Daniel R Gallie

List of Publications by Year
in descending order

91 papers	7,124 citations	71061 41 h-index	60583 81 g-index
263 all docs	263 docs citations	263 times ranked	6077 citing authors

#	Article	IF	Citations
1	Increasing vitamin C content of plants through enhanced ascorbate recycling. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 3525-3530.	3.3	456
2	The 5'-leader sequence of tobacco mosaic virus RNA enhances the expression of foreign gene transcriptsin vitroandin vivo. Nucleic Acids Research, 1987, 15, 3257-3273.	6.5	413
3	The Ascorbic Acid Redox State Controls Guard Cell Signaling and Stomatal Movement. Plant Cell, 2004, 16, 1143-1162.	3.1	354
4	The role of l-ascorbic acid recycling in responding to environmental stress and in promoting plant growth. Journal of Experimental Botany, 2013, 64, 433-443.	2.4	292
5	Programmed cell death during endosperm development. Plant Molecular Biology, 2000, 44, 283-301.	2.0	281
6	A tale of two termini:. Gene, 1998, 216, 1-11.	1.0	263
7	Translation Initiation Factors eIF-iso4G and eIF-4B Interact with the Poly(A)-binding Protein and Increase Its RNA Binding Activity. Journal of Biological Chemistry, 1997, 272, 16247-16255.	1.6	241
8	Identification of the motifs within the tobacco mosaic virus 5â€²-leader responsible for enhancing translation. Nucleic Acids Research, 1992, 20, 4631-4638.	6.5	231
9	Brassinosteroid functions to protect the translational machinery and heatâ€shock protein synthesis following thermal stress. Plant Journal, 2002, 29, 681-691.	2.8	212
10	Increasing Tolerance to Ozone by Elevating Foliar Ascorbic Acid Confers Greater Protection against Ozone Than Increasing Avoidance. Plant Physiology, 2005, 138, 1673-1689.	2.3	207
11	Dehydroascorbate Reductase Affects Leaf Growth, Development, and Function. Plant Physiology, 2006, 142, 775-787.	2.3	203
12	L-Ascorbic Acid: A Multifunctional Molecule Supporting Plant Growth and Development. Scientifica, 2013, 2013, 1-24.	0.6	192
13	ACC synthase expression regulates leaf performance and drought tolerance in maize. Plant Journal, 2004, 40, 813-825.	2.8	170
14	Analysis of programmed cell death in wheat endosperm reveals differences in endosperm development between cereals. , 1999, 39, 915-926.		166
15	Regulation of programmed cell death in maize endosperm by abscisic acid. , 2000, 42, 397-414.		153
16	eIF4G Functionally Differs from eIFiso4G in Promoting Internal Initiation, Cap-independent Translation, and Translation of Structured mRNAs. Journal of Biological Chemistry, 2001, 276, 36951-36960.	1.6	124
17	The 5'-leader of tobacco mosaic virus promotes translation through enhanced recruitment of eIF4F. Nucleic Acids Research, 2002, 30, 3401-3411.	6.5	123
18	Cap-Independent Translation Conferred by the 5â€² Leader of Tobacco Etch Virus Is Eukaryotic Initiation Factor 4G Dependent. Journal of Virology, 2001, 75, 12141-12152.	1.5	114

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19	The tobacco etch viral 5â€² leader and poly(A) tail are functionally synergistic regulators of translation. Gene, 1995, 165, 233-238.	1.0	108
20	Translational control of cellular and viral mRNAs. Plant Molecular Biology, 1996, 32, 145-158.	2.0	107
21	The Phosphorylation State of Translation Initiation Factors Is Regulated Developmentally and following Heat Shock in Wheat. Journal of Biological Chemistry, 1997, 272, 1046-1053.	1.6	97
22	Post-transcriptional regulation in higher eukaryotes: The role of the reporter gene in controlling expression. Molecular Genetics and Genomics, 1991, 228, 258-264.	2.4	95
23	Potyvirus Genome-linked Protein, VPg, Directly Affects Wheat Germ in Vitro Translation. Journal of Biological Chemistry, 2008, 283, 1340-1349.	1.6	92
24	Plant Initiation Factor 3 Subunit Composition Resembles Mammalian Initiation Factor 3 and Has a Novel Subunit. Journal of Biological Chemistry, 2001, 276, 2122-2131.	1.6	91
25	Developmental and Thermal Regulation of the Maize Heat Shock Protein, HSP101. Plant Physiology, 2001, 127, 777-791.	2.3	91
26	The role of the 3'-untranslated region of non-polyadenylated plant viral mRNAs in regulating translational efficiency. Gene, 1994, 142, 159-165.	1.0	89
27	Unified nomenclature for the subunits of eukaryotic initiation factor 311This letter arises from the Cold Spring Harbor Translational Control meeting held on September 6â€"10 2000 in Cold Spring Harbor, NY, USA.. Trends in Biochemical Sciences, 2001, 26, 284.	3.7	85
28	The Phosphorylation State of Poly(A)-binding Protein Specifies Its Binding to Poly(A) RNA and Its Interaction with Eukaryotic Initiation Factor (eIF) 4F, eIFiso4F, and eIF4B. Journal of Biological Chemistry, 2000, 275, 17452-17462.	1.6	84
29	Expression of the ethylene biosynthetic machinery in maize roots is regulated in response to hypoxia. Journal of Experimental Botany, 2010, 61, 857-871.	2.4	80
30	Mutational analysis of the tobacco mosaic virus 5â€²-leader for altered ability to enhance translation. Nucleic Acids Research, 1988, 16, 883-893.	6.5	79
31	Senescence-induced expression of cytokinin reverses pistil abortion during maize flower development. Plant Journal, 2004, 38, 910-922.	2.8	79
32	Deletion of the eIFiso4G subunit of the Arabidopsis eIFiso4F translation initiation complex impairs health and viability. Plant Molecular Biology, 2010, 74, 249-263.	2.0	78
33	Protein-protein interactions required during translation. Plant Molecular Biology, 2002, 50, 949-970.	2.0	74
34	The Histone 3â€²-Terminal Stem-Loop-Binding Protein Enhances Translation through a Functional and Physical Interaction with Eukaryotic Initiation Factor 4G (eIF4G) and eIF3. Molecular and Cellular Biology, 2002, 22, 7853-7867.	1.1	71
35	Cap-independent Translation of Tobacco Etch Virus Is Conferred by an RNA Pseudoknot in the 5â€²-Leader. Journal of Biological Chemistry, 2005, 280, 26813-26824.	1.6	71
36	Identification and Characterization of the Functional Elements within the Tobacco Etch Virus 5â€² Leader Required for Cap-Independent Translation. Journal of Virology, 1999, 73, 9080-9088.	1.5	71

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37	Controlling gene expression in transgenics. Current Opinion in Plant Biology, 1998, 1, 166-172.	3.5	65
38	Tissue-specific expression of the ethylene biosynthetic machinery regulates root growth in maize. Plant Molecular Biology, 2009, 69, 195-211.	2.0	54
39	Metabolite Profiling of <i>Arabidopsis</i> Inoculated with <i>Alternaria brassicicola</i> Reveals That Ascorbate Reduces Disease Severity. Molecular Plant-Microbe Interactions, 2012, 25, 1628-1638.	1.4	54
40	Heat Shock Protein HSP101 Binds to the Fed-1 Internal Light Regulatory Element and Mediates Its High Translational Activity. Plant Cell, 2000, 12, 1213-1227.	3.1	53
41	Visualization of Poly(A)-Binding Protein Complex Formation with Poly(A) RNA Using Atomic Force Microscopy. Journal of Structural Biology, 1997, 119, 109-117.	1.3	48
42	Ethylene receptors in plants - why so much complexity?. F1000prime Reports, 2015, 7, 39.	5.9	47
43	Coat protein enhances translational efficiency of Alfalfa mosaic virus RNAs and interacts with the eIF4G component of initiation factor eIF4F. Journal of General Virology, 2005, 86, 1841-1849.	1.3	42
44	Increasing Vitamin C Content in Plant Foods to Improve Their Nutritional Valueâ€"Successes and Challenges. Nutrients, 2013, 5, 3424-3446.	1.7	42
45	Aleurone Cell Identity Is Suppressed following Connation in Maize Kernels. Plant Physiology, 2005, 139, 204-212.	2.3	41
46	Translation initiation factors are differentially regulated in cereals during development and following heat shock. Plant Journal, 1998, 14, 715-722.	2.8	39
47	Analysis of Translation Elongation Factors from Wheat during Development and Following Heat Shock. Biochemical and Biophysical Research Communications, 1998, 245, 295-300.	1.0	39
48	eIF4G, eIFiso4G, and eIF4B Bind the Poly(A)-binding Protein through Overlapping Sites within the RNA Recognition Motif Domains. Journal of Biological Chemistry, 2007, 282, 25247-25258.	1.6	39
49	Dehydroascorbate Reductase Affects Non-photochemical Quenching and Photosynthetic Performance. Journal of Biological Chemistry, 2008, 283, 21347-21361.	1.6	39
50	Tobacco Etch Virus mRNA Preferentially Binds Wheat Germ Eukaryotic Initiation Factor (eIF) 4G Rather than eIFiso4G. Journal of Biological Chemistry, 2006, 281, 35826-35834.	1.6	37
51	The role of 5'-leader length, secondary structure and PABP concentration on cap and poly(A) tail function during translation in Xenopus oocytes. Nucleic Acids Research, 2000, 28, 2943-2953.	6.5	36
52	The Phosphorylation State of the Wheat Translation Initiation Factors eIF4B, eIF4A, and eIF2 Is Differentially Regulated during Seed Development and Germination. Journal of Biological Chemistry, 1998, 273, 20084-20089.	1.6	35
53	Secondary structure in the 5â€²-leader or 3â€²-untranslated region reduces protein yield but does not affect the functional interaction between the 5â€²-cap and the poly(A) tail. FEBS Letters, 1999, 462, 79-84.	1.3	34
54	RNA delivery inSaccharomyces cerevisiae using electroporation. Yeast, 1992, 8, 1007-1014.	0.8	32

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55	Competitive and Noncompetitive Binding of eIF4B, eIF4A, and the Poly(A) Binding Protein to Wheat Translation Initiation Factor eIFiso4G. Biochemistry, 2010, 49, 8251-8265.	1.2	31
56	Search for the Cellular Functions of Plant Hsp100/Clp Family Proteins. Critical Reviews in Plant Sciences, 2001, 20, 277-295.	2.7	30
57	Insights from a Paradigm Shift: How the Poly(A)-Binding Protein Brings Translating mRNAs Full Circle. New Journal of Science, 2014, 2014, 1-16.	1.0	30
58	Chloroplast-localized iron superoxide dismutases FSD2 and FSD3 are functionally distinct in Arabidopsis. PLoS ONE, 2019, 14, e0220078.	1.1	29
59	The Wheat Poly (A)-Binding Protein Functionally Complements Pab1 in Yeast. FEBS Journal, 1997, 243, 350-357.	0.2	28
60	Wheat Eukaryotic Initiation Factor 4B Organizes Assembly of RNA and eIFiso4G, eIF4A, and Poly(A)-binding Protein. Journal of Biological Chemistry, 2006, 281, 24351-24364.	1.6	27
61	Appearance and elaboration of the ethylene receptor family during land plant evolution. Plant Molecular Biology, 2015, 87, 521-539.	2.0	27
62	Violaxanthin de-epoxidase is rate-limiting for non-photochemical quenching under subsaturating light or during chilling in Arabidopsis. Plant Physiology and Biochemistry, 2012, 58, 66-82.	2.8	26
63	Enhancing effect of the 3â€²-untranslated region of tobacco mosaic virus RNA on protein synthesis in vitro. FEBS Letters, 1994, 354, 271-273.	1.3	25
64	Regulated Ethylene Insensitivity through the Inducible Expression of the Arabidopsis etr1-1 Mutant Ethylene Receptor in Tomato. Plant Physiology, 2010, 152, 1928-1939.	2.3	23
65	Eukaryotic Translation Initiation Factor eIFiso4G Is Required to Regulate Violaxanthin De-epoxidase Expression in Arabidopsis. Journal of Biological Chemistry, 2014, 289, 13926-13936.	1.6	23
66	Eukaryotic Initiation Factor eIFiso4G1 and eIFiso4G2 Are Isoforms Exhibiting Distinct Functional Differences in Supporting Translation in Arabidopsis. Journal of Biological Chemistry, 2016, 291, 1501-1513.	1.6	23
67	Analysis of the functional conservation of ethylene receptors between maize and Arabidopsis. Plant Molecular Biology, 2010, 74, 405-421.	2.0	22
68	The role of the poly(A) binding protein in the assembly of the Cap-binding complex during translation initiation in plants. Translation, 2014, 2, e959378.	2.9	20
69	Induction of Monozygotic Twinning by Ascorbic Acid in Tobacco. PLoS ONE, 2012, 7, e39147.	1.1	20
70	The effect of the length of the 3â€²-untranslated region on expression in plants. FEBS Letters, 1996, 394, 285-288.	1.3	19
71	RNase activity requires formation of disulfide bonds and is regulated by the redox state. Plant Molecular Biology, 2004, 55, 83-96.	2.0	18
72	The unique evolution of the programmed cell death 4 protein in plants. BMC Evolutionary Biology, 2013, 13, 199.	3.2	18

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73	Eukaryotic initiation factor 4B and the poly(A)-binding protein bind eIF4G competitively. Translation, 2013, 1, e24038.	2.9	17
74	Programmed cell death during endosperm development. , 2000, , 39-57.		17
75	Solution Structure of the PABC Domain from Wheat Poly (A)-Binding Protein:â€‰ An Insight into RNA Metabolic and Translational Control in Plants. Biochemistry, 2007, 46, 4221-4231.	1.2	15
76	Effects of poly(A)-binding protein on the interactions of translation initiation factor eIF4F and eIF4FÂ·4B with internal ribosome entry site (IRES) of tobacco etch virus RNA. Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms, 2008, 1779, 622-627.	0.9	14
77	Translation Initiation Factor 4B Homodimerization, RNA Binding, and Interaction with Poly(A)-binding Protein Are Enhanced by Zinc. Journal of Biological Chemistry, 2008, 283, 36140-36153.	1.6	14
78	Ethylene Regulates Energy-Dependent Non-Photochemical Quenching in Arabidopsis through Repression of the Xanthophyll Cycle. PLoS ONE, 2015, 10, e0144209.	1.1	14
79	Developmental and Thermal Regulation of the Maize Heat Shock Protein, HSP101. Plant Physiology, 2001, 127, 777-791.	2.3	13
80	ATP-dependent Hexameric Assembly of the Heat Shock Protein Hsp101 Involves Multiple Interaction Domains and a Functional C-proximal Nucleotide-binding Domain. Journal of Biological Chemistry, 2002, 277, 39617-39626.	1.6	12
81	Sequence diversity and conservation of the poly(A)-binding protein in plants. Plant Science, 2000, 152, 101-114.	1.7	11
82	Phylogenetic analysis reveals dynamic evolution of the poly(A)-binding protein gene family in plants. BMC Evolutionary Biology, 2014, 14, 238.	3.2	10
83	Plant growth and fertility requires functional interactions between specific PABP and eIF4G gene family members. PLoS ONE, 2018, 13, e0191474.	1.1	9
84	Class II members of the poly(A) binding protein family exhibit distinct functions during Arabidopsis growth and development. Translation, 2017, 5, e1295129.	2.9	8
85	Introduction of mRNA to plant protoplasts using polyethylene glycol. Plant Cell Reports, 1993, 13, 119-122.	2.8	6
86	Title is missing!. Plant Cell, Tissue and Organ Culture, 2002, 68, 163-170.	1.2	5
87	Use of In Vitro Translation Extract Depleted in Specific Initiation Factors for the Investigation of Translational Regulation. Methods in Enzymology, 2007, 429, 35-51.	0.4	4
88	m⁷GpppG Cap Dependence for Efficient Translation of <i>Drosophila</i> 70â€kDa Heatâ€Shockâ€Protein (Hsp70) mRNA. FEBS Journal, 1995, 232, 778-788.	0.2	0
89	Tobacco Etch Virus mRNA Preferentially Binds Wheat Germ Eukaryotic Initiation Factor (eIF)4G rather than (eIF)iso4G. FASEB Journal, 2006, 20, A108.	0.2	0
90	Poly(A)â€Binding Protein Affects the Kinetics of Tobacco Etch Virus Pseudoknot RNA Binding to Wheat germ Translation Initiation Factor eIF4F. FASEB Journal, 2008, 22, 998.1.	0.2	0

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91	Biophysical Characterization of Effect of Zinc on Eukaryotic Translation Initiation Factor 4B. FASEB Journal, 2010, 24, 499.10.	0.2	0