Ari Helenius

List of Publications by Year
in descending order

142 papers	43,782 citations	3731 89 h-index	11052 137 g-index
145 all docs	145 docs citations	145 times ranked	33588 citing authors

#	Article	IF	Citations
1	Solubilization of membranes by detergents. BBA - Biomembranes, 1975, 415, 29-79.	8.0	2,762
2	Acidification of the Endocytic and Exocytic Pathways. Annual Review of Biochemistry, 1986, 55, 663-700.	11.1	1,957
3	Endosome maturation. EMBO Journal, 2011, 30, 3481-3500.	7.8	1,878
4	Quality control in the endoplasmic reticulum. Nature Reviews Molecular Cell Biology, 2003, 4, 181-191.	37.0	1,866
5	Roles of N-Linked Glycans in the Endoplasmic Reticulum. Annual Review of Biochemistry, 2004, 73, 1019-1049.	11.1	1,789
6	Neuropilin-1 facilitates SARS-CoV-2 cell entry and infectivity. Science, 2020, 370, 856-860.	12.6	1,441
7	Caveolar endocytosis of simian virus 40 reveals a new two-step vesicular-transport pathway to the ER. Nature Cell Biology, 2001, 3, 473-483.	10.3	1,158
8	Setting the Standards: Quality Control in the Secretory Pathway. Science, 1999, 286, 1882-1888.	12.6	1,142
9	Protein Oligomerization in the Endoplasmic Reticulum. Annual Review of Cell Biology, 1989, 5, 277-307.	26.1	1,022
10	Virus Entry: Open Sesame. Cell, 2006, 124, 729-740.	28.9	1,016
11	Neuropilin-1 is a host factor for SARS-CoV-2 infection. Science, 2020, 370, 861-865.	12.6	1,015
12	Virus Entry by Endocytosis. Annual Review of Biochemistry, 2010, 79, 803-833.	11.1	855
13	On the entry of semliki forest virus into BHK-21 cells. Journal of Cell Biology, 1980, 84, 404-420.	5.2	829
14	Stepwise dismantling of adenovirus 2 during entry into cells. Cell, 1993, 75, 477-486.	28.9	807
15	Membrane fusion proteins of enveloped animal viruses. Quarterly Reviews of Biophysics, 1983, 16, 151-195.	5.7	711
16	Virus entry by macropinocytosis. Nature Cell Biology, 2009, 11, 510-520.	10.3	710
17	Vaccinia Virus Uses Macropinocytosis and Apoptotic Mimicry to Enter Host Cells. Science, 2008, 320, 531-535.	12.6	676
18	How Viruses Enter Animal Cells. Science, 2004, 304, 237-242.	12.6	671

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19	Quality control in the secretory pathway. Current Opinion in Cell Biology, 1995, 7, 523-529.	5.4	653
20	Local Actin Polymerization and Dynamin Recruitment in SV40-Induced Internalization of Caveolae. Science, 2002, 296, 535-539.	12.6	648
21	Virus Entry into Animal Cells. Advances in Virus Research, 1989, 36, 107-151.	2.1	643
22	[63] Properties of detergents. Methods in Enzymology, 1979, 56, 734-749.	1.0	627
23	Endocytosis Via Caveolae. Traffic, 2002, 3, 311-320.	2.7	623
24	Microtubule-mediated Transport of Incoming Herpes Simplex Virus 1 Capsids to the Nucleus. Journal of Cell Biology, 1997, 136, 1007-1021.	5.2	619
25	Glucose trimming and reglucosylation determine glycoprotein association with calnexin in the endoplasmic reticulum. Cell, 1995, 81, 425-433.	28.9	556
26	GM1 structure determines SV40-induced membrane invagination and infection. Nature Cell Biology, 2010, 12, 11-18.	10.3	535
27	Endosomes. Trends in Biochemical Sciences, 1983, 8, 245-250.	7.5	481
28	Caveolin-Stabilized Membrane Domains as Multifunctional Transport and Sorting Devices in Endocytic Membrane Traffic. Cell, 2004, 118, 767-780.	28.9	470
29	Penetration of semliki forest virus from acidic prelysosomal vacuoles. Cell, 1983, 32, 931-940.	28.9	426
30	Clathrin- and caveolin-1â€"independent endocytosis. Journal of Cell Biology, 2005, 168, 477-488.	5.2	399
31	Pathway of vesicular stomatitis virus entry leading to infection. Journal of Molecular Biology, 1982, 156, 609-631.	4.2	388
32	Adsorptive endocytosis of Semliki Forest virus. Journal of Molecular Biology, 1980, 142, 439-454.	4.2	383
33	ER quality control: towards an understanding at the molecular level. Current Opinion in Cell Biology, 2001, 13, 431-437.	5.4	369
34	Rab7 Associates with Early Endosomes to Mediate Sorting and Transport of Semliki Forest Virus to Late Endosomes. PLoS Biology, 2005, 3, e233.	5.6	368
35	High-speed nanoscopic tracking of the position and orientation of a single virus. Nature Methods, 2009, 6, 923-927.	19.0	328
36	Endocytosis of Viruses and Bacteria. Cold Spring Harbor Perspectives in Biology, 2014, 6, a016972-a016972.	5.5	320

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37	Unpacking the incoming influenza virus. Cell, 1992, 69, 577-578.	28.9	318
38	Folding, trimerization, and transport are sequential events in the biogenesis of influenza virus hemagglutinin. Cell, 1988, 53, 197-209.	28.9	313
39	Insider information: what viruses tell us about endocytosis. Current Opinion in Cell Biology, 2003, 15, 414-422.	5.4	312
40	The endoplasmic reticulum as a protein-folding compartment. Trends in Cell Biology, 1992, 2, 227-231.	7.9	306
41	Role of ATP and disulphide bonds during protein folding in the endoplasmic reticulum. Nature, 1992, 356, 260-262.	27.8	303
42	Glycoproteins form mixed disulphides with oxidoreductases during folding in living cells. Nature, 1999, 402, 90-93.	27.8	294
43	Simian Virus 40 Depends on ER Protein Folding and Quality Control Factors for Entry into Host Cells. Cell, 2007, 131, 516-529.	28.9	285
44	The role of the nuclear pore complex in adenovirus DNA entry. EMBO Journal, 1997, 16, 5998-6007.	7.8	269
45	TROSY-NMR reveals interaction between ERp57 and the tip of the calreticulin P-domain. Proceedings of the National Academy of Sciences of the United States of America, 2002, 99, 1954-1959.	7.1	269
46	Caveolin-1 is ubiquitinated and targeted to intralumenal vesicles in endolysosomes for degradation. Journal of Cell Biology, 2010, 191, 615-629.	5.2	262
47	Haemagglutinin of influenza virus expressed from a cloned gene promotes membrane fusion. Nature, 1982, 300, 658-659.	27.8	254
48	The Number and Location of Glycans on Influenza Hemagglutinin Determine Folding and Association with Calnexin and Calreticulin. Journal of Cell Biology, 1997, 139, 613-623.	5.2	250
49	Nuclear import of hepatitis B virus capsids and release of the viral genome. Proceedings of the National Academy of Sciences of the United States of America, 2003, 100, 9849-9854.	7.1	246
50	Entry of Human Papillomavirus Type 16 by Actin-Dependent, Clathrin- and Lipid Raft-Independent Endocytosis. PLoS Pathogens, 2012, 8, e1002657.	4.7	238
51	Herpes Simplex Virus Type 1 Entry into Host Cells: Reconstitution of Capsid Binding and Uncoating at the Nuclear Pore Complex In Vitro. Molecular and Cellular Biology, 2000, 20, 4922-4931.	2.3	237
52	Single-particle tracking of murine polyoma virus-like particles on live cells and artificial membranes. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 15110-15115.	7.1	235
53	Assembly and trafficking of caveolar domains in the cell. Journal of Cell Biology, 2005, 170, 769-779.	5.2	228
54	Biogenesis of Caveolae: Stepwise Assembly of Large Caveolin and Cavin Complexes. Traffic, 2010, 11, 361-382.	2.7	223

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55	Interactions between Newly Synthesized Glycoproteins, Calnexin and a Network of Resident Chaperones in the Endoplasmic Reticulum. Journal of Cell Biology, 1997, 136, 555-565.	5.2	221
56	Phosphorylation-dependent Binding of Hepatitis B Virus Core Particles to the Nuclear Pore Complex. Journal of Cell Biology, 1999, 145, 45-55.	5.2	221
57	Viral Entry into the Nucleus. Annual Review of Cell and Developmental Biology, 2000, 16, 627-651.	9.4	210
58	Solubilization of the membrane proteins from Semliki Forest virus with Triton X100. Journal of Molecular Biology, 1973, 80, 119-133.	4.2	203
59	Contrasting Functions of Calreticulin and Calnexin in Glycoprotein Folding and ER Quality Control. Molecular Cell, 2004, 13, 125-135.	9.7	196
60	Virus entry at a glance. Journal of Cell Science, 2013, 126, 1289-95.	2.0	194
61	Nuclear Import and Export of Viruses and Virus Genomes. Virology, 1998, 246, 1-23.	2.4	188
62	Quality Control in the Secretory Pathway: The Role of Calreticulin, Calnexin and BiP in the Retention of Glycoproteins with C-Terminal Truncations. Molecular Biology of the Cell, 1997, 8, 1943-1954.	2.1	187
63	Host Cell Factors and Functions Involved in Vesicular Stomatitis Virus Entry. Journal of Virology, 2009, 83, 440-453.	3.4	177
64	Gulping rather than sipping: macropinocytosis as a way of virus entry. Current Opinion in Microbiology, 2012, 15, 490-499.	5.1	176
65	Cargo Capture and Bulk Flow in the Early Secretory Pathway. Annual Review of Cell and Developmental Biology, 2016, 32, 197-222.	9.4	162
66	Lipid-Mediated Endocytosis. Cold Spring Harbor Perspectives in Biology, 2011, 3, a004721-a004721.	5.5	154
67	Singleâ€cell analysis of population context advances RNAi screening at multiple levels. Molecular Systems Biology, 2012, 8, 579.	7.2	153
68	<i>N</i> -Glycolyl GM1 Ganglioside as a Receptor for Simian Virus 40. Journal of Virology, 2007, 81, 12846-12858.	3.4	150
69	The Host Nonsense-Mediated mRNA Decay Pathway Restricts Mammalian RNA Virus Replication. Cell Host and Microbe, 2014, 16, 403-411.	11.0	150
70	Role of Endosomes in Simian Virus 40 Entry and Infection. Journal of Virology, 2011, 85, 4198-4211.	3.4	147
71	Glycan-dependent and -independent Association of Vesicular Stomatitis Virus G Protein with Calnexin. Journal of Biological Chemistry, 1996, 271, 14280-14284.	3.4	144
72	Vaccinia virus strains use distinct forms of macropinocytosis for host-cell entry. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 9346-9351.	7.1	142

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73	Echovirus 1 Endocytosis into Caveosomes Requires Lipid Rafts, Dynamin II, and Signaling Events. Molecular Biology of the Cell, 2004, 15, 4911-4925.	2.1	141
74	Inhibition of endocytosis by anti-clathrin antibodies. Cell, 1987, 50, 453-463.	28.9	140
75	Oligomers of the ATPase EHD2 confine caveolae to the plasma membrane through association with actin. EMBO Journal, 2012, 31, 2350-2364.	7.8	140
76	Recognition of local glycoprotein misfolding by the ER folding sensor UDP-glucose:glycoprotein glucosyltransferase. , 2000, 7, 278-280.		136
77	Human Papillomavirus Type 16 Entry: Retrograde Cell Surface Transport along Actin-Rich Protrusions. PLoS Pathogens, 2008, 4, e1000148.	4.7	136
78	BAP31 and BiP are essential for dislocation of SV40 from the endoplasmic reticulum to the cytosol. Nature Cell Biology, 2011, 13, 1305-1314.	10.3	136
79	Large Scale RNAi Reveals the Requirement of Nuclear Envelope Breakdown for Nuclear Import of Human Papillomaviruses. PLoS Pathogens, 2014, 10, e1004162.	4.7	135
80	Stepwise Priming by Acidic pH and a High K ⁺ Concentration Is Required for Efficient Uncoating of Influenza A Virus Cores after Penetration. Journal of Virology, 2014, 88, 13029-13046.	3.4	135
81	Stepwise dissociation of the semliki forest virus membrane with triton-X-100. Biochimica Et Biophysica Acta - Biomembranes, 1973, 307, 287-300.	2.6	132
82	Entry of Bunyaviruses into Mammalian Cells. Cell Host and Microbe, 2010, 7, 488-499.	11.0	131
83	More Than One Glycan Is Needed for ER Glucosidase II to Allow Entry of Glycoproteins into the Calnexin/Calreticulin Cycle. Molecular Cell, 2005, 19, 183-195.	9.7	128
84	Protein Folding during Cotranslational Translocation in the Endoplasmic Reticulum. Molecular Cell, 2002, 10, 769-778.	9.7	118
85	Mechanisms of virus uncoating. Trends in Microbiology, 1994, 2, 52-56.	7.7	114
86	The entry of viruses into animal cells. Trends in Biochemical Sciences, 1980, 5, 104-106.	7.5	106
87	Intracellular Assembly and Secretion of Recombinant Subviral Particles from Tick-Borne Encephalitis Virus. Journal of Virology, 2003, 77, 4370-4382.	3.4	104
88	Spikeâ€"nucleocapsid interaction in Semliki Forest virus reconstructed using network antibodies. Nature, 1988, 336, 36-42.	27.8	101
89	Lymphocytic choriomeningitis virus uses a novel endocytic pathway for infectious entry via late endosomes. Virology, 2008, 378, 21-33.	2.4	101
90	Late-penetrating viruses. Current Opinion in Virology, 2011, 1, 35-43.	5.4	101

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91	Vaccinia extracellular virions enter cells by macropinocytosis and acid-activated membrane rupture. EMBO Journal, 2011, 30, 3647-3661.	7.8	97
92	Conformational Requirements for Glycoprotein Reglucosylation in the Endoplasmic Reticulum. Journal of Cell Biology, 2000, 148, 1123-1130.	5.2	94
93	Virus Entry: Looking Back and Moving Forward. Journal of Molecular Biology, 2018, 430, 1853-1862.	4.2	91
94	Bulk Flow Revisited: Transport of a Soluble Protein in the Secretory Pathway. Traffic, 2009, 10, 1819-1830.	2.7	88
95	Minor folding defects trigger local modification of glycoproteins by the ER folding sensor GT. EMBO Journal, 2005, 24, 1730-1738.	7.8	85
96	Model for the architecture of caveolae based on a flexible, net-like assembly of Cavin1 and Caveolin discs. Proceedings of the National Academy of Sciences of the United States of America, 2016, 113, E8069-E8078.	7.1	84
97	Quaternary and Domain Structure of Glycoprotein Processing Glucosidase IIâ€. Biochemistry, 2001, 40, 10717-10722.	2.5	82
98	The Transitional ER Defines a Boundary for Quality Control in the Secretion of tsO45 VSV Glycoprotein. Traffic, 2002, 3, 833-849.	2.7	82
99	Binding of Semliki Forest Virus and Its Spike Glycoproteins to Cells. FEBS Journal, 1979, 97, 213-220.	0.2	81
100	Histone Deacetylase 8 Is Required for Centrosome Cohesion and Influenza A Virus Entry. PLoS Pathogens, 2011, 7, e1002316.	4.7	78
101	Mutational Analysis Provides Molecular Insight into the Carbohydrate-Binding Region of Calreticulin:Â Pivotal Roles of Tyrosine-109 and Aspartate-135 in Carbohydrate Recognitionâ€. Biochemistry, 2004, 43, 97-106.	2.5	75
102	Folding and dimerization of hepatitis C virus E1 and E2 glycoproteins in stably transfected CHO cells. Virology, 2005, 332, 438-453.	2.4	74
103	Interactions of Substrate with Calreticulin, an Endoplasmic Reticulum Chaperone. Journal of Biological Chemistry, 2003, 278, 6194-6200.	3.4	73
104	Trimming and Readdition of Glucose to N-Linked Oligosaccharides Determines Calnexin Association of a Substrate Glycoprotein in Living Cells. Journal of Biological Chemistry, 1999, 274, 7537-7544.	3.4	72
105	Multiple Mechanisms for the Inhibition of Entry and Uncoating of Superinfecting Semliki Forest Virus. Virology, 1997, 231, 59-71.	2.4	68
106	Solubilization of the semliki forest virus membrane with sodium deoxycholate. Biochimica Et Biophysica Acta - Biomembranes, 1976, 436, 319-334.	2.6	67
107	Ganglioside-dependent cell attachment and endocytosis of murine polyomavirus-like particles. FEBS Letters, 2003, 555, 199-203.	2.8	67
108	Label-Free Optical Detection and Tracking of Single Virions Bound to Their Receptors in Supported Membrane Bilayers. Nano Letters, 2007, 7, 2263-2266.	9.1	67

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109	Cullin-3 regulates late endosome maturation. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 823-828.	7.1	61
110	<scp>HCMV</scp> Induces Macropinocytosis for Host Cell Entry in Fibroblasts. Traffic, 2016, 17, 351-368.	2.7	57
111	siRNA Screen of Early Poxvirus Genes Identifies the AAA+ ATPase D5 as the Virus Genome-Uncoating Factor. Cell Host and Microbe, 2014, 15, 103-112.	11.0	56
112	A SPOPL/Cullin-3 ubiquitin ligase complex regulates endocytic trafficking by targeting EPS15 at endosomes. ELife, 2016, 5, e13841.	6.0	53
113	Quality control in the secretory assembly line. Philosophical Transactions of the Royal Society B: Biological Sciences, 2001, 356, 147-150.	4.0	52
114	Genome-Wide Small Interfering RNA Screens Reveal VAMP3 as a Novel Host Factor Required for Uukuniemi Virus Late Penetration. Journal of Virology, 2014, 88, 8565-8578.	3.4	48
115	Vaccinia Virus Infection Requires Maturation of Macropinosomes. Traffic, 2015, 16, 814-831.	2.7	44
116	Apoptotic mimicry: phosphatidylserineâ€mediated macropinocytosis of vaccinia virus. Annals of the New York Academy of Sciences, 2010, 1209, 49-55.	3.8	42
117	Three-dimensional structure topology of the calreticulin P-domain based on NMR assignment. FEBS Letters, 2001, 488, 69-73.	2.8	41
118	Folding of Hepatitis C Virus E1 Glycoprotein in a Cell-Free System. Journal of Virology, 2001, 75, 11205-11217.	3.4	41
119	Influenza virus uses transportin 1 for vRNP debundling during cell entry. Nature Microbiology, 2019, 4, 578-586.	13.3	41
120	Entry of Alphaviruses. , 1986, , 91-119.		41
121	Alphavirus and flavivirus glycoproteins: Structures and functions. Cell, 1995, 81, 651-653.	28.9	40
122	Multiple Endoplasmic Reticulum-associated Pathways Degrade Mutant Yeast Carboxypeptidase Y in Mammalian Cells. Journal of Biological Chemistry, 2003, 278, 46895-46905.	3.4	40
123	Virus entry: What has pH got to do with it?. Nature Cell Biology, 2013, 15, 125-125.	10.3	37
124	Endocytosis of Enveloped Animal Viruses. Novartis Foundation Symposium, 1982, , 59-76.	1.1	30
125	Semliki forest virus entry and the endocytic pathway. Biochemical Society Transactions, 1984, 12, 981-983.	3.4	25
126	The Control of Membrane Traffic on the Endocytic Pathway. Current Topics in Membranes and Transport, 1987, , 255-288.	0.6	25

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127	Investigating Endocytic Pathways to the Endoplasmic Reticulum and to the Cytosol Using <scp>SNAP</scp>â€Trap. Traffic, 2013, 14, 36-46.	2.7	19
128	PI3KÎ³ Is Critical for Dendritic Cell-Mediated CD8+ T Cell Priming and Viral Clearance during Influenza Virus Infection. PLoS Pathogens, 2016, 12, e1005508.	4.7	18
129	Folding, Quality Control, and Secretion of Pancreatic Ribonuclease in Live Cells. Journal of Biological Chemistry, 2011, 286, 5813-5822.	3.4	15
130	Interaction of Newly Synthesized Apolipoprotein B with Calnexin and Calreticulin Requires Glucose Trimming in the Endoplasmic Reticulum. Bioscience Reports, 1999, 19, 189-196.	2.4	13
131	[20] Binding, endocytosis, and degradation of enveloped animal viruses. Methods in Enzymology, 1983, 98, 260-266.	1.0	12
132	Viruses as Tools in Drug Delivery. Annals of the New York Academy of Sciences, 1987, 507, 1-6.	3.8	10
133	Alphavirus Proteins. , 1980, , 317-333.		9
134	Expression of Antibody Interferes with Disulfide Bond Formation and Intracellular Transport of Antigen in the Secretory Pathway. Journal of Biological Chemistry, 1999, 274, 14495-14499.	3.4	4
135	Protein Folding in the Endoplasmic Reticulum. , 1993, , 125-136.		4
136	In Vitro Disassembly of Influenza A Virus Capsids by Gradient Centrifugation. Journal of Visualized Experiments, 2016, , e53909.	0.3	3
137	A Chaperone System for Glycoprotein Folding: The Calnexin/Calreticulin Cycle. Molecular Biology Intelligence Unit, 2003, , 19-29.	0.2	2
138	Standing on the Shoulders of Viruses. Annual Review of Biochemistry, 2020, 89, 21-43.	11.1	2
139	Ari Helenius: viruses under surveillance. Journal of Cell Biology, 2008, 182, 414-415.	5.2	1
140	Membranes, viruses, detergents, and endosomes. Molecular Biology of the Cell, 2012, 23, 4157-4159.	2.1	1
141	Caveolar endocytosis of simian virus 40 reveals a new two-step vesicular-transport pathway to the ER. , 0, .		1
142	High-throughput siRNA silencing screens to identify host-cell factors required for virus infection. Future Virology, 2009, 4, 517-519.	1.8	0