Edmund R S Kunji

List of Publications by Year
in descending order

118	9,541	36303	39675
papers	citations	51 h-index	94 g-index

132	132	132	9633
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Key features of inhibitor binding to the human mitochondrial pyruvate carrier hetero-dimer. Molecular Metabolism, 2022, 60, 101469.	6.5	8
2	TMEM63C mutations cause mitochondrial morphology defects and underlie hereditary spastic paraplegia. Brain, 2022, 145, 3095-3107.	7.6	17
3	Pathogenic variants of the mitochondrial aspartate/glutamate carrier causing citrin deficiency. Trends in Endocrinology and Metabolism, 2022, 33, 539-553.	7.1	8
4	Substrate binding in the mitochondrial ADP/ATP carrier is a step-wise process guiding the structural changes in the transport cycle. Nature Communications, 2022, 13, .	12.8	17
5	Activating ligands of Uncoupling protein 1 identified by rapid membrane protein thermostability shift analysis. Molecular Metabolism, 2022, 62, 101526.	6.5	6
6	Characterization of drug-induced human mitochondrial ADP/ATP carrier inhibition. Theranostics, 2021, 11, 5077-5091.	10.0	12
7	Structural Mechanism of Transport of Mitochondrial Carriers. Annual Review of Biochemistry, 2021, 90, 535-558.	11.1	31
8	Exome sequencing identifies a disease variant of the mitochondrial ATPâ€Mg/Pi carrier SLC25A25 in two families with kidney stones. Molecular Genetics & Genomic Medicine, 2021, , e1749.	1.2	6
9	Structure, substrate binding and symmetry of the mitochondrial ADP/ATP carrier in its matrix-open state. Biophysical Journal, 2021, 120, 5187-5195.	0.5	5
10	The SLC25 Mitochondrial Carrier Family: Structure and Mechanism. Trends in Biochemical Sciences, 2020, 45, 244-258.	7.5	197
11	A Single Cysteine Residue in the Translocation Pathway of the Mitosomal ADP/ATP Carrier from Cryptosporidium parvum Confers a Broad Nucleotide Specificity. International Journal of Molecular Sciences, 2020, 21, 8971.	4.1	5
12	The SLC25 Carrier Family: Important Transport Proteins in Mitochondrial Physiology and Pathology. Physiology, 2020, 35, 302-327.	3.1	77
13	Structural insight into mitochondrial Î²-barrel outer membrane protein biogenesis. Nature Communications, 2020, 11, 3290.	12.8	48
14	The mitochondrial ADP/ATP carrier exists and functions as a monomer. Biochemical Society Transactions, 2020, 48, 1419-1432.	3.4	24
15	Expression and Purification of Membrane Proteins in Saccharomyces cerevisiae. Methods in Molecular Biology, 2020, 2127, 47-61.	0.9	8
16	Thermostability Assays: a Generic and Versatile Tool for Studying the Functional and Structural Properties of Membrane Proteins in Detergents. Methods in Molecular Biology, 2020, 2168, 105-121.	0.9	4
17	Editorial overview: COSB Membranes. Current Opinion in Structural Biology, 2019, 57, vi-viii.	5.7	0
18	Comment on â€œProtein assemblies ejected directly from native membranes yield complexes for mass spectrometryâ€• Science, 2019, 366, .	12.6	10

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19	Structural changes in the transport cycle of the mitochondrial ADP/ATP carrier. Current Opinion in Structural Biology, 2019, 57, 135-144.	5.7	48
20	The yeast mitochondrial pyruvate carrier is a heteroâ€dimer in its functional state. EMBO Journal, 2019, 38, .	7.8	45
21	The Molecular Mechanism of Transport by the Mitochondrial ADP/ATP Carrier. Cell, 2019, 176, 435-447.e15.	28.9	221
22	Structure, Substrate Recognition, and Mechanism of the Na+-Hydantoin Membrane Transport Protein, Mhp1. , 2019, , 1-12.		0
23	Mitochondrial oxodicarboxylate carrier deficiency is associated with mitochondrial DNA depletion and spinal muscular atrophyâ€“like disease. Genetics in Medicine, 2018, 20, 1224-1235.	2.4	31
24	Perturbations of Native Membrane Protein Structure in Alkyl Phosphocholine Detergents: A Critical Assessment of NMR and Biophysical Studies. Chemical Reviews, 2018, 118, 3559-3607.	47.7	132
25	Cardiolipin dynamics and binding to conserved residues in the mitochondrial ADP/ATP carrier. Biochimica Et Biophysica Acta - Biomembranes, 2018, 1860, 1035-1045.	2.6	45
26	How Detergent Impacts Membrane Proteins: Atomic-Level Views of Mitochondrial Carriers in Dodecylphosphocholine. Journal of Physical Chemistry Letters, 2018, 9, 933-938.	4.6	41
27	Transporter gene acquisition and innovation in the evolution of Microsporidia intracellular parasites. Nature Communications, 2018, 9, 1709.	12.8	58
28	Itaconate is an anti-inflammatory metabolite that activates Nrf2 via alkylation of KEAP1. Nature, 2018, 556, 113-117.	27.8	1,115
29	Pathogenic mutations of the human mitochondrial citrate carrier SLC25A1 lead to impaired citrate export required for lipid, dolichol, ubiquinone and sterol synthesis. Biochimica Et Biophysica Acta - Bioenergetics, 2018, 1859, 1-7.	1.0	31
30	Calciumâ€regulated mitochondrial ATPâ€Mg/P_i carriers evolved from a fusion of an EFâ€hand regulatory domain with a mitochondrial ADP/ATP carrierâ€like domain. IUBMB Life, 2018, 70, 1222-1232.	3.4	11
31	Concerns with yeast mitochondrial ADP/ATP carrierâ€™s integrity in DPC. Nature Structural and Molecular Biology, 2018, 25, 747-749.	8.2	11
32	The mitochondrial transporter SLC25A25 links ciliary TRPP2 signaling and cellular metabolism. PLoS Biology, 2018, 16, e2005651.	5.6	18
33	Expanding the phenotype of de novo SLC25A4 -linked mitochondrial disease to include mild myopathy. Neurology: Genetics, 2018, 4, e256.	1.9	20
34	Screening of candidate substrates and coupling ions of transporters by thermostability shift assays. ELife, 2018, 7, .	6.0	45
35	The molecular features of uncoupling protein 1 support a conventional mitochondrial carrier-like mechanism. Biochimie, 2017, 134, 35-50.	2.6	95
36	Expression and putative role of mitochondrial transport proteins in cancer. Biochimica Et Biophysica Acta - Bioenergetics, 2017, 1858, 641-654.	1.0	58

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37	Calcium regulation of the human mitochondrial ATP-Mg/Pi carrier SLC25A24 uses a locking pin mechanism. Scientific Reports, 2017, 7, 45383.	3.3	33
38	Mitochondrial ADP/ATP Carrier in Dodecylphosphocholine Binds Cardiolipins with Non-native Affinity. Biophysical Journal, 2017, 113, 2311-2315.	0.5	18
39	Modelling the free energy profile of the mitochondrial ADP/ATP carrier. Biochimica Et Biophysica Acta - Bioenergetics, 2017, 1858, 906-914.	1.0	23
40	Recurrent De Novo Dominant Mutations in SLC25A4 Cause Severe Early-Onset Mitochondrial Disease and Loss of Mitochondrial DNA Copy Number. American Journal of Human Genetics, 2016, 99, 860-876.	6.2	93
41	Membrane Protein Production in Lactococcus lactis for Functional Studies. Methods in Molecular Biology, 2016, 1432, 79-101.	0.9	2
42	The transport mechanism of the mitochondrial ADP/ATP carrier. Biochimica Et Biophysica Acta - Molecular Cell Research, 2016, 1863, 2379-2393.	4.1	110
43	Formation of a cytoplasmic salt bridge network in the matrix state is a fundamental step in the transport mechanism of the mitochondrial ADP/ATP carrier. Biochimica Et Biophysica Acta - Bioenergetics, 2016, 1857, 14-22.	1.0	55
44	Trends in Thermostability Provide Information on the Nature of Substrate, Inhibitor, and Lipid Interactions with Mitochondrial Carriers. Journal of Biological Chemistry, 2015, 290, 8206-8217.	3.4	67
45	The mitochondrial dicarboxylate and 2â€oxoglutarate carriers do not transport glutathione. FEBS Letters, 2015, 589, 621-628.	2.8	49
46	Calcium-induced conformational changes in the regulatory domain of the human mitochondrial ATP-Mg/Pi carrier. Biochimica Et Biophysica Acta - Bioenergetics, 2015, 1847, 1245-1253.	1.0	34
47	Uncoupling protein 1 binds one nucleotide per monomer and is stabilized by tightly bound cardiolipin. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 6973-6978.	7.1	88
48	Membrane Protein Expression in Lactococcus lactis. Methods in Enzymology, 2015, 556, 77-97.	1.0	22
49	Mitochondrial pyruvate import and its effects on homeostasis. Current Opinion in Cell Biology, 2015, 33, 35-41.	5.4	57
50	Structures of yeast mitochondrial ADP/ATP carriers support a domain-based alternating-access transport mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E426-34.	7.1	182
51	Plasma Membrane-Located Purine Nucleotide Transport Proteins Are Key Components for Host Exploitation by Microsporidian Intracellular Parasites. PLoS Pathogens, 2014, 10, e1004547.	4.7	69
52	Calcium-induced conformational changes of the regulatory domain of human mitochondrial aspartate/glutamate carriers. Nature Communications, 2014, 5, 5491.	12.8	81
53	The substrate specificity of mitochondrial carriers: Mutagenesis revisited. Molecular Membrane Biology, 2013, 30, 149-159.	2.0	21
54	The substrate specificity of the human ADP/ATP carrier AAC1. Molecular Membrane Biology, 2013, 30, 160-168.	2.0	50

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55	Lipid, Detergent, and Coomassie Blue G-250 Affect the Migration of Small Membrane Proteins in Blue Native Gels. Journal of Biological Chemistry, 2013, 288, 22163-22173.	3.4	60
56	Mitochondrial Transport Protein Family: Structure. , 2013, , 1548-1554.		0
57	Mitochondrial Transport Protein Family. , 2013, , 1544-1548.		0
58	Mitochondrial Transporters: Molecular Mechanism. , 2013, , 1554-1560.		0
59	Substrate Specificity of the Two Mitochondrial Ornithine Carriers Can Be Swapped by Single Mutation in Substrate Binding Site. Journal of Biological Chemistry, 2012, 287, 7925-7934.	3.4	47
60	Identification and Functional Expression of the Mitochondrial Pyruvate Carrier. Science, 2012, 337, 93-96.	12.6	588
61	8.9 Structural and Mechanistic Aspects of Mitochondrial Transport Proteins. , 2012, , 174-205.		7
62	Online Analysis and Process Control in Recombinant Protein Production (Review). Methods in Molecular Biology, 2012, 866, 129-155.	0.9	2
63	Mitochondrial carrier homolog 2 (MTCH2): The recruitment and evolution of a mitochondrial carrier protein to a critical player in apoptosis. Experimental Cell Research, 2012, 318, 1316-1323.	2.6	34
64	Monitoring the Biomass Accumulation of Recombinant Yeast Cultures: Offline Estimations of Dry Cell Mass and Cell Counts. Methods in Molecular Biology, 2012, 866, 157-163.	0.9	1
65	Online Monitoring of Biomass Accumulation in Recombinant Yeast Cultures. Methods in Molecular Biology, 2012, 866, 165-179.	0.9	6
66	Overcoming barriers to membrane protein structure determination. Nature Biotechnology, 2011, 29, 335-340.	17.5	325
67	Functional and structural role of amino acid residues in the matrix Î±-helices, termini and cytosolic loops of the bovine mitochondrial oxoglutarate carrier. Biochimica Et Biophysica Acta - Bioenergetics, 2011, 1807, 302-310.	1.0	30
68	Coupling of proton and substrate translocation in the transport cycle of mitochondrial carriers. Current Opinion in Structural Biology, 2010, 20, 440-447.	5.7	71
69	Probing the Interactions of Carboxy-atractyloside and Atractyloside with the Yeast Mitochondrial ADP/ATP Carrier. Structure, 2010, 18, 39-46.	3.3	42
70	Mitochondrial carriers function as monomers. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 817-831.	1.0	74
71	Probing the conformation of the yeast ADP/ATP carrier by fluorescent probes. Biochimica Et Biophysica Acta - Bioenergetics, 2010, 1797, 42-43.	1.0	0
72	Identification of Transport-critical Residues in a Folate Transporter from the Folate-Biopterin Transporter (FBT) Family. Journal of Biological Chemistry, 2010, 285, 2867-2875.	3.4	22

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73	Membrane Protein Expression in Lactococcus lactis. Methods in Molecular Biology, 2010, 601, 67-85.	0.9	23
74	A novel route for ATP acquisition by the remnant mitochondria of Encephalitozoon cuniculi. Nature, 2008, 453, 553-556.	27.8	222
75	Determination of the molecular mass and dimensions of membrane proteins by size exclusion chromatography. Methods, 2008, 46, 62-72.	3.8	81
76	The mechanism of transport by mitochondrial carriers based on analysis of symmetry. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 17766-17771.	7.1	200
77	The Mimivirus Genome Encodes a Mitochondrial Carrier That Transports dATP and dTTP. Journal of Virology, 2007, 81, 3181-3186.	3.4	34
78	The Insulin-like Growth Factor-Iâ€“mTOR Signaling Pathway Induces the Mitochondrial Pyrimidine Nucleotide Carrier to Promote Cell Growth. Molecular Biology of the Cell, 2007, 18, 3545-3555.	2.1	107
79	The yeast mitochondrial ADP/ATP carrier functions as a monomer in mitochondrial membranes. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 10830-10834.	7.1	90
80	Functional and Structural Role of Amino Acid Residues in the Odd-numbered Transmembrane Î±-Helices of the Bovine Mitochondrial Oxoglutarate Carrier. Journal of Molecular Biology, 2007, 369, 400-412.	4.2	59
81	Yeast Mitochondrial ADP/ATP Carriers Are Monomeric in Detergents as Demonstrated by Differential Affinity Purification. Journal of Molecular Biology, 2007, 371, 388-395.	4.2	44
82	The conserved substrate binding site of mitochondrial carriers. Biochimica Et Biophysica Acta - Bioenergetics, 2006, 1757, 1237-1248.	1.0	135
83	Functional and Structural Role of Amino Acid Residues in the Even-numbered Transmembrane Î±-Helices of the Bovine Mitochondrial Oxoglutarate Carrier. Journal of Molecular Biology, 2006, 363, 51-62.	4.2	54
84	Optimization of membrane protein overexpression and purification using GFP fusions. Nature Methods, 2006, 3, 303-313.	19.0	297
85	Yeast mitochondrial ADP/ATP carriers are monomeric in detergents. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 16224-16229.	7.1	80
86	Mitochondrial carriers in the cytoplasmic state have a common substrate binding site. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 2617-2622.	7.1	237
87	A scalable, GFP-based pipeline for membrane protein overexpression screening and purification. Protein Science, 2005, 14, 2011-2017.	7.6	121
88	Functional expression of eukaryotic membrane proteins inLactococcus lactis. Protein Science, 2005, 14, 3048-3056.	7.6	78
89	A Novel ADP/ATP Transporter in the Mitosome of the Microaerophilic Human Parasite Entamoeba histolytica. Current Biology, 2005, 15, 737-742.	3.9	82
90	Eukaryotic membrane protein overproduction in. Current Opinion in Biotechnology, 2005, 16, 546-551.	6.6	59

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91	Higher Plant Plastids and Cyanobacteria Have Folate Carriers Related to Those of Trypanosomatids. Journal of Biological Chemistry, 2005, 280, 38457-38463.	3.4	83
92	The role and structure of mitochondrial carriers. FEBS Letters, 2004, 564, 239-244.	2.8	142
93	Lactococcus lactis as host for overproduction of functional membrane proteins. Biochimica Et Biophysica Acta - Biomembranes, 2003, 1610, 97-108.	2.6	171
94	Projection Structure of the Atractyloside-inhibited Mitochondrial ADP/ATP Carrier of Saccharomyces cerevisiae. Journal of Biological Chemistry, 2003, 278, 36985-36988.	3.4	98
95	Conserved properties of hydrogenosomal and mitochondrial ADP/ATP carriers: a common origin for both organelles. EMBO Journal, 2002, 21, 572-579.	7.8	99
96	Electron crystallographic analysis of two-dimensional crystals of sensory rhodopsin II: A 6.9 Ã¥ projection structure1 1Edited by A. Klug. Journal of Molecular Biology, 2001, 308, 279-293.	4.2	32
97	The projection structure of EmrE, a proton-linked multidrug transporter from Escherichia coli, at 7 A resolution. EMBO Journal, 2001, 20, 77-81.	7.8	101
98	The three-dimensional structure of halorhodopsin to 5 A by electron crystallography: A new unbending procedure for two-dimensional crystals by using a global reference structure. Proceedings of the National Academy of Sciences of the United States of America, 2000, 97, 4637-4642.	7.1	48
99	Specificity Mutants of the Binding Protein of the Oligopeptide Transport System of Lactococcus lactis. Journal of Bacteriology, 2000, 182, 1600-1608.	2.2	38
100	Amino acid transport inLactobacillus helveticus. FEMS Microbiology Letters, 1998, 158, 249-253.	1.8	9
101	Reconstruction of the proteolytic pathway for use of Î²-casein byLactococcus lactis. Molecular Microbiology, 1998, 27, 1107-1118.	2.5	67
102	Kinetics and Specificity of Peptide Uptake by the Oligopeptide Transport System of Lactococcus lactis. Biochemistry, 1998, 37, 16671-16679.	2.5	94
103	Amino acid transport in Lactobacillus helveticus. FEMS Microbiology Letters, 1998, 158, 249-253.	1.8	2
104	Casein and Peptide Degradation in Lactic Acid Bacteria. Biotechnology and Genetic Engineering Reviews, 1997, 14, 279-302.	6.2	56
105	Cloning and functional expression in Escherichia coli of the gene encoding the di- and tripeptide transport protein of Lactobacillus helveticus. Applied and Environmental Microbiology, 1997, 63, 2213-2217.	3.1	22
106	Multiple-peptidase mutants of Lactococcus lactis are severely impaired in their ability to grow in milk. Journal of Bacteriology, 1996, 178, 2794-2803.	2.2	116
107	Fate of peptides in peptidase mutants of Lactococcus lactis. Molecular Microbiology, 1996, 21, 123-131.	2.5	42
108	The proteotytic systems of lactic acid bacteria. Antonie Van Leeuwenhoek, 1996, 70, 187-221.	1.7	672

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109	The proteolytic systems of lactic acid bacteria. , 1996, , 91-125.		4
110	Peptidases and growth of Lactococcus lactis in milk. Dairy Science and Technology, 1996, 76, 25-32.	0.9	7
111	Bactericidal mode of action of plantaricin C. Applied and Environmental Microbiology, 1996, 62, 2701-2709.	3.1	69
112	Casein-breakdown by Lactococcus lactis. , 1996, , 303-326.		1
113	The extracellular PI-type proteinase of Lactococcus lactis hydrolyzes beta-casein into more than one hundred different oligopeptides. Journal of Bacteriology, 1995, 177, 3472-3478.	2.2	154
114	Specificity of peptide transport systems in Lactococcus lactis: evidence for a third system which transports hydrophobic di- and tripeptides. Journal of Bacteriology, 1995, 177, 4652-4657.	2.2	72
115	Transport of Î²-Casein-derived Peptides by the Oligopeptide Transport System Is a Crucial Step in the Proteolytic Pathway of Lactococcus lactis. Journal of Biological Chemistry, 1995, 270, 1569-1574.	3.4	113
116	Physiological responses of Lactococcus lactis ML3 to alternating conditions of growth and starvation. Archives of Microbiology, 1993, 159, 372-379.	2.2	40
117	Di-tripeptides and oligopeptides are taken up via distinct transport mechanisms in Lactococcus lactis. Journal of Bacteriology, 1993, 175, 2052-2059.	2.2	85
118	Genetic and biochemical characterization of the oligopeptide transport system of Lactococcus lactis. Journal of Bacteriology, 1993, 175, 7523-7532.	2.2	224