Bryan R Cullen

List of Publications by Year
in descending order

139 papers	26,216 citations	10650 74 h-index	14012 133 g-index
147 all docs	147 docs citations	147 times ranked	21476 citing authors

#	Article	IF	Citations
1	Exportin-5 mediates the nuclear export of pre-microRNAs and short hairpin RNAs. Genes and Development, 2003, 17, 3011-3016.	2.7	2,377
2	Human microRNAs are processed from capped, polyadenylated transcripts that can also function as mRNAs. Rna, 2004, 10, 1957-1966.	1.6	1,509
3	The HIV-1 rev trans-activator acts through a structured target sequence to activate nuclear export of unspliced viral mRNA. Nature, 1989, 338, 254-257.	13.7	1,350
4	[71] Use of eukaryotic expression technology in the functional analysis of cloned genes. Methods in Enzymology, 1987, 152, 684-704.	0.4	896
5	Functional dissection of the HIV-1 Rev trans-activatorâ€"Derivation of a trans-dominant repressor of Rev function. Cell, 1989, 58, 205-214.	13.5	831
6	MicroRNAs and small interfering RNAs can inhibit mRNA expression by similar mechanisms. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9779-9784.	3.3	813
7	Both Natural and Designed Micro RNAs Can Inhibit the Expression of Cognate mRNAs When Expressed in Human Cells. Molecular Cell, 2002, 9, 1327-1333.	4.5	786
8	Transcription and Processing of Human microRNA Precursors. Molecular Cell, 2004, 16, 861-865.	4.5	682
9	Viruses, microRNAs, and Host Interactions. Annual Review of Microbiology, 2010, 64, 123-141.	2.9	634
10	MicroRNAs expressed by herpes simplex virus 1 during latent infection regulate viral mRNAs. Nature, 2008, 454, 780-783.	13.7	604
11	Kaposi's sarcoma-associated herpesvirus expresses an array of viral microRNAs in latently infected cells. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 5570-5575.	3.3	548
12	A viral microRNA functions as an orthologue of cellular miR-155. Nature, 2007, 450, 1096-1099.	13.7	541
13	Recognition and cleavage of primary microRNA precursors by the nuclear processing enzyme Drosha. EMBO Journal, 2005, 24, 138-148.	3.5	505
14	Epsteinâ€"Barr Virus MicroRNAs Are Evolutionarily Conserved and Differentially Expressed. PLoS Pathogens, 2006, 2, e23.	2.1	486
15	Immunodeficiency virus rev trans-activator modulates the expression of the viral regulatory genes. Nature, 1988, 335, 181-183.	13.7	448
16	A second human antiretroviral factor, APOBEC3F, is suppressed by the HIV-1 and HIV-2 Vif proteins. EMBO Journal, 2004, 23, 2451-2458.	3.5	432
17	Transcriptional interference in avian retrovirusesâ€"implications for the promoter insertion model of leukaemogenesis. Nature, 1984, 307, 241-245.	13.7	411
18	Viral and Cellular MicroRNAs as Determinants of Viral Pathogenesis and Immunity. Cell Host and Microbe, 2008, 3, 375-387.	5.1	378

#	Article	IF	Citations
19	Viruses and microRNAs. Nature Genetics, 2006, 38, S25-S30.	9.4	365
20	Cellular inhibitors of long interspersed element 1 and Alu retrotransposition. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 8780-8785.	3.3	343
21	The role of RNAi and microRNAs in animal virus replication and antiviral immunity. Genes and Development, 2009, 23, 1151-1164.	2.7	340
22	Adenovirus VA1 Noncoding RNA Can Inhibit Small Interfering RNA and MicroRNA Biogenesis. Journal of Virology, 2004, 78, 12868-12876.	1.5	333
23	The Viral and Cellular MicroRNA Targetome in Lymphoblastoid Cell Lines. PLoS Pathogens, 2012, 8, e1002484.	2.1	321
24	Viral MicroRNA Targetome of KSHV-Infected Primary Effusion Lymphoma Cell Lines. Cell Host and Microbe, 2011, 10, 515-526.	5.1	297
25	From The Cover: A single amino acid difference in the host APOBEC3G protein controls the primate species specificity of HIV type 1 virion infectivity factor. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 3770-3774.	3.3	292
26	Posttranscriptional m 6 A Editing of HIV-1 mRNAs Enhances Viral Gene Expression. Cell Host and Microbe, 2016, 19, 675-685.	5.1	288
27	The HIV-1 Tat protein: An RNA sequence-specific processivity factor?. Cell, 1990, 63, 655-657.	13.5	264
28	Nuclear mRNA export: insights from virology. Trends in Biochemical Sciences, 2003, 28, 419-424.	3.7	256
29	Functional replacement of the HIV-1 rev protein by the HTLV-1 rex protein. Nature, 1988, 335, 738-740.	13.7	255
30	Role and Mechanism of Action of the APOBEC3 Family of Antiretroviral Resistance Factors. Journal of Virology, 2006, 80, 1067-1076.	1.5	253
31	APOBEC3A and APOBEC3B are potent inhibitors of LTR-retrotransposon function in human cells. Nucleic Acids Research, 2006, 34, 89-95.	6.5	252
32	Viral and cellular messenger RNA targets of viral microRNAs. Nature, 2009, 457, 421-425.	13.7	252
33	Regulation of HIVâ€1 gene expression. FASEB Journal, 1991, 5, 2361-2368.	0.2	247
34	Characterization of Staphylococcus aureus Cas9: a smaller Cas9 for all-in-one adeno-associated virus delivery and paired nickase applications. Genome Biology, 2015, 16, 257.	3.8	239
35	Inactivation of the Human Papillomavirus E6 or E7 Gene in Cervical Carcinoma Cells by Using a Bacterial CRISPR/Cas RNA-Guided Endonuclease. Journal of Virology, 2014, 88, 11965-11972.	1.5	232
36	MicroRNAs as mediators of viral evasion of the immune system. Nature Immunology, 2013, 14, 205-210.	7.0	223

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37	Human APOBEC3B is a potent inhibitor of HIV-1 infectivity and is resistant to HIV-1 Vif. Virology, 2005, 339, 281-288.	1.1	213
38	Suppression of hepatitis B virus DNA accumulation in chronically infected cells using a bacterial CRISPR/Cas RNA-guided DNA endonuclease. Virology, 2015, 476, 196-205.	1.1	202
39	A Mammalian Herpesvirus Uses Noncanonical Expression and Processing Mechanisms to Generate Viral MicroRNAs. Molecular Cell, 2010, 37, 135-142.	4.5	194
40	Nuclear RNA export. Journal of Cell Science, 2003, 116, 587-597.	1.2	191
41	Virally Induced Cellular MicroRNA miR-155 Plays a Key Role in B-Cell Immortalization by Epstein-Barr Virus. Journal of Virology, 2010, 84, 11670-11678.	1.5	182
42	Viruses and microRNAs: RISCy interactions with serious consequences. Genes and Development, 2011, 25, 1881-1894.	2.7	180
43	Epitranscriptomic Enhancement of Influenza A Virus Gene Expression and Replication. Cell Host and Microbe, 2017, 22, 377-386.e5.	5.1	163
44	Analysis of the Interaction of Primate Retroviruses with the Human RNA Interference Machinery. Journal of Virology, 2007, 81, 12218-12226.	1.5	161
45	Analysis of Human Alphaherpesvirus MicroRNA Expression in Latently Infected Human Trigeminal Ganglia. Journal of Virology, 2009, 83, 10677-10683.	1.5	159
46	A Human Herpesvirus MicroRNA Inhibits p21 Expression and Attenuates p21-Mediated Cell Cycle Arrest. Journal of Virology, 2010, 84, 5229-5237.	1.5	157
47	Enhancing and confirming the specificity of RNAi experiments. Nature Methods, 2006, 3, 677-681.	9.0	154
48	Is RNA interference involved in intrinsic antiviral immunity in mammals?. Nature Immunology, 2006, 7, 563-567.	7.0	153
49	Analysis of the stimulatory effect of splicing on mRNA production and utilization in mammalian cells. Rna, 2003, 9, 618-630.	1.6	145
50	Epitranscriptomic Addition of m5C to HIV-1 Transcripts Regulates Viral Gene Expression. Cell Host and Microbe, 2019, 26, 217-227.e6.	5.1	144
51	Inhibition of Human Immunodeficiency Virus Type 1 Replication in Primary Macrophages by Using Tat- or CCR5-Specific Small Interfering RNAs Expressed from a Lentivirus Vector. Journal of Virology, 2003, 77, 11964-11972.	1.5	140
52	Inhibition of a Yeast LTR Retrotransposon by Human APOBEC3 Cytidine Deaminases. Current Biology, 2005, 15, 661-666.	1.8	139
53	A Novel Assay for Viral MicroRNA Function Identifies a Single Nucleotide Polymorphism That Affects Drosha Processing. Journal of Virology, 2006, 80, 5321-5326.	1.5	135
54	In-Depth Analysis of the Interaction of HIV-1 with Cellular microRNA Biogenesis and Effector Mechanisms. MBio, 2013, 4, e000193.	1.8	134

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55	A Viral microRNA Cluster Strongly Potentiates the Transforming Properties of a Human Herpesvirus. PLoS Pathogens, 2011, 7, e1001294.	2.1	132
56	In-Depth Analysis of Kaposi's Sarcoma-Associated Herpesvirus MicroRNA Expression Provides Insights into the Mammalian MicroRNA-Processing Machinery. Journal of Virology, 2010, 84, 695-703.	1.5	130
57	A Neuron-Specific Host MicroRNA Targets Herpes Simplex Virus-1 ICP0 Expression and Promotes Latency. Cell Host and Microbe, 2014, 15, 446-456.	5.1	129
58	Functions of the auxiliary gene products of the human immunodeficiency virus type 1. Virology, 1990, 178, 1-5.	1.1	125
59	Replication of Many Human Viruses Is Refractory to Inhibition by Endogenous Cellular MicroRNAs. Journal of Virology, 2014, 88, 8065-8076.	1.5	124
60	MicroRNA-17â^¼92 plays a causative role in lymphomagenesis by coordinating multiple oncogenic pathways. EMBO Journal, 2013, 32, 2377-2391.	3.5	123
61	Addition of m6A to SV40 late mRNAs enhances viral structural gene expression and replication. PLoS Pathogens, 2018, 14, e1006919.	2.1	118
62	RNA interference: antiviral defense and genetic tool. Nature Immunology, 2002, 3, 597-599.	7.0	116
63	Differential RISC association of endogenous human microRNAs predicts their inhibitory potential. Nucleic Acids Research, 2014, 42, 4629-4639.	6.5	115
64	Is RNA Interference a Physiologically Relevant Innate Antiviral Immune Response in Mammals?. Cell Host and Microbe, 2013, 14, 374-378.	5.1	108
65	EBV BART MicroRNAs Target Multiple Pro-apoptotic Cellular Genes to Promote Epithelial Cell Survival. PLoS Pathogens, 2015, 11, e1004979.	2.1	96
66	Derivation and characterization of Dicer- and microRNA-deficient human cells. Rna, 2014, 20, 923-937.	1.6	94
67	The Members of an Epstein-Barr Virus MicroRNA Cluster Cooperate To Transform B Lymphocytes. Journal of Virology, 2011, 85, 9801-9810.	1.5	91
68	Mutational Inactivation of Herpes Simplex Virus 1 MicroRNAs Identifies Viral mRNA Targets and Reveals Phenotypic Effects in Culture. Journal of Virology, 2013, 87, 6589-6603.	1.5	91
69	Epigenetic and epitranscriptomic regulation of viral replication. Nature Reviews Microbiology, 2020, 18, 559-570.	13.6	91
70	Acetylation of Cytidine Residues Boosts HIV-1 Gene Expression by Increasing Viral RNA Stability. Cell Host and Microbe, 2020, 28, 306-312.e6.	5.1	89
71	Molecular Basis for Cell Tropism of CXCR4-Dependent Human Immunodeficiency Virus Type 1 Isolates. Journal of Virology, 2001, 75, 6776-6785.	1.5	86
72	Five Questions about Viruses and MicroRNAs. PLoS Pathogens, 2010, 6, e1000787.	2.1	86

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73	Influenza A Virus Expresses High Levels of an Unusual Class of Small Viral Leader RNAs in Infected Cells. MBio, 2010, 1, .	1.8	80
74	Derivation and function of small interfering RNAs and microRNAs. Virus Research, 2004, 102, 3-9.	1.1	79
75	Targeting hepatitis B virus cccDNA using CRISPR/Cas9. Antiviral Research, 2015, 123, 188-192.	1.9	75
76	Production of functional small interfering RNAs by an amino-terminal deletion mutant of human Dicer. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6945-54.	3.3	72
77	Identification of Viral MicroRNAs Expressed in Human Sacral Ganglia Latently Infected with Herpes Simplex Virus 2. Journal of Virology, 2010, 84, 1189-1192.	1.5	71
78	EBV Noncoding RNAs. Current Topics in Microbiology and Immunology, 2015, 391, 181-217.	0.7	71
79	Viral Epitranscriptomics. Journal of Virology, 2017, 91, .	1.5	66
80	Induction of stable RNA interference in mammalian cells. Gene Therapy, 2006, 13, 503-508.	2.3	65
81	Human Papillomavirus Genotype 31 Does Not Express Detectable MicroRNA Levels during Latent or Productive Virus Replication. Journal of Virology, 2006, 80, 10890-10893.	1.5	65
82	Cloning and analysis of microRNAs encoded by the primate Î³-herpesvirus rhesus monkey rhadinovirus. Virology, 2007, 364, 21-27.	1.1	64
83	Search for MicroRNAs Expressed by Intracellular Bacterial Pathogens in Infected Mammalian Cells. PLoS ONE, 2014, 9, e106434.	1.1	59
84	MicroRNA target site identification by integrating sequence and binding information. Nature Methods, 2013, 10, 630-633.	9.0	56
85	Identification of Novel, Highly Expressed Retroviral MicroRNAs in Cells Infected by Bovine Foamy Virus. Journal of Virology, 2014, 88, 4679-4686.	1.5	56
86	Expression of CRISPR/Cas single guide RNAs using small tRNA promoters. Rna, 2015, 21, 1683-1689.	1.6	54
87	Bacterial CRISPR/Cas DNA endonucleases: A revolutionary technology that could dramatically impact viral research and treatment. Virology, 2015, 479-480, 213-220.	1.1	53
88	Extensive Epitranscriptomic Methylation of A and C Residues on Murine Leukemia Virus Transcripts Enhances Viral Gene Expression. MBio, 2019, 10, .	1.8	52
89	Herpesvirus microRNAs: phenotypes and functions. Current Opinion in Virology, 2011, 1, 211-215.	2.6	51
90	Evolutionary Conservation of Primate Lymphocryptovirus MicroRNA Targets. Journal of Virology, 2014, 88, 1617-1635.	1.5	51

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91	Does the human immunodeficiency virus tat trans-activator contain a discrete activation domain?. Virology, 1990, 178, 560-567.	1.1	48
92	Specific induction of endogenous viral restriction factors using CRISPR/Cas-derived transcriptional activators. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E7249-56.	3.3	45
93	A Cluster of Virus-Encoded MicroRNAs Accelerates Acute Systemic Epstein-Barr Virus Infection but Does Not Significantly Enhance Virus-Induced Oncogenesis In Vivo. Journal of Virology, 2013, 87, 5437-5446.	1.5	44
94	How Do Viruses Avoid Inhibition by Endogenous Cellular MicroRNAs?. PLoS Pathogens, 2013, 9, e1003694.	2.1	43
95	Analysis of rhesus rhadinovirus microRNAs expressed in virus-induced tumors from infected rhesus macaques. Virology, 2010, 405, 592-599.	1.1	39
96	Viral RNAs: Lessons from the Enemy. Cell, 2009, 136, 592-597.	13.5	38
97	Structural and functional analysis of the avian leukemia virus constitutive transport element. Rna, 1999, 5, 1645-1655.	1.6	34
98	Viruses and RNA Interference: Issues and Controversies. Journal of Virology, 2014, 88, 12934-12936.	1.5	33
99	Targeting HPV16 DNA using CRISPR/Cas inhibits anal cancer growthin vivo. Future Virology, 2018, 13, 475-482.	0.9	33
100	Analysis of the mRNA Targetome of MicroRNAs Expressed by Mareká€™s Disease Virus. MBio, 2014, 5, e01060-13.	1.8	32
101	Influenza A virus-derived siRNAs increase in the absence of NS1 yet fail to inhibit virus replication. Rna, 2018, 24, 1172-1182.	1.6	31
102	Epitranscriptomic addition of m⁶A regulates HIV-1 RNA stability and alternative splicing. Genes and Development, 2021, 35, 992-1004.	2.7	31
103	Probing RNA Conformational Equilibria within the Functional Cellular Context. Cell Reports, 2020, 30, 2472-2480.e4.	2.9	28
104	Insights into the mechanisms underlying the inactivation of HIV-1 proviruses by CRISPR/Cas. Virology, 2018, 520, 116-126.	1.1	27
105	Persistently adenovirus-infected lymphoid cells express microRNAs derived from the viral VAI and especially VAII RNA. Virology, 2013, 447, 140-145.	1.1	26
106	The human endogenous retrovirus K Rev response element coincides with a predicted RNA folding region. Rna, 2000, 6, 1551-1564.	1.6	25
107	Gene Editing: A New Tool for Viral Disease. Annual Review of Medicine, 2017, 68, 401-411.	5.0	25
108	The Epstein-Barr virus miR-BHRF1 microRNAs regulate viral gene expression in cis. Virology, 2017, 512, 113-123.	1.1	24

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109	A â€œmicroRNA-likeâ€•small RNA expressed by Dengue virus?. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2359.	3.3	23
110	Epstein-Barr Viruses (EBVs) Deficient in EBV-Encoded RNAs Have Higher Levels of Latent Membrane Protein 2 RNA Expression in Lymphoblastoid Cell Lines and Efficiently Establish Persistent Infections in Humanized Mice. Journal of Virology, 2015, 89, 11711-11714.	1.5	20
111	Reversal of Epigenetic Silencing Allows Robust HIV-1 Replication in the Absence of Integrase Function. MBio, 2020, 11, .	1.8	19
112	Chaperoning a pathogen. Nature, 1994, 372, 319-320.	13.7	17
113	HIV-1 Vif: Counteracting Innate Antiretroviral Defenses. Molecular Therapy, 2003, 8, 525-527.	3.7	17
114	RNA Interference in Mammals: The Virus Strikes Back. Immunity, 2017, 46, 970-972.	6.6	15
115	Does RNA interference have a future as a treatment for HIV-1 induced disease?. AIDS Reviews, 2005, 7, 22-5.	0.5	14
116	Outwitted by Viral RNAs. Science, 2007, 317, 329-330.	6.0	13
117	Optimization of a multiplex CRISPR/Cas system for use as an antiviral therapeutic. Methods, 2015, 91, 82-86.	1.9	13
118	Induced Packaging of Cellular MicroRNAs into HIV-1 Virions Can Inhibit Infectivity. MBio, 2017, 8, .	1.8	13
119	Understanding the characteristics of nonspecific binding of drug-like compounds to canonical stemâ€“loop RNAs and their implications for functional cellular assays. Rna, 2021, 27, 12-26.	1.6	13
120	Mapping of pseudouridine residues on cellular and viral transcripts using a novel antibody-based technique. Rna, 2021, 27, 1400-1411.	1.6	13
121	The positive effect of the negative factor. Nature, 1991, 351, 698-699.	13.7	12
122	HIV-1 Nef protein: An invitation to a kill. Nature Medicine, 1999, 5, 985-986.	15.2	11
123	Tax Induces the Recruitment of NF-ÎºB to Unintegrated HIV-1 DNA To Rescue Viral Gene Expression and Replication. Journal of Virology, 2021, 95, e0028521.	1.5	11
124	Assaying Nuclear Messenger RNA Export in Human Cells. , 2004, 257, 085-092.		10
125	MicroRNA expression by an oncogenic retrovirus. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 2695-2696.	3.3	10
126	A lentiviral vector bearing a reverse intron demonstrates superior expression of both proteins and microRNAs. RNA Biology, 2017, 14, 1570-1579.	1.5	10

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127	A new entry route for HIV. Nature Medicine, 2001, 7, 20-21.	15.2	9
128	Protocols for Expression and Functional Analysis of Viral MicroRNAs. Methods in Enzymology, 2007, 427, 229-243.	0.4	6
129	Partial reconstitution of the RNAi response in human cells using Drosophila gene products. Rna, 2017, 23, 153-160.	1.6	6
130	New trick from an old foe. Nature, 1996, 379, 208-209.	13.7	5
131	Making a NeST for a Persistent Virus. Cell Host and Microbe, 2013, 13, 241-242.	5.1	3
132	Analysis of viral microRNA expression by elephant endotheliotropic herpesvirus 1. Virology, 2014, 454-455, 102-108.	1.1	3
133	The virologyâ€“RNA biology connection. Rna, 2015, 21, 592-594.	1.6	3
134	Mapping RNA Modifications Using Photo-Crosslinking-Assisted Modification Sequencing. Methods in Molecular Biology, 2021, 2298, 123-134.	0.4	3
135	Epitranscriptomic Addition of m ⁵C to HIV-1 Transcripts Regulates Viral Gene Expression. SSRN Electronic Journal, 0, , .	0.4	1
136	Epitranscriptomic Regulation of HIV-1 Gene Expression by m ⁵C and the Novel m ⁵C Reader MBD2. SSRN Electronic Journal, 0, , .	0.4	1
137	HIV-1 Packing to Leave. Cell, 2014, 159, 975-976.	13.5	0
138	Interview with Bryan R Cullen. Future Virology, 2014, 9, 345-350.	0.9	0
139	Viruses, microRNAs and RNA Interference. FASEB Journal, 2009, 23, 194.3.	0.2	0