Elena I Frolova

List of Publications by Year
in descending order

63 papers	3,841 citations	125106 35 h-index	145109 60 g-index
67 all docs	67 docs citations	67 times ranked	3077 citing authors

#	Article	IF	Citations
1	Site-specific recognition of SARS-CoV-2 nsp1 protein with a tailored titanium dioxide nanoparticle â€“ elucidation of the complex structure using NMR data and theoretical calculation. Nanoscale Advances, 2022, 4, 1527-1532.	2.2	6
2	Optimized production and immunogenicity of an insect virus-based chikungunya virus candidate vaccine in cell culture and animal models. Emerging Microbes and Infections, 2021, 10, 305-316.	3.0	9
3	NAP1L1 and NAP1L4 Binding to Hypervariable Domain of Chikungunya Virus nsP3 Protein Is Bivalent and Requires Phosphorylation. Journal of Virology, 2021, 95, e0083621.	1.5	11
4	Natural and Recombinant SARS-CoV-2 Isolates Rapidly Evolve <i>In Vitro</i> to Higher Infectivity through More Efficient Binding to Heparan Sulfate and Reduced S1/S2 Cleavage. Journal of Virology, 2021, 95, e0135721.	1.5	25
5	1H, 13C and 15N resonance assignment of the SARS-CoV-2 full-length nsp1 protein and its mutants reveals its unique secondary structure features in solution. PLoS ONE, 2021, 16, e0251834.	1.1	4
6	Mutations in Hypervariable Domain of Venezuelan Equine Encephalitis Virus nsP3 Protein Differentially Affect Viral Replication. Journal of Virology, 2020, 94, .	1.5	9
7	Structural and Functional Characterization of Host FHL1 Protein Interaction with Hypervariable Domain of Chikungunya Virus nsP3 Protein. Journal of Virology, 2020, 95, .	1.5	17
8	Novel NMR Assignment Strategy Reveals Structural Heterogeneity in Solution of the nsP3 HVD Domain of Venezuelan Equine Encephalitis Virus. Molecules, 2020, 25, 5824.	1.7	7
9	Hypervariable Domain of nsP3 of Eastern Equine Encephalitis Virus Is a Critical Determinant of Viral Virulence. Journal of Virology, 2020, 94, .	1.5	13
10	Structural characterization and biological function of bivalent binding of CD2AP to intrinsically disordered domain of chikungunya virus nsP3 protein. Virology, 2019, 537, 130-142.	1.1	22
11	Lack of nsP2-specific nuclear functions attenuates chikungunya virus replication both in vitro and in vivo. Virology, 2019, 534, 14-24.	1.1	19
12	Novel Mutations in nsP2 Abolish Chikungunya Virus-Induced Transcriptional Shutoff and Make the Virus Less Cytopathic without Affecting Its Replication Rates. Journal of Virology, 2019, 93, .	1.5	39
13	Î²- <scp>d</scp> - <i>N</i> ⁴ -Hydroxycytidine Is a Potent Anti-alphavirus Compound That Induces a High Level of Mutations in the Viral Genome. Journal of Virology, 2018, 92, .	1.5	148
14	Sindbis Virus Infection Causes Cell Death by nsP2-Induced Transcriptional Shutoff or by nsP3-Dependent Translational Shutoff. Journal of Virology, 2018, 92, .	1.5	36
15	Multiple Host Factors Interact with the Hypervariable Domain of Chikungunya Virus nsP3 and Determine Viral Replication in Cell-Specific Mode. Journal of Virology, 2018, 92, .	1.5	52
16	Hypervariable Domain of Eastern Equine Encephalitis Virus nsP3 Redundantly Utilizes Multiple Cellular Proteins for Replication Complex Assembly. Journal of Virology, 2017, 91, .	1.5	50
17	The SD1 Subdomain of Venezuelan Equine Encephalitis Virus Capsid Protein Plays a Critical Role in Nucleocapsid and Particle Assembly. Journal of Virology, 2016, 90, 2008-2020.	1.5	4
18	Both RIG-I and MDA5 detect alphavirus replication in concentration-dependent mode. Virology, 2016, 487, 230-241.	1.1	54

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19	New World and Old World Alphaviruses Have Evolved to Exploit Different Components of Stress Granules, FXR and G3BP Proteins, for Assembly of Viral Replication Complexes. PLoS Pathogens, 2016, 12, e1005810.	2.1	138
20	IFIT1 Differentially Interferes with Translation and Replication of Alphavirus Genomes and Promotes Induction of Type I Interferon. PLoS Pathogens, 2015, 11, e1004863.	2.1	88
21	Venezuelan Equine Encephalitis Virus Variants Lacking Transcription Inhibitory Functions Demonstrate Highly Attenuated Phenotype. Journal of Virology, 2015, 89, 71-82.	1.5	32
22	Enhancement of protein expression by alphavirus replicons by designing self-replicating subgenomic RNAs. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 10708-10713.	3.3	38
23	Interferon-Stimulated Poly(ADP-Ribose) Polymerases Are Potent Inhibitors of Cellular Translation and Virus Replication. Journal of Virology, 2014, 88, 2116-2130.	1.5	143
24	The Amino-Terminal Domain of Alphavirus Capsid Protein Is Dispensable for Viral Particle Assembly but Regulates RNA Encapsidation through Cooperative Functions of Its Subdomains. Journal of Virology, 2013, 87, 12003-12019.	1.5	34
25	Venezuelan Equine Encephalitis Virus nsP2 Protein Regulates Packaging of the Viral Genome into Infectious Virions. Journal of Virology, 2013, 87, 4202-4213.	1.5	33
26	Pseudoinfectious Venezuelan Equine Encephalitis Virus: a New Means of Alphavirus Attenuation. Journal of Virology, 2013, 87, 2023-2035.	1.5	23
27	Hypervariable Domain of Nonstructural Protein nsP3 of Venezuelan Equine Encephalitis Virus Determines Cell-Specific Mode of Virus Replication. Journal of Virology, 2013, 87, 7569-7584.	1.5	40
28	Hypervariable Domains of nsP3 Proteins of New World and Old World Alphaviruses Mediate Formation of Distinct, Virus-Specific Protein Complexes. Journal of Virology, 2013, 87, 1997-2010.	1.5	62
29	Early Events in Alphavirus Replication Determine the Outcome of Infection. Journal of Virology, 2012, 86, 5055-5066.	1.5	43
30	Evasion of the Innate Immune Response: the Old World Alphavirus nsP2 Protein Induces Rapid Degradation of Rpb1, a Catalytic Subunit of RNA Polymerase II. Journal of Virology, 2012, 86, 7180-7191.	1.5	167
31	New PARP Gene with an Anti-Alphavirus Function. Journal of Virology, 2012, 86, 8147-8160.	1.5	117
32	Conservation of a Packaging Signal and the Viral Genome RNA Packaging Mechanism in Alphavirus Evolution. Journal of Virology, 2011, 85, 8022-8036.	1.5	95
33	Design of Chimeric Alphaviruses with a Programmed, Attenuated, Cell Type-Restricted Phenotype. Journal of Virology, 2011, 85, 4363-4376.	1.5	34
34	Venezuelan Equine Encephalitis Virus Capsid Protein Forms a Tetrameric Complex with CRM1 and Importin Î±/Î² That Obstructs Nuclear Pore Complex Function. Journal of Virology, 2010, 84, 4158-4171.	1.5	96
35	Functional Sindbis Virus Replicative Complexes Are Formed at the Plasma Membrane. Journal of Virology, 2010, 84, 11679-11695.	1.5	152
36	Interplay of Acute and Persistent Infections Caused by Venezuelan Equine Encephalitis Virus Encoding Mutated Capsid Protein. Journal of Virology, 2010, 84, 10004-10015.	1.5	52

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37	Random Insertion Mutagenesis of Sindbis Virus Nonstructural Protein 2 and Selection of Variants Incapable of Downregulating Cellular Transcription. Journal of Virology, 2009, 83, 9031-9044.	1.5	36
38	IRES-dependent replication of Venezuelan equine encephalitis virus makes it highly attenuated and incapable of replicating in mosquito cells. Virology, 2008, 377, 160-169.	1.1	41
39	Different Types of nsP3-Containing Protein Complexes in Sindbis Virus-Infected Cells. Journal of Virology, 2008, 82, 10088-10101.	1.5	121
40	A New Role for ns Polyprotein Cleavage in Sindbis Virus Replication. Journal of Virology, 2008, 82, 6218-6231.	1.5	64
41	Venezuelan Equine Encephalitis Virus Capsid Protein Inhibits Nuclear Import in Mammalian but Not in Mosquito Cells. Journal of Virology, 2008, 82, 4028-4041.	1.5	81
42	The Old World and New World Alphaviruses Use Different Virus-Specific Proteins for Induction of Transcriptional Shutoff. Journal of Virology, 2007, 81, 2472-2484.	1.5	225
43	Development of Sindbis Viruses Encoding nsP2/GFP Chimeric Proteins and Their Application for Studying nsP2 Functioning. Journal of Virology, 2007, 81, 5046-5057.	1.5	69
44	Analysis of Venezuelan Equine Encephalitis Virus Capsid Protein Function in the Inhibition of Cellular Transcription. Journal of Virology, 2007, 81, 13552-13565.	1.5	109
45	Comparative analysis of the alphavirus-based vectors expressing Rift Valley fever virus glycoproteins. Virology, 2007, 366, 212-225.	1.1	39
46	Expression patterns of Wnt genes during development of an anterior part of the chicken eye. Developmental Dynamics, 2006, 235, 496-505.	0.8	60
47	Sindbis Virus Nonstructural Protein nsP2 Is Cytotoxic and Inhibits Cellular Transcription. Journal of Virology, 2006, 80, 5686-5696.	1.5	159
48	Formation of nsP3-Specific Protein Complexes during Sindbis Virus Replication. Journal of Virology, 2006, 80, 4122-4134.	1.5	123
49	Inhibition of Transcription and Translation in Sindbis Virus-Infected Cells. Journal of Virology, 2005, 79, 9397-9409.	1.5	126
50	PKR-Dependent and -Independent Mechanisms Are Involved in Translational Shutoff during Sindbis Virus Infection. Journal of Virology, 2004, 78, 8455-8467.	1.5	119
51	The expression pattern of opticin during chicken embryogenesis. Gene Expression Patterns, 2004, 4, 335-338.	0.3	11
52	Roles of Nonstructural Protein nsP2 and Alpha/Beta Interferons in Determining the Outcome of Sindbis Virus Infection. Journal of Virology, 2002, 76, 11254-11264.	1.5	200
53	The expression pattern of a novel Deltex homologue during chicken embryogenesis. Mechanisms of Development, 2000, 92, 285-289.	1.7	11
54	Binding of the glucose-dependent Mig1p repressor to the GAL1 and GAL4 promoters in vivo: regulationby glucose and chromatin structure. Nucleic Acids Research, 1999, 27, 1350-1358.	6.5	52

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55	Ribozyme mimics as catalytic antisense reagents. Applied Biochemistry and Biotechnology, 1995, 54, 43-56.	1.4	18
56	Sequence-Specific Cleavage of HIV mRNA by a Ribozyme Mimic. Journal of the American Chemical Society, 1994, 116, 5981-5982.	6.6	159
57	Comparison of interactions of 5?-derivatives of deoxyoctathymidylate with human DNA polymerize ? and HIV reverse transcriptase. Molecular Biology Reports, 1993, 18, 43-47.	1.0	3
58	Kinetic study of the addressed modification by hemin derivatives of oligonucleotides. Biochimie, 1993, 75, 5-11.	1.3	17
59	Oxidative degradation of nucleic acids. Russian Chemical Reviews, 1993, 62, 65-86.	2.5	33
60	5â€²-Derivatives of oligonucleotides as primers of DNA polymerization catalyzed by AMV reverse transcriptase and Klenow fragment of DNA polymerase 1. FEBS Letters, 1991, 281, 111-113.	1.3	5
61	Hydroxyl radical generation by oligonucleotide derivatives of anthracycline antibiotic and synthetic quinone. Chemico-Biological Interactions, 1991, 77, 325-339.	1.7	8
62	Porphyrin-linked oligonucleotides. FEBS Letters, 1990, 269, 101-104.	1.3	23
63	Hydroxyl radical generation and DNA strand scission mediated by natural anticancer and synthetic quinones. FEBS Letters, 1989, 242, 397-400.	1.3	16