Catherine L Peichel

List of Publications by Year
in descending order

#	Article	IF	Citations
1	Analysis of ancestry heterozygosity suggests that hybrid incompatibilities in threespine stickleback are environment dependent. PLoS Biology, 2022, 20, e3001469.	5.6	29
2	Pleiotropy facilitates parallel adaptation in sticklebacks. Molecular Ecology, 2022, 31, 1476-1486.	3.9	19
3	Chromosomal Fusions Facilitate Adaptation to Divergent Environments in Threespine Stickleback. Molecular Biology and Evolution, 2022, 39, .	8.9	19
4	Evolution of the canonical sex chromosomes of the guppy and its relatives. G3: Genes, Genomes, Genetics, 2022, 12, .	1.8	13
5	Searching for signatures of sexually antagonistic selection on stickleback sex chromosomes. Philosophical Transactions of the Royal Society B: Biological Sciences, 2022, 377, .	4.0	15
6	Genetics of adaptation. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	37
7	Identification of a candidate sex determination gene in <i>Culaea inconstans</i> suggests convergent recruitment of an <i>Amh</i> duplicate in two lineages of stickleback. Journal of Evolutionary Biology, 2022, 35, 1683-1695.	1.7	14
8	Heterogeneous Histories of Recombination Suppression on Stickleback Sex Chromosomes. Molecular Biology and Evolution, 2021, 38, 4403-4418.	8.9	26
9	Expanding the classical paradigm: what we have learnt from vertebrates about sex chromosome evolution. Philosophical Transactions of the Royal Society B: Biological Sciences, 2021, 376, 20200097.	4.0	43
10	Assembly of the threespine stickleback Y chromosome reveals convergent signatures of sex chromosome evolution. Genome Biology, 2020, 21, 177.	8.8	79
11	Adaptation via pleiotropy and linkage: Association mapping reveals a complex genetic architecture within the stickleback<i>Eda</i>locus. Evolution Letters, 2020, 4, 282-301.	3.3	34
12	Phosphorus limitation does not drive loss of bony lateral plates in freshwater stickleback (<i>Gasterosteus aculeatus</i>). Evolution; International Journal of Organic Evolution, 2020, 74, 2088-2104.	2.3	1
13	Genetic architecture of a key reproductive isolation trait differs between sympatric and non-sympatric sister species of Lake Victoria cichlids. Proceedings of the Royal Society B: Biological Sciences, 2020, 287, 20200270.	2.6	14
14	EvoChromo: towards a synthesis of chromatin biology and evolution. Development (Cambridge), 2019, 146, .	2.5	16
15	A key metabolic gene for recurrent freshwater colonization and radiation in fishes. Science, 2019, 364, 886-889.	12.6	109
16	Ecological factors and morphological traits are associated with repeated genomic differentiation between lake and stream stickleback. Philosophical Transactions of the Royal Society B: Biological Sciences, 2019, 374, 20180241.	4.0	35
17	Sex Differences in Recombination in Sticklebacks. G3: Genes, Genomes, Genetics, 2018, 8, 1971-1983.	1.8	63
18	Transitions in sex determination and sex chromosomes across vertebrate species. Molecular Ecology, 2018, 27, 3950-3963.	3.9	143

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19	Convergence and divergence in sex-chromosome evolution. Nature Genetics, 2017, 49, 321-322.	21.4	7
20	Contrasting effects of environment and genetics generate a continuum of parallel evolution. Nature Ecology and Evolution, 2017, 1, 158.	7.8	188
21	Sensory trait variation contributes to biased dispersal of threespine stickleback in flowing water. Journal of Evolutionary Biology, 2017, 30, 681-695.	1.7	22
22	Chromosome Evolution: Molecular Mechanisms and Evolutionary Consequences. Journal of Heredity, 2017, 108, 1-2.	2.4	7
23	The genetic and molecular architecture of phenotypic diversity in sticklebacks. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20150486.	4.0	134
24	Genetic Coupling of Female Mate Choice with Polygenic Ecological Divergence Facilitates Stickleback Speciation. Current Biology, 2017, 27, 3344-3349.e4.	3.9	56
25	Manyâ€toâ€one formâ€toâ€function mapping weakens parallel morphological evolution. Evolution; International Journal of Organic Evolution, 2017, 71, 2738-2749.	2.3	37
26	Improvement of the Threespine Stickleback Genome Using a Hi-C-Based Proximity-Guided Assembly. Journal of Heredity, 2017, 108, 693-700.	2.4	62
27	Genetic Architecture of Conspicuous Red Ornaments in Female Threespine Stickleback. G3: Genes, Genomes, Genetics, 2016, 6, 579-588.	1.8	30
28	Evolution of Schooling Behavior in Threespine Sticklebacks Is Shaped by the<i>Eda</i>Gene. Genetics, 2016, 203, 677-681.	2.9	43
29	Does plasticity enhance or dampen phenotypic parallelism? A test with three lakeâ€“stream stickleback pairs. Journal of Evolutionary Biology, 2016, 29, 126-143.	1.7	63
30	Centromere inactivation on a neo-Y fusion chromosome in threespine stickleback fish. Chromosome Research, 2016, 24, 437-450.	2.2	14
31	Differences in rheotactic responses contribute to divergent habitat use between parapatric lake and stream threespine stickleback. Evolution; International Journal of Organic Evolution, 2015, 69, 2517-2524.	2.3	19
32	Social Regulation of Gene Expression in Threespine Sticklebacks. PLoS ONE, 2015, 10, e0137726.	2.5	32
33	Genetic Mapping of Natural Variation in Schooling Tendency in the Threespine Stickleback. G3: Genes, Genomes, Genetics, 2015, 5, 761-769.	1.8	31
34	Y Fuse? Sex Chromosome Fusions in Fishes and Reptiles. PLoS Genetics, 2015, 11, e1005237.	3.5	109
35	Purifying Selection Maintains Dosage-Sensitive Genes during Degeneration of the Threespine Stickleback Y Chromosome. Molecular Biology and Evolution, 2015, 32, 1981-1995.	8.9	79
36	Identification of the centromeric repeat in the threespine stickleback fish (Gasterosteus aculeatus). Chromosome Research, 2015, 23, 767-779.	2.2	16

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37	Extent of QTL Reuse During Repeated Phenotypic Divergence of Sympatric Threespine Stickleback. Genetics, 2015, 201, 1189-1200.	2.9	61
38	Sex Determination: Why So Many Ways of Doing It?. PLoS Biology, 2014, 12, e1001899.	5.6	916
39	Sex Chromosome Turnover Contributes to Genomic Divergence between Incipient Stickleback Species. PLoS Genetics, 2014, 10, e1004223.	3.5	93
40	Modular Skeletal Evolution in Sticklebacks Is Controlled by Additive and Clustered Quantitative Trait Loci. Genetics, 2014, 197, 405-420.	2.9	122
41	Pleiotropic effects of a single gene on skeletal development and sensory system patterning in sticklebacks. EvoDevo, 2014, 5, 5.	3.2	37
42	Genomics and the origin of species. Nature Reviews Genetics, 2014, 15, 176-192.	16.3	850
43	Genetics of ecological divergence during speciation. Nature, 2014, 511, 307-311.	27.8	264
44	Automated quantification of the schooling behaviour of sticklebacks. Eurasip Journal on Image and Video Processing, 2013, 2013, .	2.6	6
45	Genetic and Neural Modularity Underlie the Evolution of Schooling Behavior in Threespine Sticklebacks. Current Biology, 2013, 23, 1884-1888.	3.9	108
46	Genetic Architecture of Variation in the Lateral Line Sensory System of Threespine Sticklebacks. G3: Genes, Genomes, Genetics, 2012, 2, 1047-1056.	1.8	47
47	Molecular and developmental contributions to divergent pigment patterns in marine and freshwater sticklebacks. Evolution & Development, 2012, 14, 351-362.	2.0	30
48	The probability of genetic parallelism and convergence in natural populations. Proceedings of the Royal Society B: Biological Sciences, 2012, 279, 5039-5047.	2.6	372
49	Turnover of sex chromosomes and speciation in fishes. Environmental Biology of Fishes, 2012, 94, 549-558.	1.0	144
50	PARALLEL AND NONPARALLEL ASPECTS OF ECOLOGICAL, PHENOTYPIC, AND GENETIC DIVERGENCE ACROSS REPLICATE POPULATION PAIRS OF LAKE AND STREAM STICKLEBACK. Evolution; International Journal of Organic Evolution, 2012, 66, 402-418.	2.3	187
51	Admixture mapping of male nuptial colour and body shape in a recently formed hybrid population of threespine stickleback. Molecular Ecology, 2012, 21, 5265-5279.	3.9	65
52	Divergence in Sex Steroid Hormone Signaling between Sympatric Species of Japanese Threespine Stickleback. PLoS ONE, 2011, 6, e29253.	2.5	35
53	About PAR: The distinct evolutionary dynamics of the pseudoautosomal region. Trends in Genetics, 2011, 27, 358-367.	6.7	184
54	Novel methods for discriminating behavioral differences between stickleback individuals and populations in a laboratory shoaling assay. Behavioral Ecology and Sociobiology, 2011, 65, 1147-1157.	1.4	14

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55	Heritable Differences in Schooling Behavior among Threespine Stickleback Populations Revealed by a Novel Assay. PLoS ONE, 2011, 6, e18316.	2.5	66
56	Adaptive Divergence in the Thyroid Hormone Signaling Pathway in the Stickleback Radiation. Current Biology, 2010, 20, 2124-2130.	3.9	141
57	Perspectives on the Genetic Architecture of Divergence in Body Shape in Sticklebacks. Integrative and Comparative Biology, 2010, 50, 1057-1066.	2.0	29
58	Are homologies in vertebrate sex determination due to shared ancestry or to limited options?. Genome Biology, 2010, 11, 205.	9.6	198
59	Turnover of Sex Chromosomes in the Stickleback Fishes (Gasterosteidae). PLoS Genetics, 2009, 5, e1000391.	3.5	243
60	A role for a neo-sex chromosome in stickleback speciation. Nature, 2009, 461, 1079-1083.	27.8	327
61	Reverse Evolution of Armor Plates in the Threespine Stickleback. Current Biology, 2008, 18, 769-774.	3.9	160
62	Molecular Cytogenetic Evidence of Rearrangements on the Y Chromosome of the Threespine Stickleback Fish. Genetics, 2008, 179, 2173-2182.	2.9	89
63	Divergence of male courtship displays between sympatric forms of anadromous threespine stickleback. Behaviour, 2008, 145, 443-461.	0.8	20
64	Parallel Evolution of Pitx1 Underlies Pelvic Reduction in Scottish Threespine Stickleback (Gasterosteus aculeatus). Journal of Heredity, 2007, 98, 581-586.	2.4	60
65	Sexual Dimorphism in the External Morphology of the Threespine Stickleback (Gasterosteus) Tj ETQq1 1 0.784314 rgBT /Overlock 10 Tf	1.3	104
66	Contrasting hybridization rates between sympatric three-spined sticklebacks highlight the fragility of reproductive barriers between evolutionarily young species. Molecular Ecology, 2006, 15, 739-752.	3.9	134
67	Fishing for the secrets of vertebrate evolution in threespine sticklebacks. Developmental Dynamics, 2005, 234, 815-823.	1.8	46
68	Genetic and developmental basis of evolutionary pelvic reduction in threespine sticklebacks. Nature, 2004, 428, 717-723.	27.8	771
69	Social Behavior: How Do Fish Find Their Shoal Mate?. Current Biology, 2004, 14, R503-R504.	3.9	34
70	The Master Sex-Determination Locus in Threespine Sticklebacks Is on a Nascent Y Chromosome. Current Biology, 2004, 14, 1416-1424.	3.9	367
71	Notes from the field: How a molecular geneticist got wet. Genesis, 2004, 40, 146-150.	1.6	0
72	The Genetic Architecture of Parallel Armor Plate Reduction in Threespine Sticklebacks. PLoS Biology, 2004, 2, e109.	5.6	332

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73	New Genomic Tools for Molecular Studies of Evolutionary Change in Threespine Sticklebacks. Behaviour, 2004, 141, 1331-1344.	0.8	64
74	Sticklebacks. Current Biology, 2003, 13, R942-R943.	3.9	4
75	The genetic architecture of divergence between threespine stickleback species. Nature, 2001, 414, 901-905.	27.8	479
76	Large scale transgenic and cluster deletion analysis of the HoxD complex separate an ancestral regulatory module from evolutionary innovations. Genes and Development, 2001, 15, 2209-2214.	5.9	128
77	Evaluation of mouse Sfrp3/Frzb1 as a candidate for the lst, Ul, and Far mutants on Chromosome 2. Mammalian Genome, 1998, 9, 385-387.	2.2	9
78	Genetic and Physical Mapping of the Mouse <i>Ulnaless</i> Locus. Genetics, 1996, 144, 1757-1767.	2.9	12
79	Mapping the midkine family of developmentally regulated signaling molecules. Mammalian Genome, 1993, 4, 632-638.	2.2	8
80	Phenotypic divergence and reproductive isolation between sympatric forms of Japanese threespine sticklebacks. Biological Journal of the Linnean Society, 0, 91, 671-685.	1.6	78