Dieter Blaas

List of Publications by Year
in descending order

115 papers	5,098 citations	81900 39 h-index	106344 65 g-index
120 all docs	120 docs citations	120 times ranked	4512 citing authors

#	Article	IF	Citations
1	Effect of Bafilomycin A1 and Nocodazole on Endocytic Transport in HeLa Cells: Implications for Viral Uncoating and Infection. Journal of Virology, 1998, 72, 9645-9655.	3.4	291
2	Cleavage site analysis in picornaviral polyproteins: Discovering cellular targets by neural networks. Protein Science, 1996, 5, 2203-2216.	7.6	219
3	Charge-reduced nano electrospray ionization combined with differential mobility analysis of peptides, proteins, glycoproteins, noncovalent protein complexes and viruses. Journal of Mass Spectrometry, 2001, 36, 1038-1052.	1.6	202
4	Virusâ˜'Ligand Interactions:Â Identification and Characterization of Ligand Binding by NMR Spectroscopy. Journal of the American Chemical Society, 2003, 125, 14-15.	13.7	196
5	Multiple receptors involved in human rhinovirus attachment to live cells. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17778-17783.	7.1	159
6	X-ray structure of a minor group human rhinovirus bound to a fragment of its cellular receptor protein. Nature Structural and Molecular Biology, 2004, 11, 429-434.	8.2	143
7	Rhinovirus induces an anabolic reprogramming in host cell metabolism essential for viral replication. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E7158-E7165.	7.1	115
8	Mechanism of entry of human rhinovirus 2 into HeLa cells. Virology, 1987, 158, 255-258.	2.4	110
9	Major and Minor Receptor Group Human Rhinoviruses Penetrate from Endosomes by Different Mechanisms. Journal of Virology, 1998, 72, 1354-1364.	3.4	99
10	Insights into Minor Group Rhinovirus Uncoating: The X-ray Structure of the HRV2 Empty Capsid. PLoS Pathogens, 2012, 8, e1002473.	4.7	98
11	IgGs are made for walking on bacterial and viral surfaces. Nature Communications, 2014, 5, 4394.	12.8	97
12	Human Rhinovirus Type 2 Is Internalized by Clathrin-Mediated Endocytosis. Journal of Virology, 2003, 77, 5360-5369.	3.4	90
13	Polypeptide 2A of human rhinovirus type 2: Identification as a protease and characterization by mutational analysis. Virology, 1989, 169, 68-77.	2.4	89
14	Uncoating of human rhinoviruses. Reviews in Medical Virology, 2010, 20, 281-297.	8.3	89
15	Very-Low-Density Lipoprotein Receptor Fragment Shed from HeLa Cells Inhibits Human Rhinovirus Infection. Journal of Virology, 1998, 72, 10246-10250.	3.4	80
16	Analysis of Common Cold Virus (Human Rhinovirus Serotype 2) by Capillary Zone Electrophoresis:â€‰ The Problem of Peak Identification. Analytical Chemistry, 1999, 71, 2028-2032.	6.5	75
17	The Minor Receptor Group of Human Rhinovirus (HRV) Includes HRV23 and HRV25, but the Presence of a Lysine in the VP1 HI Loop Is Not Sufficient for Receptor Binding. Journal of Virology, 2005, 79, 7389-7395.	3.4	74
18	The Concerted Conformational Changes during Human Rhinovirus 2 Uncoating. Molecular Cell, 2002, 10, 317-326.	9.7	72

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19	Human Rhinovirus Type 89 Variants Use Heparan Sulfate Proteoglycan for Cell Attachment. Journal of Virology, 2005, 79, 5963-5970.	3.4	72
20	Determination of the pIof Human Rhinovirus Serotype 2 by Capillary Isoelectric Focusing. Analytical Chemistry, 1996, 68, 4300-4303.	6.5	65
21	Mechanism of human rhinovirus infections. Molecular and Cellular Pediatrics, 2016, 3, 21.	1.8	65
22	Cryoelectron Microscopy Analysis of the Structural Changes Associated with Human Rhinovirus Type 14 Uncoating. Journal of Virology, 2004, 78, 2935-2942.	3.4	61
23	Threeâ€dimensional structure of the Fab fragment of a neutralizing antibody to human rhinovirus serotype 2. Protein Science, 1992, 1, 1154-1161.	7.6	58
24	Conformational Changes, Plasma Membrane Penetration, and Infection by Human Rhinovirus Type 2: Role of Receptors and Low pH. Journal of Virology, 2003, 77, 5370-5377.	3.4	58
25	A reversible haploid mouse embryonic stem cell biobank resource for functional genomics. Nature, 2017, 550, 114-118.	27.8	58
26	Opening of Size-Selective Pores in Endosomes during Human Rhinovirus Serotype 2 In Vivo Uncoating Monitored by Single-Organelle Flow Analysis. Journal of Virology, 2005, 79, 1008-1016.	3.4	56
27	Expression and regulation of Schlafen (SLFN) family members in primary human monocytes, monocyte-derived dendritic cells and T cells. Results in Immunology, 2015, 5, 23-32.	2.2	56
28	A novel mechanism of antibody-mediated enhancement of flavivirus infection. PLoS Pathogens, 2017, 13, e1006643.	4.7	56
29	Affinity Capillary Electrophoresis for the Assessment of Complex Formation between Viruses and Monoclonal Antibodies. Analytical Chemistry, 2000, 72, 4634-4639.	6.5	54
30	Inhibition of Clathrin-dependent Endocytosis Has Multiple Effects on Human Rhinovirus Serotype 2 Cell Entry. Journal of Biological Chemistry, 2001, 276, 3952-3962.	3.4	54
31	Structure of a Neutralizing Antibody Bound Monovalently to Human Rhinovirus 2. Journal of Virology, 1998, 72, 4396-4402.	3.4	54
32	Separation and Biospecific Identification of Subviral Particles of Human Rhinovirus Serotype 2 by Capillary Zone Electrophoresis. Analytical Chemistry, 1999, 71, 4480-4485.	6.5	52
33	Complexes between Monoclonal Antibodies and Receptor Fragments with a Common Cold Virus:Â Determination of Stoichiometry by Capillary Electrophoresis. Analytical Chemistry, 2001, 73, 3900-3906.	6.5	52
34	Uncoating of common cold virus is preceded by RNA switching as determined by X-ray and cryo-EM analyses of the subviral A-particle. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 20063-20068.	7.1	51
35	Human rhinovirus HRV14 uncoats from early endosomes in the presence of bafilomycin. FEBS Letters, 1999, 463, 175-178.	2.8	50
36	Expression and Folding of Human Very-Low-Density Lipoprotein Receptor Fragments: Neutralization Capacity toward Human Rhinovirus HRV2. Virology, 2000, 278, 541-550.	2.4	49

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37	Substrate requirements of a human rhinoviral 2A proteinase. Virology, 1991, 181, 46-54.	2.4	47
38	Recombinant soluble low density lipoprotein receptor fragment inhibits minor group rhinovirus infection in vitro. FASEB Journal, 1998, 12, 695-703.	0.5	46
39	Viral Uncoating Is Directional: Exit of the Genomic RNA in a Common Cold Virus Starts with the Poly-(A) Tail at the 3â€²-End. PLoS Pathogens, 2013, 9, e1003270.	4.7	43
40	Viral entry pathways: the example of common cold viruses. Wiener Medizinische Wochenschrift, 2016, 166, 211-226.	1.1	43
41	Sequence and Structure of Human Rhinoviruses Reveal the Basis of Receptor Discrimination. Journal of Virology, 2003, 77, 6923-6930.	3.4	42
42	Gas-Phase Electrophoretic Molecular Mobility Analysis of Size and Stoichiometry of Complexes of a Common Cold Virus with Antibody and Soluble Receptor Molecules. Analytical Chemistry, 2008, 80, 2261-2264.	6.5	40
43	Human rhinovirus mutants resistant to low pH. Virology, 1991, 183, 757-763.	2.4	38
44	Productive Entry Pathways of Human Rhinoviruses. Advances in Virology, 2012, 2012, 1-13.	1.1	37
45	Analysis of a Common Cold Virus and Its Subviral Particles by Gas-Phase Electrophoretic Mobility Molecular Analysis and Native Mass Spectrometry. Analytical Chemistry, 2015, 87, 8709-8717.	6.5	37
46	Cellular N-myristoyltransferases play a crucial picornavirus genus-specific role in viral assembly, virion maturation, and infectivity. PLoS Pathogens, 2018, 14, e1007203.	4.7	37
47	Viral Evolution toward Change in Receptor Usage: Adaptation of a Major Group Human Rhinovirus To Grow in ICAM-1-Negative Cells. Journal of Virology, 2001, 75, 9312-9319.	3.4	36
48	A Cellular Receptor of Human Rhinovirus Type 2, the Very-Low-Density Lipoprotein Receptor, Binds to Two Neighboring Proteins of the Viral Capsid. Journal of Virology, 2003, 77, 8504-8511.	3.4	35
49	Monitoring RNA Release from Human Rhinovirus by Dynamic Force Microscopy. Journal of Virology, 2004, 78, 3203-3209.	3.4	35
50	Human Rhinovirus Type 54 Infection via Heparan Sulfate Is Less Efficient and Strictly Dependent on Low Endosomal pH. Journal of Virology, 2007, 81, 4625-4632.	3.4	35
51	Capillary electrophoresis of viruses, subviral particles and virus complexes. Journal of Separation Science, 2007, 30, 1704-1713.	2.5	35
52	VLDL Receptor Fragments of Different Lengths Bind to Human Rhinovirus HRV2 with Different Stoichiometry. Journal of Biological Chemistry, 2001, 276, 1057-1062.	3.4	34
53	Labeling of Capsid Proteins and Genomic RNA of Human Rhinovirus with Two Different Fluorescent Dyes for Selective Detection by Capillary Electrophoresis. Analytical Chemistry, 2004, 76, 7360-7365.	6.5	34
54	Recent developments in capillary and chip electrophoresis of bioparticles: Viruses, organelles, and cells. Electrophoresis, 2011, 32, 1579-1590.	2.4	34

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55	Twelve receptor molecules attach per viral particle of human rhinovirus serotype 2 via multiple modules. FEBS Letters, 2004, 568, 99-104.	2.8	33
56	Species-Specific Receptor Recognition by a Minor-Group Human Rhinovirus (HRV): HRV Serotype 1A Distinguishes between the Murine and the Human Low-Density Lipoprotein Receptor. Journal of Virology, 2002, 76, 6957-6965.	3.4	32
57	Neutralization of a common cold virus by concatemers of the third ligand binding module of the VLDL-receptor strongly depends on the number of modules. Virology, 2005, 338, 259-269.	2.4	32
58	Wortmannin delays transfer of human rhinovirus serotype 2 to late endocytic compartments. Biochemical and Biophysical Research Communications, 2006, 348, 741-749.	2.1	32
59	Attachment of VLDL Receptors to an Icosahedral Virus along the 5-fold Symmetry Axis:â€‰ Multiple Binding Modes Evidenced by Fluorescence Correlation Spectroscopy. Biochemistry, 2007, 46, 6331-6339.	2.5	32
60	Influence of detergent additives on mobility of native and subviral rhinovirus particles in capillary electrophoresis. Electrophoresis, 2006, 27, 1112-1121.	2.4	31
61	Capillary Electrophoresis with Postcolumn Infectivity Assay for the Analysis of Different Serotypes of Human Rhinovirus (Common Cold Virus). Analytical Chemistry, 2000, 72, 2553-2558.	6.5	30
62	Elevated Endosomal pH in HeLa Cells Overexpressing Mutant Dynamin Can Affect Infection by pH-Sensitive Viruses. Traffic, 2001, 2, 727-736.	2.7	30
63	Binding of Fluorescent Dye to Genomic RNA Inside Intact Human Rhinovirus after Viral Capsid Penetration Investigated by Capillary Electrophoresis. Analytical Chemistry, 2004, 76, 882-887.	6.5	30
64	Visualization of Single Receptor Molecules Bound to Human Rhinovirus under Physiological Conditions. Structure, 2005, 13, 1247-1253.	3.3	30
65	Entry of a heparan sulphate-binding HRV8 variant strictly depends on dynamin but not on clathrin, caveolin, and flotillin. Virology, 2011, 412, 55-67.	2.4	30
66	Soluble LDL Minireceptors. Journal of Biological Chemistry, 1998, 273, 33835-33840.	3.4	28
67	Virus analysis using electromigration techniques. Electrophoresis, 2009, 30, 133-140.	2.4	28
68	Capillary electrophoresis of affinity complexes between subviral 80S particles of human rhinovirus and monoclonal antibody 2G2. Electrophoresis, 2006, 27, 2630-2637.	2.4	27
69	Human Rhinovirus 14 Enters Rhabdomyosarcoma Cells Expressing ICAM-1 by a Clathrin-, Caveolin-, and Flotillin-Independent Pathway. Journal of Virology, 2010, 84, 3984-3992.	3.4	27
70	Minor group human rhinovirusâ€“receptor interactions: Geometry of multimodular attachment and basis of recognition. FEBS Letters, 2009, 583, 235-240.	2.8	26
71	Liposomal Nanocontainers as Models for Viral Infection: Monitoring Viral Genomic RNA Transfer through Lipid Membranes. Journal of Virology, 2011, 85, 8368-8375.	3.4	26
72	Crystallization and preliminary Xâ€ray diffraction studies of the Lb proteinase from footâ€andâ€mouth disease virus. Protein Science, 1996, 5, 1931-1933.	7.6	25

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73	Site of Human Rhinovirus RNA Uncoating Revealed by Fluorescent In Situ Hybridization. Journal of Virology, 2009, 83, 3770-3777.	3.4	25
74	Electrophoresis on a microfluidic chip for analysis of fluorescenceâ€labeled human rhinovirus. Electrophoresis, 2007, 28, 4734-4740.	2.4	23
75	Characterization of rhinovirus subviral <scp>A</scp> particles via capillary electrophoresis, electron microscopy and gasâ€phase electrophoretic mobility molecular analysis: Part I. Electrophoresis, 2012, 33, 1833-1841.	2.4	23
76	Human Rhinovirus Subviral A Particle Binds to Lipid Membranes over a Twofold Axis of Icosahedral Symmetry. Journal of Virology, 2013, 87, 11309-11312.	3.4	23
77	Kinetics of thermal denaturation of human rhinoviruses in the presence of anti-viral capsid binders analyzed by capillary electrophoresis. Electrophoresis, 2002, 23, 896-902.	2.4	22
78	Rhinovirus-stabilizing activity of artificial VLDL-receptor variants defines a new mechanism for virus neutralization by soluble receptors. FEBS Letters, 2005, 579, 5507-5511.	2.8	22
79	Mimicking Early Events of Virus Infection:Â Capillary Electrophoretic Analysis of Virus Attachment to Receptor-Decorated Liposomes. Analytical Chemistry, 2007, 79, 1620-1625.	6.5	22
80	Virus analysis by electrophoresis on a microfluidic chip. Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences, 2007, 860, 173-179.	2.3	22
81	Conformation of Receptor Adopted upon Interaction with Virus Revealed by Site-Specific Fluorescence Quenchers and FRET Analysis. Journal of the American Chemical Society, 2009, 131, 5478-5482.	13.7	22
82	Cryo-EM structure of pleconaril-resistant rhinovirus-B5 complexed to the antiviral OBR-5-340 reveals unexpected binding site. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 19109-19115.	7.1	22
83	Docking of a human rhinovirus neutralizing antibody onto the viral capsid. Proteins: Structure, Function and Bioinformatics, 1995, 23, 491-501.	2.6	21
84	Human Rhinovirus Type 2 Uncoating at the Plasma Membrane Is Not Affected by a pH Gradient but Is Affected by the Membrane Potential. Journal of Virology, 2009, 83, 3778-3787.	3.4	21
85	Mimicking virus attachment to host cells employing liposomes: Analysis by chip electrophoresis. Electrophoresis, 2009, 30, 2123-2128.	2.4	20
86	nanoDSF: In vitro Label-Free Method to Monitor Picornavirus Uncoating and Test Compounds Affecting Particle Stability. Frontiers in Microbiology, 2020, 11, 1442.	3.5	20
87	Low pH-Triggered Beta-Propeller Switch of the Low-Density Lipoprotein Receptor Assists Rhinovirus Infection. Journal of Virology, 2009, 83, 10922-10930.	3.4	19
88	Human Rhinovirus Type 2-Antibody Complexes Enter and Infect Cells via Fc-Î³ Receptor IIB1. Journal of Virology, 2004, 78, 2729-2737.	3.4	18
89	Determination of the Kinetic On- and Off-Rate of Single Virusâ€"Cell Interactions. Methods in Molecular Biology, 2011, 736, 197-210.	0.9	16
90	Quasi-crystalline Arrangement of Human Rhinovirus 2 on Model Cell Membranes. Single Molecules, 2001, 2, 99-103.	0.9	15

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91	Chip electrophoretic characterization of liposomes with biological lipid composition: Coming closer to a model for viral infection. Electrophoresis, 2009, 30, 4292-4299.	2.4	15
92	ICAM-1 Binding Rhinoviruses Enter HeLa Cells via Multiple Pathways and Travel to Distinct Intracellular Compartments for Uncoating. Viruses, 2017, 9, 68.	3.3	15
93	Use of free-flow electrophoresis for the analysis of cellular uptake of picornaviruses. Electrophoresis, 1997, 18, 2531-2536.	2.4	14
94	Identification of the Human Rhinovirus Serotype 1A Binding Site on the Murine Low-Density Lipoprotein Receptor by Using Human-Mouse Receptor Chimeras. Journal of Virology, 2004, 78, 6766-6774.	3.4	14
95	Monolithic anion-exchange chromatography yields rhinovirus of high purity. Journal of Virological Methods, 2018, 251, 15-21.	2.1	12
96	The Rhinovirus Subviral A-Particle Exposes 3â€²-Terminal Sequences of Its Genomic RNA. Journal of Virology, 2014, 88, 6307-6317.	3.4	11
97	Rhinovirus Inhibitors: Including a New Target, the Viral RNA. Viruses, 2021, 13, 1784.	3.3	11
98	Nonneutralizing Human Rhinovirus Serotype 2-Specific Monoclonal Antibody 2G2 Attaches to the Region That Undergoes the Most Dramatic Changes upon Release of the Viral RNA. Journal of Virology, 2006, 80, 12398-12401.	3.4	10
99	Entry of human rhinovirus 89 via ICAM-1 into HeLa epithelial cells is inhibited by actin skeleton disruption and by bafilomycin. Archives of Virology, 2014, 159, 125-140.	2.1	10
100	Recombinant soluble low-density lipoprotein receptor fragment inhibits common cold infection. , 1998, 11, 49-51.		9
101	Liposomal Leakage Induced by Virus-Derived Peptides, Viral Proteins, and Entire Virions: Rapid Analysis by Chip Electrophoresis. Analytical Chemistry, 2010, 82, 8146-8152.	6.5	9
102	Capillary Electrophoresis, Gas-Phase Electrophoretic Mobility Molecular Analysis, and Electron Microscopy: Effective Tools for Quality Assessment and Basic Rhinovirus Research. Methods in Molecular Biology, 2015, 1221, 101-128.	0.9	9
103	ICAM-1 Binding Rhinoviruses A89 and B14 Uncoat in Different Endosomal Compartments. Journal of Virology, 2016, 90, 7934-7942.	3.4	8
104	Release of Vesicular Stomatitis Virus Spike Protein G-Pseudotyped Lentivirus from the Host Cell Is Impaired upon Low-Density Lipoprotein Receptor Overexpression. Journal of Virology, 2015, 89, 11723-11726.	3.4	5
105	Human Rhinovirus Cell Entry and Uncoating. , 2008, , 1-41.		5
106	Preferential recognition of the very low-density lipoprotein receptor ligand binding site by antibodies from phage display libraries. FEBS Letters, 1996, 396, 14-20.	2.8	4
107	A Mutation in the First Ligand-Binding Repeat of the Human Very-Low-Density Lipoprotein Receptor Results in High-Affinity Binding of the Single V1 Module to Human Rhinovirus 2. Journal of Virology, 2005, 79, 14730-14736.	3.4	4
108	Atomic Force Microscopy Studies of Human Rhinovirus. Methods in Enzymology, 2010, 475, 515-539.	1.0	4

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109	Immunolocalization of Picornavirus RNA in infected cells with antibodies to Tyr-pUp, the covalent linkage unit between VPg and RNA. Journal of Virological Methods, 2011, 171, 206-211.	2.1	4
110	Predictive bioinformatic identification of minor receptor group human rhinoviruses. FEBS Letters, 2009, 583, 2547-2551.	2.8	2
111	In vitro RNA release from a human rhinovirus monitored by means of a molecular beacon and chip electrophoresis. Analytical and Bioanalytical Chemistry, 2016, 408, 4209-4217.	3.7	2
112	Catching Common Cold Virus with a Net: Pyridostatin Forms Filaments in Tris Buffer That Trap Virusesâ€"A Novel Antiviral Strategy?. Viruses, 2020, 12, 723.	3.3	2
113	Individual subunits of a rhinovirus causing common cold exhibit largely different protein-RNA contact site conformations. Communications Biology, 2020, 3, 537.	4.4	2
114	Human Rhinovirus Minor Group Receptors. , 0, , 93-105.		1
115	Nanoimaging, Molecular Interaction, and Nanotemplating of Human Rhinovirus. Nanoscience and Technology, 2011, , 589-643.	1.5	0