Richard K Hughes

List of Publications by Year
in descending order

42 papers	2,110 citations	186265 28 h-index	276875 41 g-index
46 all docs	46 docs citations	46 times ranked	3211 citing authors

#	Article	IF	Citations
1	An effector of the Irish potato famine pathogen antagonizes a host autophagy cargo receptor. ELife, 2016, 5, .	6.0	189
2	Structures of Phytophthora RXLR Effector Proteins. Journal of Biological Chemistry, 2011, 286, 35834-35842.	3.4	178
3	A Serine Carboxypeptidase-Like Acyltransferase Is Required for Synthesis of Antimicrobial Compounds and Disease Resistance in Oats Â. Plant Cell, 2009, 21, 2473-2484.	6.6	149
4	Biochemical analysis of a multifunctional cytochrome P450 (CYP51) enzyme required for synthesis of antimicrobial triterpenes in plants. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E3360-7.	7.1	137
5	Interactions defining the specificity between fungal xylanases and the xylanase-inhibiting protein XIP-I from wheat. Biochemical Journal, 2002, 365, 773-781.	3.7	105
6	Co-oxidation of Î2-Carotene Catalyzed by Soybean and Recombinant Pea Lipoxygenases. Journal of Agricultural and Food Chemistry, 1999, 47, 4899-4906.	5.2	91
7	A molecular roadmap to the plant immune system. Journal of Biological Chemistry, 2020, 295, 14916-14935.	3.4	86
8	Distinct regions of the <i>Pseudomonas syringae</i> coiled-coil effector AvrRps4 are required for activation of immunity. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 16371-16376.	7.1	81
9	Plant Cytochrome CYP74 Family: Biochemical Features, Endocellular Localisation, Activation Mechanism in Plant Defence and Improvements for Industrial Applications. ChemBioChem, 2009, 10, 1122-1133.	2.6	76
10	Emergence of a subfamily of xylanase inhibitors within glycoside hydrolase family 18. FEBS Journal, 2005, 272, 1745-1755.	4.7	74
11	Structural Basis of Host Autophagy-related Protein 8 (ATG8) Binding by the Irish Potato Famine Pathogen Effector Protein PexRD54. Journal of Biological Chemistry, 2016, 291, 20270-20282.	3.4	74
12	Structureâ€“function analysis of the <i>Fusarium oxysporum</i> Avr2 effector allows uncoupling of its immuneâ€suppressing activity from recognition. New Phytologist, 2017, 216, 897-914.	7.3	72
13	Molecular cloning and characterization of an almond 9-hydroperoxide lyase, a new CYP74 targeted to lipid bodies*. Journal of Experimental Botany, 2005, 56, 2321-2333.	4.8	54
14	A conserved amino acid residue critical for product and substrate specificity in plant triterpene synthases. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E4407-14.	7.1	53
15	Characterization of authentic recombinant pea-seed lipoxygenases with distinct properties and reaction mechanisms. Biochemical Journal, 1998, 333, 33-43.	3.7	49
16	N-terminal Î2-strand underpins biochemical specialization of an ATG8 isoform. PLoS Biology, 2019, 17, e3000373.	5.6	47
17	Kinetics of thermal inactivation of pea seed lipoxygenases and the effect of additives on their thermostability. Food Chemistry, 1999, 65, 323-329.	8.2	46
18	Structural and biochemical studies of an NB-ARC domain from a plant NLR immune receptor. PLoS ONE, 2019, 14, e0221226.	2.5	43

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19	Functional identification of the cDNA coding for a wheat endo-1,4-Î²-D-xylanase inhibitor1. FEBS Letters, 2002, 519, 66-70.	2.8	42
20	New frontiers in food enzymology: recombinant lipoxygenases. Trends in Food Science and Technology, 1999, 10, 297-302.	15.1	40
21	Probing a novel potato lipoxygenase with dual positional specificity reveals primary determinants of substrate binding and requirements for a surface hydrophobic loop and has implications for the role of lipoxygenases in tubers. Biochemical Journal, 2001, 353, 345-355.	3.7	39
22	Glycosyltransferases from Oat (Avena) Implicated in the Acylation of Avenacins. Journal of Biological Chemistry, 2013, 288, 3696-3704.	3.4	35
23	Probing a novel potato lipoxygenase with dual positional specificity reveals primary determinants of substrate binding and requirements for a surface hydrophobic loop and has implications for the role of lipoxygenases in tubers. Biochemical Journal, 2001, 353, 345.	3.7	34
24	<i>Phytophthora infestans</i> effector <scp>SFI</scp>3 targets potato <scp>UBK</scp> to suppress early immune transcriptional responses. New Phytologist, 2019, 222, 438-454.	7.3	33
25	Mutagenesis and modelling of linoleate-binding to pea seed lipoxygenase. FEBS Journal, 2001, 268, 1030-1040.	0.2	30
26	Recombinant Lipoxygenases and Oxylipin Metabolism in Relation to Food Quality. Food Biotechnology, 2004, 18, 135-170.	1.5	30
27	Subcellular localisation of Medicago truncatula9/13-hydroperoxide lyase reveals a new localisation pattern and activation mechanism for CYP74C enzymes. BMC Plant Biology, 2007, 7, 58.	3.6	30
28	Allene oxide synthase fromArabidopsis thaliana(CYP74A1) exhibits dual specificity that is regulated by monomer-micelle association. FEBS Letters, 2006, 580, 4188-4194.	2.8	29
29	Xanthine dehydrogenase from Drosophila melanogaster: purification and properties of the wild-type enzyme and of a variant lacking iron-sulfur centers. Biochemistry, 1992, 31, 3073-3083.	2.5	28
30	The effect of ethylene on phenylalanine ammonia lyase (PAL) induction by a fungal elicitor in Phaseolus vulgaris. Physiological and Molecular Plant Pathology, 1989, 34, 361-378.	2.5	23
31	Cloning and characterisation of an almond 9-lipoxygenase expressed early during seed development. Plant Science, 2005, 168, 699-706.	3.6	21
32	Characterization of Medicago truncatula (barrel medic) hydroperoxide lyase (CYP74C3), a water-soluble detergent-free cytochrome P450 monomer whose biological activity is defined by monomerâ€“micelle association. Biochemical Journal, 2006, 395, 641-652.	3.7	21
33	Evidence for Proteolytic Processing of Tobacco Mosaic Virus Movement Protein in<i>Arabidopsis thaliana</i>. Molecular Plant-Microbe Interactions, 1995, 8, 658.	2.6	21
34	Evidence for communality in the primary determinants of CYP74 catalysis and of structural similarities between CYP74 and classical mammalian P450 enzymes. Proteins: Structure, Function and Bioinformatics, 2008, 72, 1199-1211.	2.6	16
35	Genes affecting starch biosynthesis exert pleiotropic effects on the protein content and composition of pea seeds. Journal of the Science of Food and Agriculture, 2001, 81, 877-882.	3.5	11
36	Isolation and characterisation of a xylanase inhibitor Xip-II gene from durum wheat. Journal of Cereal Science, 2009, 50, 324-331.	3.7	6

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37	The gateway pDEST17 expression vector encodes a âˆ’1 ribosomal frameshifting sequence. Nucleic Acids Research, 2007, 35, 1322-1332.	14.5	5
38	Roles of molybdenum, FAD and iron-sulphur domains in molybdenum-containing hydroxylases: molecular genetic, kinetic and spectroscopic studies. Biochemical Society Transactions, 1991, 19, 260S-260S.	3.4	4
39	The Xâ€ray crystal structure of APRâ€B, an atypical adenosine 5â€²â€phosphosulfate reductase from <i>Physcomitrella patens</i>. FEBS Letters, 2013, 587, 3626-3632.	2.8	3
40	Drosophila xanthine dehydrogenase variants re-visited: a reply. Biochemical Journal, 1994, 300, 917-917.	3.7	1
41	Production of RXLR Effector Proteins for Structural Analysis by X-Ray Crystallography. Methods in Molecular Biology, 2014, 1127, 231-253.	0.9	1
42	Oligomerization of Hydroperoxide Lyase, aÂNovel P450 Enzyme in Plants. , 0, , 116-120.		0