Takashi Okamoto

List of Publications by Year
in descending order

43 papers	1,203 citations	430874 18 h-index	395702 33 g-index
45 all docs	45 docs citations	45 times ranked	965 citing authors

#	Article	IF	Citations
1	DNA demethylation is initiated in the central cells of Arabidopsis and rice. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 15138-15143.	7.1	157
2	An efficient DNA- and selectable-marker-free genome-editing system using zygotes in rice. Nature Plants, 2019, 5, 363-368.	9.3	135
3	Establishment of an in vitro fertilization system in rice (Oryza sativa L.). Planta, 2007, 226, 581-589.	3.2	77
4	Identification of Major Proteins in Maize Egg Cells. Plant and Cell Physiology, 2004, 45, 1406-1412.	3.1	65
5	Identification of Genes that are Up- or Down-regulated in the Apical or Basal Cell of Maize Two-celled Embryos and Monitoring their Expression During Zygote Development by a Cell Manipulation- and PCR-based Approach. Plant and Cell Physiology, 2005, 46, 332-338.	3.1	62
6	Dynamics of Male and Female Chromatin during Karyogamy in Rice Zygotes Â Â Â. Plant Physiology, 2014, 165, 1533-1543.	4.8	61
7	Distinct Gene Expression Profiles in Egg and Synergid Cells of Rice as Revealed by Cell Type-Specific Microarrays Â Â. Plant Physiology, 2011, 155, 881-891.	4.8	58
8	Isolation of gametes and central cells from Oryza sativa L.. Sexual Plant Reproduction, 2006, 19, 37-45.	2.2	56
9	DNA demethylation by ROS1a in rice vegetative cells promotes methylation in sperm. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 9652-9657.	7.1	56
10	Gene expression profiles in rice gametes and zygotes: identification of gamete-enriched genes and up- or down-regulated genes in zygotes after fertilization. Journal of Experimental Botany, 2013, 64, 1927-1940.	4.8	52
11	Identification of Proteins Enriched in Rice Egg or Sperm Cells by Single-Cell Proteomics. PLoS ONE, 2013, 8, e69578.	2.5	39
12	Asymmetric cell division of rice zygotes located in embryo sac and produced by in vitro fertilization. Sexual Plant Reproduction, 2010, 23, 211-217.	2.2	38
13	Expression of Genes from Paternal Alleles in Rice Zygotes and Involvement ofOsASGR-BBML1in Initiation of Zygotic Development. Plant and Cell Physiology, 2019, 60, 725-737.	3.1	32
14	Positional relationship between the gamete fusion site and the first division plane in the rice zygote. Journal of Experimental Botany, 2010, 61, 3101-3105.	4.8	27
15	Development of Polyspermic Rice Zygotes. Plant Physiology, 2016, 171, 206-214.	4.8	27
16	Studies of mitochondrial morphology and DNA amount in the rice egg cell. Current Genetics, 2010, 56, 33-41.	1.7	23
17	Nuclear migration during karyogamy in rice zygotes is mediated by continuous convergence of actin meshwork toward the egg nucleus. Journal of Plant Research, 2017, 130, 339-348.	2.4	20
18	Identification of the major protein components of rice egg cells. Journal of Plant Research, 2007, 120, 575-579.	2.4	19

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19	Cell cycle in egg cell and its progression during zygotic development in rice. Plant Reproduction, 2018, 31, 107-116.	2.2	18
20	An imbalanced parental genome ratio affects the development of rice zygotes. Journal of Experimental Botany, 2018, 69, 2609-2619.	4.8	18
21	Regulatory functions of ROS dynamics via glutathione metabolism and glutathione peroxidase activity in developing rice zygote. Plant Journal, 2021, 108, 1097-1115.	5.7	18
22	In Vitro Fertilization with Rice Gametes: Production of Zygotes and Zygote and Embryo Culture. Methods in Molecular Biology, 2011, 710, 17-27.	0.9	17
23	Development of gene expression system in egg cells and zygotes isolated from rice and maize. Plant Direct, 2017, 1, e00010.	1.9	17
24	Establishment of an In Vitro Fertilization System in Wheat (Triticum aestivumL.). Plant and Cell Physiology, 2019, 60, 835-843.	3.1	17
25	Polyspermy in angiosperms: Its contribution to polyploid formation and speciation. Molecular Reproduction and Development, 2020, 87, 374-379.	2.0	14
26	Sperm Entry into the Egg Cell Induces the Progression of Karyogamy in Rice Zygotes. Plant and Cell Physiology, 2019, 60, 1656-1665.	3.1	12
27	CRISPR/Cas9â€Based Genome Editing Using Rice Zygotes. Current Protocols in Plant Biology, 2020, 5, e20111.	2.8	11
28	In Vitro Fertilization With Isolated Higher Plant Gametes. Methods in Molecular Biology, 2008, 427, 51-69.	0.9	10
29	Karyogamy in rice zygotes: Actin filament-dependent migration of sperm nucleus, chromatin dynamics, andde novogene expression. Plant Signaling and Behavior, 2015, 10, e989021.	2.4	8
30	Development of polyspermic zygote and possible contribution of polyspermy to polyploid formation in angiosperms. Journal of Plant Research, 2017, 130, 485-490.	2.4	7
31	Gamete fusion site on the egg cell and autonomous establishment of cell polarity in the zygote. Plant Signaling and Behavior, 2010, 5, 1464-1467.	2.4	5
32	Formation of triploid plants via possible polyspermy. Plant Signaling and Behavior, 2016, 11, e1218107.	2.4	4
33	Effect of Paternal Genome Excess on the Developmental and Gene Expression Profiles of Polyspermic Zygotes in Rice. Plants, 2021, 10, 255.	3.5	4
34	Isolation of gametes from Brachypodium distachyon. Plant Biotechnology, 2016, 33, 39-43.	1.0	3
35	Analysis of Proteins Enriched in Rice Gamete. Methods in Molecular Biology, 2017, 1669, 251-263.	0.9	3
36	Development and regeneration of wheatâ€“rice hybrid zygotes produced by inâ€‰vitro fertilization system. New Phytologist, 2021, 232, 2369-2383.	7.3	3

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37	Electro-fusion of Gametes and Subsequent Culture of Zygotes in Rice. Bio-protocol, 2016, 6, .	0.4	3
38	In Vitro Production of Zygotes by Electrofusion of Rice Gametes. Methods in Molecular Biology, 2020, 2122, 257-267.	0.9	2
39	Gene Expression and Genome Editing Systems by Direct Delivery of Macromolecules Into Rice Egg Cells and Zygotes. Bio-protocol, 2020, 10, e3681.	0.4	2
40	Gene and Protein Expression Profiles in Rice Gametes and Zygotes: A Cue for Understanding the Mechanisms of Gametic and Early Zygotic Development in Angiosperms. , 2014, , 369-382.		1
41	Dynamics of mitochondrial distribution during development and asymmetric division of rice zygotes. Plant Reproduction, 2021, , 1.	2.2	1
42	Isolation of gametes and zygotes from Setaria viridis. Journal of Plant Research, 2022, 135, 627-633.	2.4	1
43	In Vitro Fertilization System Using Wheat Gametes by Electric Fusion. Methods in Molecular Biology, 2022, 2484, 259-273.	0.9	0