Volker Thiel

List of Publications by Year
in descending order

103 papers	17,473 citations	36303 51 h-index	30922 102 g-index
130 all docs	130 docs citations	130 times ranked	22875 citing authors

#	Article	IF	Citations
1	N7-Methylation of the Coronavirus RNA Cap Is Required for Maximal Virulence by Preventing Innate Immune Recognition. MBio, 2022, 13, e0366221.	4.1	27
2	Enhanced fitness of SARS-CoV-2 variant of concern Alpha but not Beta. Nature, 2022, 602, 307-313.	27.8	79
3	Non-covalent SARS-CoV-2 Mpro inhibitors developed from in silico screen hits. Scientific Reports, 2022, 12, 2505.	3.3	41
4	Efficient recovery of attenuated canine distemper virus from cDNA. Virus Research, 2022, 316, 198796.	2.2	2
5	Effective Interferon Lambda Treatment Regimen To Control Lethal MERS-CoV Infection in Mice. Journal of Virology, 2022, 96, e0036422.	3.4	8
6	An early warning system for emerging SARS-CoV-2 variants. Nature Medicine, 2022, 28, 1110-1115.	30.7	47
7	Coronavirus biology and replication: implications for SARS-CoV-2. Nature Reviews Microbiology, 2021, 19, 155-170.	28.6	2,062
8	SARS-CoV-2 spike D614G change enhances replication and transmission. Nature, 2021, 592, 122-127.	27.8	440
9	SARS-CoV-2 mutations in MHC-I-restricted epitopes evade CD8 ⁺ T cell responses. Science Immunology, 2021, 6, .	11.9	143
10	Disparate temperature-dependent virusâ€“host dynamics for SARS-CoV-2 and SARS-CoV in the human respiratory epithelium. PLoS Biology, 2021, 19, e3001158.	5.6	79
11	No Evidence for Human Monocyte-Derived Macrophage Infection and Antibody-Mediated Enhancement of SARS-CoV-2 Infection. Frontiers in Cellular and Infection Microbiology, 2021, 11, 644574.	3.9	35
12	Multilevel proteomics reveals host perturbations by SARS-CoV-2 and SARS-CoV. Nature, 2021, 594, 246-252.	27.8	475
13	Betulonic Acid Derivatives Interfering with Human Coronavirus 229E Replication via the nsp15 Endoribonuclease. Journal of Medicinal Chemistry, 2021, 64, 5632-5644.	6.4	26
14	The SARSâ€unique domain (SUD) of SARSâ€CoV and SARSâ€CoVâ€2 interacts with human Paip1 to enhance viral RNA translation. EMBO Journal, 2021, 40, e102277.	7.8	26
15	Structural basis of ribosomal frameshifting during translation of the SARS-CoV-2 RNA genome. Science, 2021, 372, 1306-1313.	12.6	165
16	Establishment of caprine airway epithelial cells grown in an air-liquid interface system to study caprine respiratory viruses and bacteria. Veterinary Microbiology, 2021, 257, 109067.	1.9	3
17	SARS-CoV-2 Variants of Interest and Concern naming scheme conducive for global discourse. Nature Microbiology, 2021, 6, 821-823.	13.3	221
18	Susceptibility of Well-Differentiated Airway Epithelial Cell Cultures from Domestic and Wild Animals to Severe Acute Respiratory Syndrome Coronavirus 2. Emerging Infectious Diseases, 2021, 27, 1811-1820.	4.3	11

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19	Development of safe and highly protective live-attenuated SARS-CoV-2 vaccine candidates by genome recoding. Cell Reports, 2021, 36, 109493.	6.4	46
20	Functional comparison of MERS-coronavirus lineages reveals increased replicative fitness of the recombinant lineage 5. Nature Communications, 2021, 12, 5324.	12.8	11
21	A highly potent antibody effective against SARS-CoV-2 variants of concern. Cell Reports, 2021, 37, 109814.	6.4	39
22	Replication and single-cycle delivery of SARS-CoV-2 replicons. Science, 2021, 374, 1099-1106.	12.6	49
23	SARS-CoV-2 can infect and propagate in human placenta explants. Cell Reports Medicine, 2021, 2, 100456.	6.5	29
24	Structureâ€“function analysis of the nsp14 N7â€“guanine methyltransferase reveals an essential role in<i>Betacoronavirus</i>replication. Proceedings of the National Academy of Sciences of the United States of America, 2021, 118, .	7.1	26
25	Live attenuated virus vaccine protects against SARS-CoV-2 variants of concern B.1.1.7 (Alpha) and B.1.351 (Beta). Science Advances, 2021, 7, eabk0172.	10.3	32
26	A genome-wide CRISPR screen identifies interactors of the autophagy pathway as conserved coronavirus targets. PLoS Biology, 2021, 19, e3001490.	5.6	33
27	Convergent use of phosphatidic acid for hepatitis C virus and SARS-CoV-2 replication organelle formation. Nature Communications, 2021, 12, 7276.	12.8	37
28	Identification of an Antiviral Compound from the Pandemic Response Box that Efficiently Inhibits SARS-CoV-2 Infection In Vitro. Microorganisms, 2020, 8, 1872.	3.6	25
29	SARS-CoV-2 Inhibition by Sulfonated Compounds. Microorganisms, 2020, 8, 1894.	3.6	19
30	LY6E impairs coronavirus fusion and confers immune control of viral disease. Nature Microbiology, 2020, 5, 1330-1339.	13.3	170
31	SARS-CoV-2 Nsp1 binds the ribosomal mRNA channel to inhibit translation. Nature Structural and Molecular Biology, 2020, 27, 959-966.	8.2	432
32	The International Virus Bioinformatics Meeting 2020. Viruses, 2020, 12, 1398.	3.3	3
33	Emerging and re-emerging porcine viruses. Virus Research, 2020, 290, 198198.	2.2	0
34	Temperature-dependent surface stability of SARS-CoV-2. Journal of Infection, 2020, 81, 452-482.	3.3	89
35	Rapid reconstruction of SARS-CoV-2 using a synthetic genomics platform. Nature, 2020, 582, 561-565.	27.8	377
36	Inactivation of Severe Acute Respiratory Syndrome Coronavirus 2 by WHO-Recommended Hand Rub Formulations and Alcohols. Emerging Infectious Diseases, 2020, 26, 1592-1595.	4.3	299

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37	Labyrinthopeptins as virolytic inhibitors of respiratory syncytial virus cell entry. Antiviral Research, 2020, 177, 104774.	4.1	30
38	Viral RNA in an m6A disguise. Nature Microbiology, 2020, 5, 531-532.	13.3	5
39	Nucleocapsid Protein Recruitment to Replication-Transcription Complexes Plays a Crucial Role in Coronaviral Life Cycle. Journal of Virology, 2020, 94, .	3.4	294
40	In-Yeast Assembly of Coronavirus Infectious cDNA Clones Using a Synthetic Genomics Pipeline. Methods in Molecular Biology, 2020, 2203, 167-184.	0.9	5
41	Proximity Labeling for the Identification of Coronavirusâ€"Host Protein Interactions. Methods in Molecular Biology, 2020, 2203, 187-204.	0.9	4
42	Physiologic RNA targets and refined sequence specificity of coronavirus EndoU. Rna, 2020, 26, 1976-1999.	3.5	24
43	Establishment of Primary Transgenic Human Airway Epithelial Cell Cultures to Study Respiratory Virusâ€"Host Interactions. Viruses, 2019, 11, 747.	3.3	9
44	Successful establishment of a reverse genetic system for QX-type infectious bronchitis virus and technical improvement of the rescue procedure. Virus Research, 2019, 272, 197726.	2.2	4
45	The Role of Stress Granules and the Nonsense-mediated mRNA Decay Pathway in Antiviral Defence. Chimia, 2019, 73, 374.	0.6	9
46	Determination of host proteins composing the microenvironment of coronavirus replicase complexes by proximity-labeling. ELife, 2019, 8, .	6.0	157
47	Antiviral activity of K22 against members of the order Nidovirales. Virus Research, 2018, 246, 28-34.	2.2	17
48	Synthetic virusesâ€"Anything new?. PLoS Pathogens, 2018, 14, e1007019.	4.7	11
49	Host switching pathogens, infectious outbreaks and zoonosis: A Marie SkÅ,odowska-Curie innovative training network (HONOURs). Virus Research, 2018, 257, 120-124.	2.2	2
50	Research Models and Tools for the Identification of Antivirals and Therapeutics against Zika Virus Infection. Viruses, 2018, 10, 593.	3.3	16
51	Attenuation of replication by a 29 nucleotide deletion in SARS-coronavirus acquired during the early stages of human-to-human transmission. Scientific Reports, 2018, 8, 15177.	3.3	181
52	The Small-Compound Inhibitor K22 Displays Broad Antiviral Activity against Different Members of the Family Flaviviridae and Offers Potential as a Panviral Inhibitor. Antimicrobial Agents and Chemotherapy, 2018, 62, .	3.2	9
53	A new era of virus bioinformatics. Virus Research, 2018, 251, 86-90.	2.2	49
54	Virologistsâ€"Heroes need weapons. PLoS Pathogens, 2018, 14, e1006771.	4.7	11

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55	Virucidal Activity of World Health Organizationâ€"Recommended Formulations Against Enveloped Viruses, Including Zika, Ebola, and Emerging Coronaviruses. Journal of Infectious Diseases, 2017, 215, 902-906.	4.0	151
56	Pentagalloylglucose, a highly bioavailable polyphenolic compound present in Cortex moutan, efficiently blocks hepatitis C virus entry. Antiviral Research, 2017, 147, 19-28.	4.1	28
57	Inactivation of Zika virus in human breast milk by prolonged storage or pasteurization. Virus Research, 2017, 228, 58-60.	2.2	32
58	Early endonuclease-mediated evasion of RNA sensing ensures efficient coronavirus replication. PLoS Pathogens, 2017, 13, e1006195.	4.7	184
59	Link of a ubiquitous human coronavirus to dromedary camels. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, 9864-9869.	7.1	122
60	The differentiated airway epithelium infected by influenza viruses maintains the barrier function despite a dramatic loss of ciliated cells. Scientific Reports, 2016, 6, 39668.	3.3	81
61	Systems biology of viral infection. Virus Research, 2016, 218, 1.	2.2	0
62	SARS-CoV and IFN: Too Little, Too Late. Cell Host and Microbe, 2016, 19, 139-141.	11.0	90
63	First international external quality assessment of molecular diagnostics for Mers-CoV. Journal of Clinical Virology, 2015, 69, 81-85.	3.1	27
64	New insights on the role of paired membrane structures in coronavirus replication. Virus Research, 2015, 202, 33-40.	2.2	19
65	Murine Coronavirus Ubiquitin-Like Domain Is Important for Papain-Like Protease Stability and Viral Pathogenesis. Journal of Virology, 2015, 89, 4907-4917.	3.4	50
66	Evidence for an Ancestral Association of Human Coronavirus 229E with Bats. Journal of Virology, 2015, 89, 11858-11870.	3.4	204
67	Targeting Membrane-Bound Viral RNA Synthesis Reveals Potent Inhibition of Diverse Coronaviruses Including the Middle East Respiratory Syndrome Virus. PLoS Pathogens, 2014, 10, e1004166.	4.7	136
68	Competitive Fitness in Coronaviruses Is Not Correlated with Size or Number of Double-Membrane Vesicles under Reduced-Temperature Growth Conditions. MBio, 2014, 5, e01107-13.	4.1	28
69	To sense or not to sense viral RNAâ€"essentials of coronavirus innate immune evasion. Current Opinion in Microbiology, 2014, 20, 69-75.	5.1	82
70	Dipeptidyl peptidase 4 is a functional receptor for the emerging human coronavirus-EMC. Nature, 2013, 495, 251-254.	27.8	1,731
71	Efficient Replication of the Novel Human Betacoronavirus EMC on Primary Human Epithelium Highlights Its Zoonotic Potential. MBio, 2013, 4, e00611-12.	4.1	183
72	Sequestration by IFIT1 Impairs Translation of 2â€²O-unmethylated Capped RNA. PLoS Pathogens, 2013, 9, e1003663.	4.7	175

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73	Isolation and Characterization of Current Human Coronavirus Strains in Primary Human Epithelial Cell Cultures Reveal Differences in Target Cell Tropism. Journal of Virology, 2013, 87, 6081-6090.	3.4	126
74	TMPRSS2 Activates the Human Coronavirus 229E for Cathepsin-Independent Host Cell Entry and Is Expressed in Viral Target Cells in the Respiratory Epithelium. Journal of Virology, 2013, 87, 6150-6160.	3.4	296
75	Replication of human coronaviruses SARS-CoV, HCoV-NL63 and HCoV-229E is inhibited by the drug FK506. Virus Research, 2012, 165, 112-117.	2.2	189
76	Reverse Genetics of SARS-Related Coronavirus Using Vaccinia Virus-Based Recombination. PLoS ONE, 2012, 7, e32857.	2.5	79
77	Ribose 2â€²-O-methylation provides a molecular signature for the distinction of self and non-self mRNA dependent on the RNA sensor Mda5. Nature Immunology, 2011, 12, 137-143.	14.5	640
78	The ADP-ribose-1â€³-monophosphatase domains of severe acute respiratory syndrome coronavirus and human coronavirus 229E mediate resistance to antiviral interferon responses. Journal of General Virology, 2011, 92, 1899-1905.	2.9	88
79	Cyclosporin A inhibits the replication of diverse coronaviruses. Journal of General Virology, 2011, 92, 2542-2548.	2.9	215
80	The SARS-Coronavirus-Host Interactome: Identification of Cyclophilins as Target for Pan-Coronavirus Inhibitors. PLoS Pathogens, 2011, 7, e1002331.	4.7	367
81	2â€²-O methylation of the viral mRNA cap evades host restriction by IFIT family members. Nature, 2010, 468, 452-456.	27.8	736
82	Dendritic Cell-Specific Antigen Delivery by Coronavirus Vaccine Vectors Induces Long-Lasting Protective Antiviral and Antitumor Immunity. MBio, 2010, 1, .	4.1	40
83	Type I IFN-Mediated Protection of Macrophages and Dendritic Cells Secures Control of Murine Coronavirus Infection. Journal of Immunology, 2009, 182, 1099-1106.	0.8	113
84	Organ-Specific Attenuation of Murine Hepatitis Virus Strain A59 by Replacement of Catalytic Residues in the Putative Viral Cyclic Phosphodiesterase ns2. Journal of Virology, 2009, 83, 3743-3753.	3.4	37
85	Genome Organization and Reverse Genetic Analysis of a Type I Feline Coronavirus. Journal of Virology, 2008, 82, 1851-1859.	3.4	51
86	Genetic Interactions between an Essential 3â€² <i>cis</i> -Acting RNA Pseudoknot, Replicase Gene Products, and the Extreme 3â€² End of the Mouse Coronavirus Genome. Journal of Virology, 2008, 82, 1214-1228.	3.4	87
87	Mouse Hepatitis Virus Liver Pathology Is Dependent on ADP-Ribose-1â€³-Phosphatase, a Viral Function Conserved in the Alpha-Like Supergroup. Journal of Virology, 2008, 82, 12325-12334.	3.4	139
88	Generation of Recombinant Coronaviruses Using Vaccinia Virus as the Cloning Vector and Stable Cell Lines Containing Coronaviral Replicon RNAs. Methods in Molecular Biology, 2008, 454, 237-254.	0.9	26
89	Coronavirus Non-Structural Protein 1 Is a Major Pathogenicity Factor: Implications for the Rational Design of Coronavirus Vaccines. PLoS Pathogens, 2007, 3, e109.	4.7	205
90	Control of coronavirus infection through plasmacytoid dendritic-cellâ€"derived type I interferon. Blood, 2007, 109, 1131-1137.	1.4	356

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91	Functional and Genetic Analysis of Coronavirus Replicase-Transcriptase Proteins. PLoS Pathogens, 2005, 1, e39.	4.7	130
92	Selective Replication of Coronavirus Genomes That Express Nucleocapsid Protein. Journal of Virology, 2005, 79, 6620-6630.	3.4	126
93	Recombinant Mouse Hepatitis Virus Strain A59 from Cloned, Full-Length cDNA Replicates to High Titers In Vitro and Is Fully Pathogenic In Vivo. Journal of Virology, 2005, 79, 3097-3106.	3.4	101
94	Multiple Enzymatic Activities Associated with Severe Acute Respiratory Syndrome Coronavirus Helicase. Journal of Virology, 2004, 78, 5619-5632.	3.4	384
95	Major genetic marker of nidoviruses encodes a replicative endoribonuclease. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 12694-12699.	7.1	254
96	Rapid identification of coronavirus replicase inhibitors using a selectable replicon RNA. Journal of General Virology, 2004, 85, 1717-1725.	2.9	76
97	Unique and Conserved Features of Genome and Proteome of SARS-coronavirus, an Early Split-off From the Coronavirus Group 2 Lineage. Journal of Molecular Biology, 2003, 331, 991-1004.	4.2	1,092
98	Mechanisms and enzymes involved in SARS coronavirus genome expression. Journal of General Virology, 2003, 84, 2305-2315.	2.9	767
99	Multigene RNA Vector Based on Coronavirus Transcription. Journal of Virology, 2003, 77, 9790-9798.	3.4	41
100	Long Distance Reverse-Transcription PCR. , 2002, 192, 059-066.		2
101	Viral Replicase Gene Products Suffice for Coronavirus Discontinuous Transcription. Journal of Virology, 2001, 75, 6676-6681.	3.4	135
102	Reverse Genetics System for the Avian Coronavirus Infectious Bronchitis Virus. Journal of Virology, 2001, 75, 12359-12369.	3.4	237
103	Infectious RNA transcribed in vitro from a cDNA copy of the human coronavirus genome cloned in vaccinia virus. Journal of General Virology, 2001, 82, 1273-1281.	2.9	239