296.	0.7	33
56	Differential expression and novel permeability properties of three aquaporin 8 paralogs from seawater-challenged Atlantic salmon smolts. Journal of Experimental Biology, 2013, 216, 3873-85.	0.8	33
57	Olfactory sensitivity to conspecific bile fluid and skin mucus in the European eel Anguilla anguilla (L.). Journal of Fish Biology, 2007, 70, 1907-1920.	0.7	32
58	Changes in cathepsin gene expression and relative enzymatic activity during gilthead sea bream oogenesis. Molecular Reproduction and Development, 2008, 75, 97-104.	1.0	32
59	Genomic resources for flatfish research and their applications. Journal of Fish Biology, 2010, 77, 1045-1070.	0.7	32
60	Development of a flatfish-specific enzyme-linked immunosorbent assay for Fsh using a recombinant chimeric gonadotropin. General and Comparative Endocrinology, 2015, 221, 75-85.	0.8	31
61	2â€Ð DIGE analysis of Senegalese sole (Solea senegalensis) testis proteome in wildâ€caught and hormoneâ€treated F1 fish. Proteomics, 2009, 9, 2171-2181.	1.3	30
62	Metabolic Dormancy and Responses to Environmental Desiccation in Fish Embryos. Topics in Current Genetics, 2010, , 203-226.	0.7	30
63	Transcriptional and proteomic profiling of flatfish (Solea senegalensis) spermatogenesis. Proteomics, 2011, 11, 2195-2211.	1.3	29
64	Plasma levels of follicle-stimulating and luteinizing hormones during the reproductive cycle of wild and cultured Senegalese sole (Solea senegalensis). Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2016, 191, 35-43.	0.8	29
65	Identification and functional characterization of an ovarian aquaporin from the cockroachBlattella germanicaL. (Dictyoptera, Blattellidae). Journal of Experimental Biology, 2011, 214, 3630-3638.	0.8	28
66	Molecular and functional characterization of Bemisia tabaci aquaporins reveals the water channel diversity of hemipteran insects. Insect Biochemistry and Molecular Biology, 2016, 77, 39-51.	1.2	28
67	Toward developing recombinant gonadotropin-based hormone therapies for increasing fertility in the flatfish Senegalese sole. PLoS ONE, 2017, 12, e0174387.	1.1	28
68	Serotonin inhibition of steroid-induced meiotic maturation in the teleostFundulus heteroclitus: Role of cyclic AMP and protein kinases. Molecular Reproduction and Development, 1998, 49, 333-341.	1.0	27
69	Gain-of-function mutations of mau/DrAqp3a influence zebrafish pigment pattern formation through the tissue environment. Development (Cambridge), 2017, 144, 2059-2069.	1.2	26
70	Analysis of vitelline envelope synthesis and composition during early oocyte development in gilthead seabream (Sparus aurata). Molecular Reproduction and Development, 2008, 75, 1351-1360.	1.0	25
71	Functional Genomics and Proteomic Approaches for the Study of Gamete Formation and Viability in Farmed Finfish. Reviews in Fisheries Science, 2008, 16, 56-72.	2.1	25
72	Gilthead sea bream (Sparus auratus) and European sea bass (Dicentrarchus labrax) expressed sequence tags: Characterization, tissue-specific expression and gene markers. Marine Genomics, 2010, 3, 179-191.	0.4	25

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73	Observations on oocyte maturation and hydrationin vitroin the black sea bass,Centropristis striata(Serranidae). Aquatic Living Resources, 1996, 9, 325-335.	0.5	25
74	Short- and long-term dietary effects on female sea bass (Dicentrarchus labrax): seasonal changes in plasma profiles of lipids and sex steroids in relation to reproduction. Comparative Biochemistry and Physiology C, Comparative Pharmacology and Toxicology, 1995, 111, 83-91.	0.5	24
75	Title is missing!. Aquaculture International, 1997, 5, 473-477.	1.1	24
76	Molecular pathways during marine fish egg hydration: the role of aquaporins. Journal of Fish Biology, 2009, 75, 2175-2196.	0.7	24
77	Aquaporin Biology of Spermatogenesis and Sperm Physiology in Mammals and Teleosts. Biological Bulletin, 2015, 229, 93-108.	0.7	24
78	Design and characterization of genetically engineered zebrafish aquaporin-3 mutants highly permeable to the cryoprotectant ethylene glycol. BMC Biotechnology, 2011, 11, 34.	1.7	23
79	Piscine Follicle-Stimulating Hormone Triggers Progestin Production in Gilthead Seabream Primary Ovarian Follicles1. Biology of Reproduction, 2012, 87, 111.	1.2	23
80	Cathepsin B differential expression and enzyme processing and activity during Fundulus heteroclitus embryogenesis. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2011, 158, 221-228.	0.8	22
81	Role of aquaporins during teleost gametogenesis and early embryogenesis. Frontiers in Physiology, 2011, 2, 66.	1.3	20
82	Fsh and Lh direct conserved and specific pathways during flatfish semicystic spermatogenesis. Journal of Molecular Endocrinology, 2014, 53, 175-190.	1.1	20
83	Alternative splicing of the nuclear progestin receptor in a perciform teleost generates novel mechanisms of dominant-negative transcriptional regulation. General and Comparative Endocrinology, 2013, 182, 24-40.	0.8	19
84	Souffle/Spastizin Controls Secretory Vesicle Maturation during Zebrafish Oogenesis. PLoS Genetics, 2014, 10, e1004449.	1.5	19
85	The Physiological Role and Regulation of Aquaporins in Teleost Germ Cells. Advances in Experimental Medicine and Biology, 2017, 969, 149-171.	0.8	18
86	Molecular characterization of Calymmin, a novel notochord sheath-associated extracellular matrix protein in the zebrafish embryo. Developmental Dynamics, 2002, 224, 200-209.	0.8	17
87	A Rapid Transcriptome Response Is Associated with Desiccation Resistance in Aerially-Exposed Killifish Embryos. PLoS ONE, 2013, 8, e64410.	1.1	17
88	The vertebrate Aqp14 water channel is a neuropeptide-regulated polytransporter. Communications Biology, 2019, 2, 462.	2.0	17
89	Kisspeptin Influences the Reproductive Axis and Circulating Levels of microRNAs in Senegalese Sole. International Journal of Molecular Sciences, 2020, 21, 9051.	1.8	17
90	Unravelling the Complex Duplication History of Deuterostome Glycerol Transporters. Cells, 2020, 9, 1663.	1.8	17

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91	Nutritional and Photoperiodic Effects On Hormonal Cycles and Quality of Spawning in Sea Bass (Diceatrarchus Labrax L.). Animal Biology, 1994, 45, 204-209.	0.4	16
92	Inhibition ofFundulus heteroclitus oocyte maturation in vitro by serotonin (5-hydroxytryptamine). The Journal of Experimental Zoology, 1995, 273, 224-233.	1.4	16
93	Primary oocyte transcriptional activation of aqp1ab by the nuclear progestin receptor determines the pelagic egg phenotype of marine teleosts. Developmental Biology, 2013, 377, 345-362.	0.9	16
94	The pH sensitivity of Aqp0 channels in tetraploid and diploid teleosts. FASEB Journal, 2015, 29, 2172-2184.	0.2	16
95	Dual estrogenic regulation of the nuclear progestin receptor and spermatogonial renewal during gilthead seabream (Sparus aurata) spermatogenesis. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2017, 206, 36-46.	0.8	16
96	Coordinated Action of Aquaporins Regulates Sperm Motility in a Marine Teleost1. Biology of Reproduction, 2015, 93, 40.	1.2	15
97	Seasonal-and dose-dependent effects of recombinant gonadotropins on sperm production and quality in the flatfish Solea senegalensis. Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology, 2018, 225, 59-64.	0.8	15
98	Providing recombinant gonadotropin-based therapies that induce oogenesis from previtellogenic oocytes to produce viable larvae in a teleost, the flathead grey mullet (Mugil cephalus). Aquaculture, 2021, 536, 736418.	1.7	15
99	Gonadotropin-Activated Androgen-Dependent and Independent Pathways Regulate Aquaporin Expression during Teleost (Sparus aurata) Spermatogenesis. PLoS ONE, 2015, 10, e0142512.	1.1	14
100	In vitrooocyte maturation in the sea bass: effects of hCG, pituitary extract and steroids. Journal of Fish Biology, 1999, 55, 9-25.	0.7	13
101	Enhanced water and cryoprotectant permeability of porcine oocytes after artificial expression of human and zebrafish aquaporinâ€3 channels. Molecular Reproduction and Development, 2014, 81, 450-461.	1.0	11
102	Olfactory sensitivity of the marine flatfishSolea senegalensisto conspecific body fluids. Journal of Experimental Biology, 2017, 220, 2057-2065.	0.8	10
103	A multiplier peroxiporin signal transduction pathway powers piscine spermatozoa. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2019346118.	3.3	10
104	Evidence for the differential regulation of ovarian follicle responsiveness to human chorionic gonadotropin in vitro in a serranid teleost, Centropristis striata. Aquaculture, 1997, 159, 143-157.	1.7	8
105	Fructose 1,6 bisphosphatase activity in liver and gonads of sea bass (Dicentrarchus labrax). Influence of diet composition and stage of the reproductive cycle. Fish Physiology and Biochemistry, 1997, 16, 93-105.	0.9	7
106	Changes in forebrain and pituitary dopamine and serotonin contents of female Fundulus during its biweekly reproductive cycle. Comparative Biochemistry and Physiology A, Comparative Physiology, 1997, 118, 577-584.	0.7	6
107	Auto-Adhesion Potential of Extraocular Aqp0 during Teleost Development. PLoS ONE, 2016, 11, e0154592.	1.1	5
108	Lineage-level divergence of copepod glycerol transporters and the emergence of isoform-specific trafficking regulation. Communications Biology, 2021, 4, 643.	2.0	5

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109	Expression of the T85A mutant of zebrafish aquaporin 3b improves post-thaw survival of cryopreserved early mammalian embryos. Zygote, 2016, 24, 839-847.	0.5	4
110	The cellular localization and redistribution of multiple aquaporin paralogs in the spermatic duct epithelium of a maturing marine teleost. Journal of Anatomy, 2018, 233, 177-192.	0.9	4
111	The Xenopus Oocyte as an Expression System for Functional Analyses of Fish Aquaporins. Methods in Molecular Biology, 2021, 2218, 11-28.	0.4	4
112	Effects of the Isoquinolinesulfonamide H-8 on Fundulus heteroclitus Ovarian Follicles: Role of Cyclic Nucleotide-Dependent Protein Kinases on Steroidogenesis and Oocyte Maturation In Vitro. Comparative Biochemistry and Physiology C, Comparative Pharmacology and Toxicology, 1997, 117, 75-81.	0.5	3
113	Identification and functional characterization of an ovarian aquaporin from the cockroach Blattella germanica L. (Dictyoptera, Blattellidae). Journal of Experimental Biology, 2011, 214, 3895-3895.	0.8	3
114	Aquaporin. , 2016, , 1-18.		3
115	Expression of Functional Aquaporins in Oocytes and Embryos and the Impact on Cryopreservation. Reproductive Medicine and Assisted Reproductive Techniques Series, 2009, , 104-115.	0.1	3
116	Aquaporin. , 2018, , 374-390.		1
117	New Insights into Aquaporin Evolution and Physiology in Eukaryotic Organisms: Introduction to a Virtual Symposium in The Biological Bulletin. Biological Bulletin, 2015, 229, 3-5.	0.7	0
118	Oogenesis, Fish Amphibians. , 2018, , 228-233.		0
119	Gonadotropin induction of spermiation in Senegalese sole: Effect of temperature and stripping time. Aquaculture, 2022, 550, 737844.	1.7	0