EncarnaciÃ³n MartÃnez-Salas

List of Publications by Year
in descending order

106 papers	4,606 citations	81900 39 h-index	114465 63 g-index
111 all docs	111 docs citations	111 times ranked	3102 citing authors

#	Article	IF	Citations
1	The quasispecies (extremely heterogeneous) nature of viral RNA genome populations: biological relevance â€” a review. Gene, 1985, 40, 1-8.	2.2	484
2	Internal ribosome entry site biology and its use in expression vectors. Current Opinion in Biotechnology, 1999, 10, 458-464.	6.6	181
3	Structural insights into viral IRES-dependent translation mechanisms. Current Opinion in Virology, 2015, 12, 113-120.	5.4	132
4	Interaction of the eIF4G initiation factor with the aphthovirus IRES is essential for internal translation initiation in vivo. Rna, 2000, 6, 1380-1392.	3.5	121
5	Conserved structural motifs located in distal loops of aphthovirus internal ribosome entry site domain 3 are required for internal initiation of translation. Journal of Virology, 1997, 71, 4171-4175.	3.4	121
6	New insights into internal ribosome entry site elements relevant for viral gene expression. Journal of General Virology, 2008, 89, 611-626.	2.9	120
7	Functional interactions in internal translation initiation directed by viral and cellular IRES elements. Journal of General Virology, 2001, 82, 973-984.	2.9	115
8	Picornavirus IRES elements: RNA structure and host protein interactions. Virus Research, 2015, 206, 62-73.	2.2	110
9	IRES interaction with translation initiation factors: Functional characterization of novel RNA contacts with eIF3, eIF4B, and eIF4GII. Rna, 2001, 7, 1213-1226.	3.5	108
10	The 3â€² end of the foot-and-mouth disease virus genome establishes two distinct long-range RNAâ€“RNA interactions with the 5â€² end region. Journal of General Virology, 2006, 87, 3013-3022.	2.9	104
11	Relevance of RNA structure for the activity of picornavirus IRES elements. Virus Research, 2009, 139, 172-182.	2.2	104
12	Insights into Structural and Mechanistic Features of Viral IRES Elements. Frontiers in Microbiology, 2017, 8, 2629.	3.5	100
13	A novel role for Gemin5 in mRNA translation. Nucleic Acids Research, 2009, 37, 582-590.	14.5	92
14	The impact of RNA structure on picornavirus IRES activity. Trends in Microbiology, 2008, 16, 230-237.	7.7	91
15	IRES-driven translation is stimulated separately by the FMDV 3'-NCR and poly(A) sequences. Nucleic Acids Research, 2002, 30, 4398-4405.	14.5	88
16	Structural organization of a viral IRES depends on the integrity of the GNRA motif. Rna, 2003, 9, 1333-1344.	3.5	84
17	Differential factor requirement to assemble translation initiation complexes at the alternative start codons of foot-and-mouth disease virus RNA. Rna, 2007, 13, 1366-1374.	3.5	79
18	Evidence of reciprocal tertiary interactions between conserved motifs involved in organizing RNA structure essential for internal initiation of translation. Rna, 2006, 12, 223-234.	3.5	78

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19	Increased Replicative Fitness Can Lead to Decreased Drug Sensitivity of Hepatitis C Virus. Journal of Virology, 2014, 88, 12098-12111.	3.4	74
20	Deletion or substitution of the aphthovirus 3â€² NCR abrogates infectivity and virus replication. Journal of General Virology, 2001, 82, 93-101.	2.9	72
21	Involvement of the Aphthovirus RNA Region Located between the Two Functional AUGs in Start Codon Selection. Virology, 1999, 255, 324-336.	2.4	71
22	Long-range RNA interactions between structural domains of the aphthovirus internal ribosome entry site (IRES). Rna, 1999, 5, 1374-1383.	3.5	69
23	Foot-and-mouth disease virus infection induces proteolytic cleavage of PTB, eIF3a,b, and PABP RNA-binding proteins. Virology, 2007, 364, 466-474.	2.4	62
24	Primer design for specific diagnosis by PCR of highly variable RNA viruses: Typing of foot-and-mouth disease virus. Virology, 1992, 189, 363-367.	2.4	60
25	Riboproteomic analysis of polypeptides interacting with the internal ribosomeâ€entry site element of footâ€andâ€mouth disease viral RNA. Proteomics, 2008, 8, 4782-4790.	2.2	60
26	Structural basis for the biological relevance of the invariant apical stem in IRES-mediated translation. Nucleic Acids Research, 2011, 39, 8572-8585.	14.5	58
27	Insights into the Biology of IRES Elements through Riboproteomic Approaches. Journal of Biomedicine and Biotechnology, 2010, 2010, 1-12.	3.0	57
28	Gemin5 promotes IRES interaction and translation control through its C-terminal region. Nucleic Acids Research, 2013, 41, 1017-1028.	14.5	55
29	Cap-independent translation of maize Hsp101. Plant Journal, 2005, 41, 722-731.	5.7	54
30	The RNA-binding protein Gemin5 binds directly to the ribosome and regulates global translation. Nucleic Acids Research, 2016, 44, 8335-8351.	14.5	54
31	Cloning and molecular characterization of a telomeric sequence from a temperature-induced Balbiani ring. Chromosoma, 1985, 92, 108-115.	2.2	53
32	RNA-Binding Proteins Impacting on Internal Initiation of Translation. International Journal of Molecular Sciences, 2013, 14, 21705-21726.	4.1	50
33	Upstream AUGs in embryonic proinsulin mRNA control its low translation level. EMBO Journal, 2003, 22, 5582-5592.	7.8	47
34	Gemin5 proteolysis reveals a novel motif to identify L protease targets. Nucleic Acids Research, 2012, 40, 4942-4953.	14.5	47
35	Identification of novel non-canonical RNA-binding sites in Gemin5 involved in internal initiation of translation. Nucleic Acids Research, 2014, 42, 5742-5754.	14.5	47
36	Structural analysis provides insights into the modular organization of picornavirus IRES. Virology, 2011, 409, 251-261.	2.4	46

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37	Alternative Mechanisms to Initiate Translation in Eukaryotic mRNAs. Comparative and Functional Genomics, 2012, 2012, 1-12.	2.0	45
38	Developmental regulation of a proinsulin messenger RNA generated by intron retention. EMBO Reports, 2005, 6, 1182-1187.	4.5	44
39	Sequence of the viral replicase gene from foot-and-mouth disease virus C1-Santa Pau (C-S8). Gene, 1985, 35, 55-61.	2.2	42
40	G3<scp>BP</scp>1 interacts directly with the <scp>FMDV IRES</scp> and negatively regulates translation. FEBS Journal, 2017, 284, 3202-3217.	4.7	42
41	Gemin5: A Multitasking RNA-Binding Protein Involved in Translation Control. Biomolecules, 2015, 5, 528-544.	4.0	38
42	Picornavirus IRES: Structure Function Relationship. Current Pharmaceutical Design, 2004, 10, 3757-3767.	1.9	38
43	Molecular evolution of aphthoviruses. Virus Genes, 1995, 11, 197-207.	1.6	37
44	Innate immune sensor LGP2 is cleaved by the Leader protease of foot-and-mouth disease virus. PLoS Pathogens, 2018, 14, e1007135.	4.7	35
45	Characterization of a cyanobacterial RNase P ribozyme recognition motif in the IRES of foot-and-mouth disease virus reveals a unique structural element. Rna, 2007, 13, 849-859.	3.5	34
46	Long-range RNAâ€"RNA interactions between distant regions of the hepatitis C virus internal ribosome entry site element. Journal of General Virology, 2002, 83, 1113-1121.	2.9	31
47	Characterizing the function and structural organization of the 5' tRNA-like motif within the hepatitis C virus quasispecies. Nucleic Acids Research, 2005, 33, 1487-1502.	14.5	30
48	Internal initiation of translation efficiency in different hepatitis C genotypes isolated from interferon treated patients. Archives of Virology, 1999, 144, 215-229.	2.1	29
49	RNA Structural Elements of Hepatitis C Virus Controlling Viral RNA Translation and the Implications for Viral Pathogenesis. Viruses, 2012, 4, 2233-2250.	3.3	29
50	Enhanced IRES activity by the 3â€²UTR element determines the virulence of FMDV isolates. Virology, 2014, 448, 303-313.	2.4	28
51	In-cell SHAPE uncovers dynamic interactions between the untranslated regions of the foot-and-mouth disease virus RNA. Nucleic Acids Research, 2017, 45, gkw795.	14.5	28
52	3D gene of foot-and-mouth disease virus. Journal of Molecular Biology, 1988, 204, 771-776.	4.2	27
53	Parameters influencing translational efficiency in aphthovirus IRES-based bicistronic expression vectors. Gene, 1998, 217, 51-56.	2.2	27
54	Magnesiumâ€dependent folding of a picornavirus <scp>IRES</scp> element modulates <scp>RNA</scp> conformation and eIF4G interaction. FEBS Journal, 2014, 281, 3685-3700.	4.7	26

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55	Local RNA flexibility perturbation of the IRES element induced by a novel ligand inhibits viral RNA translation. RNA Biology, 2015, 12, 555-568.	3.1	25
56	RNAâ€“protein interaction methods to study viral IRES elements. Methods, 2015, 91, 3-12.	3.8	24
57	Emerging Roles of Gemin5: From snRNPs Assembly to Translation Control. International Journal of Molecular Sciences, 2020, 21, 3868.	4.1	24
58	IRES elements: features of the RNA structure contributing to their activity. Biochimie, 2002, 84, 755-763.	2.6	23
59	Modeling Three-Dimensional Structural Motifs of Viral IRES. Journal of Molecular Biology, 2016, 428, 767-776.	4.2	23
60	The landscape of the non-canonical RNA-binding site of Gemin5 unveils a feedback loop counteracting the negative effect on translation. Nucleic Acids Research, 2018, 46, 7339-7353.	14.5	23
61	Rescue of internal initiation of translation by RNA complementation provides evidence for a distribution of functions between individual IRES domains. Virology, 2009, 388, 221-229.	2.4	21
62	Picornavirus translation strategies. FEBS Open Bio, 2022, 12, 1125-1141.	2.3	21
63	Response to retreatment with interferon-Î± plus ribavirin in chronic hepatitis C patients is independent of the NS5A gene nucleotide sequence. American Journal of Gastroenterology, 1999, 94, 2487-2495.	0.4	20
64	Using RNA inverse folding to identify IRES-like structural subdomains. RNA Biology, 2013, 10, 1842-1852.	3.1	20
65	Impact of RNAâ€“Protein Interaction Modes on Translation Control: The Versatile Multidomain Protein Gemin5. BioEssays, 2019, 41, e1800241.	2.5	20
66	In vivo footprint of a picornavirus internal ribosome entry site reveals differences in accessibility to specific RNA structural elements. Journal of General Virology, 2007, 88, 3053-3062.	2.9	19
67	Fingerprinting the junctions of RNA structure by an open-paddlewheel diruthenium compound. Rna, 2016, 22, 330-338.	3.5	19
68	Structural basis for the dimerization of Gemin5 and its role in protein recruitment and translation control. Nucleic Acids Research, 2020, 48, 788-801.	14.5	19
69	Internal translation initiation on the footâ€andâ€mouth disease virus IRES is affected by ribosomal stalk conformation. FEBS Letters, 2008, 582, 3029-3032.	2.8	18
70	Ribosome-dependent conformational flexibility changes and RNA dynamics of IRES domains revealed by differential SHAPE. Scientific Reports, 2018, 8, 5545.	3.3	18
71	Response To Retreatment With Interferon-Î± Plus Ribavirin in Chronic Hepatitis C Patients Is Independent of The Ns5a Gene Nucleotide Sequence. American Journal of Gastroenterology, 1999, 94, 2487-2495.	0.4	17
72	Susceptibility to viral infection is enhanced by stable expression of 3A or 3AB proteins from foot-and-mouth disease virus. Virology, 2008, 380, 34-45.	2.4	17

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73	Effect of Expression of the Aphthovirus Protease 3C on Viral Infection and Gene Expression. Virology, 1995, 212, 111-120.	2.4	16
74	Stable expression of antisense RNAs targeted to the 5â€² non-coding region confers heterotypic inhibition to foot-and-mouth disease virus infection. Journal of General Virology, 2003, 84, 393-402.	2.9	16
75	Evolutionary conserved motifs constrain the RNA structure organization of picornavirus IRES. FEBS Letters, 2013, 587, 1353-1358.	2.8	16
76	Deconstructing internal ribosome entry site elements: an update of structural motifs and functional divergences. Open Biology, 2018, 8, 180155.	3.6	15
77	MDA5 cleavage by the Leader protease of foot-and-mouth disease virus reveals its pleiotropic effect against the host antiviral response. Cell Death and Disease, 2020, 11, 718.	6.3	15
78	RNA-Binding Proteins at the Host-Pathogen Interface Targeting Viral Regulatory Elements. Viruses, 2021, 13, 952.	3.3	15
79	A Combined ELONA-(RT)qPCR Approach for Characterizing DNA and RNA Aptamers Selected against PCBP-2. Molecules, 2019, 24, 1213.	3.8	14
80	Rab1b and ARF5 are novel RNA-binding proteins involved in FMDV IRESâ€"driven RNA localization. Life Science Alliance, 2019, 2, e201800131.	2.8	14
81	Heterotypic inhibition of foot-and-mouth disease virus infection by combinations of RNA transcripts corresponding to the 5â€² and 3â€² regions. Antiviral Research, 1999, 44, 133-141.	4.1	13
82	Exploring IRES Region Accessibility by Interference of Foot-and-Mouth Disease Virus Infectivity. PLoS ONE, 2012, 7, e41382.	2.5	12
83	Functional and Structural Analysis of Maize Hsp101 IRES. PLoS ONE, 2014, 9, e107459.	2.5	11
84	RNA-protein coevolution study of Gemin5 uncovers the role of the PXSS motif of RBS1 domain for RNA binding. RNA Biology, 2020, 17, 1331-1341.	3.1	10
85	Autosomal Recessive Cerebellar Atrophy and Spastic Ataxia in Patients With Pathogenic Biallelic Variants in GEMIN5. Frontiers in Cell and Developmental Biology, 2022, 10, 783762.	3.7	10
86	Specific interference between two unrelated internal ribosome entry site elements impairs translation efficiency. FEBS Letters, 2005, 579, 6803-6808.	2.8	9
87	Thermostability of the Foot-and-Mouth Disease Virus Capsid Is Modulated by Lethal and Viability-Restoring Compensatory Amino Acid Substitutions. Journal of Virology, 2019, 93, .	3.4	9
88	Uncovering targets of the Leader protease: Linking RNA â€mediated pathways and antiviral defense. Wiley Interdisciplinary Reviews RNA, 2021, 12, e1645.	6.4	9
89	Translation and Protein Processing. , 0, , 141-162.		9
90	RNAiFold2T: Constraint Programming design of thermo-IRES switches. Bioinformatics, 2016, 32, i360-i368.	4.1	8

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91	Designing synthetic RNAs to determine the relevance of structural motifs in picornavirus IRES elements. Scientific Reports, 2016, 6, 24243.	3.3	8
92	The RBS1 domain of Gemin5 is intrinsically unstructured and interacts with RNA through conserved Arg and aromatic residues. RNA Biology, 2021, 18, 496-506.	3.1	7
93	Genome Organisation, Translation and Replication of Foot-and-Mouth Disease Virus RNA. , 2019, , 19-52.		7
94	Functional and structural deficiencies of Gemin5 variants associated with neurological disorders. Life Science Alliance, 2022, 5, e202201403.	2.8	7
95	Genome Organisation, Translation and Replication of Foot-and-mouth Disease Virus RNA. , 2017, , 13-42.		6
96	Tailoring the switch from IRES-dependent to 5'-end-dependent translation with the RNase P ribozyme. Rna, 2010, 16, 852-862.	3.5	4
97	Translation and Protein Processing. , 0, , 141-161.		4
98	Internal Ribosome Entry Site Elements in Eukaryotic Genomes. Current Genomics, 2004, 5, 259-277.	1.6	3
99	IRES Elements: Issues, Controversies and Evolutionary Perspectives. , 2016, , 547-564.		2
100	Genome Organisation, Translation and Replication of Foot-and-Mouth Disease Virus RNA. , 2004, , 21-52.		2
101	Structural insights of the pre-let-7 interaction with LIN28B. Nucleosides, Nucleotides and Nucleic Acids, 2021, 40, 1-19.	1.1	2
102	Analysis of theilv-linked genes that determine the morphology ofEscherichia coli Cells. Current Microbiology, 1983, 8, 177-182.	2.2	1
103	Identification of RNA-Binding Proteins Associated to RNA Structural Elements. Methods in Molecular Biology, 2021, 2323, 109-119.	0.9	1
104	Picornavirus Variation. , 1993, , 255-281.		1
105	Preface. Virus Research, 2009, 139, 135-136.	2.2	0
106	Riboproteomic Approaches to Understanding IRES Elements. , 2012, , 103-118.		0