Rune Hartmann

List of Publications by Year
in descending order

98 papers	9,112 citations	44042 48 h-index	43868 91 g-index
110 all docs	110 docs citations	110 times ranked	13054 citing authors

#	Article	IF	Citations
1	Double-Stranded RNA Is Produced by Positive-Strand RNA Viruses and DNA Viruses but Not in Detectable Amounts by Negative-Strand RNA Viruses. Journal of Virology, 2006, 80, 5059-5064.	1.5	828
2	Type III Interferon (IFN) Induces a Type I IFN-Like Response in a Restricted Subset of Cells through Signaling Pathways Involving both the Jak-STAT Pathway and the Mitogen-Activated Protein Kinases. Journal of Virology, 2007, 81, 7749-7758.	1.5	404
3	An Important Role for Type III Interferon (IFN-Î»/IL-28) in TLR-Induced Antiviral Activity. Journal of Immunology, 2008, 180, 2474-2485.	0.4	387
4	A structural basis for discriminating between self and nonself double-stranded RNAs in mammalian cells. Nature Biotechnology, 2006, 24, 559-565.	9.4	343
5	Type I and III interferons disrupt lung epithelial repair during recovery from viral infection. Science, 2020, 369, 712-717.	6.0	333
6	Guarding the frontiers: the biology of type III interferons. Nature Immunology, 2015, 16, 802-809.	7.0	279
7	OAS proteins and cGAS: unifying concepts in sensing and responding to cytosolic nucleic acids. Nature Reviews Immunology, 2014, 14, 521-528.	10.6	246
8	The Oligoadenylate Synthetase Family: An Ancient Protein Family with Multiple Antiviral Activities. Journal of Interferon and Cytokine Research, 2011, 31, 41-47.	0.5	243
9	<scp>IFN</scp>Î» is a potent antiâ€influenza therapeutic without the inflammatory side effects of <scp>IFN</scp>Î± treatment. EMBO Molecular Medicine, 2016, 8, 1099-1112.	3.3	228
10	The Two Groups of Zebrafish Virus-Induced Interferons Signal via Distinct Receptors with Specific and Shared Chains. Journal of Immunology, 2009, 183, 3924-3931.	0.4	220
11	Inhibition of SARSâ€“CoV-2 by type I and type III interferons. Journal of Biological Chemistry, 2020, 295, 13958-13964.	1.6	220
12	Antiviral Activity of Human OASL Protein Is Mediated by Enhancing Signaling of the RIG-I RNA Sensor. Immunity, 2014, 40, 936-948.	6.6	201
13	<scp>cGAS</scp> is activated by <scp>DNA</scp> in a lengthâ€dependent manner. EMBO Reports, 2017, 18, 1707-1715.	2.0	201
14	IFN-Î» prevents influenza virus spread from the upper airways to the lungs and limits virus transmission. ELife, 2018, 7, .	2.8	198
15	Efficient Replication of the Novel Human Betacoronavirus EMC on Primary Human Epithelium Highlights Its Zoonotic Potential. MBio, 2013, 4, e00611-12.	1.8	183
16	Gene structure and function of the 2â€²-5â€²-oligoadenylate synthetase family. Cellular and Molecular Life Sciences, 2000, 57, 1593-1612.	2.4	177
17	Interferon lambda 4 signals via the IFNÎ» receptor to regulate antiviral activity against HCV and coronaviruses. EMBO Journal, 2013, 32, 3055-3065.	3.5	177
18	COVID-19 and emerging viral infections: The case for interferon lambda. Journal of Experimental Medicine, 2020, 217, .	4.2	177

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19	Interferon-Î» Is Functionally an Interferon but Structurally Related to the Interleukin-10 Family. Journal of Biological Chemistry, 2009, 284, 20869-20875.	1.6	176
20	<scp>HSV</scp> â€1 <scp>ICP</scp> 27 targets the <scp>TBK</scp> 1â€activated STING signalsome to inhibit virusâ€induced type I <scp>IFN</scp> Âexpression. EMBO Journal, 2016, 35, 1385-1399.	3.5	173
21	Functional IRF3 deficiency in a patient with herpes simplex encephalitis. Journal of Experimental Medicine, 2015, 212, 1371-1379.	4.2	171
22	Influenza A virus targets a cGAS-independent STING pathway that controls enveloped RNA viruses. Nature Communications, 2016, 7, 10680.	5.8	169
23	Crystal Structure of the 2â€²-Specific and Double-Stranded RNA-Activated Interferon-Induced Antiviral Protein 2â€²-5â€²-Oligoadenylate Synthetase. Molecular Cell, 2003, 12, 1173-1185.	4.5	153
24	Human interferon-Î»3 is a potent member of the type III interferon family. Genes and Immunity, 2009, 10, 125-131.	2.2	150
25	Modular Structure of PACT: Distinct Domains for Binding and Activating PKR. Molecular and Cellular Biology, 2001, 21, 1908-1920.	1.1	145
26	Pandemic H1N1 2009 Influenza A Virus Induces Weak Cytokine Responses in Human Macrophages and Dendritic Cells and Is Highly Sensitive to the Antiviral Actions of Interferons. Journal of Virology, 2010, 84, 1414-1422.	1.5	143
27	Reduced IFNÎ»4 activity is associated with improved HCV clearance and reduced expression of interferon-stimulated genes. Nature Communications, 2014, 5, 5699.	5.8	117
28	The Kinase IKKÎ² Regulates a STING- and NF-ÎºB-Dependent Antiviral Response Pathway in Drosophila. Immunity, 2018, 49, 225-234.e4.	6.6	114
29	HSV Infection Induces Production of ROS, which Potentiate Signaling from Pattern Recognition Receptors: Role for S-glutathionylation of TRAF3 and 6. PLoS Pathogens, 2011, 7, e1002250.	2.1	107
30	Conformational diversity in prion protein variants influences intermolecular Î²-sheet formation. EMBO Journal, 2010, 29, 251-262.	3.5	105
31	p59OASL, a 2'-5' oligoadenylate synthetase like protein: a novel human gene related to the 2'-5' oligoadenylate synthetase family. Nucleic Acids Research, 1998, 26, 4121-4128.	6.5	100
32	Differential Regulation of the<i>OASL</i>and<i>OAS1</i>Genes in Response to Viral Infections. Journal of Interferon and Cytokine Research, 2009, 29, 199-208.	0.5	100
33	Extracellular 2â€²-5â€² Oligoadenylate Synthetase Stimulates RNase L-Independent Antiviral Activity: a Novel Mechanism of Virus-Induced Innate Immunity. Journal of Virology, 2010, 84, 11898-11904.	1.5	93
34	Characterization of the 2'-5'-oligoadenylate synthetase ubiquitin-like family. Nucleic Acids Research, 2003, 31, 3166-3173.	6.5	91
35	Weak Induction of Interferon Expression by Severe Acute Respiratory Syndrome Coronavirus 2 Supports Clinical Trials of Interferon-Î» to Treat Early Coronavirus Disease 2019. Clinical Infectious Diseases, 2020, 71, 1410-1412.	2.9	88
36	IFN-Î»3, not IFN-Î»4, likely mediates IFNL3â€“IFNL4 haplotypeâ€“dependent hepatic inflammation and fibrosis. Nature Genetics, 2017, 49, 795-800.	9.4	86

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37	Crystal Structure of Zebrafish Interferons I and II Reveals Conservation of Type I Interferon Structure in Vertebrates. Journal of Virology, 2011, 85, 8181-8187.	1.5	85
38	Two cGAS-like receptors induce antiviral immunity in Drosophila. Nature, 2021, 597, 114-118.	13.7	84
39	Activation of 2â€²-5â€² Oligoadenylate Synthetase by Single-stranded and Double-stranded RNA Aptamers. Journal of Biological Chemistry, 1998, 273, 3236-3246.	1.6	82
40	STEEP mediates STING ER exit and activation of signaling. Nature Immunology, 2020, 21, 868-879.	7.0	82
41	Disparate temperature-dependent virusâ€“host dynamics for SARS-CoV-2 and SARS-CoV in the human respiratory epithelium. PLoS Biology, 2021, 19, e3001158.	2.6	79
42	Crystal Structure of Interleukin-21 Receptor (IL-21R) Bound to IL-21 Reveals That Sugar Chain Interacting with WSXWS Motif Is Integral Part of IL-21R. Journal of Biological Chemistry, 2012, 287, 9454-9460.	1.6	76
43	Antiviral Activities of Different Interferon Types and Subtypes against Hepatitis E Virus Replication. Antimicrobial Agents and Chemotherapy, 2016, 60, 2132-2139.	1.4	75
44	SARS-CoV-2 suppresses IFNÎ² production mediated by NSP1, 5, 6, 15, ORF6 and ORF7b but does not suppress the effects of added interferon. PLoS Pathogens, 2021, 17, e1009800.	2.1	74
45	SARSâ€CoVâ€2 evades immune detection in alveolar macrophages. EMBO Reports, 2020, 21, e51252.	2.0	70
46	Interferon-Î» enhances adaptive mucosal immunity by boosting release of thymic stromal lymphopoietin. Nature Immunology, 2019, 20, 593-601.	7.0	68
47	The 2â€²-5â€²-Oligoadenylate Synthetase 3 Enzyme Potently Synthesizes the 2â€²-5â€²-Oligoadenylates Required for RNase L Activation. Journal of Virology, 2014, 88, 14222-14231.	1.5	59
48	Structural and functional analysis reveals that human OASL binds dsRNA to enhance RIG-I signaling. Nucleic Acids Research, 2015, 43, 5236-5248.	6.5	57
49	The p59 oligoadenylate synthetase-like protein possesses antiviral activity that requires the C-terminal ubiquitin-like domain. Journal of General Virology, 2008, 89, 2767-2772.	1.3	56
50	SARS-CoV-2 elicits robust adaptive immune responses regardless of disease severity. EBioMedicine, 2021, 68, 103410.	2.7	56
51	Gene structure of the murine 2â€²-5â€²-oligoadenylate synthetase family. Cellular and Molecular Life Sciences, 2002, 59, 1212-1222.	2.4	47
52	2â€²3â€²-cGAMP triggers a STING- and NF-ÎºBâ€“dependent broad antiviral response in <i>Drosophila</i>. Science Signaling, 2020, 13, .	1.6	46
53	Transcriptome analysis reveals a classical interferon signature induced by IFNÎ»4 in human primary cells. Genes and Immunity, 2015, 16, 414-421.	2.2	44
54	Defective RNA sensing by RIG-I in severe influenza virus infection. Clinical and Experimental Immunology, 2018, 192, 366-376.	1.1	39

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55	The role of IFN in the development of NAFLD and NASH. Cytokine, 2019, 124, 154519.	1.4	31
56	The interferon-stimulated gene product oligoadenylate synthetase-like protein enhances replication of Kaposiâ€™s sarcoma-associated herpesvirus (KSHV) and interacts with the KSHV ORF20 protein. PLoS Pathogens, 2018, 14, e1006937.	2.1	28
57	Characterization of distinct molecular interactions responsible for IRF3 and IRF7 phosphorylation and subsequent dimerization. Nucleic Acids Research, 2020, 48, 11421-11433.	6.5	28
58	2â€™-5â€™ Oligoadenylate synthetase shares active site architecture with the archaeal CCA-adding enzyme. Cellular and Molecular Life Sciences, 2008, 65, 2613-2620.	2.4	26
59	Ap3A and Ap4A are primers for oligoadenylate synthesis catalyzed by interferon-inducible 2-5A synthetase1. FEBS Letters, 1997, 408, 177-181.	1.3	25
60	Interaction between the 2'-5' oligoadenylate synthetase-like protein p59 OASL and the transcriptional repressor methyl CpG-binding protein 1. FEBS Journal, 2004, 271, 628-636.	0.2	25
61	The Structure of Human Interferon Lambda and What It Has Taught Us. Journal of Interferon and Cytokine Research, 2010, 30, 565-571.	0.5	25
62	Type I and Type III Interferons Differ in Their Adjuvant Activities for Influenza Vaccines. Journal of Virology, 2019, 93, .	1.5	25
63	The crystal structure of zebrafish IL-22 reveals an evolutionary, conserved structure highly similar to that of human IL-22. Genes and Immunity, 2014, 15, 293-302.	2.2	24
64	Cross-species analysis of viral nucleic acid interacting proteins identifies TAOKs as innate immune regulators. Nature Communications, 2021, 12, 7009.	5.8	22
65	Lambda Interferons: New Cytokines with Old Functions. Pharmaceuticals, 2010, 3, 795-809.	1.7	21
66	A conserved sugar bridge connected to the WSXWS motif has an important role for transport of IL-21R to the plasma membrane. Genes and Immunity, 2015, 16, 405-413.	2.2	19
67	Defective interferon priming and impaired antiviral responses in a patient with an IRF7 variant and severe influenza. Medical Microbiology and Immunology, 2019, 208, 869-876.	2.6	19
68	Length dependent activation of OAS proteins by dsRNA. Cytokine, 2020, 126, 154867.	1.4	18
69	Selective Janus kinase inhibition preserves interferon-Î»â€“mediated antiviral responses. Science Immunology, 2021, 6, .	5.6	16
70	Selection of a Novel and Highly Specific Tumor Necrosis Factor Î± (TNFÎ±) Antagonist. Journal of Biological Chemistry, 2010, 285, 12096-12100.	1.6	15
71	The <i>IFNL4</i> Gene Is a Noncanonical Interferon Gene with a Unique but Evolutionarily Conserved Regulation. Journal of Virology, 2020, 94, .	1.5	14
72	Rational Design of Interleukin-21 Antagonist through Selective Elimination of the Î³C Binding Epitope. Journal of Biological Chemistry, 2010, 285, 12223-12231.	1.6	13

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73	Cellular Mechanism for Impaired Hepatitis C Virus Clearance by Interferon Associated with IFNL3 Gene Polymorphisms Relates to Intrahepatic Interferon-Î» Expression. American Journal of Pathology, 2016, 186, 938-951.	1.9	13
74	Identification of an <i>IRF3</i> variant and defective antiviral interferon responses in a patient with severe influenza. European Journal of Immunology, 2019, 49, 2111-2114.	1.6	13
75	Selective Degradation of 2â€²-Adenylated Diadenosine Tri- and Tetraphosphates, Ap3A and Ap4A, by Two Specific Human Dinucleoside Polyphosphate Hydrolases. Archives of Biochemistry and Biophysics, 2000, 373, 218-224.	1.4	12
76	Frequently used bioinformatics tools overestimate the damaging effect of allelic variants. Genes and Immunity, 2019, 20, 10-22.	2.2	12
77	Systemic juvenile idiopathic arthritis and recurrent macrophage activation syndrome due to a CASP1 variant causing inflammasome hyperactivation. Rheumatology, 2020, 59, 3099-3105.	0.9	12
78	Ectodermal dysplasia with immunodeficiency caused by a branch-point mutation in IKBKG/NEMO. Journal of Allergy and Clinical Immunology, 2016, 138, 1706-1709.e4.	1.5	11
79	Species Specificity of Type III Interferon Activity and Development of a Sensitive Luciferase-Based Bioassay for Quantitation of Mouse Interferon-Î». Journal of Interferon and Cytokine Research, 2018, 38, 469-479.	0.5	11
80	Inhibition of 2â€²-5â€² oligoadenylate synthetase by divalent metal ions. FEBS Letters, 2001, 507, 54-58.	1.3	10
81	Effective Interferon Lambda Treatment Regimen To Control Lethal MERS-CoV Infection in Mice. Journal of Virology, 2022, 96, e0036422.	1.5	8
82	Rapid Uptake and Inhibition of Viral Propagation by Extracellular OAS1. Journal of Interferon and Cytokine Research, 2015, 35, 359-366.	0.5	7
83	2â€²-Adenylated derivatives of Ap3A activate RNase L. FEBS Letters, 1999, 457, 9-12.	1.3	5
84	Interferon-Î» Improves the Efficacy of Intranasally or Rectally Administered Influenza Subunit Vaccines by a Thymic Stromal Lymphopoietin-Dependent Mechanism. Frontiers in Immunology, 2021, 12, 749325.	2.2	5
85	Natural Mutations in a 2â€˜â€‘5â€˜ Oligoadenylate Synthetase Transgene Revealed Residues Essential for Enzyme Activityâ€. Biochemistry, 2005, 44, 6837-6843.	1.2	4
86	The Influence of the rs30461 Single Nucleotide Polymorphism on IFN-Î»1 Activity and Secretion. Journal of Interferon and Cytokine Research, 2019, 39, 661-667.	0.5	4
87	A Highly Sensitive Anion Exchange Chromatography Method for Measuring cGAS Activity in vitro. Bio-protocol, 2018, 8, e3055.	0.2	3
88	The Impact of IFNÎ»4 on the Adaptive Immune Response to SARS-CoV-2 Infection. Journal of Interferon and Cytokine Research, 2021, 41, 407-414.	0.5	3
89	B Cell Intrinsic STING Signaling Is Not Required for Autoreactive Germinal Center Participation. Frontiers in Immunology, 2021, 12, 782558.	2.2	3
90	The role of IFNL4 in liver inflammation and progression of fibrosis. Genes and Immunity, 2022, 23, 111-117.	2.2	2

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91	The presence of interferon affects the progression of non-alcoholic fatty liver disease. Genes and Immunity, 2022, 23, 157-165.	2.2	2
92	Establishment of well-differentiated camelid airway cultures to study Middle East respiratory syndrome coronavirus. Scientific Reports, 2022, 12, .	1.6	2
93	What makes the hepatitis C virus evolve?. ELife, 2019, 8, .	2.8	1
94	Crystal Structure of the 2â€²â€Specific and Doubleâ€Stranded RNAâ€Activated Interferonâ€Induced Antiviral Protein 2â€²â€5â€²â€Oligoadenylate Synthetase. Scandinavian Journal of Immunology, 2004, 59, 617-617.	1.3	0
95	THU-281-Single nucleotide polymorphisms associated with no interferon lambda 4 production are associated with reduced mortality in alcoholic hepatitis. Journal of Hepatology, 2019, 70, e286.	1.8	0
96	Interferon lambda 4 genotype and pathway in alcoholic hepatitis. Scandinavian Journal of Gastroenterology, 2021, 56, 304-311.	0.6	0
97	Identification of essential regulatory elements responsible for the explicit expression of IL-28RÎ± and their effect on critical SNPs using in-Silico methods. Pakistan Journal of Pharmaceutical Sciences, 2015, 28, 1523-32.	0.2	0
98	Unraveling the molecular mechanism governing the tissue specific expression of IFNÎ»R1. Pakistan Journal of Pharmaceutical Sciences, 2016, 29, 795-9.	0.2	0