# Kazuo Inaba

List of Publications by Year
in descending order

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|---|---|---|---|
| 110 papers | 5,950 citations | 147801 31 h-index | 76900 74 g-index |
| 115 all docs | 115 docs citations | 115 times ranked | 5209 citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | The Draft Genome of Ciona intestinalis : Insights into Chordate and Vertebrate Origins. Science, 2002, 298, 2157-2167. | 12.6 | 1,539 |
| 2 | Phosphoinositide phosphatase activity coupled to an intrinsic voltage sensor. Nature, 2005, 435, 1239-1243. | 27.8 | 639 |
| 3 | A web-based interactive developmental table for the ascidianCiona intestinalis, including 3D real-image embryo reconstructions: I. From fertilized egg to hatching larva. Developmental Dynamics, 2007, 236, 1790-1805. | 1.8 | 234 |
| 4 | Molecular Architecture of the Sperm Flagella: Molecules for Motility and Signaling. Zoological Science, 2003, 20, 1043-1056. | 0.7 | 212 |
| 5 | Sperm flagella: comparative and phylogenetic perspectives of protein components. Molecular Human Reproduction, 2011, 17, 524-538. | 2.8 | 198 |
| 6 | Improved genome assembly and evidence-based global gene model set for the chordate Ciona intestinalis: new insight into intron and operon populations. Genome Biology, 2008, 9, R152. | 9.6 | 192 |
| 7 | A chemoattractant for ascidian spermatozoa is a sulfated steroid. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 14831-14836. | 7.1 | 163 |
| 8 | Sperm calcineurin inhibition prevents mouse fertility with implications for male contraceptive. Science, 2015, 350, 442-445. | 12.6 | 137 |
| 9 | Sperm Chemotaxis during the Process of Fertilization in the Ascidians Ciona savignyi and Ciona intestinalis. Developmental Biology, 1993, 157, 497-506. | 2.0 | 112 |
| 10 | The Chlamydomonas reinhardtii ODA3 Gene Encodes a Protein of the Outer Dynein Arm Docking Complex. Journal of Cell Biology, 1997, 137, 1069-1080. | 5.2 | 110 |
| 11 | Tree of motility â€“ A proposed history of motility systems in the tree of life. Genes To Cells, 2020, 25, 6-21. | 1.2 | 108 |
| 12 | DC3, the 21-kDa Subunit of the Outer Dynein Arm-Docking Complex (ODA-DC), Is a Novel EF-Hand Protein Important for Assembly of Both the Outer Arm and the ODA-DC. Molecular Biology of the Cell, 2003, 14, 3650-3663. | 2.1 | 95 |
| 13 | Tctex2-Related Outer Arm Dynein Light Chain Is Phosphorylated at Activation of Sperm Motility. Biochemical and Biophysical Research Communications, 1999, 256, 177-183. | 2.1 | 89 |
| 14 | Molecular Basis of Sperm Flagellar Axonemes: Structural and Evolutionary Aspects. Annals of the New York Academy of Sciences, 2007, 1101, 506-526. | 3.8 | 83 |
| 15 | Calaxin drives sperm chemotaxis by Ca <sup>2+</sup> -mediated direct modulation of a dynein motor. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 20497-20502. | 7.1 | 80 |
| 16 | A novel neuronal calcium sensor family protein, calaxin, is a potential Ca<sup>2+</sup>â€dependent regulator for the outer arm dynein of metazoan cilia and flagella. Biology of the Cell, 2009, 101, 91-103. | 2.0 | 68 |
| 17 | Molecular cloning and characterization of a thioredoxin/nucleoside diphosphate kinase related dynein intermediate chain from the ascidian, Ciona intestinalis. Gene, 2001, 275, 177-183. | 2.2 | 59 |
| 18 | Membrane Hyperpolarization by Sperm-Activating and -Attracting Factor Increases cAMP Level and Activates Sperm Motility in the Ascidian Ciona intestinalis. Developmental Biology, 1999, 213, 246-256. | 2.0 | 58 |

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|---|---|---|---|
| 19 | Molecular Characterization of Radial Spoke Subcomplex Containing Radial Spoke Protein 3 and Heat Shock Protein 40 in Sperm Flagella of the AscidianCiona intestinalis. Molecular Biology of the Cell, 2005, 16, 626-636. | 2.1 | 57 |
| 20 | Cyclic AMP- and calmodulin-dependent phosphorylation of 21 and 26 kDa proteins in axoneme is a prerequisite for SAAF-induced motile activation in ascidian spermatozoa. Development Growth and Differentiation, 2000, 42, 129-138. | 1.5 | 55 |
| 21 | Calcium sensors of ciliary outer arm dynein: functions and phylogenetic considerations for eukaryotic evolution. Cilia, 2015, 4, 6. | 1.8 | 53 |
| 22 | Identification of a Novel Leucine-rich Repeat Protein as a Component of Flagellar Radial Spoke in the AscidianCiona intestinalis. Molecular Biology of the Cell, 2003, 14, 774-785. | 2.1 | 52 |
| 23 | Calcium and Cyclic AMP Mediate Sperm Activation, but Ca2+Alone Contributes Sperm Chemotaxis in the Ascidian, Ciona savignyi. (ascidian/sperm motility/chemotaxis/calcium/cAMP). Development Growth and Differentiation, 1994, 36, 589-595. | 1.5 | 51 |
| 24 | EST analysis of gene expression in testis of the ascidianCiona intestinalis. Molecular Reproduction and Development, 2002, 62, 431-445. | 2.0 | 51 |
| 25 | Sperm dysfunction and ciliopathy. Reproductive Medicine and Biology, 2016, 15, 77-94. | 2.4 | 51 |
| 26 | Sperm from Sneaker Male Squids Exhibit Chemotactic Swarming to CO2. Current Biology, 2013, 23, 775-781. | 3.9 | 50 |
| 27 | Tubulin-dynein system in flagellar and ciliary movement. Proceedings of the Japan Academy Series B: Physical and Biological Sciences, 2012, 88, 397-415. | 3.8 | 45 |
| 28 | Transmembrane Cell Signaling for the Initiation of Trout Sperm Motility: Roles of Ion Channels and Membrane Hyperpolarization for Cyclic AMP Synthesis. Zoological Science, 2001, 18, 919-928. | 0.7 | 40 |
| 29 | Characterization of a cAMP-dependent protein kinase catalytic subunit from rainbow trout spermatozoa. Biochemical and Biophysical Research Communications, 2003, 305, 855-861. | 2.1 | 38 |
| 30 | Doublet 7 shortening, doublet 5-preferential poly-Glu reduction, and beating stall of sperm flagella in Ttll9â^'/â^' mice. Journal of Cell Science, 2016, 129, 2757-66. | 2.0 | 37 |
| 31 | Molecular characterization of axonemal proteins and signaling molecules responsible for chemoattractantâ€induced sperm activation in Ciona intestinalis. Cytoskeleton, 2008, 65, 249-267. | 4.4 | 36 |
| 32 | Cooperative Wnt-Nodal Signals Regulate the Patterning of Anterior Neuroectoderm. PLoS Genetics, 2016, 12, e1006001. | 3.5 | 36 |
| 33 | ankAT-1 is a novel gene mediating the apical tuft formation in the sea urchin embryo. Developmental Biology, 2010, 348, 67-75. | 2.0 | 35 |
| 34 | Distribution and structural diversity of cilia in tadpole larvae of the ascidian Ciona intestinalis. Developmental Biology, 2010, 337, 42-62. | 2.0 | 34 |
| 35 | Zinc finger homeobox is required for the differentiation of serotonergic neurons in the sea urchin embryo. Developmental Biology, 2012, 363, 74-83. | 2.0 | 33 |
| 36 | Chlamydomonas DYX1C1/PF23 is essential for axonemal assembly and proper morphology of inner dynein arms. PLoS Genetics, 2017, 13, e1006996. | 3.5 | 32 |

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|---|---|---|---|
| 37 | A novel oocyte maturation arresting factor in the central nervous system of scallops inhibits serotonin-induced oocyte maturation and spawning of bivalve mollusks. General and Comparative Endocrinology, 2006, 147, 352-361. | 1.8 | 31 |
| 38 | Changes in fish communities due to benthic habitat shifts under ocean acidification conditions. Science of the Total Environment, 2020, 725, 138501. | 8.0 | 30 |
| 39 | Molecular characterization ofCiona sperm outer arm dynein reveals multiple components related to outer arm docking complex protein 2. Cytoskeleton, 2006, 63, 591-603. | 4.4 | 29 |
| 40 | Proteomic profiles of embryonic development in the ascidian Ciona intestinalis. Developmental Biology, 2009, 325, 468-481. | 2.0 | 29 |
| 41 | Local database and the search program for proteomic analysis of sperm proteins in the ascidian Ciona intestinalis. Biochemical and Biophysical Research Communications, 2004, 319, 1241-1246. | 2.1 | 28 |
| 42 | Self-incompatibility response induced by calcium increase in sperm of the ascidian Ciona intestinalis. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 4158-4162. | 7.1 | 28 |
| 43 | Nexin-Dynein regulatory complex component DRC7 but not FBXL13 is required for sperm flagellum formation and male fertility in mice. PLoS Genetics, 2020, 16, e1008585. | 3.5 | 28 |
| 44 | Proteomic characterization of sperm radial spokes identifies a novel spoke protein with an ubiquitin domain. FEBS Letters, 2009, 583, 2201-2207. | 2.8 | 27 |
| 45 | Geochemistry of two shallow CO2 seeps in Shikine Island (Japan) and their potential for ocean acidification research. Regional Studies in Marine Science, 2015, 2, 45-53. | 0.7 | 27 |
| 46 | Single-cell genomics unveiled a cryptic cyanobacterial lineage with a worldwide distribution hidden by a dinoflagellate host. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 15973-15978. | 7.1 | 27 |
| 47 | Calaxin is required for cilia-driven determination of vertebrate laterality. Communications Biology, 2019, 2, 226. | 4.4 | 26 |
| 48 | CIPRO 2.5: Ciona intestinalis protein database, a unique integrated repository of large-scale omics data, bioinformatic analyses and curated annotation, with user rating and reviewing functionality. Nucleic Acids Research, 2011, 39, D807-D814. | 14.5 | 24 |
| 49 | Branchial Cilia and Sperm Flagella Recruit Distinct Axonemal Components. PLoS ONE, 2015, 10, e0126005. | 2.5 | 24 |
| 50 | Release of Sticky Glycoproteins from Chlamydomonas Flagella During Microsphere Translocation on the Surface Membrane. Zoological Science, 2018, 35, 299. | 0.7 | 24 |
| 51 | Purification and characterization of prolyl endopeptidase from the Pacific herring, Clupea pallasi, and its role in the activation of sperm motility. Development Growth and Differentiation, 1999, 41, 217-225. | 1.5 | 23 |
| 52 | Ciona intestinalis and Oxycomanthus japonicus, Representatives of Marine Invertebrates. Experimental Animals, 2009, 58, 459-469. | 1.1 | 22 |
| 53 | Species and gamete-specific fertilization success of two sea urchins under near future levels of pCO2. Journal of Marine Systems, 2014, 137, 67-73. | 2.1 | 22 |
| 54 | Ca2+ efflux via plasma membrane Ca2+-ATPase mediates chemotaxis in ascidian sperm. Scientific Reports, 2018, 8, 16622. | 3.3 | 22 |

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|---|---|---|---|
| 55 | Two high molecular mass proteases from sea urchin sperm. Biochemical and Biophysical Research Communications, 1992, 182, 667-674. | 2.1 | 20 |
| 56 | Decreased motility of flagellated microalgae long-term acclimated to CO2-induced acidified waters. Nature Climate Change, 2020, 10, 561-567. | 18.8 | 20 |
| 57 | Chymotrypsin-like protease activity associated with demembramated sperm of chum salmon. Biology of the Cell, 1992, 76, 329-333. | 2.0 | 19 |
| 58 | Dephosphorylation of Tctex2-related dynein light chain by type 2A protein phosphatase. Biochemical and Biophysical Research Communications, 2002, 297, 800-805. | 2.1 | 19 |
| 59 | Proteomic profiling reveals compartmentâ€specific, novel functions of ascidian sperm proteins. Molecular Reproduction and Development, 2011, 78, 529-549. | 2.0 | 19 |
| 60 | Distinct Roles of Soluble and Transmembrane Adenylyl Cyclases in the Regulation of Flagellar Motility in Ciona Sperm. International Journal of Molecular Sciences, 2014, 15, 13192-13208. | 4.1 | 19 |
| 61 | Microscopic analysis of sperm movement: links to mechanisms and protein components. Microscopy (Oxford, England), 2018, 67, 144-155. | 1.5 | 19 |
| 62 | CTENO64 Is Required for Coordinated Paddling of Ciliary Comb Plate in Ctenophores. Current Biology, 2019, 29, 3510-3516.e4. | 3.9 | 18 |
| 63 | Monoclonal Antibodies against the Protein Complex That Contains the Flagellar Movement-Initiating Phosphoprotein of Oncorhynchus keta. Journal of Biochemistry, 1994, 115, 885-890. | 1.7 | 17 |
| 64 | Ap58: A novel in situ outer dynein arm-binding protein. Biochemical and Biophysical Research Communications, 2006, 343, 385-390. | 2.1 | 17 |
| 65 | Network structure of projections extending from peripheral neurons in the tunic of ascidian larva. Developmental Dynamics, 2010, 239, 2278-2287. | 1.8 | 17 |
| 66 | 14-3-3Îµa directs the pulsatile transport of basal factors toward the apical domain for lumen growth in tubulogenesis. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E8873-E8881. | 7.1 | 17 |
| 67 | B-band protein in sea urchin sperm flagella. Cytoskeleton, 1988, 10, 506-517. | 4.4 | 15 |
| 68 | Anthraniloyl ATP, a fluorescent analog of ATP, as a substrate for dynein ATPase and flagellar motility. Archives of Biochemistry and Biophysics, 1989, 274, 209-215. | 3.0 | 13 |
| 69 | Multidimensional Analysis of Uncharacterized Sperm Proteins inCiona intestinalis: EST-Based Analysis and Functional Immunoscreening of Testis-Expressed Genes. Zoological Science, 2010, 27, 204-215. | 0.7 | 13 |
| 70 | Isolation and functional characterization for oocyte maturation and sperm motility of the oocyte maturation arresting factor from the Japanese scallop, Patinopecten yessoensis. General and Comparative Endocrinology, 2012, 179, 350-357. | 1.8 | 13 |
| 71 | Flagellar waveforms of gametes in the brown algaEctocarpus siliculosus. European Journal of Phycology, 2016, 51, 139-148. | 2.0 | 13 |
| 72 | Two States of the Conformation of 21S Outer Arm Dynein Coupled with ATP Hydrolysis1. Journal of Biochemistry, 1989, 106, 349-354. | 1.7 | 12 |

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|---|---|---|---|
| 73 | Distinct <scp>C</scp>a<sup>2+</sup> channels maintain a high motility state of the sperm that may be needed for penetration of egg jelly of the newt, <scp>C</scp>ynops pyrrhogaster. Development Growth and Differentiation, 2013, 55, 657-667. | 1.5 | 12 |
| 74 | Calaxin establishes basal body orientation and coordinates movement of monocilia in sea urchin embryos. Scientific Reports, 2017, 7, 10751. | 3.3 | 12 |
| 75 | Association of a 66 kDa Homolog of Chlamydomonas DC2, a Subunit of the Outer Arm Docking Complex, with Outer Arm Dynein of Sperm Flagella in the Ascidian Ciona intestinalis. Zoological Science, 2006, 23, 679-687. | 0.7 | 11 |
| 76 | Valosinâ€containing protein/p97 interacts with spermâ€activating and spermâ€attracting factor (SAAF) in the ascidian egg and modulates spermâ€attracting activity. Development Growth and Differentiation, 2008, 50, 665-673. | 1.5 | 10 |
| 77 | Lipid rafts function in Ca<sup>2+</sup> signaling responsible for activation of sperm motility and chemotaxis in the ascidian Ciona intestinalis. Molecular Reproduction and Development, 2011, 78, 920-929. | 2.0 | 10 |
| 78 | Autonomous changes in the swimming direction of sperm in the gastropodStrombus luhuanus. Journal of Experimental Biology, 2014, 217, 986-96. | 1.7 | 10 |
| 79 | Structural diversity and distribution of cilia in the apical sense organ of the ctenophore Bolinopsis mikado. Cytoskeleton, 2020, 77, 442-455. | 2.0 | 10 |
| 80 | A dynein-associated photoreceptor protein prevents ciliary acclimation to blue light. Science Advances, 2021, 7, . | 10.3 | 10 |
| 81 | Genetic Relationships of the Genus Tridentiger (Pisces, Gobiidae) Based on Allozyme Polymorphism. Zoological Science, 1996, 13, 175-183. | 0.7 | 9 |
| 82 | Conformational Changes of Dynein: Mapping and Sequence Analysis of ATP/Vanadate-Dependent Trypsin-Sensitive Sites on the Outer Arm Dynein Â Heavy Chain from Sea Urchin Sperm Flagell. Journal of Biochemistry, 2000, 127, 1115-1120. | 1.7 | 8 |
| 83 | Microtubule stabilizer reveals requirement of Ca2+-dependent conformational changes of microtubules for rapid coiling of haptonema in haptophyte algae. Biology Open, 2019, 8, . | 1.2 | 8 |
| 84 | ATP-Dependent Conformational Changes of Dynein: Evidence for Changes in the Interaction of Dynein Heavy Chain with the Intermediate Chain 11. Journal of Biochemistry, 1995, 117, 903-907. | 1.7 | 7 |
| 85 | Glutathione transferase theta in apical ciliary tuft regulates mechanical reception and swimming behavior of Sea Urchin Embryos. Cytoskeleton, 2013, 70, 453-470. | 2.0 | 7 |
| 86 | Japanese marine biological stations: Preface to the special issue. Regional Studies in Marine Science, 2015, 2, 154-157. | 0.7 | 7 |
| 87 | Crystal structure of a Ca2+-dependent regulator of flagellar motility reveals the open-closed structural transition. Scientific Reports, 2018, 8, 2014. | 3.3 | 7 |
| 88 | Sperm Proteases that May Be Involved in the Initiation of Sperm Motility in the Newt, Cynops pyrrhogaster. International Journal of Molecular Sciences, 2014, 15, 15210-15224. | 4.1 | 6 |
| 89 | Sustained Heterozygosity Across a Self-Incompatibility Locus in an Inbred Ascidian. Molecular Biology and Evolution, 2015, 32, 81-90. | 8.9 | 6 |
| 90 | A brown algal sex pheromone reverses the sign of phototaxis by cAMP/Ca2+-dependent signaling in the male gametes of Mutimo cylindricus (Cutleriaceae). Journal of Photochemistry and Photobiology B: Biology, 2019, 192, 113-123. | 3.8 | 6 |

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| 91 | Opening the black box: microspatial patterns of zoospore dispersal, parentage, and selfing in the kelp Ecklonia cava as revealed by microsatellite markers. Journal of Applied Phycology, 2019, 31, 3283-3294. | 2.8 | 6 |
| 92 | Purification of Dyneins from Sperm Flagella. Methods in Cell Biology, 2009, 92, 49-63. | 1.1 | 5 |
| 93 | Protease in sturgeon sperm and the effects of protease inhibitors on sperm motility and velocity. Fish Physiology and Biochemistry, 2014, 40, 1393-1398. | 2.3 | 5 |
| 94 | Inverse relationship of Ca2+-dependent flagellar response between animal sperm and prasinophyte algae. Journal of Plant Research, 2017, 130, 465-473. | 2.4 | 5 |
| 95 | The Roles of Two CNG Channels in the Regulation of Ascidian Sperm Chemotaxis. International Journal of Molecular Sciences, 2022, 23, 1648. | 4.1 | 5 |
| 96 | Conformational Changes of the Î² Chain of the Outer-Arm Dynein from Sea Urchin Sperm Flagella Coupled with ATP Hydrolysis1. Journal of Biochemistry, 1990, 108, 663-668. | 1.7 | 4 |
| 97 | Mapping of ATP-Dependent Trypsin-Sensitive Sites on the Î² Chain of Outer-Arm Dynein from Sea Urchin Sperm Flagella1. Journal of Biochemistry, 1991, 110, 795-801. | 1.7 | 4 |
| 98 | Black Tea High-Molecular-Weight Polyphenol Increases the Motility of Sea Urchin Sperm by Activating Mitochondrial Respiration. Bioscience, Biotechnology and Biochemistry, 2012, 76, 2321-2324. | 1.3 | 4 |
| 99 | Development of 12 polymorphic microsatellite DNA markers for the kelp Ecklonia cava (Phaeophyceae,) Tj ETQq1 1 0.784314 rgBT /O | 0.8 | 4 |
| 100 | Post-Embryonic Development and Genital-Complex Formation in Three Species of Polyclad Flatworms. Zoological Science, 2018, 35, 28. | 0.7 | 4 |
| 101 | Flagellar motility during sperm chemotaxis and phototaxis in fucalean algae. European Journal of Phycology, 2021, 56, 85-93. | 2.0 | 2 |
| 102 | Region-Specific Loss of Two-Headed Ciliary Dyneins in Ascidian Endostyle. Zoological Science, 2020, 37, 512-518. | 0.7 | 2 |
| 103 | A New Species of Acoela Possessing a Middorsal Appendage with a Possible Sensory Function. Zoological Science, 2022, 39, 147-156. | 0.7 | 2 |
| 104 | Phosphorylation of axonemal 21 kDa and 26 kDa proteins modulates activation of sperm motility in the ascidian,Ciona intestinalis. Zygote, 1999, 8, S59-S60. | 1.1 | 1 |
| 105 | Sperm motility-activating complex formed by t-complex distorters. Biochemical and Biophysical Research Communications, 2003, 310, 1155-1159. | 2.1 | 1 |
| 106 | A Unique Seminal Plasma Protein, Zona Pellucida 3-Like Protein, has Ca2 -Dependent Sperm Agglutination Activity. Zoological Science, 2018, 35, 161. | 0.7 | 1 |
| 107 | Morphological differences in tardigrade spermatozoa induce variation in gamete motility. BMC Zoology, 2022, 7, . | 1.0 | 1 |
| 108 | CTENO64 is Required for Coordinated Paddling of Ciliary Comb Plate in Ctenophores. SSRN Electronic Journal, 0, , . | 0.4 | 0 |

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|---|---|---|---|
| 109 | JAMBIO and Its Coastal Organism Joint Surveys: Network of Marine Stations Explores Japanese Coastal Biota. Zoological Science, 2022, 39, 1-6. | 0.7 | 0 |
| 110 | Axonemal Growth and Alignment During Paraspermatogenesis in the Marine Gastropod Strombus luhuanus. Frontiers in Cell and Developmental Biology, 0, 10, . | 3.7 | 0 |