Keiko U Torii

List of Publications by Year
in descending order

109 papers	10,489 citations	38742 50 h-index	34986 98 g-index
125 all docs	125 docs citations	125 times ranked	7317 citing authors

#	Article	IF	Citations
1	The Arabidopsis ERECTA gene encodes a putative receptor protein kinase with extracellular leucine-rich repeats.. Plant Cell, 1996, 8, 735-746.	6.6	733
2	Stomatal Patterning and Differentiation by Synergistic Interactions of Receptor Kinases. Science, 2005, 309, 290-293.	12.6	554
3	Termination of asymmetric cell division and differentiation of stomata. Nature, 2007, 445, 501-505.	27.8	490
4	<i>SCREAM/ICE1</i>and<i>SCREAM2</i>Specify Three Cell-State Transitional Steps Leading to<i>Arabidopsis</i>Stomatal Differentiation Â. Plant Cell, 2008, 20, 1775-1785.	6.6	461
5	The secretory peptide gene <i>EPF1</i> enforces the stomatal one-cell-spacing rule. Genes and Development, 2007, 21, 1720-1725.	5.9	438
6	Synergistic interaction of three ERECTA-family receptor-like kinases controls Arabidopsis organ growth and flower development by promoting cell proliferation. Development (Cambridge), 2004, 131, 1491-1501.	2.5	386
7	Mechanisms of Stomatal Development. Annual Review of Plant Biology, 2012, 63, 591-614.	18.7	346
8	Epidermal Cell Density is Autoregulated via a Secretory Peptide, EPIDERMAL PATTERNING FACTOR 2 in Arabidopsis Leaves. Plant and Cell Physiology, 2009, 50, 1019-1031.	3.1	321
9	Direct interaction of ligandâ€“receptor pairs specifying stomatal patterning. Genes and Development, 2012, 26, 126-136.	5.9	310
10	Leucine-Rich Repeat Receptor Kinases in Plants: Structure, Function, and Signal Transduction Pathways. International Review of Cytology, 2004, 234, 1-46.	6.2	309
11	Differential Function of Arabidopsis SERK Family Receptor-like Kinases in Stomatal Patterning. Current Biology, 2015, 25, 2361-2372.	3.9	242
12	ERECTA, an LRR receptor-like kinase protein controlling development pleiotropically affects resistance to bacterial wilt. Plant Journal, 2003, 36, 353-365.	5.7	239
13	Competitive binding of antagonistic peptides fine-tunes stomatal patterning. Nature, 2015, 522, 439-443.	27.8	237
14	Dominant-Negative Receptor Uncovers Redundancy in the Arabidopsis ERECTA Leucine-Rich Repeat Receptorâ€“Like Kinase Signaling Pathway That Regulates Organ Shape. Plant Cell, 2003, 15, 1095-1110.	6.6	224
15	Rapid and reversible root growth inhibition by TIR1 auxin signalling. Nature Plants, 2018, 4, 453-459.	9.3	198
16	A MAPK Cascade Downstream of ERECTA Receptor-Like Protein Kinase Regulates <i>Arabidopsis</i> Inflorescence Architecture by Promoting Localized Cell Proliferation Â. Plant Cell, 2013, 24, 4948-4960.	6.6	191
17	Dysregulation of cell-to-cell connectivity and stomatal patterning by loss-of-function mutation in<i>Arabidopsis CHORUS</i>(<i>GLUCAN SYNTHASE-LIKE 8</i>). Development (Cambridge), 2010, 137, 1731-1741.	2.5	186
18	50Âyears of Arabidopsis research: highlights and future directions. New Phytologist, 2016, 209, 921-944.	7.3	186

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19	Two callose synthases, GSL1 and GSL5, play an essential and redundant role in plant and pollen development and in fertility. Plant Molecular Biology, 2005, 58, 333-349.	3.9	172
20	Molecular Profiling of Stomatal Meristemoids Reveals New Component of Asymmetric Cell Division and Commonalities among Stem Cell Populations in<i>Arabidopsis</i>Â Â Â. Plant Cell, 2011, 23, 3260-3275.	6.6	169
21	Out of the Mouths of Plants: The Molecular Basis of the Evolution and Diversity of Stomatal Development. Plant Cell, 2010, 22, 296-306.	6.6	160
22	Regulation of inflorescence architecture by intertissue layer ligandâ€“receptor communication between endodermis and phloem. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 6337-6342.	7.1	160
23	Regulation of Arabidopsis Early Anther Development by the Mitogen-Activated Protein Kinases, MPK3 and MPK6, and the ERECTA and Related Receptor-Like Kinases. Molecular Plant, 2008, 1, 645-658.	8.3	134
24	Receptor kinase activation and signal transduction in plants: an emerging picture. Current Opinion in Plant Biology, 2000, 3, 361-367.	7.1	129
25	Phosphocode-dependent functional dichotomy of a common co-receptor in plant signalling. Nature, 2018, 561, 248-252.	27.8	126
26	Hormonal and environmental signals guiding stomatal development. BMC Biology, 2018, 16, 21.	3.8	124
27	Functional dissection of Arabidopsis COP1 reveals specific roles of its three structural modules in light control of seedling development. EMBO Journal, 1998, 17, 5577-5587.	7.8	119
28	The bHLH Protein, MUTE, Controls Differentiation of Stomata and the Hydathode Pore in Arabidopsis. Plant and Cell Physiology, 2008, 49, 934-943.	3.1	115
29	The ArabidopsisERECTAgene is expressed in the shoot apical meristem and organ primordia. Plant Journal, 1998, 15, 301-310.	5.7	113
30	Interaction of Auxin and ERECTA in Elaborating Arabidopsis Inflorescence Architecture Revealed by the Activation Tagging of a New Member of the YUCCA Family Putative Flavin Monooxygenases. Plant Physiology, 2005, 139, 192-203.	4.8	112
31	Chemical hijacking of auxin signaling with an engineered auxinâ€“TIR1 pair. Nature Chemical Biology, 2018, 14, 299-305.	8.0	107
32	ERECTA and BAK1 Receptor Like Kinases Interact to Regulate Immune Responses in Arabidopsis. Frontiers in Plant Science, 2016, 7, 897.	3.6	99
33	Haploinsufficiency after successive loss of signaling reveals a role for<i>ERECTA</i>-family genes in<i>Arabidopsis</i>ovule development. Development (Cambridge), 2007, 134, 3099-3109.	2.5	97
34	MUTE Directly Orchestrates Cell-State Switch and the Single Symmetric Division to Create Stomata. Developmental Cell, 2018, 45, 303-315.e5.	7.0	97
35	Mix-and-match: ligandâ€“receptor pairs in stomatal development and beyond. Trends in Plant Science, 2012, 17, 711-719.	8.8	95
36	Autocrine regulation of stomatal differentiation potential by EPF1 and ERECTA-LIKE1 ligand-receptor signaling. ELife, 2017, 6, .	6.0	86

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37	Breaking the silence: three bHLH proteins direct cellâ€fate decisions during stomatal development. BioEssays, 2007, 29, 861-870.	2.5	84
38	Lineage-specific stem cells, signals and asymmetries during stomatal development. Development (Cambridge), 2016, 143, 1259-1270.	2.5	84
39	Autonomy of cell proliferation and developmental programs during Arabidopsis aboveground organ morphogenesis. Developmental Biology, 2007, 304, 367-381.	2.0	80
40	Receptor serine/threonine protein kinases in signalling: analysis of the erecta receptorâ€like kinase ofArabidopsis thaliana. New Phytologist, 2001, 151, 133-143.	7.3	77
41	<i>Arabidopsis</i> homeodomain-leucine zipper IV proteins promote stomatal development and ectopically induce stomata beyond the epidermis. Development (Cambridge), 2013, 140, 1924-1935.	2.5	76
42	Molecular Framework of a Regulatory Circuit Initiating Two-Dimensional Spatial Patterning of Stomatal Lineage. PLoS Genetics, 2015, 11, e1005374.	3.5	74
43	Regulation of floral patterning and organ identity by Arabidopsis ERECTA-family receptor kinase genes. Journal of Experimental Botany, 2013, 64, 5323-5333.	4.8	64
44	Plant twitter: ligands under 140 amino acids enforcing stomatal patterning. Journal of Plant Research, 2010, 123, 275-280.	2.4	63
45	The RING Finger Motif of Photomorphogenic Repressor COP1 Specifically Interacts with the RING-H2 Motif of a NovelArabidopsis Protein. Journal of Biological Chemistry, 1999, 274, 27674-27681.	3.4	62
46	A Secreted Peptide and Its Receptors Shape the Auxin Response Pattern and Leaf Margin Morphogenesis. Current Biology, 2016, 26, 2478-2485.	3.9	61
47	ERECTA â€family receptor kinase genes redundantly prevent premature progression of secondary growth in the Arabidopsis hypocotyl. New Phytologist, 2017, 213, 1697-1709.	7.3	60
48	Two-dimensional spatial patterning in developmental systems. Trends in Cell Biology, 2012, 22, 438-446.	7.9	57
49	Stomatal differentiation: the beginning and the end. Current Opinion in Plant Biology, 2015, 28, 16-22.	7.1	57
50	The presence of multiple introns is essential for ERECTA expression in Arabidopsis. Rna, 2011, 17, 1907-1921.	3.5	56
51	Bipartite anchoring of SCREAM enforces stomatal initiation by coupling MAP kinases to SPEECHLESS. Nature Plants, 2019, 5, 742-754.	9.3	55
52	Plant synthetic biology for molecular engineering of signalling and development. Nature Plants, 2016, 2, 16010.	9.3	51
53	SPINDLY, ERECTA, and Its Ligand STOMAGEN Have a Role in Redox-Mediated Cortex Proliferation in the Arabidopsis Root. Molecular Plant, 2014, 7, 1727-1739.	8.3	49
54	Co-Immunoprecipitation of Membrane-Bound Receptors. The Arabidopsis Book, 2015, 13, e0180.	0.5	46

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55	Arabidopsis ERECTA-Family Receptor Kinases Mediate Morphological Alterations Stimulated by Activation of NB-LRR-Type UNI Proteins. Plant and Cell Physiology, 2011, 52, 804-814.	3.1	42
56	A Peptide Pair Coordinates Regular Ovule Initiation Patterns with Seed Number and Fruit Size. Current Biology, 2020, 30, 4352-4361.e4.	3.9	41
57	Small Pores with a Big Impact. Plant Physiology, 2017, 174, 467-469.	4.8	40
58	Ethylene-induced hyponastic growth in<i>Arabidopsis thaliana</i>is controlled by ERECTA. Plant Journal, 2010, 61, 83-95.	5.7	39
59	Stomatal development in time: the past and the future. Current Opinion in Genetics and Development, 2017, 45, 1-9.	3.3	38
60	Take a deep breath: peptide signalling in stomatal patterning and differentiation. Journal of Experimental Botany, 2013, 64, 5243-5251.	4.8	37
61	Stomatal Development and Perspectives toward Agricultural Improvement. Cold Spring Harbor Perspectives in Biology, 2019, 11, a034660.	5.5	37
62	Stem development through vascular tissues: EPFLâ€"ERECTA family signaling that bounces in and out of phloem. Journal of Experimental Botany, 2017, 68, 45-53.	4.8	36
63	Stomatal development in the context of epidermal tissues. Annals of Botany, 2021, 128, 137-148.	2.9	36
64	Shouting out loud: signaling modules in the regulation of stomatal development. Plant Physiology, 2021, 185, 765-780.	4.8	35
65	A super-sensitive auxin-inducible degron system with an engineered auxin-TIR1 pair. Nucleic Acids Research, 2020, 48, e108-e108.	14.5	32
66	FERONIA as an upstream receptor kinase for polar cell growth in plants. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 17461-17462.	7.1	31
67	Discovery of synthetic small molecules that enhance the number of stomata: Câ€"H functionalization chemistry for plant biology. Chemical Communications, 2017, 53, 9632-9635.	4.1	28
68	<i>ERECTA</i>-family genes coordinate stem cell functions between the epidermal and internal layers of the shoot apical meristem. Development (Cambridge), 2018, 145, .	2.5	26
69	Mechanisms and Strategies Shaping Plant Peptide Hormones. Plant and Cell Physiology, 2017, 58, 1313-1318.	3.1	25
70	A Super Strong Engineered Auxinâ€"TIR1 Pair. Plant and Cell Physiology, 2018, 59, 1538-1544.	3.1	25
71	Deceleration of the cell cycle underpins a switch from proliferative to terminal divisions in plant stomatal lineage. Developmental Cell, 2022, 57, 569-582.e6.	7.0	24
72	Linking cell cycle to stomatal differentiation. Current Opinion in Plant Biology, 2019, 51, 66-73.	7.1	23

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73	Cell biology of the leaf epidermis: Fate specification, morphogenesis, and coordination. Plant Cell, 2022, 34, 209-227.	6.6	23
74	Cryptic bioactivity capacitated by synthetic hybrid plant peptides. Nature Communications, 2017, 8, 14318.	12.8	22
75	Long-term, High-resolution Confocal Time Lapse Imaging of Arabidopsis Cotyledon Epidermis during Germination. Journal of Visualized Experiments, 2012, , .	0.3	20
76	Stem cells within the shoot apical meristem: identity, arrangement and communication. Cellular and Molecular Life Sciences, 2019, 76, 1067-1080.	5.4	20
77	Plant stem cell research is uncovering the secrets of longevity and persistent growth. Plant Journal, 2021, 106, 326-335.	5.7	19
78	Receptor-like kinases in plant development. Advances in Botanical Research, 2000, , 225-267.	1.1	18
79	SCREAMing Twist on the Role of ICE1 in Freezing Tolerance. Plant Cell, 2020, 32, 816-819.	6.6	17
80	The manifold actions of signaling peptides on subcellular dynamics of a receptor specify stomatal cell fate. ELife, 2020, 9, .	6.0	17
81	The N-terminal fragment of Arabidopsis photomorphogenic repressor COP1 maintains partial function and acts in a concentration-dependent manner. Plant Journal, 1999, 20, 713-717.	5.7	15
82	ERECTA controls low light intensity-induced differential petiole growth independent of Phytochrome B and Cryptochrome 2 action in Arabidopsis thaliana. Plant Signaling and Behavior, 2010, 5, 284-286.	2.4	14
83	A Tale of Two Systems: Peptide Ligand-Receptor Pairs in Plant Development. Cold Spring Harbor Symposia on Quantitative Biology, 2012, 77, 83-89.	1.1	14
84	Cell walls as a stage for intercellular communication regulating shoot meristem development. Frontiers in Plant Science, 2015, 6, 324.	3.6	14
85	Intragenic suppressors unravel the role of the SCREAM ACT-like domain for bHLH partner selectivity in stomatal development. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	14
86	Expression of an N-Terminal Fragment of COP1 Confers a Dominant-Negative Effect on Light-Regulated Seedling Development in Arabidopsis. Plant Cell, 1996, 8, 1491.	6.6	13
87	The role of COP1 in light control of Arabidopsis seedling development. Plant, Cell and Environment, 1997, 20, 728-733.	5.7	13
88	Chemical control of stomatal function and development. Current Opinion in Plant Biology, 2021, 60, 102010.	7.1	13
89	Harnessing synthetic chemistry to probe and hijack auxin signaling. New Phytologist, 2018, 220, 417-424.	7.3	12
90	Effective range of non-cell autonomous activator and inhibitor peptides specifying plant stomatal patterning. Development (Cambridge), 2020, 147, .	2.5	12

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91	The Next Generation of Training for Arabidopsis Researchers: Bioinformatics and Quantitative Biology. Plant Physiology, 2017, 175, 1499-1509.	4.8	11
92	Plant Chemical Biology. Plant and Cell Physiology, 2018, 59, 1483-1486.	3.1	11
93	Dissecting plant hormone signaling with synthetic molecules: perspective from the chemists. Current Opinion in Plant Biology, 2019, 47, 32-37.	7.1	9
94	Regulation of Inflorescence Architecture and Organ Shape by the ERECTA Gene in Arabidopsis. , 2003, , 153-164.		9
95	Stomagenesis versus myogenesis: Parallels in intrinsic and extrinsic regulation of transcription factor mediated specialized cellâ€type differentiation in plants and animals. Development Growth and Differentiation, 2016, 58, 341-354.	1.5	7
96	Stomatal Development. Plant Signaling and Behavior, 2007, 2, 311-313.	2.4	6
97	The boundary-expressed <i>EPIDERMAL PATTERNING FACTOR-LIKE2</i> gene encoding a signaling peptide promotes cotyledon growth during <i>Arabidopsis thaliana</i> embryogenesis. Plant Biotechnology, 2021, 38, 317-322.	1.0	5
98	Stomatal Patterning and Guard Cell Differentiation. Plant Cell Monographs, 2007, , 343-359.	0.4	4
99	Immunohistochemical localization of a glycoprotein, GP80, in the outermost layer of the developing endosperm of immature seeds of carrot. Planta, 1991, 185, 201-8.	3.2	3
100	Regulation of plant form: Identification of a molecule controlling cell expansion. BioEssays, 1995, 17, 383-386.	2.5	3
101	Heat Shocking the Jedi Master: HSP90's Role inÂRegulating Stomatal Cell Fate. Molecular Plant, 2020, 13, 536-538.	8.3	2
102	Transmembrane Receptors in Plants: Receptor Kinases and their Ligands. , 0, , 1-29.		1
103	From surface to air: shoot meristem growth. Trends in Cell Biology, 1999, 9, 331-332.	7.9	0
104	Cell Biology â€" Building blocks for dynamic development and behaviors. Current Opinion in Plant Biology, 2012, 15, 575-577.	7.1	0
105	Keiko U. Torii. Current Biology, 2013, 23, R943-R944.	3.9	0
106	Imaging Ventral Cell Plate Formation in Guard Cells. Microscopy and Microanalysis, 2015, 21, 713-714.	0.4	0
107	Impact of erecta mutation on leaf serration differs between Arabidopsis accessions. Plant Signaling and Behavior, 2016, 11, e1261231.	2.4	0
108	Communication, Fate, and Decision Making during Stomatal Development. Journal of the Society of Japanese Women Scientists, 2006, 7, 12-17.	0.0	0

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109	Plant structure and function: Evolutionary origins and underlying mechanisms. Plant Physiology, 0, , .	4.8	0