Carlos F Arias

List of Publications by Year
in descending order

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139	6,231	47006	88630
papers	citations	47 h-index	70 g-index

154	154	154	6157
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multistep entry of rotavirus into cells: a Versaillesque dance. Trends in Microbiology, 2004, 12, 271-278.	7.7	183
2	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
3	A Metagenomic Analysis of Pandemic Influenza A (2009 H1N1) Infection in Patients from North America. PLoS ONE, 2010, 5, e13381.	2.5	169
4	Heat Shock Cognate Protein 70 Is Involved in Rotavirus Cell Entry. Journal of Virology, 2002, 76, 4096-4102.	3.4	152
5	Primary structure of the cleavage site associated with trypsin enhancement of rotavirus SA11 infectivity. Virology, 1985, 144, 11-19.	2.4	130
6	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
7	Infectivity and genome persistence of rotavirus and astrovirus in groundwater and surface water. Water Research, 2008, 42, 2618-2628.	11.3	128
8	Rotavirus Infection Induces the Phosphorylation of eIF2Î± but Prevents the Formation of Stress Granules. Journal of Virology, 2008, 82, 1496-1504.	3.4	125
9	Hologenomic adaptations underlying the evolution of sanguivory in the common vampire bat. Nature Ecology and Evolution, 2018, 2, 659-668.	7.8	124
10	Metagenomic sequencing with spiked primer enrichment for viral diagnostics and genomic surveillance. Nature Microbiology, 2020, 5, 443-454.	13.3	114
11	Characterization of Rotavirus Cell Entry. Journal of Virology, 2004, 78, 2310-2318.	3.4	112
12	Silencing the Morphogenesis of Rotavirus. Journal of Virology, 2005, 79, 184-192.	3.4	112
13	Role of sialic acids in rotavirus infection. Glycoconjugate Journal, 2006, 23, 27-37.	2.7	112
14	Discovery of a Novel Polyomavirus in Acute Diarrheal Samples from Children. PLoS ONE, 2012, 7, e49449.	2.5	110
15	Biochemical Characterization of Rotavirus Receptors in MA104 Cells. Journal of Virology, 2000, 74, 9362-9371.	3.4	101
16	Rotavirus gene silencing by small interfering RNAs. EMBO Reports, 2002, 3, 1175-1180.	4.5	101
17	Interaction of Rotaviruses with Hsc70 during Cell Entry Is Mediated by VP5. Journal of Virology, 2003, 77, 7254-7260.	3.4	92
18	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

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19	The VP5 Domain of VP4 Can Mediate Attachment of Rotaviruses to Cells. Journal of Virology, 2000, 74, 593-599.	3.4	87
20	Caspases Mediate Processing of the Capsid Precursor and Cell Release of Human Astroviruses. Journal of Virology, 2004, 78, 8601-8608.	3.4	85
21	Molecular analysis of a serotype 8 human astrovirus genome. Journal of General Virology, 2000, 81, 2891-2897.	2.9	85
22	Rotavirus Entry: a Deep Journey into the Cell with Several Exits. Journal of Virology, 2015, 89, 890-893.	3.4	82
23	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
24	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
25	The Astrovirus Capsid: A Review. Viruses, 2017, 9, 15.	3.3	81
26	Integrin Î±2Î²1 Mediates the Cell Attachment of the Rotavirus Neuraminidase-Resistant Variant nar3. Virology, 2000, 278, 50-54.	2.4	80
27	Rotavirus Nonstructural Protein NSP3 Is Not Required for Viral Protein Synthesis. Journal of Virology, 2006, 80, 9031-9038.	3.4	80
28	Proteolytic Processing of a Serotype 8 Human Astrovirus ORF2 Polyprotein. Journal of Virology, 2002, 76, 7996-8002.	3.4	79
29	Protein Kinase R Is Responsible for the Phosphorylation of eIF2Î± in Rotavirus Infection. Journal of Virology, 2010, 84, 10457-10466.	3.4	76
30	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
31	Tight Junctions Go Viral!. Viruses, 2015, 7, 5145-5154.	3.3	73
32	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
33	Entry of Rotaviruses Is a Multistep Process. Virology, 1999, 263, 450-459.	2.4	67
34	Molecular Biology of Rotavirus Cell Entry. Archives of Medical Research, 2002, 33, 356-361.	3.3	65
35	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
36	Replication of the Rotavirus Genome Requires an Active Ubiquitin-Proteasome System. Journal of Virology, 2011, 85, 11964-11971.	3.4	62

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37	Gangliosides Have a Functional Role during Rotavirus Cell Entry. Journal of Virology, 2013, 87, 1115-1122.	3.4	61
38	Molecular Anatomy of 2009 Influenza Virus A (H1N1). Archives of Medical Research, 2009, 40, 643-654.	3.3	60
39	Endoplasmic Reticulum Chaperones Are Involved in the Morphogenesis of Rotavirus Infectious Particles. Journal of Virology, 2008, 82, 5368-5380.	3.4	59
40	Human Virome. Archives of Medical Research, 2017, 48, 701-716.	3.3	58
41	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
42	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
43	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
44	The Salmonella ompC gene: Structure and use as a carrier for heterologous sequences. Gene, 1995, 156, 1-9.	2.2	53
45	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
46	Rotavirus RRV associates with lipid membrane microdomains during cell entry. Virology, 2004, 322, 370-381.	2.4	53
47	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
48	Influence of Calcium on the Early Steps of Rotavirus Infection. Virology, 2002, 295, 190-200.	2.4	51
49	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
50	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
51	Zika Virus in Salivary Glands of Five Different Species of Wild-Caught Mosquitoes from Mexico. Scientific Reports, 2018, 8, 809.	3.3	48
52	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
53	Characterization of Human Astrovirus Cell Entry. Journal of Virology, 2014, 88, 2452-2460.	3.4	46
54	The tight junction protein JAM-A functions as coreceptor for rotavirus entry into MA104 cells. Virology, 2015, 475, 172-178.	2.4	46

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55	Mapping the Subgroup Epitopes of Rotavirus Protein VP6. Virology, 1994, 204, 153-162.	2.4	45
56	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
57	The evolution of bat nucleic acidâ€sensing Tollâ€like receptors. Molecular Ecology, 2015, 24, 5899-5909.	3.9	43
58	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
59	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
60	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
61	Inhibiting Rotavirus Infection by Membrane-Impermeant Thiol/Disulfide Exchange Blockers and Antibodies against Protein Disulfide Isomerase. Intervirology, 2012, 55, 451-464.	2.8	41
62	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
63	DNA Microarray for Detection of Gastrointestinal Viruses. Journal of Clinical Microbiology, 2015, 53, 136-145.	3.9	41
64	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
65	RNA silencing of rotavirus gene expression. Virus Research, 2004, 102, 43-51.	2.2	38
66	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
67	A simplified workflow for monoclonal antibody sequencing. PLoS ONE, 2019, 14, e0218717.	2.5	37
68	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
69	Crystal Structure of the Human Astrovirus Capsid Protein. Journal of Virology, 2016, 90, 9008-9017.	3.4	33
70	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
71	Synthesis of the outer-capsid glycoprotein of the simian rotavirus SA11 in Escherichia coli. Gene, 1986, 47, 211-219.	2.2	32
72	Is There Still Room for Novel Viral Pathogens in Pediatric Respiratory Tract Infections?. PLoS ONE, 2014, 9, e113570.	2.5	32

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73	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
74	Identification of Host Cell Factors Associated with Astrovirus Replication in Caco-2 Cells. Journal of Virology, 2015, 89, 10359-10370.	3.4	32
75	Genomic Analysis of Early SARS-CoV-2 Variants Introduced in Mexico. Journal of Virology, 2020, 94, .	3.4	32
76	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
77	Bats, Primates, and the Evolutionary Origins and Diversification of Mammalian Gammaherpesviruses. MBio, 2016, 7, .	4.1	31
78	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
79	Characterization of viroplasm formation during the early stages of rotavirus infection. Virology Journal, 2010, 7, 350.	3.4	29
80	Rotavirus Strategies Against the Innate Antiviral System. Annual Review of Virology, 2016, 3, 591-609.	6.7	29
81	Isolation of Neutralizing Monoclonal Antibodies to Human Astrovirus and Characterization of Virus Variants That Escape Neutralization. Journal of Virology, 2019, 93, .	3.4	26
82	The gut virome of healthy children during the first year of life is diverse and dynamic. PLoS ONE, 2021, 16, e0240958.	2.5	26
83	Rotavirus cell entry: not so simple after all. Current Opinion in Virology, 2021, 48, 42-48.	5.4	25
84	Nanoscale organization of rotavirus replication machineries. ELife, 2019, 8, .	6.0	24
85	Rotavirusâ€“host cell interactions: an arms race. Current Opinion in Virology, 2012, 2, 389-398.	5.4	23
86	Immunological characterization of a rotavirus-neutralizing epitope fused to the cholera toxin B subunit. Gene, 1993, 133, 227-232.	2.2	21
87	Rotavirus Diarrhea Severity Is Related to the VP4 Type in Mexican Children. Journal of Clinical Microbiology, 2003, 41, 3158-3162.	3.9	21
88	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
89	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
90	Rhinovirus is an important pathogen in upper and lower respiratory tract infections in Mexican children. Virology Journal, 2015, 12, 31.	3.4	20

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91	Actin-Dependent Nonlytic Rotavirus Exit and Infectious Virus Morphogenetic Pathway in Nonpolarized Cells. Journal of Virology, 2018, 92, .	3.4	19
92	Polarized rotavirus entry and release from differentiated small intestinal cells. Virology, 2016, 499, 65-71.	2.4	18
93	Structural Basis for Escape of Human Astrovirus from Antibody Neutralization: Broad Implications for Rational Vaccine Design. Journal of Virology, 2018, 92, .	3.4	18
94	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
95	Protein Disulfide Isomerase A4 Is Involved in Genome Uncoating during Human Astrovirus Cell Entry. Viruses, 2021, 13, 53.	3.3	18
96	Early Events of Rotavirus Infection: The Search for the Receptor(s). Novartis Foundation Symposium, 2008, 238, 47-63.	1.1	17
97	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
98	Replication Cycle of Astroviruses. , 2012, , 19-45.		16
99	The Guanine Nucleotide Exchange Factor GBF1 Participates in Rotavirus Replication. Journal of Virology, 2019, 93, .	3.4	15
100	Rotavirus Vaccine: Early Introduction in Latin Americaâ€"Risks and Benefits. Archives of Medical Research, 2006, 37, 1-10.	3.3	14
101	The Ubiquitin-Proteasome System Is Necessary for Efficient Replication of Human Astrovirus. Journal of Virology, 2018, 92, .	3.4	14
102	The actin cytoskeleton is important for rotavirus internalization and RNA genome replication. Virus Research, 2019, 263, 27-33.	2.2	14
103	Rotaviruses Associate with Distinct Types of Extracellular Vesicles. Viruses, 2020, 12, 763.	3.3	14
104	Minimal capsid composition of infectious human astrovirus. Virology, 2018, 521, 58-61.	2.4	13
105	Dominance of Three Sublineages of the SARS-CoV-2 Delta Variant in Mexico. Viruses, 2022, 14, 1165.	3.3	12
106	Protein NS26 is highly conserved among porcine rotavirus strains. Nucleic Acids Research, 1993, 21, 1042-1042.	14.5	11
107	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
108	The tyrosine kinase inhibitor genistein induces the detachment of rotavirus particles from the cell surface. Virus Research, 2015, 210, 141-148.	2.2	11

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109	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
110	Rotavirus RNAs sponge host cell RNA binding proteins and interfere with their subcellular localization. Virology, 2018, 525, 96-105.	2.4	11
111	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
112	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
113	Rotaviruses require basolateral molecules for efficient infection of polarized MDCKII cells. Virus Research, 2010, 147, 231-241.	2.2	10
114	High Seropositivity Rate of Neutralizing Antibodies to Astrovirus VA1 in Human Populations. MSphere, 2021, 6, e0048421.	2.9	10
115	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
116	Rotavirus cell entry. Future Virology, 2008, 3, 135-146.	1.8	9
117	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
118	Role of the Guanine Nucleotide Exchange Factor GBF1 in the Replication of RNA Viruses. Viruses, 2020, 12, 682.	3.3	8
119	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
120	Lipid metabolism is involved in the association of rotavirus viroplasms with endoplasmic reticulum membranes. Virology, 2022, 569, 29-36.	2.4	7
121	II, 3. Attachment and post-attachment receptors for rotavirus. Perspectives in Medical Virology, 2003, 9, 143-163.	0.1	6
122	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
123	The Capsid Precursor Protein of Astrovirus VA1 Is Proteolytically Processed Intracellularly. Journal of Virology, 2022, 96, .	3.4	6
124	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
125	Molecular Epidemiology of Influenza A/H3N2 Viruses Circulating in Mexico from 2003 to 2012. PLoS ONE, 2014, 9, e102453.	2.5	5
126	Viral Communities Among Sympatric Vampire Bats and Cattle. EcoHealth, 2018, 15, 132-142.	2.0	5

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127	Genomic Characterization of SARS-CoV-2 Isolated from Patients with Distinct Disease Outcomes in Mexico. Microbiology Spectrum, 2022, , e0124921.	3.0	5
128	Development of a novel DNA based reverse genetics system for classic human astroviruses. Virology, 2019, 535, 130-135.	2.4	4
129	PronÃ³stico de la diarrea por rotavirus. Salud Publica De Mexico, 2001, 43, 524-528.	0.4	4
130	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
131	Preface. Virus Research, 2004, 102, 1-2.	2.2	3
132	Characterization of Rotavirus Strains with Unusual Electrophoretic Profiles. Memorias Do Instituto Oswaldo Cruz, 1997, 92, 771-774.	1.6	3
133	High Prevalence and Diversity of Caliciviruses in a Community Setting Determined by a Metagenomic Approach. Microbiology Spectrum, 2022, 10, e0185321.	3.0	3
134	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
135	Complete Genome Sequence of Human Coronavirus OC43 Isolated from Mexico. Genome Announcements, 2016, 4, .	0.8	2
136	Virus diversity and evolution. Current Opinion in Microbiology, 2013, 16, 465-467.	5.1	1
137	Rotavirus Biology. , 2017, , 19-42.		1
138	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
139	Astrovirus. , 2016, , 1231-1242.		0