Encarnacin Martnez-Salas

List of Publications by Citations

103 papers	3,785 citations	36 h-index	58 g-index
111 ext. papers	4,210 ext. citations	6.7 avg, IF	5.52 L-index

#	Paper	IF	Citations
103	The quasispecies (extremely heterogeneous) nature of viral RNA genome populations: biological relevance--a review. *Gene*, **1985**, 40, 1-8	3.8	392
102	Internal ribosome entry site biology and its use in expression vectors. *Current Opinion in Biotechnology*, **1999**, 10, 458-64	11.4	153
101	New insights into internal ribosome entry site elements relevant for viral gene expression. *Journal of General Virology*, **2008**, 89, 611-626	4.9	113
100	Interaction of the eIF4G initiation factor with the aphthovirus IRES is essential for internal translation initiation in vivo. *Rna*, **2000**, 6, 1380-92	5.8	113
99	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, 4171-5	6.6	109
98	Functional interactions in internal translation initiation directed by viral and cellular IRES elements. *Journal of General Virology*, **2001**, 82, 973-984	4.9	103
97	Structural insights into viral IRES-dependent translation mechanisms. *Current Opinion in Virology*, **2015**, 12, 113-20	7.5	99
96	IRES interaction with translation initiation factors: functional characterization of novel RNA contacts with eIF3, eIF4B, and eIF4GII. *Rna*, **2001**, 7, 1213-26	5.8	97
95	The 3′end of the foot-and-mouth disease virus genome establishes two distinct long-range RNA-RNA interactions with the 5′end region. *Journal of General Virology*, **2006**, 87, 3013-3022	4.9	90
94	Relevance of RNA structure for the activity of picornavirus IRES elements. *Virus Research*, **2009**, 139, 172-82	6.4	89
93	Picornavirus IRES elements: RNA structure and host protein interactions. *Virus Research*, **2015**, 206, 62-73	3.4	87
92	The impact of RNA structure on picornavirus IRES activity. *Trends in Microbiology*, **2008**, 16, 230-7	12.4	80
91	Structural organization of a viral IRES depends on the integrity of the GNRA motif. *Rna*, **2003**, 9, 1333-44	5.8	78
90	IRES-driven translation is stimulated separately by the FMDV 3′NCR and poly(A) sequences. *Nucleic Acids Research*, **2002**, 30, 4398-405	20.1	75
89	Evidence of reciprocal tertiary interactions between conserved motifs involved in organizing RNA structure essential for internal initiation of translation. *Rna*, **2006**, 12, 223-34	5.8	74
88	A novel role for Gemin5 in mRNA translation. *Nucleic Acids Research*, **2009**, 37, 582-90	20.1	72
87	Differential factor requirement to assemble translation initiation complexes at the alternative start codons of foot-and-mouth disease virus RNA. *Rna*, **2007**, 13, 1366-74	5.8	69

86	Deletion or substitution of the aphthovirus 3XNCR abrogates infectivity and virus replication. *Journal of General Virology*, **2001**, 82, 93-101	4.9	67
85	Involvement of the aphthovirus RNA region located between the two functional AUGs in start codon selection. *Virology*, **1999**, 255, 324-36	3.6	67
84	Long-range RNA interactions between structural domains of the aphthovirus internal ribosome entry site (IRES). *Rna*, **1999**, 5, 1374-83	5.8	64
83	Increased replicative fitness can lead to decreased drug sensitivity of hepatitis C virus. *Journal of Virology*, **2014**, 88, 12098-111	6.6	57
82	Foot-and-mouth disease virus infection induces proteolytic cleavage of PTB, eIF3a,b, and PABP RNA-binding proteins. *Virology*, **2007**, 364, 466-74	3.6	56
81	Riboproteomic analysis of polypeptides interacting with the internal ribosome-entry site element of foot-and-mouth disease viral RNA. *Proteomics*, **2008**, 8, 4782-90	4.8	54
80	Insights into Structural and Mechanistic Features of Viral IRES Elements. *Frontiers in Microbiology*, **2017**, 8, 2629	5.7	50
79	Insights into the biology of IRES elements through riboproteomic approaches. *Journal of Biomedicine and Biotechnology*, **2010**, 2010, 458927		50
78	Primer design for specific diagnosis by PCR of highly variable RNA viruses: typing of foot-and-mouth disease virus. *Virology*, **1992**, 189, 363-7	3.6	50
77	Gemin5 promotes IRES interaction and translation control through its C-terminal region. *Nucleic Acids Research*, **2013**, 41, 1017-28	20.1	49
76	Structural basis for the biological relevance of the invariant apical stem in IRES-mediated translation. *Nucleic Acids Research*, **2011**, 39, 8572-85	20.1	49
75	Cap-independent translation of maize Hsp101. *Plant Journal*, **2005**, 41, 722-31	6.9	47
74	Cloning and molecular characterization of a telomeric sequence from a temperature-induced Balbiani ring. *Chromosoma*, **1985**, 92, 108-115	2.8	47
73	Upstream AUGs in embryonic proinsulin mRNA control its low translation level. *EMBO Journal*, **2003**, 22, 5582-92	13	43
72	Structural analysis provides insights into the modular organization of picornavirus IRES. *Virology*, **2011**, 409, 251-61	3.6	40
71	Alternative Mechanisms to Initiate Translation in Eukaryotic mRNAs. *Comparative and Functional Genomics*, **2012**, 2012, 391546		40
70	RNA-binding proteins impacting on internal initiation of translation. *International Journal of Molecular Sciences*, **2013**, 14, 21705-26	6.3	39
69	Gemin5 proteolysis reveals a novel motif to identify L protease targets. *Nucleic Acids Research*, **2012**, 40, 4942-53	20.1	37

68	Developmental regulation of a proinsulin messenger RNA generated by intron retention. *EMBO Reports*, **2005**, 6, 1182-7	6.5	37
67	Sequence of the viral replicase gene from foot-and-mouth disease virus C1-Santa Pau (C-S8). *Gene*, **1985**, 35, 55-61	3.8	36
66	The RNA-binding protein Gemin5 binds directly to the ribosome and regulates global translation. *Nucleic Acids Research*, **2016**, 44, 8335-51	20.1	35
65	Identification of novel non-canonical RNA-binding sites in Gemin5 involved in internal initiation of translation. *Nucleic Acids Research*, **2014**, 42, 5742-54	20.1	35
64	Picornavirus IRES: structure function relationship. *Current Pharmaceutical Design*, **2004**, 10, 3757-67	3.3	34
63	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, 849-59	5.8	32
62	G3BP1 interacts directly with the FMDV IRES and negatively regulates translation. *FEBS Journal*, **2017**, 284, 3202-3217	5.7	31
61	Innate immune sensor LGP2 is cleaved by the Leader protease of foot-and-mouth disease virus. *PLoS Pathogens*, **2018**, 14, e1007135	7.6	27
60	RNA structural elements of hepatitis C virus controlling viral RNA translation and the implications for viral pathogenesis. *Viruses*, **2012**, 4, 2233-50	6.2	27
59	Parameters influencing translational efficiency in aphthovirus IRES-based bicistronic expression vectors. *Gene*, **1998**, 217, 51-6	3.8	27
58	Internal initiation of translation efficiency in different hepatitis C genotypes isolated from interferon treated patients. *Archives of Virology*, **1999**, 144, 215-29	2.6	27
57	Long-range RNA-RNA interactions between distant regions of the hepatitis C virus internal ribosome entry site element. *Journal of General Virology*, **2002**, 83, 1113-1121	4.9	27
56	Molecular evolution of aphthoviruses. *Virus Genes*, **1995**, 11, 197-207	2.3	25
55	Gemin5: A Multitasking RNA-Binding Protein Involved in Translation Control. *Biomolecules*, **2015**, 5, 528-44	3.9	24
54	Characterizing the function and structural organization of the 5′tRNA-like motif within the hepatitis C virus quasispecies. *Nucleic Acids Research*, **2005**, 33, 1487-502	20.1	24
53	3D gene of foot-and-mouth disease virus. Conservation by convergence of average sequences. *Journal of Molecular Biology*, **1988**, 204, 771-6	6.5	23
52	Magnesium-dependent folding of a picornavirus IRES element modulates RNA conformation and eIF4G interaction. *FEBS Journal*, **2014**, 281, 3685-700	5.7	22
51	Local RNA flexibility perturbation of the IRES element induced by a novel ligand inhibits viral RNA translation. *RNA Biology*, **2015**, 12, 555-68	4.8	20

50	Rescue of internal initiation of translation by RNA complementation provides evidence for a distribution of functions between individual IRES domains. *Virology*, **2009**, 388, 221-9	3.6	20
49	Enhanced IRES activity by the 3XUTR element determines the virulence of FMDV isolates. *Virology*, **2014**, 448, 303-13	3.6	19
48	IRES elements: features of the RNA structure contributing to their activity. *Biochimie*, **2002**, 84, 755-63	4.6	19
47	RNA-protein interaction methods to study viral IRES elements. *Methods*, **2015**, 91, 3-12	4.6	18
46	Using RNA inverse folding to identify IRES-like structural subdomains. *RNA Biology*, **2013**, 10, 1842-52	4.8	18
45	Internal translation initiation on the foot-and-mouth disease virus IRES is affected by ribosomal stalk conformation. *FEBS Letters*, **2008**, 582, 3029-32	3.8	18
44	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	4.9	18
43	Response to retreatment with interferon-alpha plus ribavirin in chronic hepatitis C patients is independent of the NS5A gene nucleotide sequence. *American Journal of Gastroenterology*, **1999**, 94, 2487-95	0.7	17
42	Response to retreatment with interferon- plus ribavirin in chronic hepatitis C patients is independent of the NS5A gene nucleotide sequence. *American Journal of Gastroenterology*, **1999**, 94, 2487-2495	0.7	17
41	Modeling Three-Dimensional Structural Motifs of Viral IRES. *Journal of Molecular Biology*, **2016**, 428, 767-776	6.5	16
40	In-cell SHAPE uncovers dynamic interactions between the untranslated regions of the foot-and-mouth disease virus RNA. *Nucleic Acids Research*, **2017**, 45, 1416-1432	20.1	16
39	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	3.6	15
38	Stable expression of antisense RNAs targeted to the 5Xnon-coding region confers heterotypic inhibition to foot-and-mouth disease virus infection. *Journal of General Virology*, **2003**, 84, 393-402	4.9	15
37	Effect of expression of the aphthovirus protease 3C on viral infection and gene expression. *Virology* , **1995**, 212, 111-20	3.6	14
36	Evolutionary conserved motifs constrain the RNA structure organization of picornavirus IRES. *FEBS Letters*, **2013**, 587, 1353-8	3.8	13
35	Heterotypic inhibition of foot-and-mouth disease virus infection by combinations of RNA transcripts corresponding to the 5Xand 3Xregions. *Antiviral Research*, **1999**, 44, 133-41	10.8	13
34	Deconstructing internal ribosome entry site elements: an update of structural motifs and functional divergences. *Open Biology*, **2018**, 8,	7	13
33	Impact of RNA-Protein Interaction Modes on Translation Control: The Versatile Multidomain Protein Gemin5. *BioEssays*, **2019**, 41, e1800241	4.1	12

32	A Combined ELONA-(RT)qPCR Approach for Characterizing DNA and RNA Aptamers Selected against PCBP-2. *Molecules*, **2019**, 24,	4.8	12
31	Fingerprinting the junctions of RNA structure by an open-paddlewheel diruthenium compound. *Rna* , **2016**, 22, 330-8	5.8	12
30	Exploring IRES region accessibility by interference of foot-and-mouth disease virus infectivity. *PLoS ONE*, **2012**, 7, e41382	3.7	12
29	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	20.1	12
28	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	9.8	11
27	Emerging Roles of Gemin5: From snRNPs Assembly to Translation Control. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	10
26	Functional and structural analysis of maize hsp101 IRES. *PLoS ONE*, **2014**, 9, e107459	3.7	10
25	Rab1b and ARF5 are novel RNA-binding proteins involved in FMDV IRES-driven RNA localization. *Life Science Alliance*, **2019**, 2,	5.8	10
24	Specific interference between two unrelated internal ribosome entry site elements impairs translation efficiency. *FEBS Letters*, **2005**, 579, 6803-8	3.8	9
23	Translation and Protein Processing141-162		9
22	Structural basis for the dimerization of Gemin5 and its role in protein recruitment and translation control. *Nucleic Acids Research*, **2020**, 48, 788-801	20.1	9
21	Ribosome-dependent conformational flexibility changes and RNA dynamics of IRES domains revealed by differential SHAPE. *Scientific Reports*, **2018**, 8, 5545	4.9	8
20	Designing synthetic RNAs to determine the relevance of structural motifs in picornavirus IRES elements. *Scientific Reports*, **2016**, 6, 24243	4.9	8
19	RNAiFold2T: Constraint Programming design of thermo-IRES switches. *Bioinformatics*, **2016**, 32, i360-i368	7.2	7
18	Genome Organisation, Translation and Replication of Foot-and-mouth Disease Virus RNA **2017**, 13-42		6
17	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,	6.6	5
16	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	4.8	4
15	Tailoring the switch from IRES-dependent to 5Xend-dependent translation with the RNase P ribozyme. *Rna*, **2010**, 16, 852-62	5.8	4

List of Publications

14	Genome Organisation, Translation and Replication of Foot-and-Mouth Disease Virus RNA **2019**, 19-52		4
13	Uncovering targets of the Leader protease: Linking RNA-mediated pathways and antiviral defense. *Wiley Interdisciplinary Reviews RNA*, **2021**, 12, e1645	9.3	4
12	Internal Ribosome Entry Site Elements in Eukaryotic Genomes. *Current Genomics*, **2004**, 5, 259-277	2.6	3
11	Genome Organisation, Translation and Replication of Foot-and-Mouth Disease Virus RNA **2004**, 21-52		2
10	IRES Elements: Issues, Controversies and Evolutionary Perspectives **2016**, 547-564		1
9	Analysis of theilv-linked genes that determine the morphology ofEscherichia coli Cells. *Current Microbiology*, **1983**, 8, 177-182	2.4	1
8	Structural insights of the pre-let-7 interaction with LIN28B. *Nucleosides, Nucleotides and Nucleic Acids*, **2021**, 40, 194-211	1.4	1
7	Picornavirus Variation **1993**, 255-281		1
6	Translation and Protein Processing141-161		1
5	RNA-Binding Proteins at the Host-Pathogen Interface Targeting Viral Regulatory Elements. *Viruses*, **2021**, 13,	6.2	1
4	Identification of RNA-Binding Proteins Associated to RNA Structural Elements. *Methods in Molecular Biology*, **2021**, 2323, 109-119	1.4	1
3	The RBS1 domain of Gemin5 is intrinsically unstructured and interacts with RNA through conserved Arg and aromatic residues. *RNA Biology*, **2021**, 1-11	4.8	1
2	Autosomal Recessive Cerebellar Atrophy and Spastic Ataxia in Patients With Pathogenic Biallelic Variants in .. *Frontiers in Cell and Developmental Biology*, **2022**, 10, 783762	5.7	1
1	Riboproteomic Approaches to Understanding IRES Elements **2012**, 103-118		