F Ulrich Hartl

List of Publications by Year in Descending Order

130 papers	24,349 citations	66 h-index	138 g-index
138 ext. papers	28,091 ext. citations	25.5 avg, IF	7.5 L-index

#	Paper	IF	Citations
130	Gel-like inclusions of C-terminal fragments of TDP-43 sequester stalled proteasomes in neurons.. *EMBO Reports*, **2022**, e53890	6.5	1
129	The chaperone Clusterin in neurodegeneration-friend or foe?. *BioEssays*, **2022**, e2100287	4.1	1
128	Scaffolding protein CcmM directs multiprotein phase separation in □carboxysome biogenesis. *Nature Structural and Molecular Biology*, **2021**, 28, 909-922	17.6	3
127	A new way of D/Ealing with protein misfolding. *Molecular Cell*, **2021**, 81, 4114-4115	17.6	0
126	The Hsc70 disaggregation machinery removes monomer units directly from □synuclein fibril ends. *Nature Communications*, **2021**, 12, 5999	17.4	2
125	In situ architecture of neuronal □Synuclein inclusions. *Nature Communications*, **2021**, 12, 2110	17.4	24
124	Multiple pathways of toxicity induced by dipeptide repeat aggregates and GC RNA in a cellular model. *ELife*, **2021**, 10,	8.9	2
123	Bacterial RF3 senses chaperone function in co-translational folding. *Molecular Cell*, **2021**, 81, 2914-2928.e7	17.6	2
122	The extracellular chaperone Clusterin enhances Tau aggregate seeding in a cellular model. *Nature Communications*, **2021**, 12, 4863	17.4	8
121	Fluc-EGFP reporter mice reveal differential alterations of neuronal proteostasis in aging and disease. *EMBO Journal*, **2021**, 40, e107260	13	5
120	Chaperone Machineries of Rubisco - The Most Abundant Enzyme. *Trends in Biochemical Sciences*, **2020**, 45, 748-763	10.3	16
119	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	11.5	15
118	Cell-to-cell transmission of C9orf72 poly-(Gly-Ala) triggers key features of ALS/FTD. *EMBO Journal*, **2020**, 39, e102811	13	27
117	Efficient Catalysis of Protein Folding by GroEL/ES of the Obligate Chaperonin Substrate MetF. *Journal of Molecular Biology*, **2020**, 432, 2304-2318	6.5	8
116	An inventory of interactors of the human HSP60/HSP10 chaperonin in the mitochondrial matrix space. *Cell Stress and Chaperones*, **2020**, 25, 407-416	4	8
115	Amplifiers co-translationally enhance CFTR biosynthesis via PCBP1-mediated regulation of CFTR mRNA. *Journal of Cystic Fibrosis*, **2020**, 19, 733-741	4.1	22
114	Bacterial Hsp70 resolves misfolded states and accelerates productive folding of a multi-domain protein. *Nature Communications*, **2020**, 11, 365	17.4	43

113	Structure and conformational cycle of a bacteriophage-encoded chaperonin. *PLoS ONE*, **2020**, 15, e0230090	3.7	6
112	Mitochondria and friends - a special issue in honor of Walter Neupert (1939-2019). *Biological Chemistry*, **2020**, 401, 643-644	4.5	
111	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	11.5	52
110	Dual Functions of a Rubisco Activase in Metabolic Repair and Recruitment to Carboxysomes. *Cell*, **2020**, 183, 457-473.e20	56.2	9
109	Sis1 potentiates the stress response to protein aggregation and elevated temperature. *Nature Communications*, **2020**, 11, 6271	17.4	11
108	Functional Modules of the Proteostasis Network. *Cold Spring Harbor Perspectives in Biology*, **2020**, 12,	10.2	57
107	Recent advances in understanding catalysis of protein folding by molecular chaperones. *FEBS Letters*, **2020**, 594, 2770-2781	3.8	37
106	Rubisco condensate formation by CcmM in carboxysome biogenesis. *Nature*, **2019**, 566, 131-135	50.4	102
105	Structure and function of Vms1 and Arb1 in RQC and mitochondrial proteome homeostasis. *Nature*, **2019**, 570, 538-542	50.4	35
104	A protein quality control pathway regulated by linear ubiquitination. *EMBO Journal*, **2019**, 38,	13	22
103	Chaperone Function of Hgh1 in the Biogenesis of Eukaryotic Elongation Factor 2. *Molecular Cell*, **2019**, 74, 88-100.e9	17.6	7
102	The proteostasis network and its decline in ageing. *Nature Reviews Molecular Cell Biology*, **2019**, 20, 421-485	4.7	391
101	The nucleolus functions as a phase-separated protein quality control compartment. *Science*, **2019**, 365, 342-347	33.3	185
100	The Hsp70 Chaperone System Stabilizes a Thermo-sensitive Subproteome in E. coli. *Cell Reports*, **2019**, 28, 1335-1345.e6	10.6	20
99	Improved recombinant expression and purification of functional plant Rubisco. *FEBS Letters*, **2019**, 593, 611-621	3.8	20
98	In Situ Structure of Neuronal C9orf72 Poly-GA Aggregates Reveals Proteasome Recruitment. *Cell*, **2018**, 172, 696-705.e12	56.2	196
97	High capacity of the endoplasmic reticulum to prevent secretion and aggregation of amyloidogenic proteins. *EMBO Journal*, **2018**, 37, 337-350	13	21
96	GroEL Ring Separation and Exchange in the Chaperonin Reaction. *Cell*, **2018**, 172, 605-617.e11	56.2	33

95	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	11.5	40
94	Pathway of Actin Folding Directed by the Eukaryotic Chaperonin TRiC. *Cell*, **2018**, 174, 1507-1521.e16	56.2	36
93	Pathways of cellular proteostasis in aging and disease. *Journal of Cell Biology*, **2018**, 217, 51-63	7.3	367
92	Biogenesis and Metabolic Maintenance of Rubisco. *Annual Review of Plant Biology*, **2017**, 68, 29-60	30.7	126
91	Protein Misfolding Diseases. *Annual Review of Biochemistry*, **2017**, 86, 21-26	29.1	224
90	Cytosolic Protein Vms1 Links Ribosome Quality Control to Mitochondrial and Cellular Homeostasis. *Cell*, **2017**, 171, 890-903.e18	56.2	86
89	Unfolding the chaperone story. *Molecular Biology of the Cell*, **2017**, 28, 2919-2923	3.5	6
88	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	3.4	11
87	In Situ Architecture and Cellular Interactions of PolyQ Inclusions. *Cell*, **2017**, 171, 179-187.e10	56.2	177
86	Mechanism of Enzyme Repair by the AAA Chaperone Rubisco Activase. *Molecular Cell*, **2017**, 67, 744-756.e6	17.6	30
85	Plant RuBisCo assembly in with five chloroplast chaperones including BSD2. *Science*, **2017**, 358, 1272-1278	33.3	112
84	Rubisco Activases: AAA+ Chaperones Adapted to Enzyme Repair. *Frontiers in Molecular Biosciences*, **2017**, 4, 20	5.6	38
83	Soluble Oligomers of PolyQ-Expanded Huntingtin Target a Multiplicity of Key Cellular Factors. *Molecular Cell*, **2016**, 63, 951-64	17.6	115
82	The formation, function and regulation of amyloids: insights from structural biology. *Journal of Internal Medicine*, **2016**, 280, 164-76	10.8	32
81	In vivo aspects of protein folding and quality control. *Science*, **2016**, 353, aac4354	33.3	726
80	Cytoplasmic protein aggregates interfere with nucleocytoplasmic transport of protein and RNA. *Science*, **2016**, 351, 173-6	33.3	267
79	Failure of RQC machinery causes protein aggregation and proteotoxic stress. *Nature*, **2016**, 531, 191-5	50.4	129
78	Structure of human heat-shock transcription factor 1 in complex with DNA. *Nature Structural and Molecular Biology*, **2016**, 23, 140-6	17.6	62

77	The GroEL-GroES Chaperonin Machine: A Nano-Cage for Protein Folding. *Trends in Biochemical Sciences*, **2016**, 41, 62-76	10.3	205
76	Susan Lee Lindquist (1949-2016)-pioneer in the study of cellular protein folding and disease. *EMBO Journal*, **2016**, 35, 2626-2627	13	1
75	Cellular Homeostasis and Aging. *Annual Review of Biochemistry*, **2016**, 85, 1-4	29.1	70
74	Structure and mechanism of the Rubisco-assembly chaperone Raf1. *Nature Structural and Molecular Biology*, **2015**, 22, 720-8	17.6	45
73	Chaperonin-Assisted Protein Folding: Relative Population of Asymmetric and Symmetric GroEL:GroES Complexes. *Journal of Molecular Biology*, **2015**, 427, 2244-55	6.5	29
72	Widespread Proteome Remodeling and Aggregation in Aging C. elegans. *Cell*, **2015**, 161, 919-32	56.2	333
71	Degradation of potent Rubisco inhibitor by selective sugar phosphatase. *Nature Plants*, **2015**, 1, 14002	11.5	30
70	Role of auxiliary proteins in Rubisco biogenesis and function. *Nature Plants*, **2015**, 1, 15065	11.5	68
69	Proteotoxic stress and ageing triggers the loss of redox homeostasis across cellular compartments. *EMBO Journal*, **2015**, 34, 2334-49	13	63
68	Structural Analysis of the Rubisco-Assembly Chaperone RbcX-II from Chlamydomonas reinhardtii. *PLoS ONE*, **2015**, 10, e0135448	3.7	11
67	Opposing effects of folding and assembly chaperones on evolvability of Rubisco. *Nature Chemical Biology*, **2015**, 11, 148-55	11.7	67
66	Action of the Hsp70 chaperone system observed with single proteins. *Nature Communications*, **2015** , 6, 6307	17.4	46
65	Role of small subunit in mediating assembly of red-type form I Rubisco. *Journal of Biological Chemistry*, **2015**, 290, 1066-74	5.4	23
64	Sugarcoating ER Stress. *Cell*, **2014**, 156, 1125-1127	56.2	20
63	Interplay of acetyltransferase EP300 and the proteasome system in regulating heat shock transcription factor 1. *Cell*, **2014**, 156, 975-85	56.2	106
62	Active cage mechanism of chaperonin-assisted protein folding demonstrated at single-molecule level. *Journal of Molecular Biology*, **2014**, 426, 2739-54	6.5	41
61	GroEL/ES chaperonin modulates the mechanism and accelerates the rate of TIM-barrel domain folding. *Cell*, **2014**, 157, 922-934	56.2	92
60	Proteostasis impairment in protein-misfolding and -aggregation diseases. *Trends in Cell Biology*, **2014**, 24, 506-14	18.3	418

59	ER stress-induced eIF2-alpha phosphorylation underlies sensitivity of striatal neurons to pathogenic huntingtin. *PLoS ONE*, **2014**, 9, e90803	3.7	59
58	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, 18219-24	11.5	38
57	Soluble forms of polyQ-expanded huntingtin rather than large aggregates cause endoplasmic reticulum stress. *Nature Communications*, **2013**, 4, 2753	17.4	122
56	The first chaperonin. *Nature Reviews Molecular Cell Biology*, **2013**, 14, 611	48.7	3
55	PolyQ proteins interfere with nuclear degradation of cytosolic proteins by sequestering the Sis1p chaperone. *Cell*, **2013**, 154, 134-45	56.2	255
54	Molecular chaperone functions in protein folding and proteostasis. *Annual Review of Biochemistry*, **2013**, 82, 323-55	29.1	937
53	DnaK functions as a central hub in the E. coli chaperone network. *Cell Reports*, **2012**, 1, 251-64	10.6	233
52	Quantitative proteomics reveals that Hsp90 inhibition preferentially targets kinases and the DNA damage response. *Molecular and Cellular Proteomics*, **2012**, 11, M111.014654	7.6	77
51	Chaperonin cofactors, Cpn10 and Cpn20, of green algae and plants function as hetero-oligomeric ring complexes. *Journal of Biological Chemistry*, **2012**, 287, 20471-81	5.4	39
50	Structure of green-type Rubisco activase from tobacco. *Nature Structural and Molecular Biology*, **2011**, 18, 1366-70	17.6	89
49	Chaperone-assisted protein folding: the path to discovery from a personal perspective. *Nature Medicine*, **2011**, 17, 1206-10	50.5	34
48	Amyloid-like aggregates sequester numerous metastable proteins with essential cellular functions. *Cell*, **2011**, 144, 67-78	56.2	520
47	Molecular chaperones in protein folding and proteostasis. *Nature*, **2011**, 475, 324-32	50.4	2147
46	Structure and function of the AAA+ protein CbbX, a red-type Rubisco activase. *Nature*, **2011**, 479, 194-9	50.4	117
45	Firefly luciferase mutants as sensors of proteome stress. *Nature Methods*, **2011**, 8, 879-84	21.6	125
44	Crystal structure of a chaperone-bound assembly intermediate of form I Rubisco. *Nature Structural and Molecular Biology*, **2011**, 18, 875-80	17.6	50
43	Coupled chaperone action in folding and assembly of hexadecameric Rubisco. *Nature*, **2010**, 463, 197-202	50.4	143
42	Chaperonin-catalyzed rescue of kinetically trapped states in protein folding. *Cell*, **2010**, 142, 112-22	56.2	111

41	Converging concepts of protein folding in vitro and in vivo. *Nature Structural and Molecular Biology*, **2009**, 16, 574-81	17.6	827
40	The native 3D organization of bacterial polysomes. *Cell*, **2009**, 136, 261-71	56.2	190
39	Chaperone-assisted protein folding in health and disease. *FASEB Journal*, **2009**, 23, 195.1	0.9	
38	Essential role of the chaperonin folding compartment in vivo. *EMBO Journal*, **2008**, 27, 1458-68	13	58
37	The Thermosome of Thermoplasma acidophilum and Its Relationship to the Eukaryotic Chaperonin TRiC. *FEBS Journal*, **2008**, 227, 848-856		2
36	Monitoring protein conformation along the pathway of chaperonin-assisted folding. *Cell*, **2008**, 133, 142-53	56.2	139
35	Structural basis for the cooperation of Hsp70 and Hsp110 chaperones in protein folding. *Cell*, **2008**, 133, 1068-79	56.2	195
34	Structure and function of RbcX, an assembly chaperone for hexadecameric Rubisco. *Cell*, **2007**, 129, 1189-200	56.2	107
33	CHAPERONE-ASSISTED PROTEIN FOLDING IN THE CYTOSOL. *FASEB Journal*, **2007**, 21, A153	0.9	
32	Structural features of the GroEL-GroES nano-cage required for rapid folding of encapsulated protein. *Cell*, **2006**, 125, 903-14	56.2	244
31	Chaperonin TRiC promotes the assembly of polyQ expansion proteins into nontoxic oligomers. *Molecular Cell*, **2006**, 23, 887-97	17.6	225
30	Real-time observation of trigger factor function on translating ribosomes. *Nature*, **2006**, 444, 455-60	50.4	175
29	Molecular chaperones of the Hsp110 family act as nucleotide exchange factors of Hsp70s. *EMBO Journal*, **2006**, 25, 2519-28	13	270
28	Proteome-wide analysis of chaperonin-dependent protein folding in Escherichia coli. *Cell*, **2005**, 122, 209-20	56.2	515
27	Protein synthesis upon acute nutrient restriction relies on proteasome function. *Science*, **2005**, 310, 1960-3	53.3	253
26	In vivo analysis of the overlapping functions of DnaK and trigger factor. *EMBO Reports*, **2004**, 5, 195-200	6.5	140
25	Cellular toxicity of polyglutamine expansion proteins: mechanism of transcription factor deactivation. *Molecular Cell*, **2004**, 15, 95-105	17.6	349
24	Function of trigger factor and DnaK in multidomain protein folding: increase in yield at the expense of folding speed. *Cell*, **2004**, 117, 199-209	56.2	172

23	Molecular chaperones Hsp90 and Hsp70 deliver preproteins to the mitochondrial import receptor Tom70. *Cell*, **2003**, 112, 41-50	56.2	655
22	Geldanamycin activates a heat shock response and inhibits huntingtin aggregation in a cell culture model of Huntington‹ disease. *Human Molecular Genetics*, **2001**, 10, 1307-15	5.6	346
21	Hsp90: a specialized but essential protein-folding tool. *Journal of Cell Biology*, **2001**, 154, 267-73	7.3	712
20	Dual function of protein confinement in chaperonin-assisted protein folding. *Cell*, **2001**, 107, 223-33	56.2	253
19	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, 7841-6	11.5	541
18	Co-translational domain folding as the structural basis for the rapid de novo folding of firefly luciferase. *Nature Structural Biology*, **1999**, 6, 697-705		145
17	Polypeptide flux through bacterial Hsp70: DnaK cooperates with trigger factor in chaperoning nascent chains. *Cell*, **1999**, 97, 755-65	56.2	344
16	Recombination of protein domains facilitated by co-translational folding in eukaryotes. *Nature*, **1997**, 388, 343-9	50.4	343
15	In vivo observation of polypeptide flux through the bacterial chaperonin system. *Cell*, **1997**, 90, 491-500	56.2	305
14	Significant hydrogen exchange protection in GroEL-bound DHFR is maintained during iterative rounds of substrate cycling. *Protein Science*, **1996**, 5, 2506-13	6.3	66
13	Protein folding in the central cavity of the GroEL-GroES chaperonin complex. *Nature*, **1996**, 379, 420-6	50.4	341
12	Molecular chaperones in cellular protein folding. *Nature*, **1996**, 381, 571-9	50.4	3109
11	Identification of GroEL as a constituent of an mRNA-protection complex in Escherichia coli. *Molecular Microbiology*, **1995**, 16, 1259-68	4.1	48
10	Folding of nascent polypeptide chains in a high molecular mass assembly with molecular chaperones. *Nature*, **1994**, 370, 111-7	50.4	598
9	Conformation of GroEL-bound alpha-lactalbumin probed by mass spectrometry. *Nature*, **1994**, 372, 646-51	50.4	202
8	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, 10345-9	11.5	443
7	Identification of nucleotide-binding regions in the chaperonin proteins GroEL and GroES. *Nature*, **1993**, 366, 279-82	50.4	98
6	A comment on: ŒThe aromatic amino acid content of the bacterial chaperone protein groEL (cpn60): evidence for the presence of a single tryptophanŒ by N.C. Price, S.M. Kelly, S. Wood and A. auf der Mauer (1991) FEBS Lett. 292, 9-12. *FEBS Letters*, **1993**, 320, 83-4; discussion 85	3.8	17

5	Protein folding in the cell: the role of molecular chaperones Hsp70 and Hsp60. *Annual Review of Biophysics and Biomolecular Structure*, **1992**, 21, 293-322		269
4	Successive action of DnaK, DnaJ and GroEL along the pathway of chaperone-mediated protein folding. *Nature*, **1992**, 356, 683-9	50.4	905
3	Dual Role of a Rubisco Activase in Metabolic Repair and Carboxysome Organization		3
2	Protein Folding in Vivo1-9		
1	Gel-like inclusions of C-terminal fragments of TDP-43 sequester and inhibit proteasomes in neurons		1