Peter W Sorensen

List of Publications by Year
in descending order

98 papers	5,757 citations	71102 41 h-index	82547 72 g-index
115 all docs	115 docs citations	115 times ranked	3890 citing authors

#	Article	IF	Citations
1	F Prostaglandins Function as Potent Olfactory Stimulants that Comprise the Postovulatory Female Sex Pheromone in Goldfish1. Biology of Reproduction, 1988, 39, 1039-1050.	2.7	285
2	Functional Identification of a Goldfish Odorant Receptor. Neuron, 1999, 23, 487-498.	8.1	224
3	Mixture of new sulfated steroids functions as a migratory pheromone in the sea lamprey. Nature Chemical Biology, 2005, 1, 324-328.	8.0	222
4	Effects of Temperature and Trophic State on Degradation of Environmental DNA in Lake Water. Environmental Science & Technology, 2016, 50, 1859-1867.	10.0	210
5	Hormonal and pheromonal control of spawning behavior in the goldfish. Fish Physiology and Biochemistry, 2002, 26, 71-84.	2.3	196
6	The Relationship between the Distribution of Common Carp and Their Environmental DNA in a Small Lake. PLoS ONE, 2014, 9, e112611.	2.5	172
7	Optimizing techniques to capture and extract environmental <scp>DNA</scp> for detection and quantification of fish. Molecular Ecology Resources, 2016, 16, 56-68.	4.8	171
8	Environment shapes the fecal microbiome of invasive carp species. Microbiome, 2016, 4, 44.	11.1	166
9	Neural Processing, Perception, and Behavioral Responses to Natural Chemical Stimuli by Fish and Crustaceans. Journal of Chemical Ecology, 2008, 34, 898-914.	1.8	159
10	Direct behavioral evidence that unique bile acids released by larval sea lamprey (Petromyzon) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 2000, 57, 557-569.	1.4	145
11	Brief review of fish pheromones and discussion of their possible uses in the control of nonâ€indigenous teleost fishes. New Zealand Journal of Marine and Freshwater Research, 2004, 38, 399-417.	2.0	141
12	Sexually mature male goldfish release large quantities of androstenedione into the water where it functions as a pheromone. General and Comparative Endocrinology, 2005, 140, 164-175.	1.8	121
13	ENVIRONMENTAL ESTROGENS SUPPRESS HORMONES, BEHAVIOR, AND REPRODUCTIVE FITNESS IN MALE FATHEAD MINNOWS. Environmental Toxicology and Chemistry, 2007, 26, 271.	4.3	118
14	Effects of a rapidly increasing population of common carp on vegetative cover and waterfowl in a recently restored Midwestern shallow lake. Hydrobiologia, 2009, 632, 235-245.	2.0	115
15	Extreme olfactory sensitivity of mature and gonadally-regressed goldfish to a potent steroidal pheromone, 17?,20?-dihydroxy-4-pregnen-3-one. Journal of Comparative Physiology A: Neuroethology, Sensory, Neural, and Behavioral Physiology, 1987, 160, 305-313.	1.6	107
16	Recruitment and abundance of an invasive fish, the common carp, is driven by its propensity to invade and reproduce in basins that experience winter-time hypoxia in interconnected lakes. Biological Invasions, 2010, 12, 1101-1112.	2.4	106
17	Differing behavioral and endocrinological effects of two female sex pheromones on male goldfish. Hormones and Behavior, 1989, 23, 317-332.	2.1	99
18	Laboratory assessment of the role of a larval pheromone and natural stream odor in spawning stream localization by migratory sea lamprey (Petromyzon marinus). Canadian Journal of Fisheries and Aquatic Sciences, 2001, 58, 2374-2385.	1.4	99

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19	High rate of redd superimposition by brook trout (Salvelinus fontinalis) and brown trout (Salmo trutta) in a Minnesota stream cannot be explained by habitat availability alone. Canadian Journal of Fisheries and Aquatic Sciences, 1998, 55, 2310-2316.	1.4	97
20	The three steroidal components of the goldfish preovulatory pheromone signal evoke different behaviors in males. Comparative Biochemistry and Physiology - B Biochemistry and Molecular Biology, 2001, 129, 645-651.	1.6	96
21	Exposure to the pheromone 17Î±,20Î²-dihydroxy-4-pregnen-3-one enhances the behavioural spawning success, sperm production and sperm motility of male goldfish. Animal Behaviour, 1993, 46, 245-256.	1.9	93
22	Evidence That Petromyzontid Lampreys Employ a Common Migratory Pheromone That Is Partially Comprised of Bile Acids. Journal of Chemical Ecology, 2004, 30, 2091-2110.	1.8	91
23	The Chemical Ecology and Potential Application of the Sea Lamprey Migratory Pheromone. Journal of Great Lakes Research, 2003, 29, 66-84.	1.9	88
24	Behavioral and genomic impacts of a wastewater effluent on the fathead minnow. Aquatic Toxicology, 2011, 101, 38-48.	4.0	80
25	Sex pheromones selectively stimulate the medial olfactory tracts of male goldfish. Brain Research, 1991, 558, 343-347.	2.2	77
26	Title is missing!. Fish Physiology and Biochemistry, 2001, 24, 15-30.	2.3	77
27	A field test verifies that pheromones can be useful for sea lamprey (Petromyzon marinus) control in the Great Lakes. Canadian Journal of Fisheries and Aquatic Sciences, 2006, 63, 475-479.	1.4	76
28	Discrimination of pheromonal cues in fish: emerging parallels with insects. Current Opinion in Neurobiology, 1998, 8, 458-467.	4.2	75
29	Female goldfish signal spawning readiness by altering when and where they release a urinary pheromone. Animal Behaviour, 2007, 74, 1329-1338.	1.9	69
30	A Sterol-Like Odorant in the Urine of Mozambique Tilapia Males Likely Signals Social Dominance to Females. Journal of Chemical Ecology, 2008, 34, 438-449.	1.8	68
31	Origins of the freshwater attractant(s) of migrating elvers of the American eel,Anguilla rostrata. Environmental Biology of Fishes, 1986, 17, 185-200.	1.0	67
32	Lamprey Spawning Migration. , 2015, , 215-263.		67
33	Evolution and Specialization of Fish Hormonal Pheromones. , 1999, , 15-47.		60
34	Isolation and Biological Activity of the Multi-Component Sea Lamprey Migratory Pheromone. Journal of Chemical Ecology, 2008, 34, 1259-1267.	1.8	57
35	Temporal Variation in the Estrogenicity of a Sewage Treatment Plant Effluent and Its Biological Significance. Environmental Science & Technology, 2008, 42, 3421-3427.	10.0	54
36	Olfactory-mediated stream-finding behavior of migratory adult sea lamprey (Petromyzon marinus). Canadian Journal of Fisheries and Aquatic Sciences, 2011, 68, 523-533.	1.4	54

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37	Importance of the olfactory sense to migratory sea lampreys Petromyzon marinus seeking riverine spawning habitat. Journal of Fish Biology, 2010, 76, 949-964.	1.6	52
38	Tenâ€week exposure to treated sewage discharge has relatively minor, variable effects on reproductive behavior and sperm production in goldfish. Environmental Toxicology and Chemistry, 2002, 21, 2185-2190.	4.3	51
39	A critical review of the discovery and application of a migratory pheromone in an invasive fish, the sea lamprey Petromyzon marinus L.. Journal of Fish Biology, 2007, 71, 100-114.	1.6	51
40	Variation in native micro-predator abundance explains recruitment of a mobile invasive fish, the common carp, in a naturally unstable environment. Biological Invasions, 2012, 14, 1919-1929.	2.4	49
41	Effects of common carp (Cyprinus carpio) on sediment mixing depth and mobile phosphorus mass in the active sediment layer of a shallow lake. Hydrobiologia, 2016, 763, 23-33.	2.0	48
42	Reproductive Pheromones. Fish Physiology, 2005, , 359-412.	0.8	47
43	Biological invasion by a benthivorous fish reduced the cover and species richness of aquatic plants in most lakes of a large North American ecoregion. Global Change Biology, 2016, 22, 3937-3947.	9.5	47
44	Stable Isotope Analysis of Amphidromous Hawaiian Gobies Suggests Their Larvae Spend a Substantial Period of Time in Freshwater River Plumes. Environmental Biology of Fishes, 2005, 74, 31-42.	1.0	42
45	Cognitive aspects of food searching behavior in free-ranging wild Common Carp. Environmental Biology of Fishes, 2010, 88, 295-300.	1.0	42
46	Effects of common carp on phosphorus concentrations, water clarity, and vegetation density: a whole system experiment in a thermally stratified lake. Hydrobiologia, 2015, 746, 303-311.	2.0	42
47	Possible Applications of Pheromones in an Integrated Sea Lamprey Management Program. Journal of Great Lakes Research, 2003, 29, 794-800.	1.9	41
48	Details of the Structure Determination of the Sulfated Steroids PSDS and PADS:Â New Components of the Sea Lamprey (Petromyzonmarinus) Migratory Pheromone. Journal of Organic Chemistry, 2007, 72, 7544-7550.	3.2	41
49	Nonlinear relationship between Silver Carp density and their eDNA concentration in a large river. PLoS ONE, 2019, 14, e0218823.	2.5	41
50	Polar Metabolites Synergize the Activity of Prostaglandin F2Î± in a Species-Specific Hormonal Sex Pheromone Released by Ovulated Common Carp. Journal of Chemical Ecology, 2011, 37, 695-704.	1.8	40
51	A Multi-Component Species Identifying Pheromone in the Goldfish. Journal of Chemical Ecology, 2011, 37, 219-227.	1.8	39
52	Biologically Relevant Concentrations of Petromyzonol Sulfate, a Component of the Sea Lamprey Migratory Pheromone, Measured in Stream Water. Journal of Chemical Ecology, 2005, 31, 2205-2210.	1.8	36
53	Using Boat Electrofishing to Estimate the Abundance of Invasive Common Carp in Small Midwestern Lakes. North American Journal of Fisheries Management, 2012, 32, 817-822.	1.0	36
54	Guidelines for Use of Fishes in Researchâ€”Revised and Expanded, 2014. Fisheries, 2014, 39, 415-416.	0.8	35

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55	Olfactory Sensitivity of Pacific Lampreys to Lamprey Bile Acids. Transactions of the American Fisheries Society, 2009, 138, 144-152.	1.4	34
56	Attracting Common Carp to a bait site with food reveals strong positive relationships between fish density, feeding activity, environmental <scp>DNA</scp>, and sex pheromone release that could be used in invasive fish management. Ecology and Evolution, 2018, 8, 6714-6727.	1.9	34
57	Theory and Application of Semiochemicals in Nuisance Fish Control. Journal of Chemical Ecology, 2016, 42, 698-715.	1.8	31
58	Hormonal Pheromones in Fish. , 2002, , 375-434.		29
59	Common carp and goldfish discern conspecific identity using chemical cues. Behaviour, 2008, 145, 1409-1425.	0.8	29
60	Male-typical courtship, spawning behavior, and olfactory sensitivity are induced to different extents by androgens in the goldfish suggesting they are controlled by different neuroendocrine mechanisms. General and Comparative Endocrinology, 2016, 232, 160-173.	1.8	28
61	Injured Eurasian Ruffe, Gymnocephalus cernuus, Release an Alarm Pheromone that Could be Used to Control their Dispersal. Journal of Great Lakes Research, 2000, 26, 183-195.	1.9	26
62	Evidence that 4-pregnen-17,20Î²,21-triol-3-one functions as a maturation-inducing hormone and pheromonal precursor in the percid fish, Gymnocephalus cernuus. General and Comparative Endocrinology, 2004, 139, 1-11.	1.8	26
63	High-Potency Olfactory Receptor Agonists Discovered by Virtual High-Throughput Screening: Molecular Probes for Receptor Structure and Olfactory Function. Neuron, 2008, 60, 767-774.	8.1	26
64	Sourceâ€“sink dynamics explain the distribution and persistence of an invasive population of common carp across a model Midwestern watershed. Biological Invasions, 2018, 20, 1961-1976.	2.4	25
65	Bold minnows consistently approach danger in the field and lab in response to either chemical or visual indicators of predation risk. Behavioral Ecology and Sociobiology, 2010, 64, 381-387.	1.4	23
66	A Practical Method for Obtaining Useful Quantities of Pheromones from Sea Lamprey and Other Fishes for Identification and Control. Journal of Great Lakes Research, 2006, 32, 832.	1.9	22
67	Common Carp Implanted with Prostaglandin F2Î± Release a Sex Pheromone Complex that Attracts Conspecific Males in Both the Laboratory and Field. Journal of Chemical Ecology, 2012, 38, 127-134.	1.8	22
68	Direct Field and Laboratory Evidence that a Combination of Egg and Larval Predation Controls Recruitment of Invasive Common Carp in Many Lakes of the Upper Mississippi River Basin. Transactions of the American Fisheries Society, 2013, 142, 1134-1140.	1.4	22
69	High levels of circulating prostaglandin F2Î± associated with ovulation stimulate female sexual receptivity and spawning behavior in the goldfish (Carassius auratus). General and Comparative Endocrinology, 2018, 267, 128-136.	1.8	22
70	Production and fate of the sea lamprey migratory pheromone. Fish Physiology and Biochemistry, 2010, 36, 1013-1020.	2.3	21
71	A complex sound coupled with an air curtain blocks invasive carp passage without habituation in a laboratory flume. Biological Invasions, 2019, 21, 2837-2855.	2.4	21
72	Silver, bighead, and common carp orient to acoustic particle motion when avoiding a complex sound. PLoS ONE, 2017, 12, e0180110.	2.5	20

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73	Spawning Interactions between Sympatric Brown and Brook Trout May Contribute to Species Replacement. Transactions of the American Fisheries Society, 2002, 131, 569-576.	1.4	19
74	Anatomical and physiological studies of bigheaded carps demonstrate that the epibranchial organ functions as a pharyngeal taste organ. Journal of Experimental Biology, 2014, 217, 3945-54.	1.7	19
75	Partial migration to seasonallyâ€unstable habitat facilitates biological invasions in a predatorâ€dominated system. Oikos, 2015, 124, 1520-1526.	2.7	19
76	Different Migratory Strategies of Invasive Common Carp and Native Northern Pike in the American Midwest Suggest an Opportunity for Selective Management Strategies. North American Journal of Fisheries Management, 2016, 36, 769-779.	1.0	19
77	The Chemical Sensitivity and Electrical Activity of Individual Olfactory Sensory Neurons to a Range of Sex Pheromones and Food Odors in the Goldfish. Chemical Senses, 2018, 43, 249-260.	2.0	19
78	Synthesis and olfactory activity of unnatural, sulfated 5Î²-bile acid derivatives in the sea lamprey (Petromyzon marinus). Steroids, 2011, 76, 291-300.	1.8	18
79	Pheromones in Vertebrates. , 2010, , 225-262.		15
80	Second Messenger Systems Mediating Sex Pheromone and Amino Acid Sensitivity in Goldfish Olfactory Receptor Neurons. Chemical Senses, 2005, 30, i315-i316.	2.0	14
81	Behavioral responses of adult male and female fathead minnows to a model estrogenic effluent and its effects on exposure regime and reproductive success. Aquatic Toxicology, 2011, 101, 521-528.	4.0	14
82	Invasive Bighead and Silver Carps Form Different Sized Shoals that Readily Intermix. PLoS ONE, 2016, 11, e0157174.	2.5	14
83	Monitoring upstream fish passage through a Mississippi River lock and dam reveals species differences in lock chamber usage and supports a fish passage model which describes velocityâ€dependent passage through spillway gates. River Research and Applications, 2020, 36, 36-46.	1.7	14
84	Case Studies Demonstrate That Common Carp Can Be Sustainably Reduced by Exploiting Source-Sink Dynamics in Midwestern Lakes. Fishes, 2020, 5, 36.	1.7	14
85	Migration, homing and spatial ecology of common carp in interconnected lakes. Ecology of Freshwater Fish, 2022, 31, 164-176.	1.4	13
86	Chemical Cues which Include Amino Acids Mediate Species-Specific Feeding Behavior in Invasive Filter-Feeding Bigheaded Carps. Journal of Chemical Ecology, 2017, 43, 374-384.	1.8	10
87	A Blend of F Prostaglandins Functions as an Attractive Sex Pheromone in Silver Carp. Fishes, 2019, 4, 27.	1.7	9
88	Numeric Simulation Demonstrates That the Upstream Movement of Invasive Bigheaded Carp Can Be Blocked at Sets of Mississippi River Locks-and-Dams Using a Combination of Optimized Spillway Gate Operations, Lock Deterrents, and Carp Removal. Fishes, 2021, 6, 10.	1.7	9
89	The Effect of Modifying a CFD-AB Approach on Fish Passage through a Model Hydraulic Dam. Water (Switzerland), 2019, 11, 1776.	2.7	6
90	Common Carp Are Initially Repelled by a Broadband Outboard Motor Sound in a Lock Chamber but Habituate Rapidly. North American Journal of Fisheries Management, 2020, 40, 1499-1509.	1.0	6

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91	Management Briefs: Effects of Electroshocking on the Sexual Behavior of Goldfish and Brook Trout. North American Journal of Fisheries Management, 1994, 14, 862-865.	1.0	5
92	Hormonal Prostaglandin F2Î± Mediates Behavioral Responsiveness to a Species-Specific Multi-component Male Hormonal Sex Pheromone in a Female Fish. Integrative and Comparative Biology, 2021, 61, 193-204.	2.0	5
93	Introduction to the Biology and Control of Invasive Fishes and a Special Issue on This Topic. Fishes, 2021, 6, 69.	1.7	4
94	Movements of a model fish, the common carp, through a generic Mississippi River lock and dam demonstrate how fish swimming performance, behavior, and dischargeâ€driven flowâ€fields determine fish passage rates in ways that can be predicted and modified using fish passage models. River Research and Applications, 0, , .	1.7	4
95	Chemical Analysis of Aquatic Pheromones in Fish. Methods in Molecular Biology, 2013, 1068, 55-69.	0.9	3
96	Otolith Microchemistry of Common Carp Reflects Capture Location and Differentiates Nurseries in an Interconnected Lake System of the North American Midwest. North American Journal of Fisheries Management, 2020, 40, 1100-1118.	1.0	2
97	Global Inland Capture and Culture Finfisheries Follow Different Trends When Evaluated by the Human Development Index. Sustainability, 2021, 13, 8420.	3.2	2
98	Behavioral Analysis of Pheromones in Fish. Methods in Molecular Biology, 2013, 1068, 293-305.	0.9	1