Carla M Koehler

List of Publications by Citations

66 papers	4,627 citations	37 h-index	68 g-index
70 ext. papers	5,106 ext. citations	8.5 avg, IF	5.43 L-index

#	Paper	IF	Citations
66	Importing mitochondrial proteins: machineries and mechanisms. *Cell*, **2009**, 138, 628-44	56.2	993
65	New developments in mitochondrial assembly. *Annual Review of Cell and Developmental Biology*, **2004**, 20, 309-35	12.6	270
64	PNPASE regulates RNA import into mitochondria. *Cell*, **2010**, 142, 456-67	56.2	256
63	The Tim9p-Tim10p complex binds to the transmembrane domains of the ADP/ATP carrier. *EMBO Journal*, **2002**, 21, 942-53	13	166
62	Interaction of mitochondrial targeting signals with acidic receptor domains along the protein import pathway: evidence for the "acid chain" hypothesis. *EMBO Journal*, **1998**, 17, 3886-98	13	147
61	Human deafness dystonia syndrome is caused by a defect in assembly of the DDP1/TIMM8a-TIMM13 complex. *Human Molecular Genetics*, **2002**, 11, 477-86	5.6	140
60	A role for cytochrome c and cytochrome c peroxidase in electron shuttling from Erv1. *EMBO Journal* , **2007**, 26, 4801-11	13	136
59	MTCH2/MIMP is a major facilitator of tBID recruitment to mitochondria. *Nature Cell Biology*, **2010**, 12, 553-562	23.4	134
58	How membrane proteins travel across the mitochondrial intermembrane space. *Trends in Biochemical Sciences*, **1999**, 24, 428-32	10.3	128
57	The role of the Tim8p-Tim13p complex in a conserved import pathway for mitochondrial polytopic inner membrane proteins. *Journal of Cell Biology*, **2002**, 158, 1017-27	7.3	114
56	The small Tim proteins and the twin Cx3C motif. *Trends in Biochemical Sciences*, **2004**, 29, 1-4	10.3	113
55	Mitochondrial mislocalization and altered assembly of a cluster of Barth syndrome mutant tafazzins. *Journal of Cell Biology*, **2006**, 174, 379-90	7.3	111
54	Mammalian polynucleotide phosphorylase is an intermembrane space RNase that maintains mitochondrial homeostasis. *Molecular and Cellular Biology*, **2006**, 26, 8475-87	4.8	111
53	Correcting human mitochondrial mutations with targeted RNA import. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 4840-5	11.5	96
52	Tim18p, a new subunit of the TIM22 complex that mediates insertion of imported proteins into the yeast mitochondrial inner membrane. *Molecular and Cellular Biology*, **2000**, 20, 1187-93	4.8	95
51	Protein translocation pathways of the mitochondrion. *FEBS Letters*, **2000**, 476, 27-31	3.8	86
50	A new function in translocation for the mitochondrial i-AAA protease Yme1: import of polynucleotide phosphorylase into the intermembrane space. *Molecular and Cellular Biology*, **2006**, 26, 8488-97	4.8	85

49	Redox pathways of the mitochondrion. *Antioxidants and Redox Signaling*, **2006**, 8, 813-22	8.4	84
48	The role of Hot13p and redox chemistry in the mitochondrial TIM22 import pathway. *Journal of Biological Chemistry*, **2004**, 279, 43744-51	5.4	76
47	A mutation in PNPT1, encoding mitochondrial-RNA-import protein PNPase, causes hereditary hearing loss. *American Journal of Human Genetics*, **2012**, 91, 919-27	11	64
46	Atomic structure of a toxic, oligomeric segment of SOD1 linked to amyotrophic lateral sclerosis (ALS). *Proceedings of the National Academy of Sciences of the United States of America*, **2017**, 114, 8770-8775	11.5	60
45	PNPASE and RNA trafficking into mitochondria. *Biochimica Et Biophysica Acta - Gene Regulatory Mechanisms*, **2012**, 1819, 998-1007	6	60
44	Mitochondrial Transfer by Photothermal Nanoblade Restores Metabolite Profile in Mammalian Cells. *Cell Metabolism*, **2016**, 23, 921-9	24.6	59
43	Loss of function of SLC25A46 causes lethal congenital pontocerebellar hypoplasia. *Brain*, **2016**, 139, 2877-2890	11.2	58
42	Reconstitution of the mia40-erv1 oxidative folding pathway for the small tim proteins. *Molecular Biology of the Cell*, **2009**, 20, 3481-90	3.5	57
41	A small molecule inhibitor of redox-regulated protein translocation into mitochondria. *Developmental Cell*, **2013**, 25, 81-92	10.2	56
40	Repurposing Approach Identifies Auranofin with Broad Spectrum Antifungal Activity That Targets Mia40-Erv1 Pathway. *Frontiers in Cellular and Infection Microbiology*, **2017**, 7, 4	5.9	53
39	The Tim8-Tim13 complex has multiple substrate binding sites and binds cooperatively to Tim23. *Journal of Molecular Biology*, **2008**, 382, 1144-56	6.5	53
38	The calcium-binding aspartate/glutamate carriers, citrin and aralar1, are new substrates for the DDP1/TIMM8a-TIMM13 complex. *Human Molecular Genetics*, **2004**, 13, 2101-11	5.6	52
37	Rapid degradation of mutant SLC25A46 by the ubiquitin-proteasome system results in MFN1/2-mediated hyperfusion of mitochondria. *Molecular Biology of the Cell*, **2017**, 28, 600-612	3.5	50
36	Barth syndrome mutations that cause tafazzin complex lability. *Journal of Cell Biology*, **2011**, 192, 447-62	7.3	49
35	Defining the role of oxygen tension in human neural progenitor fate. *Stem Cell Reports*, **2014**, 3, 743-57	8	48
34	Redox regulation of protein folding in the mitochondrial intermembrane space. *Biochimica Et Biophysica Acta - Molecular Cell Research*, **2009**, 1793, 139-45	4.9	48
33	Pharmacologic rescue of an enzyme-trafficking defect in primary hyperoxaluria 1. *Proceedings of the National Academy of Sciences of the United States of America*, **2014**, 111, 14406-11	11.5	45
32	Assembly of the three small Tim proteins precedes docking to the mitochondrial carrier translocase. *EMBO Reports*, **2008**, 9, 548-54	6.5	45

31	Tim54p connects inner membrane assembly and proteolytic pathways in the mitochondrion. *Journal of Cell Biology*, **2007**, 178, 1161-75	7.3	39
30	Defining functional classes of Barth syndrome mutation in humans. *Human Molecular Genetics*, **2016**, 25, 1754-70	5.6	37
29	Substrate specificity of the TIM22 mitochondrial import pathway revealed with small molecule inhibitor of protein translocation. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 9578-83	11.5	32
28	The essential function of the small Tim proteins in the TIM22 import pathway does not depend on formation of the soluble 70-kilodalton complex. *Molecular and Cellular Biology*, **2001**, 21, 6132-8	4.8	32
27	ER-mitochondria contacts: Actin dynamics at the ER control mitochondrial fission via calcium release. *Journal of Cell Biology*, **2018**, 217, 15-17	7.3	27
26	The mitochondrial import gene tomm22 is specifically required for hepatocyte survival and provides a liver regeneration model. *DMM Disease Models and Mechanisms*, **2010**, 3, 486-95	4.1	27
25	Contiguous X-chromosome deletion syndrome encompassing the BTK, TIMM8A, TAF7L, and DRP2 genes. *Journal of Clinical Immunology*, **2007**, 27, 640-6	5.7	26
24	A mitochondrial rhomboid protease. *Developmental Cell*, **2003**, 4, 769-70	10.2	25
23	The TCL1 oncoprotein binds the RNase PH domains of the PNPase exoribonuclease without affecting its RNA degrading activity. *Cancer Letters*, **2007**, 248, 198-210	9.9	22
22	Osm1 facilitates the transfer of electrons from Erv1 to fumarate in the redox-regulated import pathway in the mitochondrial intermembrane space. *Molecular Biology of the Cell*, **2017**, 28, 2773-2785	3.5	21
21	P53 Regulates Rapid Apoptosis in Human Pluripotent Stem Cells. *Journal of Molecular Biology*, **2016** , 428, 1465-75	6.5	17
20	Role of twin Cys-Xaa9-Cys motif cysteines in mitochondrial import of the cytochrome C oxidase biogenesis factor Cmc1. *Journal of Biological Chemistry*, **2012**, 287, 31258-69	5.4	16
19	FAM210B is an erythropoietin target and regulates erythroid heme synthesis by controlling mitochondrial iron import and ferrochelatase activity. *Journal of Biological Chemistry*, **2018**, 293, 19797-19811	5.4	16
18	Stendomycin selectively inhibits TIM23-dependent mitochondrial protein import. *Nature Chemical Biology*, **2017**, 13, 1239-1244	11.7	15
17	Mia40 Protein Serves as an Electron Sink in the Mia40-Erv1 Import Pathway. *Journal of Biological Chemistry*, **2015**, 290, 20804-20814	5.4	10
16	In vitro analysis of yeast mitochondrial protein import. *Current Protocols in Cell Biology*, **2007**, Chapter 11, Unit 11.19	2.3	10
15	Mitochondrial import of the long and short isoforms of human uncoupling protein 3. *FEBS Letters*, **2000**, 465, 135-40	3.8	10
14	Mitochondria-targeted RNA import. *Methods in Molecular Biology*, **2015**, 1264, 107-16	1.4	9

List of Publications

13	The Taz1p transacylase is imported and sorted into the outer mitochondrial membrane via a membrane anchor domain. *Eukaryotic Cell*, **2013**, 12, 1600-8		9
12	PNPase knockout results in mtDNA loss and an altered metabolic gene expression program. *PLoS ONE*, **2018**, 13, e0200925	3.7	7
11	Adaptation of a Genetic Screen Reveals an Inhibitor for Mitochondrial Protein Import Component Tim44. *Journal of Biological Chemistry*, **2017**, 292, 5429-5442	5.4	6
10	Mitochondrial Calcium Uniporter Deficiency in Zebrafish Causes Cardiomyopathy With Arrhythmia. *Frontiers in Physiology*, **2020**, 11, 617492	4.6	5
9	A Chemical Biology Approach to Model Pontocerebellar Hypoplasia Type 1B (PCH1B). *ACS Chemical Biology*, **2018**, 13, 3000-3010	4.9	5
8	The great escape: Mgr2 of the mitochondrial TIM23 translocon is a gatekeeper Tasked with releasing membrane proteins. *Molecular Cell*, **2014**, 56, 613-4	17.6	4
7	Tmem14c Plays An Essential Role In Mitochondrial Heme Metabolism. *Blood*, **2013**, 122, 427-427	2.2	1
6	Aim32 is a dual-localized 2Fe-2S mitochondrial protein that functions in redox quality control. *Journal of Biological Chemistry*, **2021**, 297, 101135	5.4	1
5	Structural basis for the mechanisms of human presequence protease conformational switch and substrate recognition.. *Nature Communications*, **2022**, 13, 1833	17.4	0
4	The Function of TIM22 in the Insertion of Inner Membrane Proteins in Mitochondria. *The Enzymes*, **2007**, 367-385	2.3	
3	Tim54p mediates the assembly of the AAA protease Yme1p. *FASEB Journal*, **2006**, 20, A494	0.9	
2	Altered Membrane Association and Complex Formation of Tafazzin in the Absence of Cardiolipin. *FASEB Journal*, **2006**, 20, A59	0.9	
1	Megaloblastic Anemia and Mitochondriopathy Caused by a Homozygous Mutation in Sideroflexin-4.. *Blood*, **2012**, 120, 79-79	2.2	