Koichi Kawakami

List of Publications by Year
in descending order

119 papers	8,874 citations	57758 44 h-index	49909 87 g-index
140 all docs	140 docs citations	140 times ranked	9303 citing authors

#	Article	IF	Citations
1	A novel gene trap line for visualization and manipulation of erbb3b+ neural crest and glial cells in zebrafish. Developmental Biology, 2022, 482, 114-123.	2.0	7
2	Optogenetic Phase Transition of TDP-43 in Spinal Motor Neurons of Zebrafish Larvae. Journal of Visualized Experiments, 2022, , .	0.3	0
3	Innervation modulates the functional connectivity between pancreatic endocrine cells. ELife, 2022, 11, .	6.0	11
4	Developmental independence of median fins from the larval fin fold revises their evolutionary origin. Scientific Reports, 2022, 12, 7521.	3.3	1
5	KCNJ8/ABCC9-containing K-ATP channel modulates brain vascular smooth muscle development and neurovascular coupling. Developmental Cell, 2022, 57, 1383-1399.e7.	7.0	16
6	Integrated Behavioral, Genetic and Brain Circuit Visualization Methods to Unravel Functional Anatomy of Zebrafish Amygdala. Frontiers in Neuroanatomy, 2022, 16, .	1.7	4
7	Do not curse the darkness of the spinal cord, light TDP-43. Neural Regeneration Research, 2021, 16, 986.	3.0	0
8	Pyramidal Neurons of the Zebrafish Tectum Receive Highly Convergent Input From Torus Longitudinalis. Frontiers in Neuroanatomy, 2021, 15, 636683.	1.7	14
9	Multi-phaseted problems of TDP-43 in selective neuronal vulnerability in ALS. Cellular and Molecular Life Sciences, 2021, 78, 4453-4465.	5.4	6
10	Neural circuitry for stimulus selection in the zebrafish visual system. Neuron, 2021, 109, 805-822.e6.	8.1	40
11	Illuminating ALS Motor Neurons With Optogenetics in Zebrafish. Frontiers in Cell and Developmental Biology, 2021, 9, 640414.	3.7	5
12	Haploinsufficiency of PRR12 causes a spectrum of neurodevelopmental, eye, and multisystem abnormalities. Genetics in Medicine, 2021, 23, 1234-1245.	2.4	6
13	Involvement of Cerebellar Neural Circuits in Active Avoidance Conditioning in Zebrafish. ENeuro, 2021, 8, ENEURO.0507-20.2021.	1.9	8
14	Enteric nervous system can regenerate in zebrafish larva via migration into the ablated area and proliferation of neural crest-derived cells. Development (Cambridge), 2021, 148, .	2.5	4
15	Electrophysiological and pharmacological characterization of spreading depolarization in the adult zebrafish tectum. Journal of Neurophysiology, 2021, 126, 1934-1942.	1.8	2
16	Development of the anterior lateral line system through local tissueâ€tissue interactions in the zebrafish head. Developmental Dynamics, 2020, 249, 1440-1454.	1.8	7
17	Neuronal Circuits That Control Rhythmic Pectoral Fin Movements in Zebrafish. Journal of Neuroscience, 2020, 40, 6678-6690.	3.6	18
18	Proteasome subunit PSMC3 variants cause neurosensory syndrome combining deafness and cataract due to proteotoxic stress. EMBO Molecular Medicine, 2020, 12, e11861.	6.9	43

#	Article	IF	Citations
19	Gsx2 is required for specification of neurons in the inferior olivary nuclei from Ptf1a-expressing neural progenitors in zebrafish. Development (Cambridge), 2020, 147, .	2.5	9
20	Transient and lineage-restricted requirement of Ebf3 for sternum ossification. Development (Cambridge), 2020, 147, .	2.5	6
21	The Genetic Basis of Morphological Diversity in Domesticated Goldfish. Current Biology, 2020, 30, 2260-2274.e6.	3.9	52
22	Gastrointestinal Neurons Expressing HCN4 Regulate Retrograde Peristalsis. Cell Reports, 2020, 30, 2879-2888.e3.	6.4	14
23	A virtual reality system to analyze neural activity and behavior in adult zebrafish. Nature Methods, 2020, 17, 343-351.	19.0	53
24	Optogenetic modulation of TDP-43 oligomerization accelerates ALS-related pathologies in the spinal motor neurons. Nature Communications, 2020, 11, 1004.	12.8	59
25	Chondroitin sulfate proteoglycan 4 regulates zebrafish body axis organization via Wnt/planar cell polarity pathway. PLoS ONE, 2020, 15, e0230943.	2.5	5
26	Zebrafish can regenerate endoskeleton in larval pectoral fin but the regenerative ability declines. Developmental Biology, 2020, 463, 110-123.	2.0	11
27	Muscle defects due to perturbed somite segmentation contribute to late adult scoliosis. Aging, 2020, 12, 18603-18621.	3.1	5
28	Non-thalamic origin of zebrafish sensory nuclei implies convergent evolution of visual pathways in amniotes and teleosts. ELife, 2020, 9, .	6.0	27
29	Shootins mediate collective cell migration and organogenesis of the zebrafish posterior lateral line system. Scientific Reports, 2019, 9, 12156.	3.3	6
30	Neural signatures of sleep in zebrafish. Nature, 2019, 571, 198-204.	27.8	114
31	De novo assembly of the goldfish (Carassius auratus) genome and the evolution of genes after whole-genome duplication. Science Advances, 2019, 5, eaav0547.	10.3	182
32	Pattern of fin rays along the antero-posterior axis based on their connection to distal radials. Zoological Letters, 2019, 5, 30.	1.3	7
33	Glia-neuron interactions underlie state transitions to generalized seizures. Nature Communications, 2019, 10, 3830.	12.8	98
34	The First International Zebrafish Conference/Workshop in Qatar. Zebrafish, 2019, 16, 493-495.	1.1	1
35	Mutant KCNJ3 and KCNJ5 Potassium Channels as Novel Molecular Targets in Bradyarrhythmias and Atrial Fibrillation. Circulation, 2019, 139, 2157-2169.	1.6	51
36	Six6 and Six7 coordinately regulate expression of middle-wavelength opsins in zebrafish. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 4651-4660.	7.1	29

#	Article	IF	Citations
37	Reactivation of Notch signaling is required for cardiac valve regeneration. Scientific Reports, 2019, 9, 16059.	3.3	17
38	A bidirectional network for appetite control in larval zebrafish. ELife, 2019, 8, .	6.0	50
39	Identification of a neuronal population in the telencephalon essential for fear conditioning in zebrafish. BMC Biology, 2018, 16, 45.	3.8	111
40	Epidermal regulation of bone morphogenesis through the development and regeneration of osteoblasts in the zebrafish scale. Developmental Biology, 2018, 437, 105-119.	2.0	59
41	A novel zebrafish intestinal tumor model reveals a role for cyp7a1-dependent tumor-liver crosstalk in tumor's adverse effects on host. DMM Disease Models and Mechanisms, 2018, 11, .	2.4	29
42	A tRNA-based multiplex sgRNA expression system in zebrafish and its application to generation of transgenic albino fish. Scientific Reports, 2018, 8, 13366.	3.3	26
43	Wilms Tumor 1b defines a wound-specific sheath cell subpopulation associated with notochord repair. ELife, 2018, 7, .	6.0	21
44	A new mode of pancreatic islet innervation revealed by live imaging in zebrafish. ELife, 2018, 7, .	6.0	20
45	Structure/Function Studies of the Î±4 Subunit Reveal Evolutionary Loss of a GlyR Subtype Involved in Startle and Escape Responses. Frontiers in Molecular Neuroscience, 2018, 11, 23.	2.9	16
46	Protocadherin-Mediated Cell Repulsion Controls the Central Topography and Efferent Projections of the Abducens Nucleus. Cell Reports, 2018, 24, 1562-1572.	6.4	23
47	Ablation of a Neuronal Population Using a Two-photon Laser and Its Assessment Using Calcium Imaging and Behavioral Recording in Zebrafish Larvae. Journal of Visualized Experiments, 2018, , .	0.3	6
48	Glycine-alanine dipeptide repeat protein contributes to toxicity in a zebrafish model of C9orf72 associated neurodegeneration. Molecular Neurodegeneration, 2017, 12, 6.	10.8	57
49	Proteolysis regulates cardiomyocyte maturation and tissue integration. Nature Communications, 2017, 8, 14495.	12.8	27
50	Left Habenula Mediates Light-Preference Behavior in Zebrafish via an Asymmetrical Visual Pathway. Neuron, 2017, 93, 914-928.e4.	8.1	96
51	Activation of the hypothalamic feeding centre upon visual prey detection. Nature Communications, 2017, 8, 15029.	12.8	98
52	Motile-Cilia-Mediated Flow Improves Sensitivity and Temporal Resolution of Olfactory Computations. Current Biology, 2017, 27, 166-174.	3.9	74
53	Granule cells control recovery from classical conditioned fear responses in the zebrafish cerebellum. Scientific Reports, 2017, 7, 11865.	3.3	30
54	Transposons As Tools for Functional Genomics in Vertebrate Models. Trends in Genetics, 2017, 33, 784-801.	6.7	64

#	Article	IF	Citations
55	Preface to Vertebrate Brains: evolution, structures and functions. Development Growth and Differentiation, 2017, 59, 160-162.	1.5	0
56	Transient inflammatory response mediated by interleukin-1Î² is required for proper regeneration in zebrafish fin fold. ELife, 2017, 6, .	6.0	112
57	Activin-A enhances mTOR signaling to promote aberrant chondrogenesis in fibrodysplasia ossificans progressiva. Journal of Clinical Investigation, 2017, 127, 3339-3352.	8.2	126
58	Analysis of transcription factors expressed at the anterior mouse limb bud. PLoS ONE, 2017, 12, e0175673.	2.5	13
59	A novel perivascular cell population in the zebrafish brain. ELife, 2017, 6, .	6.0	77
60	A Novel Zebrafish ret Heterozygous Model of Hirschsprung Disease Identifies a Functional Role for mapk10 as a Modifier of Enteric Nervous System Phenotype Severity. PLoS Genetics, 2016, 12, e1006439.	3.5	40
61	Zebrafish lines expressing UASâ€driven red probes for monitoring cytoskeletal dynamics. Genesis, 2016, 54, 483-489.	1.6	4
62	Visualization of Neuregulin 1 ectodomain shedding reveals its local processing in vitro and in vivo. Scientific Reports, 2016, 6, 28873.	3.3	12
63	Calcium dysregulation contributes to neurodegeneration in FTLD patient iPSC-derived neurons. Scientific Reports, 2016, 6, 34904.	3.3	67
64	Cellular dynamics of regeneration reveals role of two distinct Pax7 stem cell populations in larval zebrafish muscle repair. DMM Disease Models and Mechanisms, 2016, 9, 671-84.	2.4	45
65	Calcium Imaging of Neuronal Activity in Free-Swimming Larval Zebrafish. Methods in Molecular Biology, 2016, 1451, 333-341.	0.9	14
66	Fluorescence-Activated Cell Sorting and Gene Expression Profiling of GFP-Positive Cells from Transgenic Zebrafish Lines. Methods in Molecular Biology, 2016, 1451, 93-106.	0.9	1
67	Optimization of a Neurotoxin to Investigate the Contribution of Excitatory Interneurons to Speed Modulation InÂVivo. Current Biology, 2016, 26, 2319-2328.	3.9	62
68	Fgf signalling controls diverse aspects of fin regeneration. Development (Cambridge), 2016, 143, 2920-9.	2.5	59
69	Stereotyped initiation of retinal waves by bipolar cells via presynaptic NMDA autoreceptors. Nature Communications, 2016, 7, 12650.	12.8	28
70	CSF-contacting neurons regulate locomotion by relaying mechanical stimuli to spinal circuits. Nature Communications, 2016, 7, 10866.	12.8	162
71	Chromatin-prebound Crm1 recruits Nup98-HoxA9 fusion to induce aberrant expression of Hox cluster genes. ELife, 2016, 5, e09540.	6.0	45
72	Erratum. Methods in Molecular Biology, 2016, 1451, E1-E1.	0.9	0

#	Article	IF	Citations
73	BAC transgenic zebrafish reveal hypothalamic enhancer activity around obesity associated SNP rs9939609 within the human FTO gene. Genesis, 2015, 53, 640-651.	1.6	6
74	Neuromuscular regulation in zebrafish by a large AAA+ ATPase/ubiquitin ligase, mysterin/RNF213. Scientific Reports, 2015, 5, 16161.	3.3	20
75	Stable and bicistronic expression of two genes in somite- and lateral plate-derived tissues to study chick limb development. BMC Developmental Biology, 2015, 15, 39.	2.1	11
76	Diversification of non-visual photopigment parapinopsin in spectral sensitivity for diverse pineal functions. BMC Biology, 2015, 13, 73.	3.8	38
77	Neuregulin 1 Type II-ErbB Signaling Promotes Cell Divisions Generating Neurons from Neural Progenitor Cells in the Developing Zebrafish Brain. PLoS ONE, 2015, 10, e0127360.	2.5	20
78	Endothelial Ca2+ oscillations reflect VEGFR signaling-regulated angiogenic capacity in vivo. ELife, 2015, 4, .	6.0	79
79	RING finger protein 121 facilitates the degradation and membrane localization of voltage-gated sodium channels. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 2859-2864.	7.1	22
80	High-resolution live imaging reveals axon-glia interactions during peripheral nerve injury and repair in zebrafish. DMM Disease Models and Mechanisms, 2015, 8, 553-564.	2.4	41
81	Deubiquitinating enzymes regulate Hes1 stability and neuronal differentiation. FEBS Journal, 2015, 282, 2411-2423.	4.7	47
82	Establishment of Gal4 transgenic zebrafish lines for analysis of development of cerebellar neural circuitry. Developmental Biology, 2015, 397, 1-17.	2.0	66
83	Deletion of a kinesin I motor unmasks a mechanism of homeostatic branching control by neurotrophin-3. ELife, 2015, 4, .	6.0	30
84	Co-option of Sox3 as the male-determining factor on the Y chromosome in the fish Oryzias dancena. Nature Communications, 2014, 5, 4157.	12.8	275
85	Different combinations of Notch ligands and receptors regulate V2 interneuron progenitor proliferation and V2a/V2b cell fate determination. Developmental Biology, 2014, 391, 196-206.	2.0	37
86	Development of the lateral line canal system through a bone remodeling process in zebrafish. Developmental Biology, 2014, 392, 1-14.	2.0	36
87	Involvement of Androgen Receptor in Sex Determination in an Amphibian Species. PLoS ONE, 2014, 9, e93655.	2.5	27
88	Real-Time Visualization of Neuronal Activity during Perception. Current Biology, 2013, 23, 307-311.	3.9	240
89	Transgenic tools to characterize neuronal properties of discrete populations of zebrafish neurons. Development (Cambridge), 2013, 140, 3927-3931.	2.5	194
90	Cellular dissection of the spinal cord motor column by BAC transgenesis and gene trapping in zebrafish. Frontiers in Neural Circuits, 2013, 7, 100.	2.8	32

#	Article	IF	Citations
91	Efficient genetic modification and germ-line transmission of primordial germ cells using piggyBac and Tol2 transposons. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1466-72.	7.1	150
92	An mnr2b/hlxb9lb enhancer trap line that labels spinal and abducens motor neurons in zebrafish. Developmental Dynamics, 2012, 241, 327-332.	1.8	12
93	Functional validation of human pigmentation SNPs in zebrafish. FASEB Journal, 2012, 26, 774.2.	0.5	0
94	Transposon-mediated BAC transgenesis in zebrafish. Nature Protocols, 2011, 6, 1998-2021.	12.0	206
95	Migration of neuronal precursors from the telencephalic ventricular zone into the olfactory bulb in adult zebrafish. Journal of Comparative Neurology, 2011, 519, 3549-3565.	1.6	59
96	Stable, conditional, and muscleâ€fiberâ€specific expression of electroporated transgenes in chick limb muscle cells. Developmental Dynamics, 2011, 240, 1223-1232.	1.8	14
97	Imaging functional neural circuits in zebrafish with a new GCaMP and the Gal4FF-UAS system. Communicative and Integrative Biology, 2011, 4, 566-568.	1.4	29
98	Imaging functional neural circuits in zebrafish with a new GCaMP and the Gal4FF-UAS system. Communicative and Integrative Biology, 2011, 4, 566-8.	1.4	24
99	A transgenic zebrafish for monitoring in vivo microtubule structures. Developmental Dynamics, 2010, 239, 2695-2699.	1.8	27
100	zTrap: zebrafish gene trap and enhancer trap database. BMC Developmental Biology, 2010, 10, 105.	2.1	147
101	Mib-Jag1-Notch signalling regulates patterning and structural roles of the notochord by controlling cell-fate decisions. Development (Cambridge), 2010, 137, 2527-2537.	2.5	80
102	Olfactory neural circuitry for attraction to amino acids revealed by transposon-mediated gene trap approach in zebrafish. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9884-9889.	7.1	128
103	The Tol2-mediated Gal4-UAS method for gene and enhancer trapping in zebrafish. Methods, 2009, 49, 275-281.	3.8	85
104	Transcriptional regulation of a myeloid-lineage specific gene lysozyme C during zebrafish myelopoiesis. Mechanisms of Development, 2009, 126, 314-323.	1.7	45
105	Analysis of Genes and Genome by the Tol2-Mediated Gene and Enhancer Trap Methods. Methods in Molecular Biology, 2009, 546, 85-102.	0.9	16
106	Targeted gene expression by the Gal4â€UAS system in zebrafish. Development Growth and Differentiation, 2008, 50, 391-399.	1.5	155
107	Genetic dissection of neural circuits by Tol2 transposon-mediated Gal4 gene and enhancer trapping in zebrafish. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 1255-1260.	7.1	505
108	Insertional mutagenesis by theTol2transposon-mediated enhancer trap approach generated mutations in two developmental genes:tcf7andsynembryn-like. Development (Cambridge), 2008, 135, 159-169.	2.5	142

#	Article	IF	Citations
109	Stable integration and conditional expression of electroporated transgenes in chicken embryos. Developmental Biology, 2007, 305, 616-624.	2.0	237
110	Tol2: a versatile gene transfer vector in vertebrates. Genome Biology, 2007, 8, S7.	9.6	442
111	Targeting neural circuitry in zebrafish using GAL4 enhancer trapping. Nature Methods, 2007, 4, 323-326.	19.0	375
112	Functional Dissection of the Tol2 Transposable Element Identified the Minimal cis-Sequence and a Highly Repetitive Sequence in the Subterminal Region Essential for Transposition. Genetics, 2006, 174, 639-649.	2.9	487
113	Transposon tools and methods in zebrafish. Developmental Dynamics, 2005, 234, 244-254.	1.8	268
114	Transposition of the Tol2 Element, an Ac-Like Element From the Japanese Medaka Fish Oryzias latipes, in Mouse Embryonic Stem Cells. Genetics, 2004, 166, 895-899.	2.9	132
115	Transgenesis and Gene Trap Methods in Zebrafish by Using the Tol2 Transposable Element. Methods in Cell Biology, 2004, 77, 201-222.	1.1	247
116	A Transposon-Mediated Gene Trap Approach Identifies Developmentally Regulated Genes in Zebrafish. Developmental Cell, 2004, 7, 133-144.	7.0	767
117	Excision of the Tol2 transposable element of the medaka fish Oryzias latipes in Xenopus laevis and Xenopus tropicalis. Gene, 2004, 338, 93-98.	2.2	49
118	Transposition of the Tol2 Element, an Ac-Like Element From the Japanese Medaka Fish Oryzias latipes, in Mouse Embryonic Stem Cells. Genetics, 2004, 166, 895-899.	2.9	38
119	Excision of the Tol2 transposable element of the medaka fish, Oryzias latipes, in zebrafish, Danio rerio. Gene, 1998, 225, 17-22.	2.2	161