Daniel R Gallie

List of Publications by Year in Descending Order

91 papers	6,006 citations	39 h-index	77 g-index
263 ext. papers	6,545 ext. citations	5.9 avg, IF	6.15 L-index

#	Paper	IF	Citations
91	Chloroplast-localized iron superoxide dismutases FSD2 and FSD3 are functionally distinct in Arabidopsis. *PLoS ONE*, **2019**, 14, e0220078	3.7	12
90	Plant growth and fertility requires functional interactions between specific PABP and eIF4G gene family members. *PLoS ONE*, **2018**, 13, e0191474	3.7	6
89	Class II members of the poly(A) binding protein family exhibit distinct functions during Arabidopsis growth and development. *Translation*, **2017**, 5, e1295129		5
88	Eukaryotic Initiation Factor eIFiso4G1 and eIFiso4G2 Are Isoforms Exhibiting Distinct Functional Differences in Supporting Translation in Arabidopsis. *Journal of Biological Chemistry*, **2016**, 291, 1501-13	5.4	12
87	Appearance and elaboration of the ethylene receptor family during land plant evolution. *Plant Molecular Biology*, **2015**, 87, 521-39	4.6	20
86	Ethylene receptors in plants - why so much complexity?. *F1000prime Reports*, **2015**, 7, 39		28
85	Ethylene Regulates Energy-Dependent Non-Photochemical Quenching in Arabidopsis through Repression of the Xanthophyll Cycle. *PLoS ONE*, **2015**, 10, e0144209	3.7	11
84	Eukaryotic translation initiation factor eIFiso4G is required to regulate violaxanthin De-epoxidase expression in Arabidopsis. *Journal of Biological Chemistry*, **2014**, 289, 13926-36	5.4	17
83	Phylogenetic analysis reveals dynamic evolution of the poly(A)-binding protein gene family in plants. *BMC Evolutionary Biology*, **2014**, 14, 238	3	7
82	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		9
81	Insights from a Paradigm Shift: How the Poly(A)-Binding Protein Brings Translating mRNAs Full Circle. *New Journal of Science*, **2014**, 2014, 1-16		4
80	The unique evolution of the programmed cell death 4 protein in plants. *BMC Evolutionary Biology*, **2013**, 13, 199	3	17
79	The role of L-ascorbic acid recycling in responding to environmental stress and in promoting plant growth. *Journal of Experimental Botany*, **2013**, 64, 433-43	7	217
78	L-ascorbic Acid: a multifunctional molecule supporting plant growth and development. *Scientifica*, **2013**, 2013, 795964	2.6	135
77	Eukaryotic initiation factor 4B and the poly(A)-binding protein bind eIF4G competitively. *Translation* , **2013**, 1, e24038		15
76	Increasing vitamin C content in plant foods to improve their nutritional value-successes and challenges. *Nutrients*, **2013**, 5, 3424-46	6.7	29
75	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	5.4	19

74	Metabolite profiling of Arabidopsis inoculated with Alternaria brassicicola reveals that ascorbate reduces disease severity. *Molecular Plant-Microbe Interactions*, **2012**, 25, 1628-38	3.6	38
73	Induction of monozygotic twinning by ascorbic acid in tobacco. *PLoS ONE*, **2012**, 7, e39147	3.7	17
72	Expression of the ethylene biosynthetic machinery in maize roots is regulated in response to hypoxia. *Journal of Experimental Botany*, **2010**, 61, 857-71	7	71
71	Regulated ethylene insensitivity through the inducible expression of the Arabidopsis etr1-1 mutant ethylene receptor in tomato. *Plant Physiology*, **2010**, 152, 1928-39	6.6	21
70	Competitive and noncompetitive binding of eIF4B, eIF4A, and the poly(A) binding protein to wheat translation initiation factor eIFiso4G. *Biochemistry*, **2010**, 49, 8251-65	3.2	22
69	Deletion of the eIFiso4G subunit of the Arabidopsis eIFiso4F translation initiation complex impairs health and viability. *Plant Molecular Biology*, **2010**, 74, 249-63	4.6	58
68	Analysis of the functional conservation of ethylene receptors between maize and Arabidopsis. *Plant Molecular Biology*, **2010**, 74, 405-21	4.6	21
67	Biophysical Characterization of Effect of Zinc on Eukaryotic Translation Initiation Factor 4B. *FASEB Journal*, **2010**, 24, 499.10	0.9	
66	Tissue-specific expression of the ethylene biosynthetic machinery regulates root growth in maize. *Plant Molecular Biology*, **2009**, 69, 195-211	4.6	51
65	m7GpppG Cap Dependence for Efficient Translation of Drosophila 70-kDa Heat-Shock-Protein (Hsp70) mRNA. *FEBS Journal*, **2008**, 232, 778-788		
64	Effects of poly(A)-binding protein on the interactions of translation initiation factor eIF4F and eIF4F.4B with internal ribosome entry site (IRES) of tobacco etch virus RNA. *Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms*, **2008**, 1779, 622-7	6	14
63	Translation initiation factor 4B homodimerization, RNA binding, and interaction with Poly(A)-binding protein are enhanced by zinc. *Journal of Biological Chemistry*, **2008**, 283, 36140-53	5.4	12
62	Potyvirus genome-linked protein, VPg, directly affects wheat germ in vitro translation: interactions with translation initiation factors eIF4F and eIFiso4F. *Journal of Biological Chemistry*, **2008**, 283, 1340-1349	5.4	77
61	Dehydroascorbate reductase affects non-photochemical quenching and photosynthetic performance. *Journal of Biological Chemistry*, **2008**, 283, 21347-61	5.4	34
60	Poly(A)-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	0.9	
59	Solution structure of the PABC domain from wheat poly (A)-binding protein: an insight into RNA metabolic and translational control in plants. *Biochemistry*, **2007**, 46, 4221-31	3.2	14
58	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, 25247-58	5.4	34
57	Use of in vitro translation extract depleted in specific initiation factors for the investigation of translational regulation. *Methods in Enzymology*, **2007**, 429, 35-51	1.7	4

56	Wheat eukaryotic initiation factor 4B organizes assembly of RNA and eIFiso4G, eIF4A, and poly(A)-binding protein. *Journal of Biological Chemistry*, **2006**, 281, 24351-64	5.4	24
55	Tobacco etch virus mRNA preferentially binds wheat germ eukaryotic initiation factor (eIF) 4G rather than eIFiso4G. *Journal of Biological Chemistry*, **2006**, 281, 35826-34	5.4	36
54	Dehydroascorbate reductase affects leaf growth, development, and function. *Plant Physiology*, **2006**, 142, 775-87	6.6	179
53	Tobacco Etch Virus mRNA Preferentially Binds Wheat Germ Eukaryotic Initiation Factor (eIF)4G rather than (eIF)iso4G. *FASEB Journal*, **2006**, 20, A108	0.9	
52	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	4.9	36
51	Cap-independent translation of tobacco etch virus is conferred by an RNA pseudoknot in the 5′leader. *Journal of Biological Chemistry*, **2005**, 280, 26813-24	5.4	64
50	Increasing tolerance to ozone by elevating foliar ascorbic acid confers greater protection against ozone than increasing avoidance. *Plant Physiology*, **2005**, 138, 1673-89	6.6	189
49	Aleurone cell identity is suppressed following connation in maize kernels. *Plant Physiology*, **2005**, 139, 204-12	6.6	36
48	The ascorbic acid redox state controls guard cell signaling and stomatal movement. *Plant Cell*, **2004** , 16, 1143-62	11.6	316
47	Senescence-induced expression of cytokinin reverses pistil abortion during maize flower development. *Plant Journal*, **2004**, 38, 910-22	6.9	56
46	ACC synthase expression regulates leaf performance and drought tolerance in maize. *Plant Journal*, **2004**, 40, 813-25	6.9	138
45	RNase activity requires formation of disulfide bonds and is regulated by the redox state. *Plant Molecular Biology*, **2004**, 55, 83-96	4.6	12
44	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, 3525-30	11.5	406
43	Brassinosteroid functions to protect the translational machinery and heat-shock protein synthesis following thermal stress. *Plant Journal*, **2002**, 29, 681-91	6.9	177
42	Induction of RNase and nuclease activity in cultured maize endosperm cells following sucrose starvation. *Plant Cell, Tissue and Organ Culture*, **2002**, 68, 163-170	2.7	5
41	Protein-protein interactions required during translation. *Plant Molecular Biology*, **2002**, 50, 949-70	4.6	63
40	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, 39617-26	5.4	11
39	The histone 3′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, 7853-67	4.8	64

38	The 5Uleader of tobacco mosaic virus promotes translation through enhanced recruitment of eIF4F. *Nucleic Acids Research*, **2002**, 30, 3401-11	20.1	112
37	Developmental and Thermal Regulation of the Maize Heat Shock Protein, HSP101. *Plant Physiology*, **2001**, 127, 777-791	6.6	13
36	Unified nomenclature for the subunits of eukaryotic initiation factor 3. *Trends in Biochemical Sciences*, **2001**, 26, 284	10.3	78
35	Cap-independent translation conferred by the 5Uleader of tobacco etch virus is eukaryotic initiation factor 4G dependent. *Journal of Virology*, **2001**, 75, 12141-52	6.6	104
34	Search for the Cellular Functions of Plant Hsp100/Clp Family Proteins. *Critical Reviews in Plant Sciences*, **2001**, 20, 277-295	5.6	17
33	Plant initiation factor 3 subunit composition resembles mammalian initiation factor 3 and has a novel subunit. *Journal of Biological Chemistry*, **2001**, 276, 2122-31	5.4	76
32	Developmental and Thermal Regulation of the Maize Heat Shock Protein, HSP101. *Plant Physiology*, **2001**, 127, 777-791	6.6	79
31	eIF4G functionally differs from eIFiso4G in promoting internal initiation, cap-independent translation, and translation of structured mRNAs. *Journal of Biological Chemistry*, **2001**, 276, 36951-60	5.4	109
30	Regulation of programmed cell death in maize endosperm by abscisic acid. *Plant Molecular Biology*, **2000**, 42, 397-414	4.6	112
29	Programmed cell death during endosperm development. *Plant Molecular Biology*, **2000**, 44, 283-301	4.6	210
28	Heat shock protein HSP101 binds to the Fed-1 internal light regulator y element and mediates its high translational activity. *Plant Cell*, **2000**, 12, 1213-27	11.6	50
27	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, 17452-62	5.4	74
26	The role of 5Uleader length, secondary structure and PABP concentration on cap and poly(A) tail function during translation in Xenopus oocytes. *Nucleic Acids Research*, **2000**, 28, 2943-53	20.1	31
25	Sequence diversity and conservation of the poly(A)-binding protein in plants. *Plant Science*, **2000**, 152, 101-114	5.3	11
24	Programmed cell death during endosperm development **2000**, 39-57		17
23	Analysis of programmed cell death in wheat endosperm reveals differences in endosperm development between cereals. *Plant Molecular Biology*, **1999**, 39, 915-26	4.6	143
22	Secondary structure in the 5Uleader or 3Uuntranslated region reduces protein yield but does not affect the functional interaction between the 5Ucap and the poly(A) tail. *FEBS Letters*, **1999**, 462, 79-84	3.8	27
21	Identification and characterization of the functional elements within the tobacco etch virus 5U leader required for cap-independent translation. *Journal of Virology*, **1999**, 73, 9080-8	6.6	66

20	Controlling gene expression in transgenics. *Current Opinion in Plant Biology*, **1998**, 1, 166-72	9.9	57
19	Translation initiation factors are differentially regulated in cereals during development and following heat shock. *Plant Journal*, **1998**, 14, 715-722	6.9	37
18	A tale of two termini: a functional interaction between the termini of an mRNA is a prerequisite for efficient translation initiation. *Gene*, **1998**, 216, 1-11	3.8	240
17	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, 20084-9	5.4	32
16	Analysis of translation elongation factors from wheat during development and following heat shock. *Biochemical and Biophysical Research Communications*, **1998**, 245, 295-300	3.4	38
15	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, 16247-55	5.4	210
14	The phosphorylation state of translation initiation factors is regulated developmentally and following heat shock in wheat. *Journal of Biological Chemistry*, **1997**, 272, 1046-53	5.4	86
13	Visualization of poly(A)-binding protein complex formation with poly(A) RNA using atomic force microscopy. *Journal of Structural Biology*, **1997**, 119, 109-17	3.4	38
12	The wheat poly(A)-binding protein functionally complements pab1 in yeast. *FEBS Journal*, **1997**, 243, 350-7		21
11	The effect of the length of the 3Ʉuntranslated region on expression in plants. *FEBS Letters*, **1996**, 394, 285-8	3.8	14
10	Translational control of cellular and viral mRNAs. *Plant Molecular Biology*, **1996**, 32, 145-58	4.6	93
9	The tobacco etch viral 5Ʉleader and poly(A) tail are functionally synergistic regulators of translation. *Gene*, **1995**, 165, 233-8	3.8	94
8	The role of the 3Ʉuntranslated region of non-polyadenylated plant viral mRNAs in regulating translational efficiency. *Gene*, **1994**, 142, 159-65	3.8	78
7	Enhancing effect of the 3Ʉuntranslated region of tobacco mosaic virus RNA on protein synthesis in vitro. *FEBS Letters*, **1994**, 354, 271-3	3.8	21
6	Introduction of mRNA to plant protoplasts using polyethylene glycol. *Plant Cell Reports*, **1993**, 13, 119-22	3.1	5
5	Identification of the motifs within the tobacco mosaic virus 5Ʉleader responsible for enhancing translation. *Nucleic Acids Research*, **1992**, 20, 4631-8	20.1	195
4	RNA delivery in Saccharomyces cerevisiae using electroporation. *Yeast*, **1992**, 8, 1007-14	3.4	29
3	Post-transcriptional regulation in higher eukaryotes: the role of the reporter gene in controlling expression. *Molecular Genetics and Genomics*, **1991**, 228, 258-64		83

2	Mutational analysis of the tobacco mosaic virus 5′-leader for altered ability to enhance translation. *Nucleic Acids Research*, **1988**, 16, 883-93	20.1	71
1	The 5′-leader sequence of tobacco mosaic virus RNA enhances the expression of foreign gene transcripts in vitro and in vivo. *Nucleic Acids Research*, **1987**, 15, 3257-73	20.1	371