Richard M Napier

List of Publications by Year
in descending order

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63 papers	3,424 citations	201674 27 h-index	144013 57 g-index
69 all docs	69 docs citations	69 times ranked	3682 citing authors

#	Article	IF	Citations
1	A combinatorial TIR1/AFBâ€“Aux/IAA co-receptor system for differential sensing of auxin. Nature Chemical Biology, 2012, 8, 477-485.	8.0	490
2	Structure-Function Analysis of the Presumptive Arabidopsis Auxin Permease AUX1 [W]. Plant Cell, 2004, 16, 3069-3083.	6.6	308
3	Patch-clamp analysis establishes a role for an auxin binding protein in the auxin stimulation of plasma membrane current in Zea mays protoplasts. Plant Journal, 1993, 4, 41-46.	5.7	186
4	Maize calreticulin localizes preferentially to plasmodesmata in root apex. Plant Journal, 1999, 19, 481-488.	5.7	171
5	Novel auxin transport inhibitors phenocopy the auxin influx carrier mutation aux1. Plant Journal, 2001, 25, 399-406.	5.7	163
6	A short history of auxin-binding proteins. Plant Molecular Biology, 2002, 49, 339-348.	3.9	142
7	Crystal structure of auxin-binding protein 1 in complex with auxin. EMBO Journal, 2002, 21, 2877-2885.	7.8	138
8	Receptors for auxin: will it all end in TIRs?. Trends in Plant Science, 2006, 11, 217-223.	8.8	121
9	Weed resistance to synthetic auxin herbicides. Pest Management Science, 2018, 74, 2265-2276.	3.4	113
10	Quick on the Uptake: Characterization of a Family of Plant Auxin Influx Carriers. Journal of Plant Growth Regulation, 2001, 20, 217-225.	5.1	101
11	Defining Binding Efficiency and Specificity of Auxins for SCF^{TIR1/AFB}-Aux/IAA Co-receptor Complex Formation. ACS Chemical Biology, 2014, 9, 673-682.	3.4	100
12	Auxin action and auxinâ€binding proteins. New Phytologist, 1995, 129, 167-201.	7.3	98
13	Recent Trends in Advanced Polymer Materials in Agriculture Related Applications. ACS Applied Polymer Materials, 2021, 3, 1203-1217.	4.4	96
14	Auxin Receptors and Auxin Binding Proteins. Critical Reviews in Plant Sciences, 1995, 14, 27-47.	5.7	75
15	Zooming In on Plant Hormone Analysis: Tissue- and Cell-Specific Approaches. Annual Review of Plant Biology, 2017, 68, 323-348.	18.7	74
16	cis-Cinnamic Acid Is a Novel, Natural Auxin Efflux Inhibitor That Promotes Lateral Root Formation. Plant Physiology, 2017, 173, 552-565.	4.8	61
17	The Binding of Auxin to the Arabidopsis Auxin Influx Transporter AUX1. Plant Physiology, 2008, 148, 529-535.	4.8	56
18	A short history of auxin-binding proteins. Plant Molecular Biology, 2002, 49, 339-48.	3.9	54

#	Article	IF	Citations
19	Auxins and Cytokininsâ€"The Role of Subcellular Organization on Homeostasis. International Journal of Molecular Sciences, 2018, 19, 3115.	4.1	49
20	Single-Chain Glycopolymer Folding via Hostâ€"Guest Interactions and Its Unprecedented Effect on DC-SIGN Binding. Biomacromolecules, 2018, 19, 3040-3047.	5.4	49
21	Stability of small ubiquitin-like modifier (SUMO) proteases OVERLY TOLERANT TO SALT1 and -2 modulates salicylic acid signalling and SUMO1/2 conjugation inArabidopsis thaliana. Journal of Experimental Botany, 2016, 67, 353-363.	4.8	48
22	Jasmonic Acid Inhibits Auxin-Induced Lateral Rooting Independently of the CORONATINE INSENSITIVE1 Receptor. Plant Physiology, 2018, 177, 1704-1716.	4.8	48
23	Biosensors in plants. Current Opinion in Plant Biology, 2010, 13, 736-743.	7.1	43
24	Models of Auxin Binding. Journal of Plant Growth Regulation, 2001, 20, 244-254.	5.1	38
25	A cheminformatics review of auxins as herbicides. Journal of Experimental Botany, 2018, 69, 265-275.	4.8	36
26	Plant Hormone Binding Sites. Annals of Botany, 2004, 93, 227-233.	2.9	34
27	Non-canonical auxin signalling: fast and curious. Journal of Experimental Botany, 2019, 70, 2609-2614.	4.8	33
28	Synthetic auxin herbicides: finding the lock and key to weed resistance. Plant Science, 2020, 300, 110631.	3.6	33
29	Evolutionary Conserved Cysteines Function as cis-Acting Regulators of Arabidopsis PIN-FORMED 2 Distribution. International Journal of Molecular Sciences, 2017, 18, 2274.	4.1	28
30	Seedling developmental defects upon blocking CINNAMATEâ€4â€HYDROXYLASE are caused by perturbations in auxin transport. New Phytologist, 2021, 230, 2275-2291.	7.3	27
31	Quinclorac resistance induced by the suppression of the expression of 1-aminocyclopropane-1-carboxylic acid (ACC) synthase and ACC oxidase genes in Echinochloa crus-galli var. zelayensis. Pesticide Biochemistry and Physiology, 2018, 146, 25-32.	3.6	26
32	Plant pest and disease diagnosis using electronic nose and support vector machine approach. Journal of Plant Diseases and Protection, 2012, 119, 200-207.	2.9	25
33	Tomographic docking suggests the mechanism of auxin receptor TIR1 selectivity. Open Biology, 2016, 6, 160139.	3.6	24
34	Auxin molecular field maps define <scp>AUX</scp>1 selectivity: many auxin herbicides are not substrates. New Phytologist, 2018, 217, 1625-1639.	7.3	24
35	The Story of Auxin-Binding Protein 1 (ABP1). Cold Spring Harbor Perspectives in Biology, 2021, 13, a039909.	5.5	23
36	Bottlebrush Glycopolymers from 2-Oxazolines and Acrylamides for Targeting Dendritic Cell-Specific Intercellular Adhesion Molecule-3-Grabbing Nonintegrin and Mannose-Binding Lectin. Biomacromolecules, 2020, 21, 2298-2308.	5.4	22

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37	Pinstatic Acid Promotes Auxin Transport by Inhibiting PIN Internalization. Plant Physiology, 2019, 180, 1152-1165.	4.8	21
38	Advances in Understanding the Mechanism of Action of the Auxin Permease AUX1. International Journal of Molecular Sciences, 2018, 19, 3391.	4.1	20
39	An in-frame deletion mutation in the degron tail of auxin coreceptorIAA2confers resistance to the herbicide 2,4-D inSisymbrium orientale. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	19
40	New fluorescent auxin probes visualise tissueâ€specific and subcellular distributions of auxin in Arabidopsis. New Phytologist, 2021, 230, 535-549.	7.3	15
41	Ring closing metathesis reactions of Î±-methylene-Î²-lactams: application to the synthesis of a simplified phyllostictine analogue with herbicidal activity. Organic and Biomolecular Chemistry, 2015, 13, 7655-7663.	2.8	14
42	The allelochemical MDCA inhibits lignification and affects auxin homeostasis. Plant Physiology, 2016, 172, pp.01972.2015.	4.8	14
43	Multi-Arm Star-Shaped Glycopolymers with Precisely Controlled Core Size and Arm Length. Biomacromolecules, 2020, 21, 3736-3744.	5.4	14
44	The Tetrazole Analogue of the Auxin Indole-3-acetic Acid Binds Preferentially to TIR1 and Not AFB5. ACS Chemical Biology, 2018, 13, 2585-2594.	3.4	13
45	PROTEIN RETENTION IN THE ENDOPLASMIC RETICULUM OF INSECT CELLS IS NOT COMPROMISED BY BACULOVIRUS INFECTION. Cell Biology International, 1996, 20, 413-422.	3.0	12
46	Mode of Action of a Novel Synthetic Auxin Herbicide Halauxifen-Methyl. Agronomy, 2022, 12, 1659.	3.0	12
47	TIRs of joy: new receptors for auxin. BioEssays, 2005, 27, 1213-1217.	2.5	11
48	Altered Expression of Auxin-binding Protein 1 Affects Cell Expansion and Auxin Pool Size in Tobacco Cells. Journal of Plant Growth Regulation, 2006, 25, 69-78.	5.1	11
49	Retaining individualities: the photodynamics of self-ordering porphyrin assemblies. Chemical Communications, 2016, 52, 1938-1941.	4.1	11
50	Assaying Auxin Receptor Activity Using SPR Assays with F-Box Proteins and Aux/IAA Degrons. Methods in Molecular Biology, 2017, 1497, 159-191.	0.9	9
51	Jasmonate â€“ a blooming decade. Journal of Experimental Botany, 2017, 68, 1299-1302.	4.8	8
52	Molecular analysis of auxin-specific signal transduction. Plant Growth Regulation, 1996, 18, 1-6.	3.4	7
53	Phyllostictine A: total synthesis, structural verification and determination of substructure responsible for plant growth inhibition. Chemical Communications, 2018, 54, 7211-7214.	4.1	7
54	Kinetic Characterisation of a Single Chain Antibody against the Hormone Abscisic Acid: Comparison with Its Parental Monoclonal. PLoS ONE, 2016, 11, e0152148.	2.5	6

#	Article	IF	Citations
55	It starts with TIRs. Nature Plants, 2018, 4, 410-411.	9.3	6
56	Auxin Receptors and Auxin Binding Proteins. Critical Reviews in Plant Sciences, 1995, 14, 27-27.	5.7	6
57	Generating aptamers towards human sperm cells using massively parallel sequencing. Analytical and Bioanalytical Chemistry, 2021, 413, 5821-5834.	3.7	5
58	A Highly Selective Biosensor with Nanomolar Sensitivity Based on Cytokinin Dehydrogenase. PLoS ONE, 2014, 9, e90877.	2.5	4
59	Hyaluronan (HA)-inspired glycopolymers as molecular tools for studying HA functions. RSC Chemical Biology, 2021, 2, 568-576.	4.1	4
60	Auxin Receptors and Perception. , 2014, , 101-116.		3
61	Growth of plant culture. Trends in Plant Science, 2003, 8, 568-569.	8.8	0
62	Front Cover: Cover Image, Volume 74, Issue 10. Pest Management Science, 2018, 74, i.	3.4	0
63	Ultrafast spectroscopic investigation of discrete co-assemblies of a Zn-porphyrinâ€“polymer conjugate with a hexapyridyl template. Chemical Physics Letters, 2021, 777, 138736.	2.6	0