John T Patton

List of Publications by Year
in descending order

135 papers	9,519 citations	47006 47 h-index	42399 92 g-index
142 all docs	142 docs citations	142 times ranked	5494 citing authors

#	Article	IF	Citations
1	Rotavirus as an Expression Platform of Domains of the SARS-CoV-2 Spike Protein. Vaccines, 2021, 9, 449.	4.4	17
2	Species A rotavirus reverse genetics: Achievements and prospects. Virus Research, 2021, 306, 198583.	2.2	1
3	Simplified Reverse Genetics Method to Recover Recombinant Rotaviruses Expressing Reporter Proteins. Journal of Visualized Experiments, 2020, , .	0.3	13
4	Rotaviruses as Neonatal Vaccine Expression Vectors against Other Enteric Pathogens. Proceedings (mdpi), 2020, 50, 53.	0.2	4
5	Expression of Separate Heterologous Proteins from the Rotavirus NSP3 Genome Segment Using a Translational 2A Stop-Restart Element. Journal of Virology, 2020, 94, .	3.4	25
6	Rotavirus Species B Encodes a Functional Fusion-Associated Small Transmembrane Protein. Journal of Virology, 2019, 93, .	3.4	19
7	Collection of Recombinant Rotaviruses Expressing Fluorescent Reporter Proteins. Microbiology Resource Announcements, 2019, 8, .	0.6	19
8	Rotavirus Calcium Dysregulation Manifests as Dynamic Calcium Signaling in the Cytoplasm and Endoplasmic Reticulum. Scientific Reports, 2019, 9, 10822.	3.3	50
9	Generation of Recombinant Rotavirus Expressing NSP3-UnaG Fusion Protein by a Simplified Reverse Genetics System. Journal of Virology, 2019, 93, .	3.4	45
10	Multiple Introductions and Antigenic Mismatch with Vaccines May Contribute to Increased Predominance of G12P[8] Rotaviruses in the United States. Journal of Virology, 2019, 93, .	3.4	31
11	Genome packaging in multi-segmented dsRNA viruses: distinct mechanisms with similar outcomes. Current Opinion in Virology, 2018, 33, 106-112.	5.4	62
12	Vesicle-Cloaked Virus Clusters Are Optimal Units for Inter-organismal Viral Transmission. Cell Host and Microbe, 2018, 24, 208-220.e8.	11.0	209
13	Drebrin restricts rotavirus entry by inhibiting dynamin-mediated endocytosis. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3642-E3651.	7.1	49
14	Rotavirus NSP1 Requires Casein Kinase II-Mediated Phosphorylation for Hijacking of Cullin-RING Ligases. MBio, 2017, 8, .	4.1	24
15	Shutdown of interferon signaling by a viral-hijacked E3 ubiquitin ligase. Microbial Cell, 2017, 4, 387-389.	3.2	13
16	Rotavirus Replication and Reverse Genetics. , 2016, , 121-143.		5
17	Reassortment in segmented RNA viruses: mechanisms and outcomes. Nature Reviews Microbiology, 2016, 14, 448-460.	28.6	259
18	Modeling of the rotavirus group C capsid predicts a surface topology distinct from other rotavirus species. Virology, 2016, 487, 150-162.	2.4	7

#	Article	IF	Citations
19	Comparative Proteomics Reveals Strain-Specific Î²-TrCP Degradation via Rotavirus NSP1 Hijacking a Host Cullin-3-Rbx1 Complex. PLoS Pathogens, 2016, 12, e1005929.	4.7	59
20	Rotavirus Infects Human Biliary Epithelial Cells and Stimulates Secretion of Cytokines IL-6 and IL-8 via MAPK Pathway. BioMed Research International, 2015, 2015, 1-9.	1.9	15
21	Silencing the alarms: Innate immune antagonism by rotavirus NSP1 and VP3. Virology, 2015, 479-480, 75-84.	2.4	39
22	Structural Basis for 2â€²-5â€²-Oligoadenylate Binding and Enzyme Activity of a Viral RNase L Antagonist. Journal of Virology, 2015, 89, 6633-6645.	3.4	28
23	Putative E3 Ubiquitin Ligase of Human Rotavirus Inhibits NF-Îº B Activation by Using Molecular Mimicry To Target Î²-TrCP. MBio, 2015, 6, .	4.1	56
24	Prevalence of Groups A and C Rotavirus Antibodies in Infants with Biliary Atresia and Cholestatic Controls. Journal of Pediatrics, 2015, 166, 79-84.e1.	1.8	17
25	Molecular Epidemiology of Contemporary G2P[4] Human Rotaviruses Cocirculating in a Single U.S. Community: Footprints of a Globally Transitioning Genotype. Journal of Virology, 2014, 88, 3789-3801.	3.4	52
26	Regulation of rotavirus polymerase activity by inner capsid proteins. Current Opinion in Virology, 2014, 9, 31-38.	5.4	12
27	Analysis of Human Rotaviruses from a Single Location Over an 18-Year Time Span Suggests that Protein Coadaption Influences Gene Constellations. Journal of Virology, 2014, 88, 9842-9863.	3.4	23
28	Absence of Genetic Differences among G10P[11] Rotaviruses Associated with Asymptomatic and Symptomatic Neonatal Infections in Vellore, India. Journal of Virology, 2014, 88, 9060-9071.	3.4	12
29	Predicted Structure and Domain Organization of Rotavirus Capping Enzyme and Innate Immune Antagonist VP3. Journal of Virology, 2014, 88, 9072-9085.	3.4	35
30	Mutations in the rotavirus spike protein VP4 reduce trypsin sensitivity but not viral spread. Journal of General Virology, 2013, 94, 1296-1300.	2.9	7
31	Comparative analysis of Reoviridae reverse genetics methods. Methods, 2013, 59, 199-206.	3.8	14
32	The Battle between Rotavirus and Its Host for Control of the Interferon Signaling Pathway. PLoS Pathogens, 2013, 9, e1003064.	4.7	88
33	Ulnar Collateral Ligament Reconstruction Using Bisuspensory Fixation. American Journal of Sports Medicine, 2013, 41, 1158-1164.	4.2	34
34	Homologous 2â€²,5â€²-phosphodiesterases from disparate RNA viruses antagonize antiviral innate immunity. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 13114-13119.	7.1	118
35	Rotavirus NSP1 Mediates Degradation of Interferon Regulatory Factors through Targeting of the Dimerization Domain. Journal of Virology, 2013, 87, 9813-9821.	3.4	57
36	Generation of Genetically Stable Recombinant Rotaviruses Containing Novel Genome Rearrangements and Heterologous Sequences by Reverse Genetics. Journal of Virology, 2013, 87, 6211-6220.	3.4	39

#	Article	IF	Citations
37	Rotavirus variant replicates efficiently although encoding an aberrant NSP3 that fails to induce nuclear localization of poly(A)-binding protein. Journal of General Virology, 2012, 93, 1483-1494.	2.9	31
38	Interactions among capsid proteins orchestrate rotavirus particle functions. Current Opinion in Virology, 2012, 2, 373-379.	5.4	33
39	Genetic Analyses Reveal Differences in the VP7 and VP4 Antigenic Epitopes between Human Rotaviruses Circulating in Belgium and Rotaviruses in Rotarix and RotaTeq. Journal of Clinical Microbiology, 2012, 50, 966-976.	3.9	160
40	Diversity and Relationships of Cocirculating Modern Human Rotaviruses Revealed Using Large-Scale Comparative Genomics. Journal of Virology, 2012, 86, 9148-9162.	3.4	45
41	Crystallographic Analysis of Rotavirus NSP2-RNA Complex Reveals Specific Recognition of 5â€² GG Sequence for RTPase Activity. Journal of Virology, 2012, 86, 10547-10557.	3.4	25
42	Structural insights into the coupling of virion assembly and rotavirus replication. Nature Reviews Microbiology, 2012, 10, 165-177.	28.6	182
43	Vaccine-derived NSP2 segment in rotaviruses from vaccinated children with gastroenteritis in Nicaragua. Infection, Genetics and Evolution, 2012, 12, 1282-1294.	2.3	67
44	Mutational analysis of residues involved in nucleotide and divalent cation stabilization in the rotavirus RNA-dependent RNA polymerase catalytic pocket. Virology, 2012, 431, 12-20.	2.4	19
45	Rotavirus RNA polymerases resolve into two phylogenetically distinct classes that differ in their mechanism of template recognition. Virology, 2012, 431, 50-57.	2.4	17
46	Rotavirus diversity and evolution in the post-vaccine world. Discovery Medicine, 2012, 13, 85-97.	0.5	89
47	Assortment and packaging of the segmented rotavirus genome. Trends in Microbiology, 2011, 19, 136-144.	7.7	113
48	Intra-genotypic diversity of archival G4P[8] human rotaviruses from Washington, DC. Infection, Genetics and Evolution, 2011, 11, 1586-1594.	2.3	26
49	Uniformity of rotavirus strain nomenclature proposed by the Rotavirus Classification Working Group (RCWG). Archives of Virology, 2011, 156, 1397-1413.	2.1	827
50	Diversity of Interferon Antagonist Activities Mediated by NSP1 Proteins of Different Rotavirus Strains. Journal of Virology, 2011, 85, 1970-1979.	3.4	78
51	Residues of the Rotavirus RNA-Dependent RNA Polymerase Template Entry Tunnel That Mediate RNA Recognition and Genome Replication. Journal of Virology, 2011, 85, 1958-1969.	3.4	15
52	Rotavirus VP2 Core Shell Regions Critical for Viral Polymerase Activation. Journal of Virology, 2011, 85, 3095-3105.	3.4	57
53	Complete genome sequence analysis of candidate human rotavirus vaccine strains RV3 and 116E. Virology, 2010, 405, 201-213.	2.4	38
54	Simian Rotaviruses Possess Divergent Gene Constellations That Originated from Interspecies Transmission and Reassortment. Journal of Virology, 2010, 84, 2013-2026.	3.4	60

#	Article	IF	Citations
55	Dual selection mechanisms drive efficient single-gene reverse genetics for rotavirus. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 18652-18657.	7.1	81
56	Mechanism of Intraparticle Synthesis of the Rotavirus Double-stranded RNA Genome. Journal of Biological Chemistry, 2010, 285, 18123-18128.	3.4	55
57	Primed for Discovery: Atomic-Resolution Cryo-EM Structure of a Reovirus Entry Intermediate. Viruses, 2010, 2, 1340-1346.	3.3	2
58	4 Prevalence of Acute Asymptomatic Group a Rotavirus Infection in Cholestatic Infants Enrolled in the Biliary Atresia Research Consortium (BARC). Gastroenterology, 2010, 138, S-773.	1.3	0
59	345 Rotavirus (RV) Infection of Human Cholangiocytes Results in Release of IL-6 and IL-8. Gastroenterology, 2010, 138, S-785-S-786.	1.3	0
60	Functions of the Rotavirus RNA Polymerase in Virus Replication. , 2010, , 31-40.		0
61	Evolutionary Dynamics of Human Rotaviruses: Balancing Reassortment with Preferred Genome Constellations. PLoS Pathogens, 2009, 5, e1000634.	4.7	178
62	Rotavirus Antagonism of the Innate Immune Response. Viruses, 2009, 1, 1035-1056.	3.3	22
63	Shared and Group-Specific Features of the Rotavirus RNA Polymerase Reveal Potential Determinants of Gene Reassortment Restriction. Journal of Virology, 2009, 83, 6135-6148.	3.4	45
64	The ins and outs of four-tunneled Reoviridae RNA-dependent RNA polymerases. Current Opinion in Structural Biology, 2009, 19, 775-782.	5.7	48
65	Core-Associated Genome Replication Mechanisms of dsRNA Viruses. , 2009, , 201-224.		0
66	Culturing, Storage, and Quantification of Rotaviruses. Current Protocols in Microbiology, 2009, 15, Unit 15C.3.	6.5	126
67	824 Humoral Immunity to Rotavirus-Infected Human Cholangiocytes in Biliary Atresia. Gastroenterology, 2009, 136, A-808.	1.3	0
68	Rotavirus Antagonism of the Host Innate Immune Response. , 2009, , 655-677.		0
69	Recommendations for the classification of group A rotaviruses using all 11 genomic RNA segments. Archives of Virology, 2008, 153, 1621-1629.	2.1	642
70	Nonâ€structural protein NSP2 induces heterotypic antibody responses during primary rotavirus infection and reinfection in children. Journal of Medical Virology, 2008, 80, 1090-1098.	5.0	16
71	Mechanism for Coordinated RNA Packaging and Genome Replication by Rotavirus Polymerase VP1. Structure, 2008, 16, 1678-1688.	3.3	148
72	Group A Human Rotavirus Genomics: Evidence that Gene Constellations Are Influenced by Viral Protein Interactions. Journal of Virology, 2008, 82, 11106-11116.	3.4	156

#	Article	IF	Citations
73	Full Genome-Based Classification of Rotaviruses Reveals a Common Origin between Human Wa-Like and Porcine Rotavirus Strains and Human DS-1-Like and Bovine Rotavirus Strains. Journal of Virology, 2008, 82, 3204-3219.	3.4	791
74	Molecular Characterization of a Subgroup Specificity Associated with the Rotavirus Inner Capsid Protein VP2. Journal of Virology, 2008, 82, 2752-2764.	3.4	18
75	Rotavirus RNA Replication and Gene Expression. Novartis Foundation Symposium, 2008, 238, 64-81.	1.1	32
76	Rotavirus NSP1 Inhibits Expression of Type I Interferon by Antagonizing the Function of Interferon Regulatory Factors IRF3, IRF5, and IRF7. Journal of Virology, 2007, 81, 4473-4481.	3.4	190
77	Crystallographic and Biochemical Analysis of Rotavirus NSP2 with Nucleotides Reveals a Nucleoside Diphosphate Kinase-Like Activity. Journal of Virology, 2007, 81, 12272-12284.	3.4	39
78	Viral factories in rotavirus-infected cells: interactions between protein and RNA components. Future Virology, 2007, 2, 157-161.	1.8	0
79	Genome heterogeneity of SA11 rotavirus due to reassortment with â€œOâ€•agent. Virology, 2007, 359, 415-424.	2.4	31
80	An ATPase activity associated with the rotavirus phosphoprotein NSP5. Virology, 2007, 369, 389-399.	2.4	11
81	Coupling of Rotavirus Genome Replication and Capsid Assembly. Advances in Virus Research, 2006, 69, 167-201.	2.1	41
82	Histidine Triad-like Motif of the Rotavirus NSP2 Octamer Mediates both RTPase and NTPase Activities. Journal of Molecular Biology, 2006, 362, 539-554.	4.2	44
83	A base-specific recognition signal in the 5' consensus sequence of rotavirus plus-strand RNAs promotes replication of the double-stranded RNA genome segments. Rna, 2006, 12, 133-146.	3.5	45
84	Structure-Function Analysis of Rotavirus NSP2 Octamer by Using a Novel Complementation System. Journal of Virology, 2006, 80, 7984-7994.	3.4	49
85	Critical Role for Cryopyrin/Nalp3 in Activation of Caspase-1 in Response to Viral Infection and Double-stranded RNA. Journal of Biological Chemistry, 2006, 281, 36560-36568.	3.4	598
86	Rotavirus Glycoprotein NSP4 Is a Modulator of Viral Transcription in the Infected Cell. Journal of Virology, 2005, 79, 15165-15174.	3.4	42
87	Rotavirus nonstructural protein 1 subverts innate immune response by inducing degradation of IFN regulatory factor 3. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 4114-4119.	7.1	233
88	Rotavirus Replication: Plus-Sense Templates for Double-Stranded RNA Synthesis Are Made in Viroplasms. Journal of Virology, 2004, 78, 7763-7774.	3.4	197
89	Replication and Transcription of the Rotavirus Genome. Current Pharmaceutical Design, 2004, 10, 3769-3777.	1.9	27
90	Role of the Histidine Triad-like Motif in Nucleotide Hydrolysis by the Rotavirus RNA-packaging Protein NSP2. Journal of Biological Chemistry, 2004, 279, 10624-10633.	3.4	36

#	Article	IF	Citations
91	Homotypic and Heterotypic Serum Isotypeâ€"Specific Antibody Responses to Rotavirus Nonstructural Protein 4 and Viral Protein (VP) 4, VP6, and VP7 in Infants Who Received Selected Live Oral Rotavirus Vaccines. Journal of Infectious Diseases, 2004, 189, 1833-1845.	4.0	28
92	Cell-line-induced mutation of the rotavirus genome alters expression of an IRF3-interacting protein. EMBO Journal, 2004, 23, 4072-4081.	7.8	17
93	Translation enhancer in the 3?-untranslated region of rotavirus gene 6 mRNA promotes expression of the major capsid protein VP6. Archives of Virology, 2004, 149, 303-321.	2.1	10
94	Nonstructural proteins involved in genome packaging and replication of rotaviruses and other members of the Reoviridae. Virus Research, 2004, 101, 57-66.	2.2	72
95	Rotavirus NSP2 interferes with the core lattice protein VP2 in initiation of minus-strand synthesis. Virology, 2003, 313, 261-273.	2.4	12
96	Template Recognition and Formation of Initiation Complexes by the Replicase of a Segmented Double-stranded RNA Virus. Journal of Biological Chemistry, 2003, 278, 32673-32682.	3.4	61
97	II, 4. Rotavirus genome replication: role of the RNA-binding proteins. Perspectives in Medical Virology, 2003, 9, 165-183.	0.1	8
98	RNA-Binding Activity of the Rotavirus Phosphoprotein NSP5 Includes Affinity for Double-Stranded RNA. Journal of Virology, 2002, 76, 5291-5299.	3.4	51
99	Analysis of a Temperature-Sensitive Mutant Rotavirus Indicates that NSP2 Octamers Are the Functional Form of the Protein. Journal of Virology, 2002, 76, 7082-7093.	3.4	40
100	Rotavirus protein involved in genome replication and packaging exhibits a HIT-like fold. Nature, 2002, 417, 311-315.	27.8	93
101	Reverse Transcriptase Adds Nontemplated Nucleotides to cDNAs During 5â€²-RACE and Primer Extension. BioTechniques, 2001, 30, 574-582.	1.8	52
102	Rotavirus assembly - interaction of surface protein VP7 with middle layer protein VP6. Archives of Virology, 2001, 146, 1155-1171.	2.1	6
103	Multimers of the Bluetongue Virus Nonstructural Protein, NS2, Possess Nucleotidyl Phosphatase Activity: Similarities between NS2 and Rotavirus NSP2. Virology, 2001, 280, 221-231.	2.4	41
104	Features of the 3â€²-Consensus Sequence of Rotavirus mRNAs Critical to Minus Strand Synthesis. Virology, 2001, 282, 221-229.	2.4	35
105	Identification of Sequences in Rotavirus mRNAs Important for Minus Strand Synthesis Using Antisense Oligonucleotides. Virology, 2001, 288, 71-80.	2.4	14
106	Rotavirus Nonstructural Protein NSP2 Self-assembles into Octamers That Undergo Ligand-induced Conformational Changes. Journal of Biological Chemistry, 2001, 276, 9679-9687.	3.4	88
107	Effect of Intragenic Rearrangement and Changes in the 3â€² Consensus Sequence on NSP1 Expression and Rotavirus Replication. Journal of Virology, 2001, 75, 2076-2086.	3.4	59
108	Identification and Characterization of the Helix-Destabilizing Activity of Rotavirus Nonstructural Protein NSP2. Journal of Virology, 2001, 75, 4519-4527.	3.4	82

#	Article	IF	Citations
109	Genome Replication and Packaging of Segmented Double-Stranded RNA Viruses. Virology, 2000, 277, 217-225.	2.4	130
110	De novo synthesis of minus strand RNA by the rotavirus RNA polymerase in a cell-free system involves a novel mechanism of initiation. Rna, 2000, 6, 1455-1467.	3.5	53
111	A four-nucleotide translation enhancer in the 3â€²-terminal consensus sequence of the nonpolyadenylated mRNAs of rotavirus. Rna, 2000, 6, 814-825.	3.5	41
112	Virus Replication. , 2000, 34, 33-66.		17
113	Multimers Formed by the Rotavirus Nonstructural Protein NSP2 Bind to RNA and Have Nucleoside Triphosphatase Activity. Journal of Virology, 1999, 73, 9934-9943.	3.4	107
114	Open Reading Frame in Rotavirus mRNA Specifically Promotes Synthesis of Double-Stranded RNA: Template Size Also Affects Replication Efficiency. Virology, 1999, 264, 167-180.	2.4	18
115	Rotavirus Open Cores Catalyze 5â€²-Capping and Methylation of Exogenous RNA: Evidence That VP3 Is a Methyltransferase. Virology, 1999, 265, 120-130.	2.4	82
116	Synthesis and Biological Evaluation of a Potent E-Selectin Antagonist. Journal of Medicinal Chemistry, 1999, 42, 4909-4913.	6.4	31
117	RNA-Binding and Capping Activities of Proteins in Rotavirus Open Cores. Journal of Virology, 1999, 73, 1382-1391.	3.4	50
118	Rotavirus RNA Replication Requires a Single-Stranded 3â€² End for Efficient Minus-Strand Synthesis. Journal of Virology, 1998, 72, 7387-7396.	3.4	68
119	[24] Using the RNA-capture assay to assess the RNA-binding activity of viral proteins. Methods in Molecular Genetics, 1995, 7, 373-387.	0.6	1
120	The Carboxyl-Half of the Rotavirus Nonstructural Protein NS53 (NSP1) Is Not Required for Virus Replication. Virology, 1994, 198, 567-576.	2.4	63
121	The Rotavirus RNA-Binding Protein NS35 (NSP2) Forms 10S Multimers and Interacts with the Viral RNA Polymerase. Virology, 1994, 202, 803-813.	2.4	71
122	Nucleotide and Amino Acid Sequence Analysis of the Rotavirus Nonstructural RNA-Binding Protein NS35. Virology, 1993, 192, 438-446.	2.4	52
123	Comparative Analysis of the Rotavirus NS53 Gene: Conservation of Basic and Cysteine-Rich Regions in the Protein and Possible Stem-Loop Structures in the RNA. Virology, 1993, 196, 372-378.	2.4	68
124	The rotavirus nonstructural protein, NS35, possesses RNA-binding activity in vitro and in vivo. Virology, 1992, 191, 698-708.	2.4	65
125	Rotavirus morphogenesis: Domains in the major inner capsid protein essential for binding to single-shelled particles and for trimerization. Virology, 1991, 180, 697-708.	2.4	43
126	Evidence for equimolar synthesis of double-strand RNA and minus-strand RNA in rotavirus-infected cells. Virus Research, 1990, 17, 199-208.	2.2	26

#	Article	IF	Citations
127	Characterization of rotavirus replication intermediates: A model for the assembly of single-shelled particles. Virology, 1989, 172, 616-627.	2.4	151
128	Structure and protein composition of the rotavirus replicase particle. Virology, 1988, 166, 358-365.	2.4	66
129	The Switch from Transcription to Replication of a Negative-strand RNA Virus. Cold Spring Harbor Symposia on Quantitative Biology, 1987, 52, 367-371.	1.1	12
130	Characterization of subviral particles in cells infected with simian rotavirus SA11. Virology, 1986, 155, 655-665.	2.4	56
131	Synthesis of simian rotavirus SA11 double-stranded RNA in a cell-free system. Virus Research, 1986, 6, 217-233.	2.2	56
132	Electrophoretic separation of the plus and minus strands of rotavirus SA11 double-stranded RNAs. Journal of Virological Methods, 1986, 13, 185-190.	2.1	22
133	Replication of Nondefective Parvoviruses: Lack of a Virion-Associated DNA Polymerase. Journal of Virology, 1978, 28, 20-27.	3.4	11
134	Innate Immune Responses Elicited by Reovirus and Rotavirus. , 0, , 403-422.		0
135	Recovery of Recombinant Rotavirus Expressing Fluorescent Reporter Protein. SSRN Electronic Journal, 0, , .	0.4	0