Theodore C Pierson

List of Publications by Year
in descending order

82 papers	10,005 citations	44069 48 h-index	54911 84 g-index
85 all docs	85 docs citations	85 times ranked	9287 citing authors

#	Article	IF	Citations
1	Zika virus protection by a single low-dose nucleoside-modified mRNA vaccination. Nature, 2017, 543, 248-251.	27.8	699
2	The 3.8 Ã… resolution cryo-EM structure of Zika virus. Science, 2016, 352, 467-470.	12.6	643
3	Modified mRNA Vaccines Protect against Zika Virus Infection. Cell, 2017, 168, 1114-1125.e10.	28.9	633
4	The continued threat of emerging flaviviruses. Nature Microbiology, 2020, 5, 796-812.	13.3	520
5	Rapid development of a DNA vaccine for Zika virus. Science, 2016, 354, 237-240.	12.6	348
6	Structural Basis of Zika Virus-Specific Antibody Protection. Cell, 2016, 166, 1016-1027.	28.9	325
7	The emergence of Zika virus and its new clinical syndromes. Nature, 2018, 560, 573-581.	27.8	303
8	West Nile Virus Discriminates between DC-SIGN and DC-SIGNR for Cellular Attachment and Infection. Journal of Virology, 2006, 80, 1290-1301.	3.4	292
9	Antibody Recognition and Neutralization Determinants on Domains I and II of West Nile Virus Envelope Protein. Journal of Virology, 2006, 80, 12149-12159.	3.4	272
10	The Stoichiometry of Antibody-Mediated Neutralization and Enhancement of West Nile Virus Infection. Cell Host and Microbe, 2007, 1, 135-145.	11.0	262
11	Structural Insights into the Mechanisms of Antibody-Mediated Neutralization of Flavivirus Infection:Âlmplications for Vaccine Development. Cell Host and Microbe, 2008, 4, 229-238.	11.0	249
12	Safety, tolerability, and immunogenicity of two Zika virus DNA vaccine candidates in healthy adults: randomised, open-label, phase 1 clinical trials. Lancet, The, 2018, 391, 552-562.	13.7	235
13	Vaccine Mediated Protection Against Zika Virus-Induced Congenital Disease. Cell, 2017, 170, 273-283.e12.	28.9	224
14	Molecular Insight into Dengue Virus Pathogenesis and Its Implications for Disease Control. Cell, 2015, 162, 488-492.	28.9	219
15	Degrees of maturity: the complex structure and biology of flaviviruses. Current Opinion in Virology, 2012, 2, 168-175.	5.4	199
16	A rapid and quantitative assay for measuring antibody-mediated neutralization of West Nile virus infection. Virology, 2006, 346, 53-65.	2.4	197
17	Broadly Neutralizing Activity of Zika Virus-Immune Sera Identifies a Single Viral Serotype. Cell Reports, 2016, 16, 1485-1491.	6.4	190
18	A West Nile Virus DNA Vaccine Induces Neutralizing Antibody in Healthy Adults during a Phase 1 Clinical Trial. Journal of Infectious Diseases, 2007, 196, 1732-1740.	4.0	175

#	Article	IF	Citations
19	Antibody-mediated neutralization of flaviviruses: A reductionist view. Virology, 2011, 411, 306-315.	2.4	170
20	Maturation of West Nile Virus Modulates Sensitivity to Antibody-Mediated Neutralization. PLoS Pathogens, 2008, 4, e1000060.	4.7	158
21	Induction of Epitope-Specific Neutralizing Antibodies against West Nile Virus. Journal of Virology, 2007, 81, 11828-11839.	3.4	157
22	Molecular mechanisms of antibody-mediated neutralisation of flavivirus infection. Expert Reviews in Molecular Medicine, 2008, 10, e12.	3.9	146
23	A West Nile Virus DNA Vaccine Utilizing a Modified Promoter Induces Neutralizing Antibody in Younger and Older Healthy Adults in a Phase I Clinical Trial. Journal of Infectious Diseases, 2011, 203, 1396-1404.	4.0	138
24	A Dynamic Landscape for Antibody Binding Modulates Antibody-Mediated Neutralization of West Nile Virus. PLoS Pathogens, 2011, 7, e1002111.	4.7	134
25	Flaviviruses: braking the entering. Current Opinion in Virology, 2013, 3, 3-12.	5.4	127
26	A single-dose live-attenuated vaccine prevents Zika virus pregnancy transmission and testis damage. Nature Communications, 2017, 8, 676.	12.8	125
27	Complement Protein C1q Inhibits Antibody-Dependent Enhancement of Flavivirus Infection in an IgG Subclass-Specific Manner. Cell Host and Microbe, 2007, 2, 417-426.	11.0	113
28	Zika Virus: Immunity and Vaccine Development. Cell, 2016, 167, 625-631.	28.9	113
29	Poorly Neutralizing Cross-Reactive Antibodies against the Fusion Loop of West Nile Virus Envelope Protein Protect <i>In Vivo</i> via FcÎ³ Receptor and Complement-Dependent Effector Mechanisms. Journal of Virology, 2011, 85, 11567-11580.	3.4	110
30	Temperature-dependent production of pseudoinfectious dengue reporter virus particles by complementation. Virology, 2008, 381, 67-74.	2.4	107
31	Structural Basis of Differential Neutralization of DENV-1 Genotypes by an Antibody that Recognizes a Cryptic Epitope. PLoS Pathogens, 2012, 8, e1002930.	4.7	103
32	Shake, rattle, and roll: Impact of the dynamics of flavivirus particles on their interactions with the host. Virology, 2015, 479-480, 508-517.	2.4	103
33	The Location of Asparagine-linked Glycans on West Nile Virions Controls Their Interactions with CD209 (Dendritic Cell-specific ICAM-3 Grabbing Nonintegrin). Journal of Biological Chemistry, 2006, 281, 37183-37194.	3.4	98
34	Human Monoclonal Antibodies against West Nile Virus Induced by Natural Infection Neutralize at a Postattachment Step. Journal of Virology, 2009, 83, 6494-6507.	3.4	98
35	Complement Protein C1q Reduces the Stoichiometric Threshold for Antibody-Mediated Neutralization of West Nile Virus. Cell Host and Microbe, 2009, 6, 381-391.	11.0	94
36	Deconstructing the Antiviral Neutralizing-Antibody Response: Implications for Vaccine Development and Immunity. Microbiology and Molecular Biology Reviews, 2016, 80, 989-1010.	6.6	93

#	Article	IF	Citations
37	Combined Effects of the Structural Heterogeneity and Dynamics of Flaviviruses on Antibody Recognition. Journal of Virology, 2014, 88, 11726-11737.	3.4	91
38	The Challenges of Vaccine Development against a New Virus during a Pandemic. Cell Host and Microbe, 2020, 27, 699-703.	11.0	88
39	An mRNA Vaccine Protects Mice against Multiple Tick-Transmitted Flavivirus Infections. Cell Reports, 2018, 25, 3382-3392.e3.	6.4	79
40	Zika Virus Vaccine Development: Progress in the Face of New Challenges. Annual Review of Medicine, 2019, 70, 121-135.	12.2	76
41	Functional Analysis of Antibodies against Dengue Virus Type 4 Reveals Strain-Dependent Epitope Exposure That Impacts Neutralization and Protection. Journal of Virology, 2013, 87, 8826-8842.	3.4	73
42	Genotypic Differences in Dengue Virus Neutralization Are Explained by a Single Amino Acid Mutation That Modulates Virus Breathing. MBio, 2015, 6, e01559-15.	4.1	71
43	Fe-S cofactors in the SARS-CoV-2 RNA-dependent RNA polymerase are potential antiviral targets. Science, 2021, 373, 236-241.	12.6	71
44	Enhancing dengue virus maturation using a stable furin over-expressing cell line. Virology, 2016, 497, 33-40.	2.4	69
45	A single mutation in the envelope protein modulates flavivirus antigenicity, stability, and pathogenesis. PLoS Pathogens, 2017, 13, e1006178.	4.7	69
46	A VSV-based Zika virus vaccine protects mice from lethal challenge. Scientific Reports, 2018, 8, 11043.	3.3	63
47	Mechanism and Significance of Cell Type-Dependent Neutralization of Flaviviruses. Journal of Virology, 2014, 88, 7210-7220.	3.4	58
48	Zika Virus Is Not Uniquely Stable at Physiological Temperatures Compared to Other Flaviviruses. MBio, 2016, 7, .	4.1	52
49	Potent Dengue Virus Neutralization by a Therapeutic Antibody with Low Monovalent Affinity Requires Bivalent Engagement. PLoS Pathogens, 2014, 10, e1004072.	4.7	51
50	Development of a potent Zika virus vaccine using self-amplifying messenger RNA. Science Advances, 2020, 6, eaba5068.	10.3	50
51	The Zika virus envelope protein glycan loop regulates virion antigenicity. Virology, 2018, 515, 191-202.	2.4	49
52	The Many Faces of a Dynamic Virion: Implications of Viral Breathing on Flavivirus Biology and Immunogenicity. Annual Review of Virology, 2018, 5, 185-207.	6.7	49
53	Lipid nanoparticle encapsulated nucleoside-modified mRNA vaccines elicit polyfunctional HIV-1 antibodies comparable to proteins in nonhuman primates. Npj Vaccines, 2021, 6, 50.	6.0	46
54	A Game of Numbers. Progress in Molecular Biology and Translational Science, 2015, 129, 141-166.	1.7	42

#	Article	IF	Citations
55	Protective Efficacy of Nucleic Acid Vaccines Against Transmission of Zika Virus During Pregnancy in Mice. Journal of Infectious Diseases, 2019, 220, 1577-1588.	4.0	39
56	The Infectivity of prM-Containing Partially Mature West Nile Virus Does Not Require the Activity of Cellular Furin-Like Proteases. Journal of Virology, 2011, 85, 12067-12072.	3.4	36
57	The Type-Specific Neutralizing Antibody Response Elicited by a Dengue Vaccine Candidate Is Focused on Two Amino Acids of the Envelope Protein. PLoS Pathogens, 2013, 9, e1003761.	4.7	34
58	DNA vaccination before conception protects Zika virusâ€“exposed pregnant macaques against prolonged viremia and improves fetal outcomes. Science Translational Medicine, 2019, 11, .	12.4	31
59	Distinct neutralizing antibody correlates of protection among related Zika virus vaccines identify a role for antibody quality. Science Translational Medicine, 2020, 12, .	12.4	30
60	Pseudo-infectious Reporter Virus Particles for Measuring Antibody-Mediated Neutralization and Enhancement of Dengue Virus Infection. Methods in Molecular Biology, 2014, 1138, 75-97.	0.9	28
61	Diagnostics for Zika virus on the horizon. Science, 2016, 353, 750-751.	12.6	27
62	Mechanism of differential Zika and dengue virus neutralization by a public antibody lineage targeting the DIII lateral ridge. Journal of Experimental Medicine, 2020, 217, .	8.5	26
63	A protective human monoclonal antibody targeting the West Nile virus E protein preferentially recognizes mature virions. Nature Microbiology, 2019, 4, 71-77.	13.3	25
64	A Novel Approach for the Rapid Mutagenesis and Directed Evolution of the Structural Genes of West Nile Virus. Journal of Virology, 2012, 86, 3501-3512.	3.4	22
65	Broadly neutralizing monoclonal antibodies protect against multiple tick-borne flaviviruses. Journal of Experimental Medicine, 2021, 218, .	8.5	22
66	Modeling Antibody-Enhanced Dengue Virus Infection and Disease in Mice: Protection or Pathogenesis?. Cell Host and Microbe, 2010, 7, 85-86.	11.0	18
67	Dengue and Zika Virus Cross-Reactive Human Monoclonal Antibodies Protect against Spondweni Virus Infection and Pathogenesis in Mice. Cell Reports, 2019, 26, 1585-1597.e4.	6.4	18
68	The Fc Region of an Antibody Impacts the Neutralization of West Nile Viruses in Different Maturation States. Journal of Virology, 2013, 87, 13729-13740.	3.4	17
69	Vaccine Development as a Means to Control Dengue Virus Pathogenesis: Do We Know Enough?. Annual Review of Virology, 2014, 1, 375-398.	6.7	15
70	Context-Dependent Cleavage of the Capsid Protein by the West Nile Virus Protease Modulates the Efficiency of Virus Assembly. Journal of Virology, 2015, 89, 8632-8642.	3.4	15
71	Characterization of a Species E Adenovirus Vector as a Zika virus vaccine. Scientific Reports, 2020, 10, 3613.	3.3	15
72	Capturing a Virus while It Catches Its Breath. Structure, 2012, 20, 200-202.	3.3	13

#	Article	IF	Citations
73	Levels of Circulating NS1 Impact West Nile Virus Spread to the Brain. Journal of Virology, 2021, 95, e0084421.	3.4	13
74	Zika in the Brain: New Models Shed Light on Viral Infection. Trends in Molecular Medicine, 2016, 22, 639-641.	6.7	12
75	Cross-Reactive Flavivirus Antibody: Friend and Foe?. Cell Host and Microbe, 2018, 24, 622-624.	11.0	9
76	T Cells Take on Zika Virus. Immunity, 2017, 46, 13-14.	14.3	8
77	Effects of dengue immunity on Zika virus infection. Nature, 2019, 567, 467-468.	27.8	8
78	Dengue Virus Serotype 1 Conformational Dynamics Confers Virus Strain-Dependent Patterns of Neutralization by Polyclonal Sera. Journal of Virology, 2021, 95, e0095621.	3.4	8
79	Limited Flavivirus Cross-Reactive Antibody Responses Elicited by a Zika Virus Deoxyribonucleic Acid Vaccine Candidate in Humans. Journal of Infectious Diseases, 2021, 224, 1550-1555.	4.0	5
80	Implications of a highly divergent dengue virus strain for cross-neutralization, protection, and vaccine immunity. Cell Host and Microbe, 2021, 29, 1634-1648.e5.	11.0	5
81	Impact of viral attachment factor expression on antibody-mediated neutralization of flaviviruses. Virology, 2013, 437, 20-27.	2.4	3
82	Nonhuman primates exposed to Zika virus in utero are not protected against reinfection at 1 year postpartum. Science Translational Medicine, 2020, 12, .	12.4	1