F Ulrich Hartl

List of Publications by Year
in descending order

127 papers	30,993 citations	10979 71 h-index	16164 124 g-index
138 all docs	138 docs citations	138 times ranked	25621 citing authors

#	Article	IF	Citations
1	Gelâ€like inclusions of Câ€terminal fragments of TDPâ€43 sequester stalled proteasomes in neurons. EMBO Reports, 2022, 23, e53890.	2.0	28
2	The chaperone Clusterin in neurodegenerationâˆ'friend or foe?. BioEssays, 2022, 44, e2100287.	1.2	18
3	In situ architecture of neuronal Î±-Synuclein inclusions. Nature Communications, 2021, 12, 2110.	5.8	66
4	Multiple pathways of toxicity induced by C9orf72 dipeptide repeat aggregates and G4C2 RNA in a cellular model. ELife, 2021, 10, .	2.8	17
5	Bacterial RF3 senses chaperone function in co-translational folding. Molecular Cell, 2021, 81, 2914-2928.e7.	4.5	9
6	The extracellular chaperone Clusterin enhances Tau aggregate seeding in a cellular model. Nature Communications, 2021, 12, 4863.	5.8	35
7	Flucâ€EGFP reporter mice reveal differential alterations of neuronal proteostasis in aging and disease. EMBO Journal, 2021, 40, e107260.	3.5	17
8	A new way of D/Ealing with protein misfolding. Molecular Cell, 2021, 81, 4114-4115.	4.5	1
9	The Hsc70 disaggregation machinery removes monomer units directly from Î±-synuclein fibril ends. Nature Communications, 2021, 12, 5999.	5.8	37
10	Scaffolding protein CcmM directs multiprotein phase separation in Î²-carboxysome biogenesis. Nature Structural and Molecular Biology, 2021, 28, 909-922.	3.6	24
11	Functional Modules of the Proteostasis Network. Cold Spring Harbor Perspectives in Biology, 2020, 12, a033951.	2.3	133
12	Proteome-wide observation of the phenomenon of life on the edge of solubility. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1015-1020.	3.3	115
13	Dual Functions of a Rubisco Activase in Metabolic Repair and Recruitment to Carboxysomes. Cell, 2020, 183, 457-473.e20.	13.5	30
14	Sis1 potentiates the stress response to protein aggregation and elevated temperature. Nature Communications, 2020, 11, 6271.	5.8	28
15	Chaperone Machineries of Rubisco â€" The Most Abundant Enzyme. Trends in Biochemical Sciences, 2020, 45, 748-763.	3.7	43
16	Role for ribosome-associated quality control in sampling proteins for MHC class I-mediated antigen presentation. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 4099-4108.	3.3	27
17	Cellâ€toâ€cell transmission of <i>C9orf72</i> polyâ€(Glyâ€Ala) triggers key features of <scp>ALS</scp> / <scp>FTD</scp>. EMBO Journal, 2020, 39, e102811.	3.5	51
18	Efficient Catalysis of Protein Folding by GroEL/ES of the Obligate Chaperonin Substrate MetF. Journal of Molecular Biology, 2020, 432, 2304-2318.	2.0	16

#	Article	IF	Citations
19	An inventory of interactors of the human HSP60/HSP10 chaperonin in the mitochondrial matrix space. Cell Stress and Chaperones, 2020, 25, 407-416.	1.2	18
20	Amplifiers co-translationally enhance CFTR biosynthesis via PCBP1-mediated regulation of CFTR mRNA. Journal of Cystic Fibrosis, 2020, 19, 733-741.	0.3	35
21	Bacterial Hsp70 resolves misfolded states and accelerates productive folding of a multi-domain protein. Nature Communications, 2020, 11, 365.	5.8	99
22	Structure and conformational cycle of a bacteriophage-encoded chaperonin. PLoS ONE, 2020, 15, e0230090.	1.1	8
23	Recent advances in understanding catalysis of protein folding by molecular chaperones. FEBS Letters, 2020, 594, 2770-2781.	1.3	107
24	Mitochondria and friends â€“ a special issue in honor of Walter Neupert (1939â€“2019). Biological Chemistry, 2020, 401, 643-644.	1.2	0
25	The nucleolus functions as a phase-separated protein quality control compartment. Science, 2019, 365, 342-347.	6.0	348
26	The Hsp70 Chaperone System Stabilizes a Thermo-sensitive Subproteome in E.Âcoli. Cell Reports, 2019, 28, 1335-1345.e6.	2.9	37
27	Rubisco condensate formation by CcmM in Î²-carboxysome biogenesis. Nature, 2019, 566, 131-135.	13.7	185
28	Structure and function of Vms1 and Arb1 in RQC and mitochondrial proteome homeostasis. Nature, 2019, 570, 538-542.	13.7	63
29	A protein quality control pathway regulated by linear ubiquitination. EMBO Journal, 2019, 38, .	3.5	63
30	Chaperone Function of Hgh1 in the Biogenesis of Eukaryotic Elongation Factor 2. Molecular Cell, 2019, 74, 88-100.e9.	4.5	18
31	The proteostasis network and its decline in ageing. Nature Reviews Molecular Cell Biology, 2019, 20, 421-435.	16.1	860
32	Improved recombinant expression and purification of functional plant Rubisco. FEBS Letters, 2019, 593, 611-621.	1.3	29
33	In Situ Structure of Neuronal C9orf72 Poly-GA Aggregates Reveals Proteasome Recruitment. Cell, 2018, 172, 696-705.e12.	13.5	311
34	High capacity of the endoplasmic reticulum to prevent secretion and aggregation of amyloidogenic proteins. EMBO Journal, 2018, 37, 337-350.	3.5	29
35	GroEL Ring Separation and Exchange in the Chaperonin Reaction. Cell, 2018, 172, 605-617.e11.	13.5	43
36	Molecular and structural architecture of polyQ aggregates in yeast. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E3446-E3453.	3.3	68

#	Article	IF	Citations
37	Pathways of cellular proteostasis in aging and disease. Journal of Cell Biology, 2018, 217, 51-63.	2.3	585
38	Pathway of Actin Folding Directed by the Eukaryotic Chaperonin TRiC. Cell, 2018, 174, 1507-1521.e16.	13.5	75
39	Biogenesis and Metabolic Maintenance of Rubisco. Annual Review of Plant Biology, 2017, 68, 29-60.	8.6	176
40	Protein Misfolding Diseases. Annual Review of Biochemistry, 2017, 86, 21-26.	5.0	395
41	Cytosolic Protein Vms1 Links Ribosome Quality Control to Mitochondrial and Cellular Homeostasis. Cell, 2017, 171, 890-903.e18.	13.5	140
42	Unfolding the chaperone story. Molecular Biology of the Cell, 2017, 28, 2919-2923.	0.9	17
43	Role of the ribosomal quality control machinery in nucleocytoplasmic translocation of polyQ-expanded huntingtin exon-1. Biochemical and Biophysical Research Communications, 2017, 493, 708-717.	1.0	17
44	In Situ Architecture and Cellular Interactions of PolyQ Inclusions. Cell, 2017, 171, 179-187.e10.	13.5	271
45	Mechanism of Enzyme Repair by the AAA+ Chaperone Rubisco Activase. Molecular Cell, 2017, 67, 744-756.e6.	4.5	47
46	Plant RuBisCo assembly in <i>E. coli</i> with five chloroplast chaperones including BSD2. Science, 2017, 358, 1272-1278.	6.0	172
47	Rubisco Activases: AAA+ Chaperones Adapted to Enzyme Repair. Frontiers in Molecular Biosciences, 2017, 4, 20.	1.6	52
48	Susan Lee Lindquist (1949â€“2016)â€”pioneer in the study of cellular protein folding and disease. EMBO Journal, 2016, 35, 2626-2627.	3.5	2
49	Cellular Homeostasis and Aging. Annual Review of Biochemistry, 2016, 85, 1-4.	5.0	111
50	Soluble Oligomers of PolyQ-Expanded Huntingtin Target a Multiplicity of Key Cellular Factors. Molecular Cell, 2016, 63, 951-964.	4.5	181
51	The formation, function and regulation of amyloids: insights from structural biology. Journal of Internal Medicine, 2016, 280, 164-176.	2.7	53
52	In vivo aspects of protein folding and quality control. Science, 2016, 353, aac4354.	6.0	1,100
53	Cytoplasmic protein aggregates interfere with nucleocytoplasmic transport of protein and RNA. Science, 2016, 351, 173-176.	6.0	336
54	Failure of RQC machinery causes protein aggregation and proteotoxic stress. Nature, 2016, 531, 191-195.	13.7	185

#	Article	IF	Citations
55	Structure of human heat-shock transcription factor 1 in complex with DNA. Nature Structural and Molecular Biology, 2016, 23, 140-146.	3.6	87
56	The GroELâ€"GroES Chaperonin Machine: A Nano-Cage for Protein Folding. Trends in Biochemical Sciences, 2016, 41, 62-76.	3.7	325
57	Degradation of potent Rubisco inhibitor by selective sugar phosphatase. Nature Plants, 2015, 1, 14002.	4.7	38
58	Role of auxiliary proteins in Rubisco biogenesis and function. Nature Plants, 2015, 1, 15065.	4.7	91
59	Proteotoxic stress and ageing triggers the loss of redox homeostasis across cellular compartments. EMBO Journal, 2015, 34, 2334-2349.	3.5	78
60	Structural Analysis of the Rubisco-Assembly Chaperone RbcX-II from Chlamydomonas reinhardtii. PLoS ONE, 2015, 10, e0135448.	1.1	13
61	Opposing effects of folding and assembly chaperones on evolvability of Rubisco. Nature Chemical Biology, 2015, 11, 148-155.	3.9	86
62	Action of the Hsp70 chaperone system observed with single proteins. Nature Communications, 2015, 6, 6307.	5.8	58
63	Role of Small Subunit in Mediating Assembly of Red-type Form I Rubisco. Journal of Biological Chemistry, 2015, 290, 1066-1074.	1.6	32
64	Structure and mechanism of the Rubisco-assembly chaperone Raf1. Nature Structural and Molecular Biology, 2015, 22, 720-728.	3.6	61
65	Chaperonin-Assisted Protein Folding: Relative Population of Asymmetric and Symmetric GroEL:GroES Complexes. Journal of Molecular Biology, 2015, 427, 2244-2255.	2.0	40
66	Widespread Proteome Remodeling and Aggregation in Aging C.Âelegans. Cell, 2015, 161, 919-932.	13.5	478
67	ER Stress-Induced eIF2-alpha Phosphorylation Underlies Sensitivity of Striatal Neurons to Pathogenic Huntingtin. PLoS ONE, 2014, 9, e90803.	1.1	85
68	Overexpression of Q-rich prion-like proteins suppresses polyQ cytotoxicity and alters the polyQ interactome. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 18219-18224.	3.3	52
69	Sugarcoating ER Stress. Cell, 2014, 156, 1125-1127.	13.5	22
70	Interplay of Acetyltransferase EP300 and the Proteasome System in Regulating Heat Shock Transcription Factor 1. Cell, 2014, 156, 975-985.	13.5	130
71	Active Cage Mechanism of Chaperonin-Assisted Protein Folding Demonstrated at Single-Molecule Level. Journal of Molecular Biology, 2014, 426, 2739-2754.	2.0	61
72	GroEL/ES Chaperonin Modulates the Mechanism and Accelerates the Rate of TIM-Barrel Domain Folding. Cell, 2014, 157, 922-934.	13.5	116

#	Article	IF	Citations
73	Proteostasis impairment in protein-misfolding and -aggregation diseases. Trends in Cell Biology, 2014, 24, 506-514.	3.6	519
74	Soluble forms of polyQ-expanded huntingtin rather than large aggregates cause endoplasmic reticulum stress. Nature Communications, 2013, 4, 2753.	5.8	182
75	The first chaperonin. Nature Reviews Molecular Cell Biology, 2013, 14, 611-611.	16.1	3
76	PolyQ Proteins Interfere with Nuclear Degradation of Cytosolic Proteins by Sequestering the Sis1p Chaperone. Cell, 2013, 154, 134-145.	13.5	307
77	Molecular Chaperone Functions in Protein Folding and Proteostasis. Annual Review of Biochemistry, 2013, 82, 323-355.	5.0	1,218
78	Quantitative Proteomics Reveals That Hsp90 Inhibition Preferentially Targets Kinases and the DNA Damage Response. Molecular and Cellular Proteomics, 2012, 11, M111.014654.	2.5	91
79	Chaperonin Cofactors, Cpn10 and Cpn20, of Green Algae and Plants Function as Hetero-oligomeric Ring Complexes. Journal of Biological Chemistry, 2012, 287, 20471-20481.	1.6	48
80	DnaK Functions as a Central Hub in the E.Âcoli Chaperone Network. Cell Reports, 2012, 1, 251-264.	2.9	308
81	Structure of green-type Rubisco activase from tobacco. Nature Structural and Molecular Biology, 2011, 18, 1366-1370.	3.6	97
82	Chaperone-assisted protein folding: the path to discovery from a personal perspective. Nature Medicine, 2011, 17, 1206-1210.	15.2	41
83	Amyloid-like Aggregates Sequester Numerous Metastable Proteins with Essential Cellular Functions. Cell, 2011, 144, 67-78.	13.5	604
84	Molecular chaperones in protein folding and proteostasis. Nature, 2011, 475, 324-332.	13.7	2,762
85	Structure and function of the AAA+ protein CbbX, a red-type Rubisco activase. Nature, 2011, 479, 194-199.	13.7	141
86	Firefly luciferase mutants as sensors of proteome stress. Nature Methods, 2011, 8, 879-884.	9.0	190
87	Crystal structure of a chaperone-bound assembly intermediate of form I Rubisco. Nature Structural and Molecular Biology, 2011, 18, 875-880.	3.6	56
88	Coupled chaperone action in folding and assembly of hexadecameric Rubisco. Nature, 2010, 463, 197-202.	13.7	165
89	Chaperonin-Catalyzed Rescue of Kinetically Trapped States in Protein Folding. Cell, 2010, 142, 112-122.	13.5	127
90	Converging concepts of protein folding in vitro and in vivo. Nature Structural and Molecular Biology, 2009, 16, 574-581.	3.6	979

#	Article	IF	Citations
91	The Native 3D Organization of Bacterial Polysomes. Cell, 2009, 136, 261-271.	13.5	240
92	Chaperoneâ€assisted protein folding in health and disease. FASEB Journal, 2009, 23, 195.1.	0.2	0
93	Essential role of the chaperonin folding compartment in vivo. EMBO Journal, 2008, 27, 1458-68.	3.5	65
94	Monitoring Protein Conformation along the Pathway of Chaperonin-Assisted Folding. Cell, 2008, 133, 142-153.	13.5	158
95	Structural Basis for the Cooperation of Hsp70 and Hsp110 Chaperones in Protein Folding. Cell, 2008, 133, 1068-1079.	13.5	235
96	Structure and Function of RbcX, anÂAssembly Chaperone for Hexadecameric Rubisco. Cell, 2007, 129, 1189-1200.	13.5	137
97	CHAPERONEâ€ASSISTED PROTEIN FOLDING IN THE CYTOSOL. FASEB Journal, 2007, 21, A153.	0.2	0
98	Structural Features of the GroEL-GroES Nano-Cage Required for Rapid Folding of Encapsulated Protein. Cell, 2006, 125, 903-914.	13.5	262
99	Chaperonin TRiC Promotes the Assembly of polyQ Expansion Proteins into Nontoxic Oligomers. Molecular Cell, 2006, 23, 887-897.	4.5	259
100	Real-time observation of trigger factor function on translating ribosomes. Nature, 2006, 444, 455-460.	13.7	202
101	Molecular chaperones of the Hsp110 family act as nucleotide exchange factors of Hsp70s. EMBO Journal, 2006, 25, 2519-2528.	3.5	310
102	Proteome-wide Analysis of Chaperonin-Dependent Protein Folding in Escherichia coli. Cell, 2005, 122, 209-220.	13.5	590
103	Protein Synthesis upon Acute Nutrient Restriction Relies on Proteasome Function. Science, 2005, 310, 1960-1963.	6.0	292
104	In vivo analysis of the overlapping functions of DnaK and trigger factor. EMBO Reports, 2004, 5, 195-200.	2.0	163
105	Cellular Toxicity of Polyglutamine Expansion Proteins. Molecular Cell, 2004, 15, 95-105.	4.5	395
106	Function of Trigger Factor and DnaK in Multidomain Protein Folding. Cell, 2004, 117, 199-209.	13.5	206
107	Molecular Chaperones Hsp90 and Hsp70 Deliver Preproteins to the Mitochondrial Import Receptor Tom70. Cell, 2003, 112, 41-50.	13.5	753
108	Hsp90. Journal of Cell Biology, 2001, 154, 267-274.	2.3	783

#	Article	IF	Citations
109	Dual Function of Protein Confinement in Chaperonin-Assisted Protein Folding. Cell, 2001, 107, 223-233.	13.5	278
110	Geldanamycin activates a heat shock response and inhibits huntingtin aggregation in a cell culture model of Huntington's disease. Human Molecular Genetics, 2001, 10, 1307-1315.	1.4	396
111	Hsp70 and Hsp40 chaperones can inhibit self-assembly of polyglutamine proteins into amyloid-like fibrils. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 7841-7846.	3.3	609
112	Co-translational domain folding as the structural basis for the rapid de novo folding of firefly luciferase. Nature Structural Biology, 1999, 6, 697-705.	9.7	172
113	Polypeptide Flux through Bacterial Hsp70. Cell, 1999, 97, 755-765.	13.5	399
114	Recombination of protein domains facilitated by co-translational folding in eukaryotes. Nature, 1997, 388, 343-349.	13.7	385
115	In Vivo Observation of Polypeptide Flux through the Bacterial Chaperonin System. Cell, 1997, 90, 491-500.	13.5	338
116	Significant hydrogen exchange protection in GroELâ€bound DHFR is maintained during iterative rounds of substrate cycling. Protein Science, 1996, 5, 2506-2513.	3.1	70
117	Protein folding in the central cavity of the GroELâ€“GroES chaperonin complex. Nature, 1996, 379, 420-426.	13.7	370
118	Molecular chaperones in cellular protein folding. Nature, 1996, 381, 571-580.	13.7	3,443
119	Identification of GroEL as a constituent of an mRNA-protection complex in Escherichia coli. Molecular Microbiology, 1995, 16, 1259-1268.	1.2	54
120	The Thermosome of <i>Thermoplasma acidophilum</i> and Its Relationship to the Eukaryotic Chaperonin TRiC. FEBS Journal, 1995, 227, 848-856.	0.2	4
121	Folding of nascent polypeptide chains in a high molecular mass assembly with molecular chaperones. Nature, 1994, 370, 111-117.	13.7	653
122	Conformation of GroEL-bound Î±-lactalbumin probed by mass spectrometry. Nature, 1994, 372, 646-651.	13.7	221
123	The ATP hydrolysis-dependent reaction cycle of the Escherichia coli Hsp70 system DnaK, DnaJ, and GrpE.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 10345-10349.	3.3	497
124	Identification of nucleotide-binding regions in the chaperonin proteins GroEL and GroES. Nature, 1993, 366, 279-282.	13.7	103
125	A comment on: â€˜The aromatic amino acid content of the bacterial chaperone protein groEL (cpn60): Evidence for the presence of a single tryptophanâ€™, by N.C. Price, S.M. Kelly, S. Wood and A. auf der Mauer (1991) FEBS Lett. 292, 9-12. FEBS Letters, 1993, 320, 83-84.	1.3	19
126	Protein Folding in the Cell: The Role of Molecular Chaperones Hsp70 and Hsp60. Annual Review of Biophysics and Biomolecular Structure, 1992, 21, 293-322.	18.3	305

#	Article	IF	Citations
127	Successive action of DnaK, DnaJ and GroEL along the pathway of chaperone-mediated protein folding. Nature, 1992, 356, 683-689.	13.7	992