Edward Gilding

List of Publications by Year
in descending order

43 papers	1,965 citations	304743 22 h-index	254184 43 g-index
46 all docs	46 docs citations	46 times ranked	2713 citing authors

#	Article	IF	Citations
1	Whole-genome sequencing reveals untapped genetic potential in Africaâ€™s indigenous cereal crop sorghum. Nature Communications, 2013, 4, 2320.	12.8	405
2	Efficient backbone cyclization of linear peptides by a recombinant asparaginyl endopeptidase. Nature Communications, 2015, 6, 10199.	12.8	186
3	Transcriptome Analysis of Arabidopsis Wild-Type and gl3â€“sst sim Trichomes Identifies Four Additional Genes Required for Trichome Development. Molecular Plant, 2009, 2, 803-822.	8.3	146
4	Molecular basis for the production of cyclic peptides by plant asparaginyl endopeptidases. Nature Communications, 2018, 9, 2411.	12.8	99
5	Butterfly Pea (Clitoria ternatea), a Cyclotide-Bearing Plant With Applications in Agriculture and Medicine. Frontiers in Plant Science, 2019, 10, 645.	3.6	88
6	A new method for isolating large quantities of Arabidopsis trichomes for transcriptome, cell wall and other types of analyses. Plant Journal, 2008, 56, 483-492.	5.7	72
7	Overexpression of the maize Teosinte Branched1 gene in wheat suppresses tiller development. Plant Cell Reports, 2008, 27, 1217-1225.	5.6	61
8	A bifunctional asparaginyl endopeptidase efficiently catalyzes both cleavage and cyclization of cyclic trypsin inhibitors. Nature Communications, 2020, 11, 1575.	12.8	61
9	Gene coevolution and regulation lock cyclic plant defence peptides to their targets. New Phytologist, 2016, 210, 717-730.	7.3	58
10	Analysis of purified glabra3-shapeshifter trichomes reveals a role for NOECK in regulating early trichome morphogenic events. Plant Journal, 2010, 64, 304-317.	5.7	56
11	Co-expression of a cyclizing asparaginyl endopeptidase enables efficient production of cyclic peptides in planta. Journal of Experimental Botany, 2018, 69, 633-641.	4.8	53
12	The plasticity of NBS resistance genes in sorghum is driven by multiple evolutionary processes. BMC Plant Biology, 2014, 14, 253.	3.6	49
13	A suite of kinetically superior AEP ligases can cyclise an intrinsically disordered protein. Scientific Reports, 2019, 9, 10820.	3.3	47
14	Proposed Systematic Nomenclature for Orbitides. Journal of Natural Products, 2015, 78, 645-652.	3.0	44
15	Papain-like cysteine proteases prepare plant cyclic peptide precursors for cyclization. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 7831-7836.	7.1	44
16	Allelic variation at a single gene increases food value in a drought-tolerant staple cereal. Nature Communications, 2013, 4, 1483.	12.8	41
17	Grain Sorghum Proteomics: Integrated Approach toward Characterization of Endosperm Storage Proteins in Kafirin Allelic Variants. Journal of Agricultural and Food Chemistry, 2014, 62, 9819-9831.	5.2	40
18	Domestication and the storage starch biosynthesis pathway: signatures of selection from a whole sorghum genome sequencing strategy. Plant Biotechnology Journal, 2016, 14, 2240-2253.	8.3	38

#	Article	IF	Citations
19	Total transcriptome, proteome, and allergome of Johnson grass pollen, which is important for allergic rhinitis in subtropical regions. Journal of Allergy and Clinical Immunology, 2015, 135, 133-142.	2.9	36
20	A robust tissue culture system for sorghum [Sorghum bicolor (L.) Moench]. South African Journal of Botany, 2015, 98, 157-160.	2.5	32
21	Assembly and annotation of a non-model gastropod (Nerita melanotragus) transcriptome: a comparison of De novo assemblers. BMC Research Notes, 2014, 7, 488.	1.4	27
22	Impacts of Kafirin Allelic Diversity, Starch Content, and Protein Digestibility on Ethanol Conversion Efficiency in Grain Sorghum. Cereal Chemistry, 2014, 91, 218-227.	2.2	24
23	Rapid and Scalable Plant-Based Production of a Potent Plasmin Inhibitor Peptide. Frontiers in Plant Science, 2019, 10, 602.	3.6	24
24	Tracking seasonal changes in diversity of pollen allergen exposure: Targeted metabarcoding of a subtropical aerobiome. Science of the Total Environment, 2020, 747, 141189.	8.0	23
25	Discovery and mechanistic studies of cytotoxic cyclotides from the medicinal herb Hybanthus enneaspermus. Journal of Biological Chemistry, 2020, 295, 10911-10925.	3.4	22
26	Increasing protein content and digestibility in sorghum grain with a synthetic biology approach. Journal of Cereal Science, 2019, 85, 27-34.	3.7	19
27	Make it or break it: Plant AEPs on stage in biotechnology. Biotechnology Advances, 2020, 45, 107651.	11.7	19
28	Lack of Low Frequency Variants Masks Patterns of Non-Neutral Evolution following Domestication. PLoS ONE, 2011, 6, e23041.	2.5	17
29	Neurotoxic peptides from the venom of the giant Australian stinging tree. Science Advances, 2020, 6, .	10.3	16
30	Insecticidal diversity of butterfly pea (Clitoria ternatea) accessions. Industrial Crops and Products, 2020, 147, 112214.	5.2	15
31	Bioactive Cyclization Optimizes the Affinity of a Proprotein Convertase Subtilisin/Kexin Type 9 (PCSK9) Peptide Inhibitor. Journal of Medicinal Chemistry, 2021, 64, 2523-2533.	6.4	14
32	Genetic interaction between <i>glabra3â€shapeshifter</i> and <i>siamese</i> in <i>Arabidopsis thaliana</i> converts trichome precursors into cells with meristematic activity. Plant Journal, 2007, 52, 352-361.	5.7	13
33	The Rapid Regenerative Response of a Model Sea Anemone Species Exaiptasia pallida Is Characterised by Tissue Plasticity and Highly Coordinated Cell Communication. Marine Biotechnology, 2020, 22, 285-307.	2.4	12
34	Additive effects of three auxins and copper on sorghum in vitro root induction. In Vitro Cellular and Developmental Biology - Plant, 2013, 49, 191-197.	2.1	9
35	The Role of Pullulanase in Starch Biosynthesis, Structure, and Thermal Properties by Studying Sorghum with Increased Pullulanase Activity. Starch/Staerke, 2019, 71, 1900072.	2.1	9
36	Circular Permutation of the Native Enzyme-Mediated Cyclization Position in Cyclotides. ACS Chemical Biology, 2020, 15, 962-969.	3.4	7

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37	In Planta Discovery and Chemical Synthesis of Bracelet Cystine Knot Peptides from <i>Rinorea bengalensis</i>. Journal of Natural Products, 2021, 84, 395-407.	3.0	7
38	The functionality of Î±-kafirin promoter and Î±-kafirin signal peptide. Plant Cell, Tissue and Organ Culture, 2017, 128, 133-143.	2.3	6
39	Production of a structurally validated cyclotide in rice suspension cells is enabled by a supporting biosynthetic enzyme. Planta, 2020, 252, 97.	3.2	6
40	Rational domestication of a plant-based recombinant expression system expands its biosynthetic range. Journal of Experimental Botany, 2022, 73, 6103-6114.	4.8	5
41	Neurotoxic and cytotoxic peptides underlie the painful stings of the tree nettle Urtica ferox. Journal of Biological Chemistry, 2022, 298, 102218.	3.4	5
42	Cyclotides in a Biotechnological Context. Advances in Botanical Research, 2015, , 305-333.	1.1	4
43	Comparative analysis of cyclotide-producing plant cell suspensions presents opportunities for cyclotide plant molecular farming. Phytochemistry, 2022, 195, 113053.	2.9	4