Carlos F Arias

List of Publications by Year
in descending order

139 papers	6,231 citations	47006 47 h-index	88630 70 g-index
154 all docs	154 docs citations	154 times ranked	6157 citing authors

#	Article	IF	Citations
1	Structures of Two Human Astrovirus Capsid/Neutralizing Antibody Complexes Reveal Distinct Epitopes and Inhibition of Virus Attachment to Cells. Journal of Virology, 2022, 96, JVI0141521.	3.4	6
2	Genomic Characterization of SARS-CoV-2 Isolated from Patients with Distinct Disease Outcomes in Mexico. Microbiology Spectrum, 2022, , e0124921.	3.0	5
3	Pooling saliva samples as an excellent option to increase the surveillance for SARS-CoV-2 when re-opening community settings. PLoS ONE, 2022, 17, e0263114.	2.5	11
4	High Prevalence and Diversity of Caliciviruses in a Community Setting Determined by a Metagenomic Approach. Microbiology Spectrum, 2022, 10, e0185321.	3.0	3
5	Lipid metabolism is involved in the association of rotavirus viroplasms with endoplasmic reticulum membranes. Virology, 2022, 569, 29-36.	2.4	7
6	The Alpha Variant (B.1.1.7) of SARS-CoV-2 Failed to Become Dominant in Mexico. Microbiology Spectrum, 2022, 10, e0224021.	3.0	21
7	Dominance of Three Sublineages of the SARS-CoV-2 Delta Variant in Mexico. Viruses, 2022, 14, 1165.	3.3	12
8	The Capsid Precursor Protein of Astrovirus VA1 Is Proteolytically Processed Intracellularly. Journal of Virology, 2022, 96, .	3.4	6
9	The Association of Human Astrovirus with Extracellular Vesicles Facilitates Cell Infection and Protects the Virus from Neutralizing Antibodies. Journal of Virology, 2022, 96, .	3.4	4
10	The gut virome of healthy children during the first year of life is diverse and dynamic. PLoS ONE, 2021, 16, e0240958.	2.5	26
11	Rotavirus cell entry: not so simple after all. Current Opinion in Virology, 2021, 48, 42-48.	5.4	25
12	Emergence and spread of the potential variant of interest (VOI) B.1.1.519 of SARS-CoV-2 predominantly present in Mexico. Archives of Virology, 2021, 166, 3173-3177.	2.1	31
13	High Seropositivity Rate of Neutralizing Antibodies to Astrovirus VA1 in Human Populations. MSphere, 2021, 6, e0048421.	2.9	10
14	Protein Disulfide Isomerase A4 Is Involved in Genome Uncoating during Human Astrovirus Cell Entry. Viruses, 2021, 13, 53.	3.3	18
15	Genetic Analysis of SARS-CoV-2 Variants in Mexico during the First Year of the COVID-19 Pandemic. Viruses, 2021, 13, 2161.	3.3	32
16	Rotaviruses Associate with Distinct Types of Extracellular Vesicles. Viruses, 2020, 12, 763.	3.3	14
17	Saliva Sampling and Its Direct Lysis, an Excellent Option To Increase the Number of SARS-CoV-2 Diagnostic Tests in Settings with Supply Shortages. Journal of Clinical Microbiology, 2020, 58, .	3.9	58
18	Tobamoviruses can be frequently present in the oropharynx and gut of infants during their first year of life. Scientific Reports, 2020, 10, 13595.	3.3	18

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19	Genomic Analysis of Early SARS-CoV-2 Variants Introduced in Mexico. Journal of Virology, 2020, 94, .	3.4	32
20	Role of the Guanine Nucleotide Exchange Factor GBF1 in the Replication of RNA Viruses. Viruses, 2020, 12, 682.	3.3	8
21	Metagenomic sequencing with spiked primer enrichment for viral diagnostics and genomic surveillance. Nature Microbiology, 2020, 5, 443-454.	13.3	114
22	Development of a novel DNA based reverse genetics system for classic human astroviruses. Virology, 2019, 535, 130-135.	2.4	4
23	The Guanine Nucleotide Exchange Factor GBF1 Participates in Rotavirus Replication. Journal of Virology, 2019, 93, .	3.4	15
24	A simplified workflow for monoclonal antibody sequencing. PLoS ONE, 2019, 14, e0218717.	2.5	37
25	The actin cytoskeleton is important for rotavirus internalization and RNA genome replication. Virus Research, 2019, 263, 27-33.	2.2	14
26	Isolation of Neutralizing Monoclonal Antibodies to Human Astrovirus and Characterization of Virus Variants That Escape Neutralization. Journal of Virology, 2019, 93, .	3.4	26
27	Nanoscale organization of rotavirus replication machineries. ELife, 2019, 8, .	6.0	24
28	The Geographic Structure of Viruses in the Cuatro CiÃ©negas Basin, a Unique Oasis in Northern Mexico, Reveals a Highly Diverse Population on a Small Geographic Scale. Applied and Environmental Microbiology, 2018, 84, .	3.1	43
29	Hologenomic adaptations underlying the evolution of sanguivory in the common vampire bat. Nature Ecology and Evolution, 2018, 2, 659-668.	7.8	124
30	Zika Virus in Salivary Glands of Five Different Species of Wild-Caught Mosquitoes from Mexico. Scientific Reports, 2018, 8, 809.	3.3	48
31	Most rotavirus strains require the cation-independent mannose-6-phosphate receptor, sortilin-1, and cathepsins to enter cells. Virus Research, 2018, 245, 44-51.	2.2	11
32	Actin-Dependent Nonlytic Rotavirus Exit and Infectious Virus Morphogenetic Pathway in Nonpolarized Cells. Journal of Virology, 2018, 92, .	3.4	19
33	Structural Basis for Escape of Human Astrovirus from Antibody Neutralization: Broad Implications for Rational Vaccine Design. Journal of Virology, 2018, 92, .	3.4	18
34	The Ubiquitin-Proteasome System Is Necessary for Efficient Replication of Human Astrovirus. Journal of Virology, 2018, 92, .	3.4	14
35	Viral Communities Among Sympatric Vampire Bats and Cattle. EcoHealth, 2018, 15, 132-142.	2.0	5
36	Rotavirus RNAs sponge host cell RNA binding proteins and interfere with their subcellular localization. Virology, 2018, 525, 96-105.	2.4	11

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37	Genomic Epidemiology Reconstructs the Introduction and Spread of Zika Virus in Central America and Mexico. Cell Host and Microbe, 2018, 23, 855-864.e7.	11.0	82
38	Minimal capsid composition of infectious human astrovirus. Virology, 2018, 521, 58-61.	2.4	13
39	Human Virome. Archives of Medical Research, 2017, 48, 701-716.	3.3	58
40	The Astrovirus Capsid: A Review. Viruses, 2017, 9, 15.	3.3	81
41	Rotavirus Biology. , 2017, , 19-42.		1
42	Astrovirus. , 2016, , 1231-1242.		0
43	Assessment of Epstein-Barr virus nucleic acids in gastric but not in breast cancer by next-generation sequencing of pooled Mexican samples. Memorias Do Instituto Oswaldo Cruz, 2016, 111, 200-208.	1.6	2
44	Complete Genome Sequence of Human Coronavirus OC43 Isolated from Mexico. Genome Announcements, 2016, 4, .	0.8	2
45	Rotavirus Strategies Against the Innate Antiviral System. Annual Review of Virology, 2016, 3, 591-609.	6.7	29
46	Polarized rotavirus entry and release from differentiated small intestinal cells. Virology, 2016, 499, 65-71.	2.4	18
47	Bats, Primates, and the Evolutionary Origins and Diversification of Mammalian Gammaherpesviruses. MBio, 2016, 7, .	4.1	31
48	Crystal Structure of the Human Astrovirus Capsid Protein. Journal of Virology, 2016, 90, 9008-9017.	3.4	33
49	The evolution of bat nucleic acidâ€sensing Tollâ€like receptors. Molecular Ecology, 2015, 24, 5899-5909.	3.9	43
50	Tight Junctions Go Viral!. Viruses, 2015, 7, 5145-5154.	3.3	73
51	A Novel Endogenous Betaretrovirus in the Common Vampire Bat (Desmodus rotundus) Suggests Multiple Independent Infection and Cross-Species Transmission Events. Journal of Virology, 2015, 89, 5180-5184.	3.4	32
52	The tyrosine kinase inhibitor genistein induces the detachment of rotavirus particles from the cell surface. Virus Research, 2015, 210, 141-148.	2.2	11
53	Rhinovirus is an important pathogen in upper and lower respiratory tract infections in Mexican children. Virology Journal, 2015, 12, 31.	3.4	20
54	Identification of Host Cell Factors Associated with Astrovirus Replication in Caco-2 Cells. Journal of Virology, 2015, 89, 10359-10370.	3.4	32

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55	Rotavirus Controls Activation of the 2â€²-5â€²-Oligoadenylate Synthetase/RNase L Pathway Using at Least Two Distinct Mechanisms. Journal of Virology, 2015, 89, 12145-12153.	3.4	36
56	The tight junction protein JAM-A functions as coreceptor for rotavirus entry into MA104 cells. Virology, 2015, 475, 172-178.	2.4	46
57	DNA Microarray for Detection of Gastrointestinal Viruses. Journal of Clinical Microbiology, 2015, 53, 136-145.	3.9	41
58	Rotavirus Entry: a Deep Journey into the Cell with Several Exits. Journal of Virology, 2015, 89, 890-893.	3.4	82
59	Molecular Epidemiology of Influenza A/H3N2 Viruses Circulating in Mexico from 2003 to 2012. PLoS ONE, 2014, 9, e102453.	2.5	5
60	Is There Still Room for Novel Viral Pathogens in Pediatric Respiratory Tract Infections?. PLoS ONE, 2014, 9, e113570.	2.5	32
61	Rotaviruses Reach Late Endosomes and Require the Cation-Dependent Mannose-6-Phosphate Receptor and the Activity of Cathepsin Proteases To Enter the Cell. Journal of Virology, 2014, 88, 4389-4402.	3.4	46
62	Characterization of Human Astrovirus Cell Entry. Journal of Virology, 2014, 88, 2452-2460.	3.4	46
63	PhyloFlu, a DNA Microarray for Determining the Phylogenetic Origin of Influenza A Virus Gene Segments and the Genomic Fingerprint of Viral Strains. Journal of Clinical Microbiology, 2014, 52, 803-813.	3.9	7
64	Gangliosides Have a Functional Role during Rotavirus Cell Entry. Journal of Virology, 2013, 87, 1115-1122.	3.4	61
65	Virus diversity and evolution. Current Opinion in Microbiology, 2013, 16, 465-467.	5.1	1
66	The Spike Protein VP4 Defines the Endocytic Pathway Used by Rotavirus To Enter MA104 Cells. Journal of Virology, 2013, 87, 1658-1663.	3.4	41
67	Rotavirus Prevents the Expression of Host Responses by Blocking the Nucleocytoplasmic Transport of Polyadenylated mRNAs. Journal of Virology, 2013, 87, 6336-6345.	3.4	37
68	Genome-wide RNAi screen reveals a role for the ESCRT complex in rotavirus cell entry. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10270-10275.	7.1	71
69	Replication Cycle of Astroviruses. , 2012, , 19-45.		16
70	Inhibiting Rotavirus Infection by Membrane-Impermeant Thiol/Disulfide Exchange Blockers and Antibodies against Protein Disulfide Isomerase. Intervirology, 2012, 55, 451-464.	2.8	41
71	Characterization of an influenza A virus in Mexican swine that is related to the A/H1N1/2009 pandemic clade. Virology, 2012, 433, 176-182.	2.4	17
72	Rotavirusâ€“host cell interactions: an arms race. Current Opinion in Virology, 2012, 2, 389-398.	5.4	23

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73	Discovery of a Novel Polyomavirus in Acute Diarrheal Samples from Children. PLoS ONE, 2012, 7, e49449.	2.5	110
74	Methods suitable for high-throughput screening of siRNAs and other chemical compounds with the potential to inhibit rotavirus replication. Journal of Virological Methods, 2012, 179, 242-249.	2.1	8
75	Replication of the Rotavirus Genome Requires an Active Ubiquitin-Proteasome System. Journal of Virology, 2011, 85, 11964-11971.	3.4	62
76	Rotavirus Infection Induces the Unfolded Protein Response of the Cell and Controls It through the Nonstructural Protein NSP3. Journal of Virology, 2011, 85, 12594-12604.	3.4	55
77	Different Rotavirus Strains Enter MA104 Cells through Different Endocytic Pathways: the Role of Clathrin-Mediated Endocytosis. Journal of Virology, 2010, 84, 9161-9169.	3.4	92
78	Protein Kinase R Is Responsible for the Phosphorylation of eIF2Î± in Rotavirus Infection. Journal of Virology, 2010, 84, 10457-10466.	3.4	76
79	Characterization of viroplasm formation during the early stages of rotavirus infection. Virology Journal, 2010, 7, 350.	3.4	29
80	Rotaviruses require basolateral molecules for efficient infection of polarized MDCKII cells. Virus Research, 2010, 147, 231-241.	2.2	10
81	A Metagenomic Analysis of Pandemic Influenza A (2009 H1N1) Infection in Patients from North America. PLoS ONE, 2010, 5, e13381.	2.5	169
82	Analysis of the Kinetics of Transcription and Replication of the Rotavirus Genome by RNA Interference. Journal of Virology, 2009, 83, 8819-8831.	3.4	39
83	Molecular Anatomy of 2009 Influenza Virus A (H1N1). Archives of Medical Research, 2009, 40, 643-654.	3.3	60
84	Dissecting the role of integrin subunits Î±2 and Î²3 in rotavirus cell entry by RNA silencing. Virus Research, 2009, 145, 251-259.	2.2	5
85	Comparative study of enteric viruses, coliphages and indicator bacteria for evaluating water quality in a tropical high-altitude system. Environmental Health, 2009, 8, 49.	4.0	41
86	Infectivity and genome persistence of rotavirus and astrovirus in groundwater and surface water. Water Research, 2008, 42, 2618-2628.	11.3	128
87	Rotavirus Infection Induces the Phosphorylation of eIF2Î± but Prevents the Formation of Stress Granules. Journal of Virology, 2008, 82, 1496-1504.	3.4	125
88	Rotavirus cell entry. Future Virology, 2008, 3, 135-146.	1.8	9
89	Endoplasmic Reticulum Chaperones Are Involved in the Morphogenesis of Rotavirus Infectious Particles. Journal of Virology, 2008, 82, 5368-5380.	3.4	59
90	Early Events of Rotavirus Infection: The Search for the Receptor(s). Novartis Foundation Symposium, 2008, 238, 47-63.	1.1	17

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91	Association of the Astrovirus Structural Protein VP90 with Membranes Plays a Role in Virus Morphogenesis. Journal of Virology, 2007, 81, 10649-10658.	3.4	48
92	Production of Rotavirus-Like Particles in Tomato (Lycopersicon esculentumL.) Fruit by Expression of Capsid Proteins VP2 and VP6 and Immunological Studies. Viral Immunology, 2006, 19, 42-53.	1.3	45
93	Heat shock enhances the susceptibility of BHK cells to rotavirus infection through the facilitation of entry and post-entry virus replication steps. Virus Research, 2006, 121, 74-83.	2.2	9
94	Role of sialic acids in rotavirus infection. Glycoconjugate Journal, 2006, 23, 27-37.	2.7	112
95	Rotavirus Vaccine: Early Introduction in Latin Americaâ€"Risks and Benefits. Archives of Medical Research, 2006, 37, 1-10.	3.3	14
96	Reply to the Letter to the Editor entitled â€œIntroduction of Human Rotavirus Vaccine in Latin Americaâ€. Archives of Medical Research, 2006, 37, 570.	3.3	0
97	The Peptide-Binding and ATPase Domains of Recombinant hsc70 Are Required To Interact with Rotavirus and Reduce Its Infectivity. Journal of Virology, 2006, 80, 3322-3331.	3.4	51
98	Rotavirus Nonstructural Protein NSP3 Is Not Required for Viral Protein Synthesis. Journal of Virology, 2006, 80, 9031-9038.	3.4	80
99	Reduced expression of the rotavirus NSP5 gene has a pleiotropic effect on virus replication. Journal of General Virology, 2005, 86, 1609-1617.	2.9	75
100	Silencing the Morphogenesis of Rotavirus. Journal of Virology, 2005, 79, 184-192.	3.4	112
101	Characterization of Rotavirus Cell Entry. Journal of Virology, 2004, 78, 2310-2318.	3.4	112
102	Caspases Mediate Processing of the Capsid Precursor and Cell Release of Human Astroviruses. Journal of Virology, 2004, 78, 8601-8608.	3.4	85
103	VP7 Mediates the Interaction of Rotaviruses with Integrin Î±vÎ²3 through a Novel Integrin-Binding Site. Journal of Virology, 2004, 78, 10839-10847.	3.4	53
104	Prevalence and Genetic Diversity of Human Astroviruses in Mexican Children with Symptomatic and Asymptomatic Infections. Journal of Clinical Microbiology, 2004, 42, 151-157.	3.9	81
105	The rotavirus surface protein VP8 modulates the gate and fence function of tight junctions in epithelial cells. Journal of Cell Science, 2004, 117, 5509-5519.	2.0	130
106	Rotavirus RRV associates with lipid membrane microdomains during cell entry. Virology, 2004, 322, 370-381.	2.4	53
107	Preface. Virus Research, 2004, 102, 1-2.	2.2	3
108	RNA silencing of rotavirus gene expression. Virus Research, 2004, 102, 43-51.	2.2	38

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109	Multistep entry of rotavirus into cells: a Versaillesque dance. Trends in Microbiology, 2004, 12, 271-278.	7.7	183
110	Rotavirus Diarrhea Severity Is Related to the VP4 Type in Mexican Children. Journal of Clinical Microbiology, 2003, 41, 3158-3162.	3.9	21
111	Protein Products of the Open Reading Frames Encoding Nonstructural Proteins of Human Astrovirus Serotype 8. Journal of Virology, 2003, 77, 11378-11384.	3.4	42
112	Interaction of Rotaviruses with Hsc70 during Cell Entry Is Mediated by VP5. Journal of Virology, 2003, 77, 7254-7260.	3.4	92
113	II, 3. Attachment and post-attachment receptors for rotavirus. Perspectives in Medical Virology, 2003, 9, 143-163.	0.1	6
114	Proteolytic Processing of a Serotype 8 Human Astrovirus ORF2 Polyprotein. Journal of Virology, 2002, 76, 7996-8002.	3.4	79
115	Heat Shock Cognate Protein 70 Is Involved in Rotavirus Cell Entry. Journal of Virology, 2002, 76, 4096-4102.	3.4	152
116	Molecular Biology of Rotavirus Cell Entry. Archives of Medical Research, 2002, 33, 356-361.	3.3	65
117	Influence of Calcium on the Early Steps of Rotavirus Infection. Virology, 2002, 295, 190-200.	2.4	51
118	Rotavirus gene silencing by small interfering RNAs. EMBO Reports, 2002, 3, 1175-1180.	4.5	101
119	PronÃ³stico de la diarrea por rotavirus. Salud Publica De Mexico, 2001, 43, 524-528.	0.4	4
120	Characterization of a Monoclonal Antibody Directed to the Surface of MA104 Cells That Blocks the Infectivity of Rotaviruses. Virology, 2000, 273, 160-168.	2.4	11
121	Integrin Î±2Î²1 Mediates the Cell Attachment of the Rotavirus Neuraminidase-Resistant Variant nar3. Virology, 2000, 278, 50-54.	2.4	80
122	The VP5 Domain of VP4 Can Mediate Attachment of Rotaviruses to Cells. Journal of Virology, 2000, 74, 593-599.	3.4	87
123	Biochemical Characterization of Rotavirus Receptors in MA104 Cells. Journal of Virology, 2000, 74, 9362-9371.	3.4	101
124	Molecular analysis of a serotype 8 human astrovirus genome. Journal of General Virology, 2000, 81, 2891-2897.	2.9	85
125	The C-terminal domain of rotavirus NSP5 is essential for its multimerization, hyperphosphorylation and interaction with NSP6. Journal of General Virology, 2000, 81, 821-830.	2.9	64
126	Entry of Rotaviruses Is a Multistep Process. Virology, 1999, 263, 450-459.	2.4	67

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127	Serotype Specificity of the Neutralizing-Antibody Response Induced by the Individual Surface Proteins of Rotavirus in Natural Infections of Young Children. Vaccine Journal, 1998, 5, 328-334.	2.6	11
128	Antigenic and Genomic Diversity of Human Rotavirus VP4 in Two Consecutive Epidemic Seasons in Mexico. Journal of Clinical Microbiology, 1998, 36, 1688-1692.	3.9	33
129	Characterization of Rotavirus Strains with Unusual Electrophoretic Profiles. Memorias Do Instituto Oswaldo Cruz, 1997, 92, 771-774.	1.6	3
130	Identification of two independent neutralization domains on the VP4 trypsin cleavage products VP5* and VP8* of human rotavirus ST3. Virology, 1995, 206, 148-154.	2.4	51
131	The Salmonella ompC gene: Structure and use as a carrier for heterologous sequences. Gene, 1995, 156, 1-9.	2.2	53
132	Mapping the Subgroup Epitopes of Rotavirus Protein VP6. Virology, 1994, 204, 153-162.	2.4	45
133	Dengue 2 Virus NS2B and NS3 Form a Stable Complex That Can Cleave NS3 within the Helicase Domain. Virology, 1993, 193, 888-899.	2.4	173
134	Immunological characterization of a rotavirus-neutralizing epitope fused to the cholera toxin B subunit. Gene, 1993, 133, 227-232.	2.2	21
135	Protein NS26 is highly conserved among porcine rotavirus strains. Nucleic Acids Research, 1993, 21, 1042-1042.	14.5	11
136	The nucleotide sequence of the 5â€² and 3â€² ends of rota virus SA11 gene 4. Nucleic Acids Research, 1987, 15, 4691-4691.	14.5	20
137	Conservation in rotaviruses of the protein region containing the two sites associated with trypsin enhancement of infectivity. Virology, 1986, 154, 224-227.	2.4	53
138	Synthesis of the outer-capsid glycoprotein of the simian rotavirus SA11 in Escherichia coli. Gene, 1986, 47, 211-219.	2.2	32
139	Primary structure of the cleavage site associated with trypsin enhancement of rotavirus SA11 infectivity. Virology, 1985, 144, 11-19.	2.4	130