# Julie E Gray

## List of Publications by Year
## in descending order

Source: https://exaly.com/author-pdf/2381356/publications.pdf

Version: 2024-02-01

110
papers

10,073
citations

36303

51
h-index

37204

96
g-index

118
all docs

118
docs citations

118
times ranked

8432
citing authors

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 1 | Induced Genetic Variations in Stomatal Density and Size of Rice Strongly Affects Water Use Efficiency and Responses to Drought Stresses. Frontiers in Plant Science, 2022, 13, . | 3.6 | 17 |
| 2 | Small EPIDERMAL PATTERNING FACTOR-LIKE2 peptides regulate awn development in rice. Plant Physiology, 2022, 190, 516-531. | 4.8 | 10 |
| 3 | Dynamic thermal imaging confirms local but not fast systemic <scp>ABA</scp> responses. Plant, Cell and Environment, 2021, 44, 885-899. | 5.7 | 6 |
| 4 | Stomatal responses to carbon dioxide and light require abscisic acid catabolism in <i>Arabidopsis</i>. Interface Focus, 2021, 11, 20200036. | 3.0 | 12 |
| 5 | Leaf temperature responses to ABA and dead bacteria in wheat and Arabidopsis. Plant Signaling and Behavior, 2021, 16, 1899471. | 2.4 | 1 |
| 6 | Rice Stomatal Mega-Papillae Restrict Water Loss and Pathogen Entry. Frontiers in Plant Science, 2021, 12, 677839. | 3.6 | 11 |
| 7 | The influence of stomatal morphology and distribution on photosynthetic gas exchange. Plant Journal, 2020, 101, 768-779. | 5.7 | 137 |
| 8 | <i>Cr</i><scp>RLK</scp>1L receptorâ€like kinases <scp>HERK</scp>1 and <scp>ANJEA</scp> are female determinants of pollen tube reception. EMBO Reports, 2020, 21, e48466. | 4.5 | 62 |
| 9 | How the stomate got his pore: very long chain fatty acids and a structural cell wall protein sculpt the guard cell outer cuticular ledge. New Phytologist, 2020, 228, 1698-1700. | 7.3 | 8 |
| 10 | Stomata and Sporophytes of the Model Moss Physcomitrium patens. Frontiers in Plant Science, 2020, 11, 643. | 3.6 | 13 |
| 11 | Rice with reduced stomatal density conserves water and has improved drought tolerance under future climate conditions. New Phytologist, 2019, 221, 371-384. | 7.3 | 330 |
| 12 | Distinct branches of the Nâ€end rule pathway modulate the plant immune response. New Phytologist, 2019, 221, 988-1000. | 7.3 | 59 |
| 13 | Mesophyll porosity is modulated by the presence of functional stomata. Nature Communications, 2019, 10, 2825. | 12.8 | 63 |
| 14 | Reduced stomatal density in bread wheat leads to increased water-use efficiency. Journal of Experimental Botany, 2019, 70, 4737-4748. | 4.8 | 144 |
| 15 | Rice plants overexpressing OsEPF1 show reduced stomatal density and increased root cortical aerenchyma formation. Scientific Reports, 2019, 9, 5584. | 3.3 | 63 |
| 16 | Bacterial infection systemically suppresses stomatal density. Plant, Cell and Environment, 2019, 42, 2411-2421. | 5.7 | 37 |
| 17 | Impact of Stomatal Density and Morphology on Water-Use Efficiency in a Changing World. Frontiers in Plant Science, 2019, 10, 225. | 3.6 | 353 |
| 18 | Pores for Thought: Can Genetic Manipulation of Stomatal Density Protect Future Rice Yields?. Frontiers in Plant Science, 2019, 10, 1783. | 3.6 | 49 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 19 | Molecular control of stomatal development. Biochemical Journal, 2018, 475, 441-454. | 3.7 | 106 |
| 20 | The <scp>BIG</scp> protein distinguishes the process of <scp>CO</scp><sub>2</sub>â€‐induced stomatal closure from the inhibition of stomatal opening by <scp>CO</scp><sub>2</sub>. New Phytologist, 2018, 218, 232-241. | 7.3 | 43 |
| 21 | Stomatal development: focusing on the grasses. Current Opinion in Plant Biology, 2018, 41, 1-7. | 7.1 | 89 |
| 22 | Models and Mechanisms of Stomatal Mechanics. Trends in Plant Science, 2018, 23, 822-832. | 8.8 | 53 |
| 23 | Formation of the Stomatal Outer Cuticular Ledge Requires a Guard Cell Wall Proline-Rich Protein. Plant Physiology, 2017, 174, 689-699. | 4.8 | 49 |
| 24 | Origins and Evolution of Stomatal Development. Plant Physiology, 2017, 174, 624-638. | 4.8 | 154 |
| 25 | Reducing Stomatal Density in Barley Improves Drought Tolerance without Impacting on Yield. Plant Physiology, 2017, 174, 776-787. | 4.8 | 267 |
| 26 | CRISPR-Cas9 and CRISPR-Cpf1 mediated targeting of a stomatal developmental gene EPFL9 in rice. Plant Cell Reports, 2017, 36, 745-757. | 5.6 | 170 |
| 27 | Rice <scp>SUMO</scp> protease <i>Overly Tolerant to Salt 1</i> targets the transcription factor, Osb<scp>ZIP</scp>23 to promote drought tolerance in rice. Plant Journal, 2017, 92, 1031-1043. | 5.7 | 59 |
| 28 | The Cys-Arg/N-End Rule Pathway Is a General Sensor of Abiotic Stress in Flowering Plants. Current Biology, 2017, 27, 3183-3190.e4. | 3.9 | 118 |
| 29 | Stomatal Opening Involves Polar, Not Radial, Stiffening Of Guard Cells. Current Biology, 2017, 27, 2974-2983.e2. | 3.9 | 89 |
| 30 | Conserved Roles of CrRLK1L Receptor-Like Kinases in Cell Expansion and Reproduction from Algae to Angiosperms. Frontiers in Plant Science, 2016, 07, 1269. | 3.6 | 54 |
| 31 | Stomatal Function Requires Pectin De-methyl-esterification of the Guard Cell Wall. Current Biology, 2016, 26, 2899-2906. | 3.9 | 131 |
| 32 | Origin and function of stomata in the moss Physcomitrella patens. Nature Plants, 2016, 2, 16179. | 9.3 | 138 |
| 33 | An ancestral stomatal patterning module revealed in the non-vascular land plant <i>Physcomitrella patens</i>. Development (Cambridge), 2016, 143, 3306-14. | 2.5 | 56 |
| 34 | Balancing Water Uptake and Loss through the Coordinated Regulation of Stomatal and Root Development. PLoS ONE, 2016, 11, e0156930. | 2.5 | 30 |
| 35 | Manipulating stomatal density enhances drought tolerance without deleterious effect on nutrient uptake. New Phytologist, 2015, 208, 336-341. | 7.3 | 151 |
| 36 | Stomatal Closure: The Old Guard Takes Up the SLAC. Current Biology, 2015, 25, R271-R273. | 3.9 | 12 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 37 | Increasing waterâ€use efficiency directly through genetic manipulation of stomatal density. New Phytologist, 2015, 207, 188-195. | 7.3 | 270 |
| 38 | Elevated CO 2 -Induced Responses in Stomata Require ABA and ABA Signaling. Current Biology, 2015, 25, 2709-2716. | 3.9 | 201 |
| 39 | Putting the brakes on: abscisic acid as a central environmental regulator of stomatal development. New Phytologist, 2014, 202, 376-391. | 7.3 | 117 |
| 40 | Light-Induced Stomatal Opening Is Affected by the Guard Cell Protein Kinase APK1b. PLoS ONE, 2014, 9, e97161. | 2.5 | 27 |
| 41 | New Phytologist next generation scientists. New Phytologist, 2014, 204, 736-737. | 7.3 | 2 |
| 42 | Nitric Oxide Sensing in Plants Is Mediated by Proteolytic Control of Group VII ERF Transcription Factors. Molecular Cell, 2014, 53, 369-379. | 9.7 | 312 |
| 43 | Corrigendum to â€œEarly evolutionary acquisition of stomatal control and development gene signalling networksâ€•[Curr. Opin. Plant Biol. 16 (5) (2013) 638â€"646]. Current Opinion in Plant Biology, 2014, 18, 117-118. | 7.1 | 0 |
| 44 | Early evolutionary acquisition of stomatal control and development gene signalling networks. Current Opinion in Plant Biology, 2013, 16, 638-646. | 7.1 | 54 |
| 45 | Genome-wide transcriptomic analysis of the sporophyte of the moss Physcomitrella patens. Journal of Experimental Botany, 2013, 64, 3567-3581. | 4.8 | 48 |
| 46 | Genetic manipulation of stomatal density influences stomatal size, plant growth and tolerance to restricted water supply across a growth carbon dioxide gradient. Philosophical Transactions of the Royal Society B: Biological Sciences, 2012, 367, 547-555. | 4.0 | 263 |
| 47 | Peptides Modulating Development of Specialized Cells. Signaling and Communication in Plants, 2012, , 93-106. | 0.7 | 1 |
| 48 | Expression and manipulation of <i>PHOSPHOENOLPYRUVATE CARBOXYKINASE 1</i> identifies a role for malate metabolism in stomatal closure. Plant Journal, 2012, 69, 679-688. | 5.7 | 81 |
| 49 | Regulatory Mechanism Controlling Stomatal Behavior Conserved across 400 Million Years of Land Plant Evolution. Current Biology, 2011, 21, 1025-1029. | 3.9 | 180 |
| 50 | Land Plants Acquired Active Stomatal Control Early in Their Evolutionary History. Current Biology, 2011, 21, 1030-1035. | 3.9 | 162 |
| 51 | The signalling peptide EPFL9 is a positive regulator of stomatal development. New Phytologist, 2010, 186, 609-614. | 7.3 | 137 |
| 52 | BASL and EPF2 act independently to regulate asymmetric divisions during stomatal development. Plant Signaling and Behavior, 2010, 5, 278-280. | 2.4 | 4 |
| 53 | phytochrome B and PIF4 Regulate Stomatal Development in Response to Light Quantity. Current Biology, 2009, 19, 229-234. | 3.9 | 164 |
| 54 | The Signaling Peptide EPF2 Controls Asymmetric Cell Divisions during Stomatal Development. Current Biology, 2009, 19, 864-869. | 3.9 | 346 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 55 | The relationship between pyridine nucleotides and seed dormancy. New Phytologist, 2009, 181, 62-70. | 7.3 | 35 |
| 56 | Influence of environmental factors on stomatal development. New Phytologist, 2008, 178, 9-23. | 7.3 | 300 |
| 57 | Involvement of sphingosine kinase in plant cell signalling. Plant Journal, 2008, 56, 64-72. | 5.7 | 109 |
| 58 | Control of stomatal development. Comparative Biochemistry and Physiology Part A, Molecular &amp; Integrative Physiology, 2008, 150, S144. | 1.8 | 0 |
| 59 | Intercellular Peptide Signals Regulate Plant Meristematic Cell Fate Decisions. Science Signaling, 2008, 1, pe53. | 3.6 | 11 |
| 60 | Phospho enol pyruvate Carboxykinase in Arabidopsis: Changes in Gene Expression, Protein and Activity during Vegetative and Reproductive Development. Plant and Cell Physiology, 2007, 48, 441-450. | 3.1 | 51 |
| 61 | Coordinate Regulation of Phosphoenolpyruvate Carboxylase and Phosphoenolpyruvate Carboxykinase by Light and CO2 during C4 Photosynthesis. Plant Physiology, 2007, 144, 479-486. | 4.8 | 49 |
| 62 | Nicotinamidase activity is important for germination. Plant Journal, 2007, 51, 341-351. | 5.7 | 106 |
| 63 | Plant Development: Three Steps for Stomata. Current Biology, 2007, 17, R213-R215. | 3.9 | 24 |
| 64 | Differential adaptation of two varieties of common bean to abiotic stress. Journal of Experimental Botany, 2006, 57, 699-709. | 4.8 | 67 |
| 65 | Systemic signalling of environmental cues in Arabidopsis leaves. Journal of Experimental Botany, 2006, 57, 329-341. | 4.8 | 150 |
| 66 | Plant immunophilins: functional versatility beyond protein maturation. New Phytologist, 2005, 166, 753-769. | 7.3 | 99 |
| 67 | Guard Cells: Transcription Factors Regulate Stomatal Movements. Current Biology, 2005, 15, R593-R595. | 3.9 | 27 |
| 68 | The Arabidopsis Cyclophilin Gene Family. Plant Physiology, 2004, 134, 1268-1282. | 4.8 | 212 |
| 69 | Arabidopsis AtCYP20-2 Is a Light-Regulated Cyclophilin-Type Peptidyl-Prolyl cis-trans Isomerase Associated with the Photosynthetic Membranes. Plant Physiology, 2004, 134, 1244-1247. | 4.8 | 37 |
| 70 | Geneâ€specific expression and calcium activation of Arabidopsis thaliana phospholipase C isoforms. New Phytologist, 2004, 162, 643-654. | 7.3 | 92 |
| 71 | Plant Development: YODA the Stomatal Switch. Current Biology, 2004, 14, R488-R490. | 3.9 | 31 |
| 72 | Phospholipase C is required for the control of stomatal aperture by ABA. Plant Journal, 2003, 34, 47-55. | 5.7 | 130 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 73 | Signals from the cuticle affect epidermal cell differentiation. New Phytologist, 2003, 157, 9-23. | 7.3 | 99 |
| 74 | The effects of manipulating phospholipase C on guard cell ABA-signalling. Journal of Experimental Botany, 2003, 55, 199-204. | 4.8 | 47 |
| 75 | A role for the cuticular waxes in the environmental control of stomatal development. New Phytologist, 2002, 153, 433-439. | 7.3 | 54 |
| 76 | A role for nuclear localised proteasomes in mediating auxin action. Plant Journal, 2002, 30, 691-698. | 5.7 | 3 |
| 77 | Calciumâ€based signalling systems in guard cells. New Phytologist, 2001, 151, 109-120. | 7.3 | 45 |
| 78 | Ripening-related occurrence of phosphoenolpyruvate carboxykinase in tomato fruit. Plant Molecular Biology, 2001, 47, 499-506. | 3.9 | 54 |
| 79 | ABA signalling: A messenger's FIERY fate. Current Biology, 2001, 11, R968-R970. | 3.9 | 8 |
| 80 | Ca2+ signalling in stomatal guard cells. Biochemical Society Transactions, 2000, 28, 476-481. | 3.4 | 58 |
| 81 | The HIC signalling pathway links CO2 perception to stomatal development. Nature, 2000, 408, 713-716. | 27.8 | 356 |
| 82 | Ca2+signalling in stomatal guard cells. Biochemical Society Transactions, 2000, 28, 476-81. | 3.4 | 19 |
| 83 | Abscisic acid induces oscillations in guard-cell cytosolic free calcium that involve phosphoinositide-specific phospholipase C. Proceedings of the National Academy of Sciences of the United States of America, 1999, 96, 1779-1784. | 7.1 | 369 |
| 84 | Expression of a proteasome alpha-type subunit gene during tobacco development and senescence. , 1999, 39, 325-333. |  | 34 |
| 85 | The control of specificity in guard cell signal transduction. Philosophical Transactions of the Royal Society B: Biological Sciences, 1998, 353, 1489-1494. | 4.0 | 28 |
| 86 | Molecular and Enzymatic Characterization of Three Phosphoinositide-Specific Phospholipase C Isoforms from Potato1. Plant Physiology, 1998, 116, 239-250. | 4.8 | 123 |
| 87 | 113 Conservation of proteasome structure and activity between plants and other eukaryotes. Biochemical Society Transactions, 1998, 26, S395-S395. | 3.4 | 2 |
| 88 | 115 Phosphoinositide signal transduction in guard cells. Biochemical Society Transactions, 1998, 26, S397-S397. | 3.4 | 0 |
| 89 | Pollination-enhanced expression of a receptor-like protein kinase related gene in tobacco styles. , 1997, 33, 653-665. |  | 21 |
| 90 | A role for glutamate decarboxylase during tomato ripening: the characterisation of a cDNA encoding a putative glutamate decarboxylase with a calmodulin-binding site. Plant Molecular Biology, 1995, 27, 1143-1151. | 3.9 | 50 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 91 | The manipulation and modification of tomato fruit ripening by expression of antisense RNA in transgenic plants. Euphytica, 1995, 85, 193-202. | 1.2 | 13 |
| 92 | Ethylene Genes and Fruit Ripening. , 1995, , 372-394. |  | 7 |
| 93 | The manipulation and modification of tomato fruit ripening by expression of antisense RNA in transgenic plants. Developments in Plant Breeding, 1995, , 193-202. | 0.2 | 4 |
| 94 | The use of transgenic and naturally occurring mutants to understand and manipulate tomato fruit ripening. Plant, Cell and Environment, 1994, 17, 557-571. | 5.7 | 117 |
| 95 | The Molecular Biology of Fruit Ripening. , 1994, , 287-299. |  | 1 |
| 96 | A histidine decarboxylase-like mRNA is involved in tomato fruit ripening. Plant Molecular Biology, 1993, 23, 627-631. | 3.9 | 29 |
| 97 | cDNA cloning and characterisation of novel ripening-related mRNAs with altered patterns of accumulation in the ripening inhibitor (rin) tomato ripening mutant. Plant Molecular Biology, 1993, 23, 193-207. | 3.9 | 74 |
| 98 | Sequence of a Cloned Tomato Ubiquitin Conjugating Enzyme. Plant Physiology, 1993, 103, 1471-1472. | 4.8 | 8 |
| 99 | Altered Gene Expression, Leaf Senescence, and Fruit Ripening by Inhibiting Ethylene Synthesis with EFE-Antisense Genes. Current Plant Science and Biotechnology in Agriculture, 1993, , 82-89. | 0.0 | 2 |
| 100 | Selfâ€incompatibility: insights through microscopy. Journal of Microscopy, 1992, 166, 137-148. | 1.8 | 9 |
| 101 | Molecular biology of fruit ripening and its manipulation with antisense genes. Plant Molecular Biology, 1992, 19, 69-87. | 3.9 | 217 |
| 102 | Molecular biology of fruit ripening and its manipulation with antisense genes. , 1992, , 69-87. |  | 2 |
| 103 | Self-Incompatibility as a Model for Cell-Cell Recognition in Flowering Plants. , 1991, , 527-536. |  | 1 |
| 104 | Action of the Style Product of the Self-Incompatibility Gene of Nicotiana alata (S-RNase) on in Vitro-Grown Pollen Tubes.. Plant Cell, 1991, 3, 271-283. | 6.6 | 129 |
| 105 | Action of the Style Product of the Self-Incompatibility Gene of Nicotiana alata (S-RNase) on in Vitro-Grown Pollen Tubes. Plant Cell, 1991, 3, 271. | 6.6 | 36 |
| 106 | Self-incompatibility in Nicotiana alata involves degradation of pollen rRNA. Nature, 1990, 347, 757-760. | 27.8 | 362 |
| 107 | Inheritance and effect on ripening of antisense polygalacturonase genes in transgenic tomatoes. Plant Molecular Biology, 1990, 14, 369-379. | 3.9 | 339 |
| 108 | Self-incompatibility: a self-recognition system in plants. Science, 1990, 250, 937-941. | 12.6 | 195 |

| # | ARTICLE | IF | CITATIONS |
|---|---|---|---|
| 109 | Control and manipulation of gene expression during tomato fruit ripening. Plant Molecular Biology, 1989, 13, 303-311. | 3.9 | 43 |
| 110 | Gene expression during tomato ripening. Philosophical Transactions of the Royal Society of London Series B, Biological Sciences, 1986, 314, 399-410. | 2.3 | 63 |