Heather P Harding

List of Publications by Year
in descending order

103 papers	44,306 citations	10389 72 h-index	28297 105 g-index
117 all docs	117 docs citations	117 times ranked	35498 citing authors

#	Article	IF	Citations
1	Protein translation and folding are coupled by an endoplasmic-reticulum-resident kinase. Nature, 1999, 397, 271-274.	27.8	2,856
2	An Integrated Stress Response Regulates Amino Acid Metabolism and Resistance to Oxidative Stress. Molecular Cell, 2003, 11, 619-633.	9.7	2,791
3	Regulated Translation Initiation Controls Stress-Induced Gene Expression in Mammalian Cells. Molecular Cell, 2000, 6, 1099-1108.	9.7	2,743
4	Coupling of Stress in the ER to Activation of JNK Protein Kinases by Transmembrane Protein Kinase IRE1. Science, 2000, 287, 664-666.	12.6	2,595
5	IRE1 couples endoplasmic reticulum load to secretory capacity by processing the XBP-1 mRNA. Nature, 2002, 415, 92-96.	27.8	2,452
6	Dynamic interaction of BiP and ER stress transducers in the unfolded-protein response. Nature Cell Biology, 2000, 2, 326-332.	10.3	2,397
7	Perk Is Essential for Translational Regulation and Cell Survival during the Unfolded Protein Response. Molecular Cell, 2000, 5, 897-904.	9.7	1,746
8	CHOP induces death by promoting protein synthesis and oxidation in the stressed endoplasmic reticulum. Genes and Development, 2004, 18, 3066-3077.	5.9	1,648
9	Somatic<i>CALR</i>Mutations in Myeloproliferative Neoplasms with Nonmutated<i>JAK2</i>. New England Journal of Medicine, 2013, 369, 2391-2405.	27.0	1,556
10	A Selective Inhibitor of eIF2Î± Dephosphorylation Protects Cells from ER Stress. Science, 2005, 307, 935-939.	12.6	1,277
11	Feedback Inhibition of the Unfolded Protein Response by GADD34-Mediated Dephosphorylation of eIF2Î±. Journal of Cell Biology, 2001, 153, 1011-1022.	5.2	1,187
12	Diabetes Mellitus and Exocrine Pancreatic Dysfunction in Perkâˆ'/âˆ' Mice Reveals a Role for Translational Control in Secretory Cell Survival. Molecular Cell, 2001, 7, 1153-1163.	9.7	1,081
13	GCN2 Kinase in T Cells Mediates Proliferative Arrest and Anergy Induction in Response to Indoleamine 2,3-Dioxygenase. Immunity, 2005, 22, 633-642.	14.3	1,077
14	Transcriptional and Translational Control in the Mammalian Unfolded Protein Response. Annual Review of Cell and Developmental Biology, 2002, 18, 575-599.	9.4	838
15	Translation reinitiation at alternative open reading frames regulates gene expression in an integrated stress response. Journal of Cell Biology, 2004, 167, 27-33.	5.2	788
16	The endoplasmic reticulum is the site of cholesterol-induced cytotoxicity in macrophages. Nature Cell Biology, 2003, 5, 781-792.	10.3	780
17	Targeting the unfolded protein response in disease. Nature Reviews Drug Discovery, 2013, 12, 703-719.	46.4	765
18	Cloning of mammalian Ire1 reveals diversity in the ER stress responses. EMBO Journal, 1998, 17, 5708-5717.	7.8	701

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19	ER stress-regulated translation increases tolerance to extreme hypoxia and promotes tumor growth. EMBO Journal, 2005, 24, 3470-3481.	7.8	634
20	Differential Activation of Peroxisome Proliferator-activated Receptors by Eicosanoids. Journal of Biological Chemistry, 1995, 270, 23975-23983.	3.4	609
21	Translational Repression Mediates Activation of Nuclear Factor Kappa B by Phosphorylated Translation Initiation Factor 2. Molecular and Cellular Biology, 2004, 24, 10161-10168.	2.3	566
22	Compartment-specific perturbation of protein handling activates genes encoding mitochondrial chaperones. Journal of Cell Science, 2004, 117, 4055-4066.	2.0	522
23	Endoplasmic Reticulum Stress and the Unfolded Protein Response in Cellular Models of Parkinson's Disease. Journal of Neuroscience, 2002, 22, 10690-10698.	3.6	515
24	Role of ERO1-Î±â€“mediated stimulation of inositol 1,4,5-triphosphate receptor activity in endoplasmic reticulum stressâ€“induced apoptosis. Journal of Cell Biology, 2009, 186, 783-792.	5.2	499
25	The molecular basis for selective inhibition of unconventional mRNA splicing by an IRE1-binding small molecule. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E869-78.	7.1	476
26	Selective Inhibition of a Regulatory Subunit of Protein Phosphatase 1 Restores Proteostasis. Science, 2011, 332, 91-94.	12.6	475
27	Activating Transcription Factor 3 Is Integral to the Eukaryotic Initiation Factor 2 Kinase Stress Response. Molecular and Cellular Biology, 2004, 24, 1365-1377.	2.3	436
28	Stress-induced gene expression requires programmed recovery from translational repression. EMBO Journal, 2003, 22, 1180-1187.	7.8	409
29	Endoplasmic Reticulum Stress and the Development of Diabetes. Diabetes, 2002, 51, S455-S461.	0.6	408
30	Dephosphorylation of Translation Initiation Factor 2Î± Enhances Glucose Tolerance and Attenuates Hepatosteatosis in Mice. Cell Metabolism, 2008, 7, 520-532.	16.2	389
31	Activating Transcription Factor 4 Is Translationally Regulated by Hypoxic Stress. Molecular and Cellular Biology, 2004, 24, 7469-7482.	2.3	381
32	Translational control of hippocampal synaptic plasticity and memory by the eIF2Î± kinase GCN2. Nature, 2005, 436, 1166-1170.	27.8	344
33	Cytoprotection by pre-emptive conditional phosphorylation of translation initiation factor 2. EMBO Journal, 2004, 23, 169-179.	7.8	337
34	GDF15 mediates the effects of metformin on body weight and energy balance. Nature, 2020, 578, 444-448.	27.8	326
35	Ubiquitin-Like Protein 5 Positively Regulates Chaperone Gene Expression in the Mitochondrial Unfolded Protein Response. Genetics, 2006, 174, 229-239.	2.9	319
36	GDF15 Provides an Endocrine Signal of Nutritional Stress in Mice and Humans. Cell Metabolism, 2019, 29, 707-718.e8.	16.2	286

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37	Inhibition of a constitutive translation initiation factor 2Î± phosphatase, CReP, promotes survival of stressed cells. Journal of Cell Biology, 2003, 163, 767-775.	5.2	282
38	Perk-Dependent Translational Regulation Promotes Tumor Cell Adaptation and Angiogenesis in Response to Hypoxic Stress. Molecular and Cellular Biology, 2006, 26, 9517-9532.	2.3	264
39	Partial restoration of protein synthesis rates by the small molecule ISRIB prevents neurodegeneration without pancreatic toxicity. Cell Death and Disease, 2015, 6, e1672-e1672.	6.3	260
40	Activation of GCN2 in UV-Irradiated Cells Inhibits Translation. Current Biology, 2002, 12, 1279-1286.	3.9	245
41	Adaptive suppression of the ATF4â€"CHOP branch of the unfolded protein response by toll-like receptor signalling. Nature Cell Biology, 2009, 11, 1473-1480.	10.3	241
42	Mammalian stress granules represent sites of accumulation of stalled translation initiation complexes. American Journal of Physiology - Cell Physiology, 2003, 284, C273-C284.	4.6	235
43	Ppp1r15 gene knockout reveals an essential role for translation initiation factor 2 alpha (eIF2Î±) dephosphorylation in mammalian development. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 1832-1837.	7.1	230
44	Cotranslocational Degradation Protects the Stressed Endoplasmic Reticulum from Protein Overload. Cell, 2006, 126, 727-739.	28.9	221
45	Brain ischemia and reperfusion activates the eukaryotic initiation factor 2Î± kinase, PERK. Journal of Neurochemistry, 2001, 77, 1418-1421.	3.9	209
46	ERO1-Î², a pancreas-specific disulfide oxidase, promotes insulin biogenesis and glucose homeostasis. Journal of Cell Biology, 2010, 188, 821-832.	5.2	208
47	Mutations in a translation initiation factor identify the target of a memory-enhancing compound. Science, 2015, 348, 1027-1030.	12.6	195
48	Transmission of cell stress from endoplasmic reticulum to mitochondria. Journal of Cell Biology, 2002, 157, 1151-1160.	5.2	189
49	The GCN2 kinase biases feeding behavior to maintain amino acid homeostasis in omnivores. Cell Metabolism, 2005, 1, 273-277.	16.2	188
50	Interferon-Î³ inhibits central nervous system remyelination through a process modulated by endoplasmic reticulum stress. Brain, 2006, 129, 1306-1318.	7.6	185
51	Endoplasmic reticulum stress modulates the response of myelinating oligodendrocytes to the immune cytokine interferon-Î³. Journal of Cell Biology, 2005, 169, 603-612.	5.2	179
52	A J-Protein Co-chaperone Recruits BiP to Monomerize IRE1 and Repress the Unfolded Protein Response. Cell, 2017, 171, 1625-1637.e13.	28.9	176
53	Flavonol Activation Defines an Unanticipated Ligand-Binding Site in the Kinase-RNase Domain of IRE1. Molecular Cell, 2010, 38, 291-304.	9.7	173
54	Antiviral effect of the mammalian translation initiation factor 2Î± kinase GCN2 against RNA viruses. EMBO Journal, 2006, 25, 1730-1740.	7.8	170

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55	The integrated stress response prevents demyelination by protecting oligodendrocytes against immune-mediated damage. Journal of Clinical Investigation, 2007, 117, 448-456.	8.2	166
56	Binding of ISRIB reveals a regulatory site in the nucleotide exchange factor eIF2B. Science, 2018, 359, 1533-1536.	12.6	157
57	Role for the obesity-related <i>FTO</i> gene in the cellular sensing of amino acids. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 2557-2562.	7.1	150
58	Activation-dependent substrate recruitment by the eukaryotic translation initiation factor 2 kinase PERK. Journal of Cell Biology, 2006, 172, 201-209.	5.2	146
59	Defective ATG16L1-mediated removal of IRE1Î± drives Crohnâ€™s diseaseâ€“like ileitis. Journal of Experimental Medicine, 2017, 214, 401-422.	8.5	141
60	Inhibition of Nonsense-Mediated RNA Decay by the Tumor Microenvironment Promotes Tumorigenesis. Molecular and Cellular Biology, 2011, 31, 3670-3680.	2.3	131
61	CHOP-Dependent Stress-Inducible Expression of a Novel Form of Carbonic Anhydrase VI. Molecular and Cellular Biology, 1999, 19, 495-504.	2.3	130
62	Death Protein 5 and p53-Upregulated Modulator of Apoptosis Mediate the Endoplasmic Reticulum Stressâ€“Mitochondrial Dialog Triggering Lipotoxic Rodent and Human Î²-Cell Apoptosis. Diabetes, 2012, 61, 2763-2775.	0.6	118
63	Protein-Folding Homeostasis in the Endoplasmic Reticulum and Nutritional Regulation. Cold Spring Harbor Perspectives in Biology, 2012, 4, a013177-a013177.	5.5	95
64	ISRIB Blunts the Integrated Stress Response by Allosterically Antagonising the Inhibitory Effect of Phosphorylated eIF2 on eIF2B. Molecular Cell, 2021, 81, 88-103.e6.	9.7	93
65	The ribosomal P-stalk couples amino acid starvation to GCN2 activation in mammalian cells. ELife, 2019, 8, .	6.0	93
66	Enhanced Integrated Stress Response Promotes Myelinating Oligodendrocyte Survival in Response to Interferon-Î³. American Journal of Pathology, 2008, 173, 1508-1517.	3.8	91
67	A Small Molecule Inhibitor of Endoplasmic Reticulum Oxidation 1 (ERO1) with Selectively Reversible Thiol Reactivity. Journal of Biological Chemistry, 2010, 285, 20993-21003.	3.4	91
68	Uncoupling Proteostasis and Development in Vitro with a Small Molecule Inhibitor of the Pancreatic Endoplasmic Reticulum Kinase, PERK. Journal of Biological Chemistry, 2012, 287, 44338-44344.	3.4	91
69	Oligodendrocyte-Specific Activation of PERK Signaling Protects Mice against Experimental Autoimmune Encephalomyelitis. Journal of Neuroscience, 2013, 33, 5980-5991.	3.6	91
70	Lifetime imaging of a fluorescent protein sensor reveals surprising stability of ER thiol redox. Journal of Cell Biology, 2013, 201, 337-349.	5.2	91
71	Amino acid limitation regulatesCHOPexpression through a specific pathway independent of the unfolded protein response. FEBS Letters, 1999, 448, 211-216.	2.8	82
72	Heightened stress response in primary fibroblasts expressing mutant eIF2B genes from CACH/VWM leukodystrophy patients. Human Genetics, 2005, 118, 99-106.	3.8	77

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73	A Missense Mutation in <i>PPP1R15B</i> Causes a Syndrome Including Diabetes, Short Stature, and Microcephaly. Diabetes, 2015, 64, 3951-3962.	0.6	71
74	G-actin provides substrate-specificity to eukaryotic initiation factor 2Î± holophosphatases. ELife, 2015, 4, .	6.0	70
75	Intact protein folding in the glutathione-depleted endoplasmic reticulum implicates alternative protein thiol reductants. ELife, 2014, 3, e03421.	6.0	69
76	Bioactive small molecules reveal antagonism between the integrated stress response and sterol-regulated gene expression. Cell Metabolism, 2005, 2, 361-371.	16.2	66
77	Modulation of the Eukaryotic Initiation Factor 2 Î±-Subunit Kinase PERK by Tyrosine Phosphorylation. Journal of Biological Chemistry, 2008, 283, 469-475.	3.4	60
78	ER stress disrupts Ca2+-signaling complexes and Ca2+ regulation in secretory and muscle cells from PERK-knockout mice. Journal of Cell Science, 2006, 119, 153-161.	2.0	56
79	Physiological modulation of BiP activity by trans-protomer engagement of the interdomain linker. ELife, 2015, 4, e08961.	6.0	55
80	An intact unfolded protein response in <i>Trpt1</i> knockout mice reveals phylogenic divergence in pathways for RNA ligation. Rna, 2008, 14, 225-232.	3.5	51
81	Rapid B Cell Receptor-induced Unfolded Protein Response in Nonsecretory B Cells Correlates with Pro- Versus Antiapoptotic Cell Fate. Journal of Biological Chemistry, 2005, 280, 39762-39771.	3.4	50
82	Skeletal muscleâ€specific eukaryotic translation initiation factor 2Î± phosphorylation controls amino acid metabolism and fibroblast growth factor 21â€mediated nonâ€cellâ€autonomous energy metabolism. FASEB Journal, 2016, 30, 798-812.	0.5	48
83	Impaired Eukaryotic Translation Initiation Factor 2B Activity Specifically in Oligodendrocytes Reproduces the Pathology of Vanishing White Matter Disease in Mice. Journal of Neuroscience, 2014, 34, 12182-12191.	3.6	44
84	Translational Regulation in the Cellular Response to Biosynthetic Load on the Endoplasmic Reticulum. Cold Spring Harbor Symposia on Quantitative Biology, 2001, 66, 499-508.	1.1	42
85	PERK Activation Preserves the Viability and Function of Remyelinating Oligodendrocytes in Immune-Mediated Demyelinating Diseases. American Journal of Pathology, 2014, 184, 507-519.	3.8	40
86	Translation attenuation by PERK balances ER glycoprotein synthesis with lipid-linked oligosaccharide flux. Journal of Cell Biology, 2007, 176, 605-616.	5.2	39
87	Retarded PDI diffusion and a reductive shift in poise of the calcium depleted endoplasmic reticulum. BMC Biology, 2015, 13, 2.	3.8	39
88	Establishing a Flow Process to Coumarinâ€8â€Carbaldehydes as Important Synthetic Scaffolds. Chemistry - A European Journal, 2012, 18, 9901-9910.	3.3	37
89	Mannose-6-phosphate regulates destruction of lipid-linked oligosaccharides. Molecular Biology of the Cell, 2011, 22, 2994-3009.	2.1	30
90	Novel Function of PERK as a Mediator of Force-induced Apoptosis. Journal of Biological Chemistry, 2008, 283, 23462-23472.	3.4	27

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91	Kinetic analysis of FTO (fat mass and obesity-associated) reveals that it is unlikely to function as a sensor for 2-oxoglutarate. Biochemical Journal, 2012, 444, 183-187.	3.7	27
92	Selective inhibition of the unfolded protein response: targeting catalytic sites for Schiff base modification. Molecular BioSystems, 2013, 9, 2408.	2.9	26
93	Paradoxical Sensitivity to an Integrated Stress Response Blocking Mutation in Vanishing White Matter Cells. PLoS ONE, 2016, 11, e0166278.	2.5	25
94	A deregulated integrated stress response promotes interferonâ€Î³â€induced medulloblastoma. Journal of Neuroscience Research, 2011, 89, 1586-1595.	2.9	22
95	A Method to Quantify FRET Stoichiometry with Phasor Plot Analysis and Acceptor Lifetime Ingrowth. Biophysical Journal, 2015, 108, 999-1002.	0.5	21
96	Cargo receptor-assisted endoplasmic reticulum export of pathogenic Î±1-antitrypsin polymers. Cell Reports, 2021, 35, 109144.	6.4	19
97	PERK Activation Promotes Medulloblastoma Tumorigenesis by Attenuating Premalignant Granule Cell Precursor Apoptosis. American Journal of Pathology, 2016, 186, 1939-1951.	3.8	16
98	Dual role of the integrated stress response in medulloblastoma tumorigenesis. Oncotarget, 2016, 7, 64124-64135.	1.8	15
99	Arginine Deficiency Causes Runting in the Suckling Period by Selectively Activating the Stress Kinase GCN2. Journal of Biological Chemistry, 2011, 286, 8866-8874.	3.4	11
100	Higher-order phosphataseâ€"substrate contacts terminate the integrated stress response. Nature Structural and Molecular Biology, 2021, 28, 835-846.	8.2	11
101	ERO1-Î², a pancreas-specific disulfide oxidase, promotes insulin biogenesis and glucose homeostasis. Journal of Cell Biology, 2010, 189, 769-769.	5.2	1
102	IRE1 couples endoplasmic reticulum load to secretory capacity by processing the XBP-1 mRNA. , 0, .		1
103	Monomeric Nuclear Receptors. , 1998, , 261-279.		1