Claire S Grierson

List of Publications by Year
in descending order

41 papers	3,523 citations	236925 25 h-index	289244 40 g-index
50 all docs	50 docs citations	50 times ranked	4367 citing authors

#	Article	IF	Citations
1	OXI1 kinase is necessary for oxidative burst-mediated signalling in Arabidopsis. Nature, 2004, 427, 858-861.	27.8	556
2	The Arabidopsis Rop2 GTPase Is a Positive Regulator of Both Root Hair Initiation and Tip Growth. Plant Cell, 2002, 14, 763-776.	6.6	393
3	Auxin transport through non-hair cells sustains root-hair development. Nature Cell Biology, 2009, 11, 78-84.	10.3	212
4	Positioning of Nuclei in Arabidopsis Root Hairs. Plant Cell, 2002, 14, 2941-2955.	6.6	208
5	Genetic Interactions during Root Hair Morphogenesis in Arabidopsis. Plant Cell, 2000, 12, 1961-1974.	6.6	207
6	Phytochrome coordinates Arabidopsis shoot and root development. Plant Journal, 2007, 50, 429-438.	5.7	180
7	A comparative analysis of synthetic genetic oscillators. Journal of the Royal Society Interface, 2010, 7, 1503-1524.	3.4	180
8	Separate cis sequences and trans factors direct metabolic and developmental regulation of a potato tuber storage protein gene. Plant Journal, 1994, 5, 815-826.	5.7	176
9	phytochrome B and PIF4 Regulate Stomatal Development in Response to Light Quantity. Current Biology, 2009, 19, 229-234.	3.9	164
10	A proteomic approach identifies many novel palmitoylated proteins in <scp>A</scp>rabidopsis. New Phytologist, 2013, 197, 805-814.	7.3	135
11	The TIP GROWTH DEFECTIVE1 ÂS-Acyl Transferase Regulates Plant Cell Growth in Arabidopsis Â. Plant Cell, 2005, 17, 2554-2563.	6.6	133
12	The Arabidopsis COW1 gene encodes a phosphatidylinositol transfer protein essential for root hair tip growth. Plant Journal, 2004, 40, 686-698.	5.7	93
13	Multiple roles for protein palmitoylation in plants. Trends in Plant Science, 2008, 13, 295-302.	8.8	90
14	Pollen-tube tip growth requires a balance of lateral propagation and global inhibition of Rho-family GTPase activity. Journal of Cell Science, 2010, 123, 340-350.	2.0	80
15	TIP1 is required for both tip growth and non-tip growth in Arabidopsis. New Phytologist, 1998, 138, 49-58.	7.3	78
16	Arabidopsis genes with roles in root hair development. Journal of Plant Nutrition and Soil Science, 2001, 164, 131-140.	1.9	55
17	<i>In-Silico</i> Analysis and Implementation of a Multicellular Feedback Control Strategy in a Synthetic Bacterial Consortium. ACS Synthetic Biology, 2017, 6, 507-517.	3.8	54
18	An Orthogonal Multi-input Integration System to Control Gene Expression in <i>Escherichia coli</i>. ACS Synthetic Biology, 2017, 6, 1816-1824.	3.8	52

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19	BSim 2.0: An Advanced Agent-Based Cell Simulator. ACS Synthetic Biology, 2017, 6, 1969-1972.	3.8	43
20	Organization of feed-forward loop motifs reveals architectural principles in natural and engineered networks. Science Advances, 2018, 4, eaap9751.	10.3	40
21	<i>In Vivo</i> Feedback Control of an Antithetic Molecular-Titration Motif in <i>Escherichia coli</i> Using Microfluidics. ACS Synthetic Biology, 2020, 9, 2617-2624.	3.8	37
22	Designing minimal genomes using whole-cell models. Nature Communications, 2020, 11, 836.	12.8	37
23	Evolving dynamical networks: A formalism for describing complex systems. Complexity, 2012, 17, 18-25.	1.6	34
24	Towards an engineering theory of evolution. Nature Communications, 2021, 12, 3326.	12.8	33
25	The Arabidopsis 14-3-3 protein, GF14?, binds to the Schizosaccharomyces pombe Cdc25 phosphatase and rescues checkpoint defects in the rad24? mutant. Planta, 2003, 218, 50-57.	3.2	30
26	DNA-binding properties of cloned TATA-binding protein from potato tubers. Plant Molecular Biology, 1992, 19, 455-464.	3.9	27
27	A Multi-Functional Synthetic Gene Network: A Frequency Multiplier, Oscillator and Switch. PLoS ONE, 2011, 6, e16140.	2.5	26
28	Harnessing the central dogma for stringent multi-level control of gene expression. Nature Communications, 2021, 12, 1738.	12.8	26
29	Computer-Aided Whole-Cell Design: Taking a Holistic Approach by Integrating Synthetic With Systems Biology. Frontiers in Bioengineering and Biotechnology, 2020, 8, 942.	4.1	25
30	Cheetah: A Computational Toolkit for Cybergenetic Control. ACS Synthetic Biology, 2021, 10, 979-989.	3.8	23
31	The Ankyrin Repeats and DHHC S-acyl Transferase Domain of AKR1 Act Independently to Regulate Switching from Vegetative to Mating States in Yeast. PLoS ONE, 2011, 6, e28799.	2.5	21
32	A simple method for obtaining cell-specific cDNA from small numbers of growing root-hair cells in Arabidopsis thaliana. Journal of Experimental Botany, 2003, 54, 1373-1378.	4.8	13
33	Genome-driven cell engineering review: <i>in vivo</i> and <i>in silico</i> metabolic and genome engineering. Essays in Biochemistry, 2019, 63, 267-284.	4.7	13
34	ChipSeg: An Automatic Tool to Segment Bacterial and Mammalian Cells Cultured in Microfluidic Devices. ACS Omega, 2021, 6, 2473-2476.	3.5	13
35	Biolistic transformation of Arabidopsis root hairs: a novel technique to facilitate map-based cloning. Plant Journal, 2001, 27, 367-371.	5.7	6
36	Developing a graduate training program in Synthetic Biology: SynBioCDT. Synthetic Biology, 2019, 4, ysz006.	2.2	5

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37	Testing Theoretical Minimal Genomes Using Whole-Cell Models. ACS Synthetic Biology, 2021, 10, 1598-1604.	3.8	5
38	Understanding Metabolic Flux Behaviour in Whole-Cell Model Output. Frontiers in Molecular Biosciences, 2021, 8, 732079.	3.5	5
39	A Centrifuge-Based Method for Identifying Novel Genetic Traits That Affect Root-Substrate Adhesion in Arabidopsis thaliana. Frontiers in Plant Science, 2021, 12, 602486.	3.6	3
40	Furthering genome design using models and algorithms. Current Opinion in Systems Biology, 2020, 24, 120-126.	2.6	2
41	The dynamic plant cell. Current Opinion in Plant Biology, 2010, 13, 621-622.	7.1	0