Alan Rein

List of Publications by Year
in descending order

65 papers	4,791 citations	87888 38 h-index	110387 64 g-index
70 all docs	70 docs citations	70 times ranked	2988 citing authors

#	Article	IF	Citations
1	Nucleic-acid-chaperone activity of retroviral nucleocapsid proteins: significance for viral replication. Trends in Biochemical Sciences, 1998, 23, 297-301.	7.5	370
2	High-Throughput SHAPE Analysis Reveals Structures in HIV-1 Genomic RNA Strongly Conserved across Distinct Biological States. PLoS Biology, 2008, 6, e96.	5.6	351
3	In Vitro Assembly Properties of Human Immunodeficiency Virus Type 1 Gag Protein Lacking the p6 Domain. Journal of Virology, 1999, 73, 2270-2279.	3.4	265
4	Complex interactions of HIV-1 nucleocapsid protein with oligonucleotides. Nucleic Acids Research, 2006, 34, 472-484.	14.5	244
5	Interference grouping of murine leukemia viruses: A distinct receptor for the MCF-Recombinant viruses in mouse cells. Virology, 1982, 120, 251-257.	2.4	207
6	Sequence-Specific Binding of Human Immunodeficiency Virus Type 1 Nucleocapsid Protein to Short Oligonucleotides. Journal of Virology, 1998, 72, 1902-1909.	3.4	169
7	Selective and Nonselective Packaging of Cellular RNAs in Retrovirus Particles. Journal of Virology, 2007, 81, 6623-6631.	3.4	155
8	Infectivity of Moloney Murine Leukemia Virus Defective in Late Assembly Events Is Restored by Late Assembly Domains of Other Retroviruses. Journal of Virology, 2000, 74, 7250-7260.	3.4	149
9	The Human Immunodeficiency Virus Type 1 Gag Polyprotein Has Nucleic Acid Chaperone Activity: Possible Role in Dimerization of Genomic RNA and Placement of tRNA on the Primer Binding Site. Journal of Virology, 1999, 73, 4251-4256.	3.4	138
10	Different recombinant murine leukemia viruses use different cell surface receptors. Virology, 1984, 136, 144-152.	2.4	135
11	Interactions of HIV-1 Gag with Assembly Cofactorsâ€. Biochemistry, 2006, 45, 4077-4083.	2.5	131
12	Conformation of the HIV-1 Gag Protein in Solution. Journal of Molecular Biology, 2007, 365, 812-824.	4.2	126
13	Nucleic acid binding and chaperone properties of HIV-1 Gag and nucleocapsid proteins. Nucleic Acids Research, 2006, 34, 593-605.	14.5	125
14	Interactions between HIV-1 Gag Molecules in Solution: An Inositol Phosphate-mediated Switch. Journal of Molecular Biology, 2007, 365, 799-811.	4.2	123
15	On the Role of the SP1 Domain in HIV-1 Particle Assembly: a Molecular Switch?. Journal of Virology, 2011, 85, 4111-4121.	3.4	111
16	An Unusual Topological Structure of the HIV-1 Rev Response Element. Cell, 2013, 155, 594-605.	28.9	109
17	HIV-1 Gag Extension: Conformational Changes Require Simultaneous Interaction with Membrane and Nucleic Acid. Journal of Molecular Biology, 2011, 406, 205-214.	4.2	103
18	Phenotypic mixing between N- and B-tropic murine leukemia viruses: Infectious particles with dual sensitivity to Fv-1 restriction. Cell, 1976, 7, 373-379.	28.9	96

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19	Structure and architecture of immature and mature murine leukemia virus capsids. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E11751-E11760.	7.1	92
20	Assembly Properties of Human Immunodeficiency Virus Type 1 Gag-Leucine Zipper Chimeras: Implications for Retrovirus Assembly. Journal of Virology, 2009, 83, 2216-2225.	3.4	82
21	Matrix Domain Modulates HIV-1 Gag's Nucleic Acid Chaperone Activity via Inositol Phosphate Binding. Journal of Virology, 2011, 85, 1594-1603.	3.4	80
22	Diverse interactions of retroviral Gag proteins with RNAs. Trends in Biochemical Sciences, 2011, 36, 373-80.	7.5	79
23	Loss of Fv-1 restriction in Balb/3T3 cells following infection with a single N tropic murine leukemia virus particle. Cell, 1977, 10, 479-488.	28.9	78
24	On the Selective Packaging of Genomic RNA by HIV-1. Viruses, 2016, 8, 246.	3.3	66
25	Interactions of Murine APOBEC3 and Human APOBEC3G with Murine Leukemia Viruses. Journal of Virology, 2008, 82, 6566-6575.	3.4	65
26	RNA Packaging in HIV. Trends in Microbiology, 2019, 27, 715-723.	7.7	65
27	Definition of a high-affinity Gag recognition structure mediating packaging of a retroviral RNA genome. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 19248-19253.	7.1	64
28	Membrane Binding of HIV-1 Matrix Protein: Dependence on Bilayer Composition and Protein Lipidation. Journal of Virology, 2016, 90, 4544-4555.	3.4	55
29	mRNA Molecules Containing Murine Leukemia Virus Packaging Signals Are Encapsidated as Dimers. Journal of Virology, 2004, 78, 10927-10938.	3.4	54
30	Dissection of specific binding of HIV-1 Gag to the 'packaging signal' in viral RNA. ELife, 2017, 6, .	6.0	53
31	Role of Murine Leukemia Virus Nucleocapsid Protein in Virus Assembly. Journal of Virology, 2004, 78, 12378-12385.	3.4	52
32	Nucleic acid chaperone activity of retroviral Gag proteins. RNA Biology, 2010, 7, 700-705.	3.1	52
33	Murine sarcoma virus pseudotypes acquire a determinant specifying N or B tropism from leukaemia virus during rescue. Nature, 1975, 256, 223-225.	27.8	50
34	Functional Interplay Between Murine Leukemia Virus Glycogag, Serinc5, and Surface Glycoprotein Governs Virus Entry, with Opposite Effects on Gammaretroviral and Ebolavirus Glycoproteins. MBio, 2016, 7, .	4.1	49
35	A Conformational Transition Observed in Single HIV-1 Gag Molecules during <i>In Vitro</i> Assembly of Virus-Like Particles. Journal of Virology, 2014, 88, 3577-3585.	3.4	46
36	Murine Leukemia Virus Nucleocapsid Mutant Particles Lacking Viral RNA Encapsidate Ribosomes. Journal of Virology, 2002, 76, 11405-11413.	3.4	42

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37	Fundamental differences between the nucleic acid chaperone activities of HIV-1 nucleocapsid protein and Gag or Gag-derived proteins: Biological implications. Virology, 2010, 405, 556-567.	2.4	41
38	Murine Leukemia Viruses: Objects and Organisms. Advances in Virology, 2011, 2011, 1-14.	1.1	40
39	Evidence for Cooperation between Murine Leukemia Virus Env Molecules in Mixed Oligomers. Journal of Virology, 1998, 72, 3432-3435.	3.4	35
40	Dimerization of the SP1 Region of HIV-1 Gag Induces a Helical Conformation and Association into Helical Bundles: Implications for Particle Assembly. Journal of Virology, 2016, 90, 1773-1787.	3.4	34
41	Preparation of Recombinant HIV-1 Gag Protein and Assembly of Virus-Like Particles In Vitro. Methods in Molecular Biology, 2009, 485, 197-208.	0.9	34
42	Elements in HIV-1 Gag contributing to virus particle assembly. Virus Research, 2013, 171, 341-345.	2.2	32
43	Efficient support of virus-like particle assembly by the HIV-1 packaging signal. ELife, 2018, 7, .	6.0	30
44	Solution Properties of Murine Leukemia Virus Gag Protein: Differences from HIV-1 Gag. Journal of Virology, 2011, 85, 12733-12741.	3.4	28
45	Interactions between HIV-1 Gag and Viral RNA Genome Enhance Virion Assembly. Journal of Virology, 2017, 91, .	3.4	28
46	Biochemical and Biological Studies of Mouse APOBEC3. Journal of Virology, 2014, 88, 3850-3860.	3.4	27
47	IFITM3 Reduces Retroviral Envelope Abundance and Function and Is Counteracted by glycoGag. MBio, 2020, 11, .	4.1	25
48	Functional Redundancy in HIV-1 Viral Particle Assembly. Journal of Virology, 2012, 86, 12991-12996.	3.4	24
49	Studies on the Restriction of Murine Leukemia Viruses by Mouse APOBEC3. PLoS ONE, 2012, 7, e38190.	2.5	22
50	HIV-1 Gag protein with or without p6 specifically dimerizes on the viral RNA packaging signal. Journal of Biological Chemistry, 2020, 295, 14391-14401.	3.4	20
51	Structure and Stoichiometry of Template-Directed Recombinant HIV-1 Gag Particles. Journal of Molecular Biology, 2011, 410, 667-680.	4.2	19
52	Hydrodynamic and Membrane Binding Properties of Purified Rous Sarcoma Virus Gag Protein. Journal of Virology, 2015, 89, 10371-10382.	3.4	17
53	Nucleic acidâ€"induced dimerization of HIV-1 Gag protein. Journal of Biological Chemistry, 2019, 294, 16480-16493.	3.4	15
54	Structural Mimicry Drives HIV-1 Rev-Mediated HERV-K Expression. Journal of Molecular Biology, 2020, 432, 166711.	4.2	12

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55	Distinct Contributions of Different Domains within the HIV-1 Gag Polyprotein to Specific and Nonspecific Interactions with RNA. Viruses, 2020, 12, 394.	3.3	12
56	Balb/3T3 cells chronically infected with N-tropic murine leukemia virus continue to express Fv-1b restriction. Virology, 1981, 112, 795-799.	2.4	11
57	Take two. Nature Structural and Molecular Biology, 2004, 11, 1034-1035.	8.2	9
58	Contributions of Individual Domains to Function of the HIV-1 Rev Response Element. Journal of Virology, 2017, 91, .	3.4	9
59	Antiretroviral restriction factors in mice. Virus Research, 2014, 193, 130-134.	2.2	8
60	Virus Matryoshka: A Bacteriophage Particleâ€"Guided Molecular Assembly Approach to a Monodisperse Model of the Immature Human Immunodeficiency Virus. Small, 2016, 12, 5862-5872.	10.0	8
61	The heart of the HIV RNA packaging signal?. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 19621-19623.	7.1	4
62	Across the Hall from Pioneers. Viruses, 2021, 13, 491.	3.3	4
63	Murine leukemia virus p12 functions include hitchhiking into the nucleus. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 9195-9196.	7.1	3
64	Show your cap or be packaged into HIV-1. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, e2115344118.	7.1	2
65	Stephen Oroszlan and Retroviral Proteins. Viruses, 2022, 14, 290.	3.3	0