

Karl Klaus Conzelmann

List of Publications by Year in descending order

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papers

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19636

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docs citations

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#	ARTICLE	IF	CITATIONS
1	5'-Triphosphate RNA Is the Ligand for RIG-I. <i>Science</i> , 2006, 314, 994-997.	6.0	2,094
2	Monosynaptic Restriction of Transsynaptic Tracing from Single, Genetically Targeted Neurons. <i>Neuron</i> , 2007, 53, 639-647.	3.8	1,080
3	Generation of Bovine Respiratory Syncytial Virus (BRSV) from cDNA: BRSV NS2 Is Not Essential for Virus Replication in Tissue Culture, and the Human RSV Leader Region Acts as a Functional BRSV Genome Promoter. <i>Journal of Virology</i> , 1999, 73, 251-259.	1.5	888
4	Retrograde neuronal tracing with a deletion-mutant rabies virus. <i>Nature Methods</i> , 2007, 4, 47-49.	9.0	606
5	The C-Terminal Regulatory Domain Is the RNA 5'-Triphosphate Sensor of RIG-I. <i>Molecular Cell</i> , 2008, 29, 169-179.	4.5	458
6	Molecular Characterization of Porcine Reproductive and Respiratory Syndrome Virus, a Member of the Arterivirus Group. <i>Virology</i> , 1993, 193, 329-339.	1.1	390
7	Molecular cloning and complete nucleotide sequence of the attenuated rabies virus SAD B19. <i>Virology</i> , 1990, 175, 485-499.	1.1	325
8	Targeted Ablation, Silencing, and Activation Establish Glycinergic Dorsal Horn Neurons as Key Components of a Spinal Gate for Pain and Itch. <i>Neuron</i> , 2015, 85, 1289-1304.	3.8	299
9	Identification of the Rabies Virus Alpha/Beta Interferon Antagonist: Phosphoprotein P Interferes with Phosphorylation of Interferon Regulatory Factor 3. <i>Journal of Virology</i> , 2005, 79, 7673-7681.	1.5	283
10	Budding of Rabies Virus Particles in the Absence of the Spike Glycoprotein. <i>Cell</i> , 1996, 84, 941-951.	13.5	275
11	Matrix Protein of Rabies Virus Is Responsible for the Assembly and Budding of Bullet-Shaped Particles and Interacts with the Transmembrane Spike Glycoprotein G. <i>Journal of Virology</i> , 1999, 73, 242-250.	1.5	241
12	Bovine Respiratory Syncytial Virus Nonstructural Proteins NS1 and NS2 Cooperatively Antagonize Alpha/Beta Interferon-Induced Antiviral Response. <i>Journal of Virology</i> , 2000, 74, 8234-8242.	1.5	217
13	Single-cell-initiated monosynaptic tracing reveals layer-specific cortical network modules. <i>Science</i> , 2015, 349, 70-74.	6.0	212
14	Inhibition of Interferon Signaling by Rabies Virus Phosphoprotein P: Activation-Dependent Binding of STAT1 and STAT2. <i>Journal of Virology</i> , 2006, 80, 2675-2683.	1.5	211
15	Inhibition of Toll-Like Receptor 7- and 9-Mediated Alpha/Beta Interferon Production in Human Plasmacytoid Dendritic Cells by Respiratory Syncytial Virus and Measles Virus. <i>Journal of Virology</i> , 2005, 79, 5507-5515.	1.5	208
16	Aversive state processing in the posterior insular cortex. <i>Nature Neuroscience</i> , 2019, 22, 1424-1437.	7.1	202
17	Inflammation-Induced Alteration of Astrocyte Mitochondrial Dynamics Requires Autophagy for Mitochondrial Network Maintenance. <i>Cell Metabolism</i> , 2013, 18, 844-859.	7.2	201
18	Replication-Dependent Potent IFN- λ Induction in Human Plasmacytoid Dendritic Cells by a Single-Stranded RNA Virus. <i>Journal of Immunology</i> , 2004, 173, 5935-5943.	0.4	191

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19	NONSEGMENTED NEGATIVE-STRAND RNA VIRUSES: Genetics and Manipulation of Viral Genomes. Annual Review of Genetics, 1998, 32, 123-162.	3.2	189
20	Central amygdala circuits modulate food consumption through a positive-valence mechanism. Nature Neuroscience, 2017, 20, 1384-1394.	7.1	186
21	Spread and pathogenic characteristics of a G-deficient rabies virus recombinant: an in vitro and in vivo study. Journal of General Virology, 2000, 81, 2147-2153.	1.3	182
22	A Critical Period for Experience-Dependent Remodeling of Adult-Born Neuron Connectivity. Neuron, 2015, 85, 710-717.	3.8	176
23	Systematic functional analysis of SARS-CoV-2 proteins uncovers viral innate immune antagonists and remaining vulnerabilities. Cell Reports, 2021, 35, 109126.	2.9	176
24	Replication strategies of rabies virus. Virus Research, 2005, 111, 120-131.	1.1	163
25	Social touch promotes interfemale communication via activation of parvocellular oxytocin neurons. Nature Neuroscience, 2020, 23, 1125-1137.	7.1	161
26	Retrograde monosynaptic tracing reveals the temporal evolution of inputs onto new neurons in the adult dentate gyrus and olfactory bulb. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, E1152-61.	3.3	159
27	Learning-Related Plasticity in Dendrite-Targeting Layer 1 Interneurons. Neuron, 2018, 100, 684-699.e6.	3.8	158
28	A Radial Glia-Specific Role of RhoA in Double Cortex Formation. Neuron, 2012, 73, 911-924.	3.8	157
29	A whole-brain connectivity map of mouse insular cortex. ELife, 2020, 9, .	2.8	153
30	Nonstructural Proteins NS1 and NS2 of Bovine Respiratory Syncytial Virus Block Activation of Interferon Regulatory Factor 3. Journal of Virology, 2003, 77, 8661-8668.	1.5	148
31	A CXCR4/CD4 Pseudotype Rhabdovirus That Selectively Infects HIV-1 Envelope Protein-Expressing Cells. Cell, 1997, 90, 841-847.	13.5	143
32	The First Stage of Cardinal Direction Selectivity Is Localized to the Dendrites of Retinal Ganglion Cells. Neuron, 2013, 79, 1078-1085.	3.8	139
33	Role of Alpha/Beta Interferons in the Attenuation and Immunogenicity of Recombinant Bovine Respiratory Syncytial Viruses Lacking NS Proteins. Journal of Virology, 2003, 77, 8426-8439.	1.5	138
34	Highly stable expression of a foreign gene from rabies virus vectors.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 7310-7314.	3.3	137
35	Rabies virus matrix protein regulates the balance of virus transcription and replication. Journal of General Virology, 2003, 84, 1613-1621.	1.3	134
36	Respiratory Syncytial Virus (RSV) Nonstructural (NS) Proteins as Host Range Determinants: a Chimeric Bovine RSV with NS Genes from Human RSV Is Attenuated in Interferon-Competent Bovine Cells. Journal of Virology, 2002, 76, 4287-4293.	1.5	132

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37	Viruses know it all: new insights into IFN networks. <i>Trends in Immunology</i> , 2005, 26, 396-401.	2.9	131
38	Transplanted embryonic neurons integrate into adult neocortical circuits. <i>Nature</i> , 2016, 539, 248-253.	13.7	130
39	Xenotransplanted Human Cortical Neurons Reveal Species-Specific Development and Functional Integration into Mouse Visual Circuits. <i>Neuron</i> , 2019, 104, 972-986.e6.	3.8	118
40	Double-Labeled Rabies Virus: Live Tracking of Enveloped Virus Transport. <i>Journal of Virology</i> , 2008, 82, 237-245.	1.5	116
41	Transcriptional Activation of Alpha/Beta Interferon Genes: Interference by Nonsegmented Negative-Strand RNA Viruses. <i>Journal of Virology</i> , 2005, 79, 5241-5248.	1.5	113
42	Guanylate-Binding Proteins 2 and 5 Exert Broad Antiviral Activity by Inhibiting Furin-Mediated Processing of Viral Envelope Proteins. <i>Cell Reports</i> , 2019, 27, 2092-2104.e10.	2.9	112
43	In Vivo Ligands of MDA5 and RIG-I in Measles Virus-Infected Cells. <i>PLoS Pathogens</i> , 2014, 10, e1004081.	2.1	111
44	Monoclonal antibodies to the GP5 of porcine reproductive and respiratory syndrome virus are more effective in virus neutralization than monoclonal antibodies to the GP4. <i>Veterinary Microbiology</i> , 1999, 66, 171-186.	0.8	107
45	Paramyxovirus V Proteins Disrupt the Fold of the RNA Sensor MDA5 to Inhibit Antiviral Signaling. <i>Science</i> , 2013, 339, 690-693.	6.0	107
46	Polymerase Activity of In Vitro Mutated Rabies Virus L Protein. <i>Virology</i> , 1995, 214, 522-530.	1.1	103
47	Comparative analysis of the full genome sequence of European bat lyssavirus type 1 and type 2 with other lyssaviruses and evidence for a conserved transcription termination and polyadenylation motif in the 3' non-translated region. <i>Journal of General Virology</i> , 2007, 88, 1302-1314.	1.3	94
48	Differential Transcription Attenuation of Rabies Virus Genes by Intergenic Regions: Generation of Recombinant Viruses Overexpressing the Polymerase Gene. <i>Journal of Virology</i> , 2000, 74, 7261-7269.	1.5	92
49	TNF α drives mitochondrial stress in POMC neurons in obesity. <i>Nature Communications</i> , 2017, 8, 15143.	5.8	92
50	Dissociation of Rabies Virus Matrix Protein Functions in Regulation of Viral RNA Synthesis and Virus Assembly. <i>Journal of Virology</i> , 2003, 77, 12074-12082.	1.5	88
51	Genetic Dissection of Interferon-Antagonistic Functions of Rabies Virus Phosphoprotein: Inhibition of Interferon Regulatory Factor 3 Activation Is Important for Pathogenicity. <i>Journal of Virology</i> , 2011, 85, 842-852.	1.5	86
52	Measles Virus V Protein Is a Decoy Substrate for Î² Kinase Î± and Prevents Toll-Like Receptor 7/9-Mediated Interferon Induction. <i>Journal of Virology</i> , 2008, 82, 12365-12373.	1.5	81
53	Mitochondria-Endoplasmic Reticulum Contacts in Reactive Astrocytes Promote Vascular Remodeling. <i>Cell Metabolism</i> , 2020, 31, 791-808.e8.	7.2	79
54	Abortively Infected Astrocytes Appear To Represent the Main Source of Interferon Beta in the Virus-Infected Brain. <i>Journal of Virology</i> , 2016, 90, 2031-2038.	1.5	77

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55	ATP hydrolysis by the viral RNA sensor RIG-I prevents unintentional recognition of self-RNA. <i>ELife</i> , 2015, 4, .	2.8	75
56	Tracking Fluorescence-Labeled Rabies Virus: Enhanced Green Fluorescent Protein-Tagged Phosphoprotein P Supports Virus Gene Expression and Formation of Infectious Particles. <i>Journal of Virology</i> , 2004, 78, 12333-12343.	1.5	73
57	Rhabdovirus Evasion of the Interferon System. <i>Journal of Interferon and Cytokine Research</i> , 2009, 29, 499-510.	0.5	73
58	Specific infection of CD4+ target cells by recombinant rabies virus pseudotypes carrying the HIV-1 envelope spike protein.. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1996, 93, 11366-11370.	3.3	69
59	Virus Promoters Determine Interference by Defective RNAs: Selective Amplification of Mini-RNA Vectors and Rescue from cDNA by a 3' Copy-Back Ambisense Rabies Virus. <i>Journal of Virology</i> , 1999, 73, 3818-3825.	1.5	69
60	The Measles Virus V Protein Binds to p65 (RelA) To Suppress NF- κ B Activity. <i>Journal of Virology</i> , 2011, 85, 3162-3171.	1.5	68
61	Click-Modified Anandamide siRNA Enables Delivery and Gene Silencing in Neuronal and Immune Cells. <i>Journal of the American Chemical Society</i> , 2012, 134, 12330-12333.	6.6	67
62	Respiratory Syncytial Virus (RSV) Fusion Protein Subunit F2, Not Attachment Protein G, Determines the Specificity of RSV Infection. <i>Journal of Virology</i> , 2003, 77, 4609-4616.	1.5	63
63	Significantly improved rescue of rabies virus from cDNA plasmids. <i>European Journal of Cell Biology</i> , 2012, 91, 10-16.	1.6	63
64	Respiratory Syncytial Virus Fusion Protein Mediates Inhibition of Mitogen-Induced T-Cell Proliferation by Contact. <i>Journal of Virology</i> , 2002, 76, 1163-1170.	1.5	61
65	Measles Virus C Protein Interferes with Beta Interferon Transcription in the Nucleus. <i>Journal of Virology</i> , 2012, 86, 796-805.	1.5	60
66	Porcine reproductive and respiratory syndrome virus (PRRSV): Monoclonal antibodies detect common epitopes on two viral proteins of European and U.S. isolates. <i>Veterinary Microbiology</i> , 1996, 51, 257-266.	0.8	58
67	Nucleotide sequence and expression of two β -tubulin genes in <i>Stylonychia lemnae</i> . <i>Journal of Molecular Biology</i> , 1987, 198, 643-653.	2.0	57
68	Charting Monosynaptic Connectivity Maps by Two-Color Light-Sheet Fluorescence Microscopy. <i>Cell Reports</i> , 2012, 2, 1375-1386.	2.9	56
69	Reprogramming reactive glia into interneurons reduces chronic seizure activity in a mouse model of mesial temporal lobe epilepsy. <i>Cell Stem Cell</i> , 2021, 28, 2104-2121.e10.	5.2	54
70	Melanocortin 3 Receptor Signaling in Midbrain Dopamine Neurons Increases the Motivation for Food Reward. <i>Neuropsychopharmacology</i> , 2016, 41, 2241-2251.	2.8	52
71	Mapping Brain-Wide Afferent Inputs of Parvalbumin-Expressing GABAergic Neurons in Barrel Cortex Reveals Local and Long-Range Circuit Motifs. <i>Cell Reports</i> , 2019, 28, 3450-3461.e8.	2.9	52
72	Revealing the secrets of neuronal circuits with recombinant rabies virus technology. <i>Frontiers in Neural Circuits</i> , 2013, 7, 2.	1.4	49

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73	Virokinin, a Bioactive Peptide of the Tachykinin Family, Is Released from the Fusion Protein of Bovine Respiratory Syncytial Virus. <i>Journal of Biological Chemistry</i> , 2003, 278, 46854-46861.	1.6	46
74	Pre-existing astrocytes form functional perisynaptic processes on neurons generated in the adult hippocampus. <i>Brain Structure and Function</i> , 2015, 220, 2027-2042.	1.2	46
75	Myelinosome formation represents an early stage of oligodendrocyte damage in multiple sclerosis and its animal model. <i>Nature Communications</i> , 2016, 7, 13275.	5.8	45
76	Cell-Penetrating and Neurotargeting Dendritic siRNA Nanostructures. <i>Angewandte Chemie - International Edition</i> , 2015, 54, 1946-1949.	7.2	44
77	General anesthesia globally synchronizes activity selectively in layer 5 cortical pyramidal neurons. <i>Neuron</i> , 2022, 110, 2024-2040.e10.	3.8	44
78	Identification of Two Classes of Somatosensory Neurons That Display Resistance to Retrograde Infection by Rabies Virus. <i>Journal of Neuroscience</i> , 2017, 37, 10358-10371.	1.7	43
79	Virus stamping for targeted single-cell infection in vitro and in vivo. <i>Nature Biotechnology</i> , 2018, 36, 81-88.	9.4	39
80	An L (polymerise)-deficient rabies virus defective interfering particle RNA is replicated and transcribed by heterologous helper virus L proteins. <i>Virology</i> , 1991, 184, 655-663.	1.1	37
81	Respiratory syncytial virus potentiates ABCA3 mutation-induced loss of lung epithelial cell differentiation. <i>Human Molecular Genetics</i> , 2012, 21, 2793-2806.	1.4	36
82	G gene-deficient single-round rabies viruses for neuronal circuit analysis. <i>Virus Research</i> , 2016, 216, 41-54.	1.1	36
83	Interferon in Rabies Virus Infection. <i>Advances in Virus Research</i> , 2011, 79, 91-114.	0.9	35
84	Genetic engineering of animal RNA viruses. <i>Trends in Microbiology</i> , 1996, 4, 386-393.	3.5	34
85	Cleavage at the Furin Consensus Sequence RAR/KR 109 and Presence of the Intervening Peptide of the Respiratory Syncytial Virus Fusion Protein Are Dispensable for Virus Replication in Cell Culture. <i>Journal of Virology</i> , 2002, 76, 9218-9224.	1.5	33
86	Attenuation of Rabies Virus Replication and Virulence by Picornavirus Internal Ribosome Entry Site Elements. <i>Journal of Virology</i> , 2009, 83, 1911-1919.	1.5	31
87	An anterograde rabies virus vector for high-resolution large-scale reconstruction of 3D neuron morphology. <i>Brain Structure and Function</i> , 2015, 220, 1369-1379.	1.2	30
88	Neuronal LRP4 regulates synapse formation in the developing CNS. <i>Development (Cambridge)</i> , 2017, 144, 4604-4615.	1.2	25
89	Spike residue 403 affects binding of coronavirus spikes to human ACE2. <i>Nature Communications</i> , 2021, 12, 6855.	5.8	25
90	Quantification of Lyssavirus-Neutralizing Antibodies Using Vesicular Stomatitis Virus Pseudotype Particles. <i>Viruses</i> , 2016, 8, 254.	1.5	23

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91	Cryo EM structure of the rabies virus ribonucleoprotein complex. <i>Scientific Reports</i> , 2019, 9, 9639.	1.6	21
92	Safe and effective two-in-one replicon-and-VLP minispikes vaccine for COVID-19: Protection of mice after a single immunization. <i>PLoS Pathogens</i> , 2021, 17, e1009064.	2.1	21
93	Regulatory structures of gene expression, DNA-replication and DNA-rearrangement in macronuclear genes of <i>Stylonychia lemnae</i> , a hypotrichous ciliate. <i>European Journal of Protistology</i> , 1989, 25, 158-167.	0.5	17
94	Membrane and inclusion body targeting of lyssavirus matrix proteins. <i>Cellular Microbiology</i> , 2013, 15, 200-212.	1.1	17
95	Components and Architecture of the Rhabdovirus Ribonucleoprotein Complex. <i>Viruses</i> , 2020, 12, 959.	1.5	17
96	Infection Characteristics of Rabies Virus Variants with Deletion or Insertion in the Pseudogene Sequence. <i>Journal of NeuroVirology</i> , 1998, 4, 115-119.	1.0	16
97	Anatomical projections of the dorsomedial hypothalamus to the periaqueductal grey and their role in thermoregulation: a cautionary note. <i>Physiological Reports</i> , 2018, 6, e13807.	0.7	16
98	The importance of being short: The role of rabies virus phosphoprotein isoforms assessed by differential IRES translation initiation. <i>European Journal of Cell Biology</i> , 2012, 91, 17-23.	1.6	14
99	Rabies Virus. , 2013, , 17-60.		12
100	The microtubule motor protein KIF13A is involved in intracellular trafficking of the Lassa virus matrix protein Z. <i>Cellular Microbiology</i> , 2013, 15, 315-334.	1.1	12
101	Rapid, efficient and activation-neutral gene editing of polyclonal primary human resting CD4+ T cells allows complex functional analyses. <i>Nature Methods</i> , 2022, 19, 81-89.	9.0	12
102	Brain injury environment critically influences the connectivity of transplanted neurons. <i>Science Advances</i> , 2022, 8, .	4.7	12
103	The Insula Cortex Contacts Distinct Output Streams of the Central Amygdala. <i>Journal of Neuroscience</i> , 2020, 40, 8870-8882.	1.7	11
104	Formation of somatosensory detour circuits mediates functional recovery following dorsal column injury. <i>Scientific Reports</i> , 2020, 10, 10953.	1.6	9
105	Immunogenicity Studies in Carnivores Using a Rabies Virus Construct with a Site-Directed Deletion in the Phosphoprotein. <i>Advances in Preventive Medicine</i> , 2011, 2011, 1-5.	1.1	8
106	Chimeric rabies viruses for trans-species comparison of lyssavirus glycoprotein ectodomain functions in virus replication and pathogenesis. <i>Berliner Und Munchener Tierarztliche Wochenschrift</i> , 2012, 125, 219-27.	0.7	7
107	Signal transduction in the type I interferon system and viral countermeasures. <i>Signal Transduction</i> , 2007, 7, 5-19.	0.7	6
108	Rabies virus. , 2020, , 43-81.		6

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109	Recombinant Fluorescent Rabies Virus Vectors for Tracing Neurons and Synaptic Connections. Cold Spring Harbor Protocols, 2015, 2015, pdb.top089391.	0.2	5
110	Excessive local host-graft connectivity in aging and amyloid-loaded brain. Science Advances, 2022, 8, .	4.7	5
111	Pseudotyping of G-Gene-Deficient Rabies Virus. Cold Spring Harbor Protocols, 2015, 2015, pdb.prot089417.	0.2	4
112	Optimization of whole-brain rabies virus tracing technology for small cell populations. Scientific Reports, 2021, 11, 10400.	1.6	4
113	Interferon in lyssavirus infection. Berliner Und Munchener Tierarztliche Wochenschrift, 2012, 125, 209-18.	0.7	4
114	Recovery of Replication-Competent and G-Gene-Deleted Rabies Viruses from cDNA. Cold Spring Harbor Protocols, 2015, 2015, pdb.prot089409.	0.2	3
115	Selective plasticity of callosal neurons in the adult contralesional cortex following murine traumatic brain injury. Nature Communications, 2022, 13, 2659.	5.8	3
116	Complete Genome Sequence of a Wild-Type Measles Virus Isolated during the Spring 2013 Epidemic in Germany. Genome Announcements, 2014, 2, .	0.8	2
117	Glycoproteins of Predicted Amphibian and Reptile Lyssaviruses Can Mediate Infection of Mammalian and Reptile Cells. Viruses, 2021, 13, 1726.	1.5	2
118	Charting Monosynaptic Connectivity Maps by Two-Color Light-Sheet Fluorescence Microscopy. Cell Reports, 2012, 2, 1774-1775.	2.9	0
119	ACTIVATION AND EVASION OF INNATE IMMUNE RESPONSE BY RHABDOVIRUSES. , 2015, , 353-385.		0
120	Reverse Genetics of Mononegavirales: The Rabies Virus Paradigm. , 2013, , 1-20.		0
121	Rhabdoviruses and Mechanisms of Type I Interferon Antagonism. , 0, , 211-227.		0
122	A Modified Screening System for Loss-of-Function and Dominant Negative Alleles of Essential MCMV Genes. PLoS ONE, 2014, 9, e94918.	1.1	0