Bonnie Bartel

List of Publications by Year
in descending order

110 papers	29,316 citations	18482 62 h-index	29157 104 g-index
112 all docs	112 docs citations	112 times ranked	32304 citing authors

#	Article	IF	Citations
1	The Structure of the Arabidopsis PEX4-PEX22 Peroxin Complexâ€"Insights Into Ubiquitination at the Peroxisomal Membrane. Frontiers in Cell and Developmental Biology, 2022, 10, 838923.	3.7	5
2	Plant peroxisome proteostasisâ€"establishing, renovating, and dismantling the peroxisomal proteome. Essays in Biochemistry, 2022, , .	4.7	1
3	An Arabidopsis<i>pre-RNA processing8a (prp8a)</i>missense allele restores splicing of a subset of mis-spliced mRNAs. Plant Physiology, 2022, 189, 2175-2192.	4.8	1
4	Guidelines for the use and interpretation of assays for monitoring autophagy (4th) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 Td (edition	9.1	1,430
5	Peroxisomes form intralumenal vesicles with roles in fatty acid catabolism and protein compartmentalization in Arabidopsis. Nature Communications, 2020, 11, 6221.	12.8	22
6	A PEX 5 missense allele preferentially disrupts PTS 1 cargo import into Arabidopsis peroxisomes. Plant Direct, 2019, 3, e00128.	1.9	4
7	PEX16 contributions to peroxisome import and metabolism revealed by viable Arabidopsis pex16 mutants. Journal of Integrative Plant Biology, 2019, 61, 853-870.	8.5	5
8	A facile forward-genetic screen for<i>Arabidopsis</i>autophagy mutants reveals twenty-one loss-of-function mutations disrupting six<i>ATG</i>genes. Autophagy, 2019, 15, 941-959.	9.1	42
9	Biology in Bloom: A Primer on the <i>Arabidopsis thaliana</i> Model System. Genetics, 2018, 208, 1337-1349.	2.9	38
10	A <i>pex1</i> missense mutation improves peroxisome function in a subset of <i>Arabidopsis pex6</i> mutants without restoring PEX5 recycling. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E3163-E3172.	7.1	18
11	Peroxisome Function, Biogenesis, and Dynamics in Plants. Plant Physiology, 2018, 176, 162-177.	4.8	135
12	The PEX1 ATPase Stabilizes PEX6 and Plays Essential Roles in Peroxisome Biology. Plant Physiology, 2017, 174, 2231-2247.	4.8	18
13	Disparate peroxisomeâ€related defects in Arabidopsis <i>pex6</i> and <i>pex26</i> mutants link peroxisomal retrotranslocation and oil body utilization. Plant Journal, 2017, 92, 110-128.	5.7	17
14	The Roles of Î2-Oxidation and Cofactor Homeostasis in Peroxisome Distribution and Function in <i>Arabidopsis thaliana</i>. Genetics, 2016, 204, 1089-1115.	2.9	30
15	Genetic Interactions between PEROXIN12 and Other Peroxisome-Associated Ubiquitination Components. Plant Physiology, 2016, 172, 1643-1656.	4.8	19
16	Plant peroxisomes: recent discoveries in functional complexity, organelle homeostasis, and morphological dynamics. Current Opinion in Plant Biology, 2016, 34, 17-26.	7.1	83
17	Guidelines for the use and interpretation of assays for monitoring autophagy (3rd edition). Autophagy, 2016, 12, 1-222.	9.1	4,701
18	Pexophagy and peroxisomal protein turnover in plants. Biochimica Et Biophysica Acta - Molecular Cell Research, 2016, 1863, 999-1005.	4.1	54

#	Article	IF	Citations
19	The Early-Acting Peroxin PEX19 Is Redundantly Encoded, Farnesylated, and Essential for Viability in Arabidopsis thaliana. PLoS ONE, 2016, 11, e0148335.	2.5	15
20	Elevated growth temperature decreases levels of the PEX5 peroxisome-targeting signal receptor and ameliorates defects of Arabidopsis mutants with an impaired PEX4 ubiquitin-conjugating enzyme. BMC Plant Biology, 2015, 15, 224.	3.6	20
21	Proteaphagyâ€"Selective Autophagy of Inactive Proteasomes. Molecular Cell, 2015, 58, 970-971.	9.7	7
22	Mutation of the<i>Arabidopsis</i>LON2 peroxisomal protease enhances pexophagy. Autophagy, 2014, 10, 518-519.	9.1	22
23	Peroxisomal Ubiquitin-Protein Ligases Peroxin2 and Peroxin10 Have Distinct But Synergistic Roles in Matrix Protein Import and Peroxin5 Retrotranslocation in Arabidopsis Â Â. Plant Physiology, 2014, 166, 1329-1344.	4.8	31
24	Protein Transport In and Out of Plant Peroxisomes. , 2014, , 325-345.		8
25	A viable Arabidopsis pex13 missense allele confers severe peroxisomal defects and decreases PEX5 association with peroxisomes. Plant Molecular Biology, 2014, 86, 201-214.	3.9	22
26	Disrupting Autophagy Restores Peroxisome Function to an<i>Arabidopsis lon2</i>Mutant and Reveals a Role for the LON2 Protease in Peroxisomal Matrix Protein Degradation Â. Plant Cell, 2013, 25, 4085-4100.	6.6	116
27	Genetic Dissection of Peroxisome-Associated Matrix Protein Degradation in <i>Arabidopsis thaliana</i>. Genetics, 2013, 193, 125-141.	2.9	51
28	Compensatory Mutations in Predicted Metal Transporters Modulate Auxin Conjugate Responsiveness in <i>Arabidopsis</i>. G3: Genes, Genomes, Genetics, 2013, 3, 131-141.	1.8	10
29	The 2012 Genetics Society of America Medal. Genetics, 2012, 191, 297-298.	2.9	0
30	A role for the root cap in root branching revealed by the non-auxin probe naxillin. Nature Chemical Biology, 2012, 8, 798-805.	8.0	118
31	Focus on Ubiquitin in Plant Biology. Plant Physiology, 2012, 160, 1-1.	4.8	20
32	Plant Peroxisomes: Biogenesis and Function. Plant Cell, 2012, 24, 2279-2303.	6.6	406
33	A gain-of-function mutation in IAA16 confers reduced responses to auxin and abscisic acid and impedes plant growth and fertility. Plant Molecular Biology, 2012, 79, 359-373.	3.9	107
34	Transport and Metabolism of the Endogenous Auxin Precursor Indole-3-Butyric Acid. Molecular Plant, 2011, 4, 477-486.	8.3	179
35	Reducing <i>PEX13</i> Expression Ameliorates Physiological Defects of Lateâ€Acting Peroxin Mutants. Traffic, 2011, 12, 121-134.	2.7	31
36	Matrix proteins are inefficiently imported into Arabidopsis peroxisomes lacking the receptor-docking peroxin PEX14. Plant Molecular Biology, 2011, 77, 1-15.	3.9	39

#	Article	IF	Citations
37	Multiple Facets of<i>Arabidopsis</i>Seedling Development Require  Indole-3-Butyric Acidâ€“Derived Auxin. Plant Cell, 2011, 23, 984-999.	6.6	149
38	Competencies: A Cure for Pre-Med Curriculum. Science, 2011, 334, 760-761.	12.6	2
39	Ethylene directs auxin to control root cell expansion. Plant Journal, 2010, 64, 874-884.	5.7	149
40	Interdependence of the Peroxisome-targeting Receptors in<i>Arabidopsis thaliana</i>: PEX7 Facilitates PEX5 Accumulation and Import of PTS1 Cargo into Peroxisomes. Molecular Biology of the Cell, 2010, 21, 1263-1271.	2.1	54
41	<i>Arabidopsis PIS1</i> encodes the ABCG37 transporter of auxinic compounds including the auxin precursor indole-3-butyric acid. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 10749-10753.	7.1	183
42	Plant Physiology Celebrates Its 25,000th Article!. Plant Physiology, 2010, 154, 433-433.	4.8	0
43	Conversion of Endogenous Indole-3-Butyric Acid to Indole-3-Acetic Acid Drives Cell Expansion in Arabidopsis Seedlings Â Â Â. Plant Physiology, 2010, 153, 1577-1586.	4.8	162
44	Silver Ions Increase Auxin Efflux Independently of Effects on Ethylene Response. Plant Cell, 2009, 21, 3585-3590.	6.6	80
45	Arabidopsis LON2 Is Necessary for Peroxisomal Function and Sustained Matrix Protein Import. Plant Physiology, 2009, 151, 1354-1365.	4.8	77
46	Disruption of Arabidopsis CHY1 Reveals an Important Role of Metabolic Status in Plant Cold Stress Signaling. Molecular Plant, 2009, 2, 59-72.	8.3	79
47	The<i>Arabidopsis</i>PLEIOTROPIC DRUG RESISTANCE8/ABCG36 ATP Binding Cassette Transporter Modulates Sensitivity to the Auxin Precursor Indole-3-Butyric Acid Â. Plant Cell, 2009, 21, 1992-2007.	6.6	185
48	Peroxisome-associated matrix protein degradation in <i>Arabidopsis</i>. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 4561-4566.	7.1	94
49	Sucrose induction of Arabidopsis miR398 represses two Cu/Zn superoxide dismutases. Plant Molecular Biology, 2008, 67, 403-417.	3.9	234
50	A new path to auxin. Nature Chemical Biology, 2008, 4, 337-339.	8.0	51
51	The IBR5 phosphatase promotes Arabidopsis auxin responses through a novel mechanism distinct from TIR1-mediated repressor degradation. BMC Plant Biology, 2008, 8, 41.	3.6	71
52	Cell signaling and gene regulation. Current Opinion in Plant Biology, 2008, 11, 471-473.	7.1	3
53	Criteria for Annotation of Plant MicroRNAs. Plant Cell, 2008, 20, 3186-3190.	6.6	1,158
54	Trinorlupeol: A Major Nonsterol Triterpenoid in Arabidopsis. Organic Letters, 2008, 10, 1897-1900.	4.6	20

#	Article	IF	Citations
55	Identification and Characterization of Arabidopsis Indole-3-Butyric Acid Response Mutants Defective in Novel Peroxisomal Enzymes. Genetics, 2008, 180, 237-251.	2.9	143
56	Arabidopsis <i>iba response5</i> Suppressors Separate Responses to Various Hormones. Genetics, 2008, 180, 2019-2031.	2.9	49
57	Arabidopsis thaliana Squalene Epoxidase 1 Is Essential for Root and Seed Development. Journal of Biological Chemistry, 2007, 282, 17002-17013.	3.4	89
58	Mutation of E1-CONJUGATING ENZYME-RELATED1 Decreases RELATED TO UBIQUITIN Conjugation and Alters Auxin Response and Development. Plant Physiology, 2007, 144, 976-987.	4.8	30
59	IBR3, a novel peroxisomal acyl-CoA dehydrogenase-like protein required for indole-3-butyric acid response. Plant Molecular Biology, 2007, 64, 59-72.	3.9	102
60	MicroRNAs AND THEIR REGULATORY ROLES IN PLANTS. Annual Review of Plant Biology, 2006, 57, 19-53.	18.7	2,418
61	Biosynthetic diversity in plant triterpene cyclization. Current Opinion in Plant Biology, 2006, 9, 305-314.	7.1	326
62	An Arabidopsis Basic Helix-Loop-Helix Leucine Zipper Protein Modulates Metal Homeostasis and Auxin Conjugate Responsiveness. Genetics, 2006, 174, 1841-1857.	2.9	98
63	Mutations in Arabidopsis acyl-CoA oxidase genes reveal distinct and overlapping roles in Î²-oxidation. Plant Journal, 2005, 41, 859-874.	5.7	103
64	MicroRNAs directing siRNA biogenesis. Nature Structural and Molecular Biology, 2005, 12, 569-571.	8.2	85
65	MicroRNA-Directed Regulation of Arabidopsis AUXIN RESPONSE FACTOR17 Is Essential for Proper Development and Modulates Expression of Early Auxin Response Genes. Plant Cell, 2005, 17, 1360-1375.	6.6	805
66	Identification and Functional Characterization of Arabidopsis PEROXIN4 and the Interacting Protein PEROXIN22[W]. Plant Cell, 2005, 17, 3422-3435.	6.6	112
67	An Auxin Transport Independent Pathway Is Involved in Phosphate Stress-Induced Root Architectural Alterations in Arabidopsis. Identification of BIG as a Mediator of Auxin in Pericycle Cell Activation. Plant Physiology, 2005, 137, 681-691.	4.8	181
68	The Arabidopsis Peroxisomal Targeting Signal Type 2 Receptor PEX7 Is Necessary for Peroxisome Function and Dependent on PEX5. Molecular Biology of the Cell, 2005, 16, 573-583.	2.1	136
69	Auxin: Regulation, Action, and Interaction. Annals of Botany, 2005, 95, 707-735.	2.9	1,876
70	A Receptor for Auxin. Plant Cell, 2005, 17, 2425-2429.	6.6	79
71	Weed Power, Translating Arabidopsis. Plant Physiology, 2004, 135, 601-601.	4.8	0
72	A Family of Auxin-Conjugate Hydrolases That Contributes to Free Indole-3-Acetic Acid Levels during Arabidopsis Germination. Plant Physiology, 2004, 135, 978-988.	4.8	220

#	Article	IF	Citations
73	IAR4, a Gene Required for Auxin Conjugate Sensitivity in Arabidopsis, Encodes a Pyruvate Dehydrogenase E1Î± Homolog. Plant Physiology, 2004, 135, 989-999.	4.8	38
74	An Arabidopsis indole-3-butyric acid-response mutant defective in PEROXIN6, an apparent ATPase implicated in peroxisomal function. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 1786-1791.	7.1	124
75	MicroRNA regulation of gene expression in plants. Current Opinion in Plant Biology, 2004, 7, 512-520.	7.1	221
76	MicroRNA Regulation of NAC-Domain Targets Is Required for Proper Formation and Separation of Adjacent Embryonic, Vegetative, and Floral Organs. Current Biology, 2004, 14, 1035-1046.	3.9	617
77	ILR2, a novel gene regulating IAA conjugate sensitivity and metal transport in Arabidopsis thaliana. Plant Journal, 2003, 35, 523-534.	5.7	41
78	A uniform system for microRNA annotation. Rna, 2003, 9, 277-279.	3.5	1,620
79	MicroRNAs: At the Root of Plant Development?. Plant Physiology, 2003, 132, 709-717.	4.8	389
80	IBR5, a Dual-Specificity Phosphatase-Like Protein Modulating Auxin and Abscisic Acid Responsiveness in Arabidopsis. Plant Cell, 2003, 15, 2979-2991.	6.6	150
81	PLANT BIOLOGY: Seeing Red. Science, 2003, 299, 352-353.	12.6	18
82	Characterization of a Family of IAA-Amino Acid Conjugate Hydrolases from Arabidopsis. Journal of Biological Chemistry, 2002, 277, 20446-20452.	3.4	262
83	MicroRNAs in plants. Genes and Development, 2002, 16, 1616-1626.	5.9	1,797
84	Prediction of Plant MicroRNA Targets. Cell, 2002, 110, 513-520.	28.9	2,088
85	Auxin Signaling. Developmental Cell, 2001, 1, 595-604.	7.0	61
86	Inputs to the Active Indole-3-Acetic Acid Pool: De Novo Synthesis, Conjugate Hydrolysis, and Indole-3-Butyric Acid b-Oxidation. Journal of Plant Growth Regulation, 2001, 20, 198-216.	5.1	174
87	A library of Arabidopsis 35S-cDNA lines for identifying novel mutants. , 2001, 46, 695-703.		76
88	The Arabidopsis <i>pxa1</i> Mutant Is Defective in an ATP-Binding Cassette Transporter-Like Protein Required for Peroxisomal Fatty Acid Î²-Oxidation. Plant Physiology, 2001, 127, 1266-1278.	4.8	300
89	A Gain-of-Function Mutation in IAA28 Suppresses Lateral Root Development. Plant Cell, 2001, 13, 465-480.	6.6	374
90	chy1, an Arabidopsis Mutant with Impaired Î²-Oxidation, Is Defective in a Peroxisomal Î²-Hydroxyisobutyryl-CoA Hydrolase. Journal of Biological Chemistry, 2001, 276, 31037-31046.	3.4	95

#	Article	IF	Citations
91	A Gain-of-Function Mutation in IAA28 Suppresses Lateral Root Development. Plant Cell, 2001, 13, 465.	6.6	32
92	Cloning and Characterization of IAR1, a Gene Required for Auxin Conjugate Sensitivity in Arabidopsis. Plant Cell, 2000, 12, 2395.	6.6	3
93	Cloning and Characterization of IAR1, a Gene Required for Auxin Conjugate Sensitivity in Arabidopsis. Plant Cell, 2000, 12, 2395-2408.	6.6	97
94	FKF1, a Clock-Controlled Gene that Regulates the Transition to Flowering in Arabidopsis. Cell, 2000, 101, 331-340.	28.9	444
95	Genetic Analysis of Indole-3-butyric Acid Responses in<i>Arabidopsis thaliana</i>Reveals Four Mutant Classes. Genetics, 2000, 156, 1323-1337.	2.9	256
96	IAR3 Encodes an Auxin Conjugate Hydrolase from Arabidopsis. Plant Cell, 1999, 11, 365.	6.6	1
97	IAR3 Encodes an Auxin Conjugate Hydrolase from Arabidopsis. Plant Cell, 1999, 11, 365-376.	6.6	236
98	Redundancy as a way of life - IAA metabolism. Current Opinion in Plant Biology, 1999, 2, 207-213.	7.1	172
99	Cloning and characterization of the Arabidopsis thaliana lupeol synthase gene. Phytochemistry, 1998, 49, 1905-1911.	2.9	123
100	Arabidopsis Mutants Resistant to the Auxin Effects of Indole-3-Acetonitrile Are Defective in the Nitrilase Encoded by the NIT1 Gene. Plant Cell, 1997, 9, 1781.	6.6	0
101	AUXIN BIOSYNTHESIS. Annual Review of Plant Biology, 1997, 48, 51-66.	14.3	286
102	ILR1, an amidohydrolase that releases active indole-3-acetic acid from conjugates. Science, 1995, 268, 1745-1748.	12.6	260
103	Differential regulation of an auxin-producing nitrilase gene family in Arabidopsis thaliana.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 6649-6653.	7.1	188
104	Molecular cloning, characterization, and overexpression of ERG7, the Saccharomyces cerevisiae gene encoding lanosterol synthase.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 2211-2215.	7.1	117
105	Isolation of an Arabidopsis thaliana gene encoding cycloartenol synthase by functional expression in a yeast mutant lacking lanosterol synthase by the use of a chromatographic screen.. Proceedings of the National Academy of Sciences of the United States of America, 1993, 90, 11628-11632.	7.1	216
106	The N-end rule is mediated by the UBC2(RAD6) ubiquitin-conjugating enzyme.. Proceedings of the National Academy of Sciences of the United States of America, 1991, 88, 7351-7355.	7.1	264
107	The tails of ubiquitin precursors are ribosomal proteins whose fusion to ubiquitin facilitates ribosome biogenesis. Nature, 1989, 338, 394-401.	27.8	697
108	Hypersensitivity to heavy water: A new conditional phenotype. Cell, 1988, 52, 935-941.	28.9	30

#	Article	IF	Citations
109	Molecular Genetics of the Ubiquitin System. , 1988, , 39-75.		7
110	Behavior and brain neurotransmitters: Correlations in different strains of mice. Behavioral and Neural Biology, 1986, 46, 30-45.	2.2	12