## Tatyana V Pestova

List of Publications by Year in descending order

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Version: 2024-02-01

92 papers 13,950 citations

59 h-index 91 g-index

95 all docs 95 docs citations 95 times ranked 10279 citing authors

#	Article	IF	CITATIONS
1	The mechanism of eukaryotic translation initiation and principles of its regulation. Nature Reviews Molecular Cell Biology, 2010, $11$ , $113$ - $127$ .	37.0	2,160
2	5′ UTR m6A Promotes Cap-Independent Translation. Cell, 2015, 163, 999-1010.	28.9	1,414
3	The roles of individual eukaryotic translation initiation factors in ribosomal scanning and initiation codon selection. Genes and Development, 2002, 16, 2906-2922.	5.9	463
4	Initiation of Protein Synthesis from the A Site of the Ribosome. Cell, 2000, 102, 511-520.	28.9	402
5	Eukaryotic ribosomes require initiation factors 1 and 1A to locate initiation codons. Nature, 1998, 394, 854-859.	27.8	381
6	The joining of ribosomal subunits in eukaryotes requires elF5B. Nature, 2000, 403, 332-335.	27.8	355
7	The Role of ABCE1 in Eukaryotic Posttermination Ribosomal Recycling. Molecular Cell, 2010, 37, 196-210.	9.7	290
8	Specific Interaction of Eukaryotic Translation Initiation Factor 3 with the 5′ Nontranslated Regions of Hepatitis C Virus and Classical Swine Fever Virus RNAs. Journal of Virology, 1998, 72, 4775-4782.	3.4	266
9	In Vitro Reconstitution of Eukaryotic Translation Reveals Cooperativity between Release Factors eRF1 and eRF3. Cell, 2006, 125, 1125-1136.	28.9	258
10	A cell cycle-dependent protein serves as a template-specific translation initiation factor. Genes and Development, 2000, 14, 2028-2045.	5.9	256
11	Dissociation by Pelota, Hbs1 and ABCE1 of mammalian vacant 80S ribosomes and stalled elongation complexes. EMBO Journal, 2011, 30, 1804-1817.	7.8	255
12	Cap-Independent Translation of Picornavirus RN As: Structure and Function of the Internal Ribosomal Entry Site. Enzyme, 1990, 44, 292-309.	0.7	216
13	Translation elongation after assembly of ribosomes on the Cricket paralysis virus internal ribosomal entry site without initiation factors or initiator tRNA. Genes and Development, 2003, 17, 181-186.	5.9	212
14	Translation Initiation on Mammalian mRNAs with Structured 5′UTRs Requires DExH-Box Protein DHX29. Cell, 2008, 135, 1237-1250.	28.9	208
15	Activities of Ligatin and MCT-1/DENR in eukaryotic translation initiation and ribosomal recycling. Genes and Development, 2010, 24, 1787-1801.	5.9	204
16	Structure of mammalian eIF3 in the context of the 43S preinitiation complex. Nature, 2015, 525, 491-495.	27.8	204
17	Ribosomal position and contacts of mRNA in eukaryotic translation initiation complexes. EMBO Journal, 2008, 27, 1609-1621.	7.8	202
18	A Conserved HEAT Domain within eIF4G Directs Assembly of the Translation Initiation Machinery. Molecular Cell, 2001, 7, 193-203.	9.7	199

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19	Structure of the Mammalian Ribosomal 43S Preinitiation Complex Bound to the Scanning Factor DHX29. Cell, 2013, 153, 1108-1119.	28.9	197
20	Release of initiation factors from 48S complexes during ribosomal subunit joining and the link between establishment of codon-anticodon base-pairing and hydrolysis of eIF2-bound GTP. Genes and Development, 2004, 18, 3078-3093.	5.9	193
21	Eukaryotic Translation Initiation Factor 4E (eIF4E) Binding Site and the Middle One-Third of eIF4GI Constitute the Core Domain for Cap-Dependent Translation, and the C-Terminal One-Third Functions as a Modulatory Region. Molecular and Cellular Biology, 2000, 20, 468-477.	2.3	190
22	Recycling of Eukaryotic Posttermination Ribosomal Complexes. Cell, 2007, 131, 286-299.	28.9	190
23	Specific functional interactions of nucleotides at key -3 and +4 positions flanking the initiation codon with components of the mammalian 48S translation initiation complex. Genes and Development, 2006, 20, 624-636.	5.9	187
24	Termination and post-termination events in eukaryotic translation. Advances in Protein Chemistry and Structural Biology, 2012, 86, 45-93.	2.3	182
25	Inhibition of translation by IFIT family members is determined by their ability to interact selectively with the 5′-terminal regions of cap0-, cap1- and 5′ppp- mRNAs. Nucleic Acids Research, 2014, 42, 3228-3245	5. <sup>14.5</sup>	182
26	Physical Association of Eukaryotic Initiation Factor 4G (eIF4G) with eIF4A Strongly Enhances Binding of eIF4G to the Internal Ribosomal Entry Site of Encephalomyocarditis Virus and Is Required for Internal Initiation of Translation. Molecular and Cellular Biology, 2000, 20, 6019-6029.	2.3	173
27	Translation Eukaryotic Initiation Factor 4G Recognizes a Specific Structural Element within the Internal Ribosome Entry Site of Encephalomyocarditis Virus RNA. Journal of Biological Chemistry, 1998, 273, 18599-18604.	3.4	171
28	The elF1A Solution Structure Reveals a Large RNA-Binding Surface Important for Scanning Function. Molecular Cell, 2000, 5, 109-119.	9.7	166
29	Translational Control by a Small RNA: Dendritic BC1 RNA Targets the Eukaryotic Initiation Factor 4A Helicase Mechanism. Molecular and Cellular Biology, 2008, 28, 3008-3019.	2.3	163
30	Hepatitis-C-virus-like internal ribosome entry sites displace eIF3 to gain access to the 40S subunit. Nature, 2013, 503, 539-543.	27.8	158
31	An Enzymatic Footprinting Analysis of the Interaction of 40S Ribosomal Subunits with the Internal Ribosomal Entry Site of Hepatitis C Virus. Journal of Virology, 2000, 74, 6242-6250.	3.4	153
32	Dissociation of eIF1 from the 40S ribosomal subunit is a key step in start codon selection in vivo. Genes and Development, 2007, 21, 1217-1230.	5.9	146
33	elF2-dependent and elF2-independent modes of initiation on the CSFV IRES: a common role of domain II. EMBO Journal, 2008, 27, 1060-1072.	7.8	138
34	Structure and interactions of the translation initiation factor eIF1. EMBO Journal, 1999, 18, 2631-2637.	7.8	135
35	The mechanism of translation initiation on Type 1 picornavirus IRESs. EMBO Journal, 2014, 33, 76-92.	7.8	135
36	Structural insights into eRF3 and stop codon recognition by eRF1. Genes and Development, 2009, 23, 1106-1118.	5.9	133

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37	Reinitiation and Other Unconventional Posttermination Events during Eukaryotic Translation. Molecular Cell, 2013, 51, 249-264.	9.7	133
38	Direct functional interaction of initiation factor eIF4G with type 1 internal ribosomal entry sites. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 9197-9202.	7.1	128
39	Position of eukaryotic initiation factor elF1 on the 40S ribosomal subunit determined by directed hydroxyl radical probing. Genes and Development, 2003, 17, 2786-2797.	5.9	127
40	Position of the CrPV IRES on the 40S subunit and factor dependence of IRES/80S ribosome assembly. EMBO Reports, 2004, 5, 906-913.	4.5	114
41	Binding of eukaryotic initiation factor 3 to ribosomal 40S subunits and its role in ribosomal dissociation and anti-association. Rna, 2005, 11, 470-486.	3.5	108
42	Assembly and Analysis of Eukaryotic Translation Initiation Complexes. Methods in Enzymology, 2007, 430, 147-177.	1.0	107
43	Initiation factor eIF5B catalyzes second GTP-dependent step in eukaryotic translation initiation. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 16689-16694.	7.1	105
44	The fidelity of translation initiation: reciprocal activities of eIF1, IF3 and YciH. EMBO Journal, 2006, 25, 196-210.	7.8	105
45	The helicase protein DHX29 promotes translation initiation, cell proliferation, and tumorigenesis. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 22217-22222.	7.1	103
46	Common conformational changes induced in type 2 picornavirus IRESs by cognate trans-acting factors. Nucleic Acids Research, 2011, 39, 4851-4865.	14.5	98
47	Toward the mechanism of elF4F-mediated ribosomal attachment to mammalian capped mRNAs. Genes and Development, 2016, 30, 1573-1588.	5.9	97
48	Eukaryotic Initiation Factors 4G and 4A Mediate Conformational Changes Downstream of the Initiation Codon of the Encephalomyocarditis Virus Internal Ribosomal Entry Site. Molecular and Cellular Biology, 2003, 23, 687-698.	2.3	94
49	Position of eukaryotic translation initiation factor elF1A on the 40S ribosomal subunit mapped by directed hydroxyl radical probing. Nucleic Acids Research, 2009, 37, 5167-5182.	14.5	94
50	Mapping the binding interface between human eukaryotic initiation factors 1A and 5B: A new interaction between old partners. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 1535-1540.	7.1	83
51	Cryo-EM of Ribosomal 80S Complexes with Termination Factors Reveals the Translocated Cricket Paralysis Virus IRES. Molecular Cell, 2015, 57, 422-432.	9.7	82
52	The eIF1A C-terminal domain promotes initiation complex assembly, scanning and AUG selection in vivo. EMBO Journal, 2005, 24, 3588-3601.	7.8	80
53	Release of Ubiquitinated and Non-ubiquitinated Nascent Chains from Stalled Mammalian Ribosomal Complexes by ANKZF1 and Ptrh1. Molecular Cell, 2018, 72, 286-302.e8.	9.7	74
54	Kinetic Analysis of Interaction of Eukaryotic Release Factor 3 with Guanine Nucleotides. Journal of Biological Chemistry, 2006, 281, 40224-40235.	3.4	70

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55	General RNA-binding proteins have a function in poly(A)-binding protein-dependent translation. EMBO Journal, 2009, 28, 58-68.	7.8	69
56	Ribosomal binding to the internal ribosomal entry site of classical swine fever virus. Rna, 2000, 6, 1791-1807.	3.5	66
57	Bypassing of stems versus linear base-by-base inspection of mammalian mRNAs during ribosomal scanning. EMBO Journal, 2011, 30, 115-129.	7.8	66
58	The mechanism of translation initiation on Aichivirus RNA mediated by a novel type of picornavirus IRES. EMBO Journal, 2011, 30, 4423-4436.	7.8	65
59	Pyrimidine tract binding protein strongly stimulates in vitro encephalomyocarditis virus RNA translation at the level of preinitiation complex formation. FEBS Letters, 1994, 351, 299-302.	2.8	63
60	Internal Initiation of Translation of Bovine Viral Diarrhea Virus RNA. Virology, 1999, 258, 249-256.	2.4	63
61	Structure of the mammalian ribosomal pre-termination complex associated with eRF1•eRF3•GDPNP. Nucleic Acids Research, 2014, 42, 3409-3418.	14.5	63
62	Distinct eRF3 Requirements Suggest Alternate eRF1 Conformations Mediate Peptide Release during Eukaryotic Translation Termination. Molecular Cell, 2008, 30, 599-609.	9.7	56
63	Preparation and activity of synthetic unmodified mammalian tRNAi Met in initiation of translation in vitro. Rna, 2001, 7, 1496-1505.	3.5	55
64	Multiple Mechanisms of Reinitiation on Bicistronic Calicivirus mRNAs. Molecular Cell, 2015, 57, 1059-1073.	9.7	55
65	Cryo-EM structure of the mammalian eukaryotic release factor eRF1–eRF3-associated termination complex. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 18413-18418.	7.1	53
66	Position of eukaryotic initiation factor eIF5B on the 80S ribosome mapped by directed hydroxyl radical probing. EMBO Journal, 2007, 26, 3109-3123.	7.8	52
67	Factor requirements for translation initiation on the Simian picornavirus internal ribosomal entry site. Rna, 2008, 14, 367-380.	3.5	51
68	Ribosome recruitment and scanning: what's new?. Trends in Biochemical Sciences, 1999, 24, 85-87.	7.5	42
69	Roles of individual domains in the function of DHX29, an essential factor required for translation of structured mammalian mRNAs. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E3150-9.	7.1	40
70	Extraction of mRNA from Stalled Ribosomes by the Ski Complex. Molecular Cell, 2020, 77, 1340-1349.e6.	9.7	34
71	Roles of the negatively charged N-terminal extension of Saccharomyces cerevisiae ribosomal protein S5 revealed by characterization of a yeast strain containing human ribosomal protein S5. Rna, 2007, 13, 2116-2128.	3.5	28
72	Attachment of ribosomal complexes and retrograde scanning during initiation on the Halastavi $\tilde{A}_i$ rva virus IRES. Nucleic Acids Research, 2016, 44, 2362-2377.	14.5	28

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73	Transcription Antitermination by Translation Initiation Factor IF1. Journal of Bacteriology, 2007, 189, 4087-4093.	2.2	26
74	Functions of unconventional mammalian translational GTPases GTPBP1 and GTPBP2. Genes and Development, 2018, 32, 1226-1241.	5.9	25
75	In Vitro Reconstitution and Biochemical Characterization of Translation Initiation by Internal Ribosomal Entry. Methods in Enzymology, 2007, 430, 409-439.	1.0	24
76	Dissemination of Internal Ribosomal Entry Sites (IRES) Between Viruses by Horizontal Gene Transfer. Viruses, 2020, 12, 612.	3.3	23
77	Reconstitution of eukaryotic translation elongation in vitro following initiation by internal ribosomal entry. Methods, 2005, 36, 261-269.	3.8	22
78	Initiation on the divergent Type I cadicivirus IRES: factor requirements and interactions with the translation apparatus. Nucleic Acids Research, 2016, 44, 3390-3407.	14.5	19
79	Distinct modes of poliovirus polyprotein initiation in vitro. Virus Research, 1989, 14, 107-118.	2.2	16
80	Human eIF5 and eIF1A Compete for Binding to eIF5B. Biochemistry, 2018, 57, 5910-5920.	2.5	15
81	PCBP2 enables the cadicivirus IRES to exploit the function of a conserved GRNA tetraloop to enhance ribosomal initiation complex formation. Nucleic Acids Research, 2016, 44, gkw609.	14.5	11
82	The Halastavi $\tilde{A}_i$ rva Virus Intergenic Region IRES Promotes Translation by the Simplest Possible Initiation Mechanism. Cell Reports, 2020, 33, 108476.	6.4	11
83	Molecular architecture of <scp>40S</scp> translation initiation complexes on the hepatitis C virus <scp>IRES</scp> . EMBO Journal, 2022, 41, .	7.8	10
84	Coupled Folding during Translation Initiation. Cell, 2003, 115, 650-652.	28.9	9
85	Two classes of EF1-family translational GTPases encoded by giant viruses. Nucleic Acids Research, 2019, 47, 5761-5776.	14.5	8
86	Functional role and ribosomal position of the unique N-terminal region of DHX29, a factor required for initiation on structured mammalian mRNAs. Nucleic Acids Research, 2021, 49, 12955-12969.	14.5	7
87	Small molecule derails translation initiation. Nature Chemical Biology, 2006, 2, 176-177.	8.0	6
88	Translation, interrupted. Nature Structural and Molecular Biology, 2006, 13, 98-99.	8.2	6
89	Horizontal gene transfer as a mechanism for the promiscuous acquisition of distinct classes of IRES by avian caliciviruses. Nucleic Acids Research, 2022, 50, 1052-1068.	14.5	5
90	In Vitro Characterization of the Activity of the Mammalian RNA Exosome on mRNAs in Ribosomal Translation Complexes. Methods in Molecular Biology, 2020, 2062, 327-354.	0.9	4

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#	Article	IF	CITATIONS
91	Translation Initiation in Eukaryotes: Factors and Mechanisms. , 2004, , 237-241.		O
92	Postâ€Termination Events in Eukaryotic Translation. FASEB Journal, 2012, 26, 461.2.	0.5	0