

# Michael Schlame

## List of Publications by Year in descending order

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68  
papers

6,305  
citations

117625  
34  
h-index

98798  
67  
g-index

72  
all docs

72  
docs citations

72  
times ranked

4708  
citing authors

#	ARTICLE	IF	CITATIONS
1	The biosynthesis and functional role of cardiolipin. Progress in Lipid Research, 2000, 39, 257-288.	11.6	707
2	Absence of Cardiolipin in the crd1 Null Mutant Results in Decreased Mitochondrial Membrane Potential and Reduced Mitochondrial Function. Journal of Biological Chemistry, 2000, 275, 22387-22394.	3.4	350
3	Thematic Review Series: Glycerolipids. Cardiolipin synthesis for the assembly of bacterial and mitochondrial membranes. Journal of Lipid Research, 2008, 49, 1607-1620.	4.2	330
4	The Enzymatic Function of Tafazzin. Journal of Biological Chemistry, 2006, 281, 39217-39224.	3.4	278
5	Barth syndrome, a human disorder of cardiolipin metabolism. FEBS Letters, 2006, 580, 5450-5455.	2.8	273
6	Molecular symmetry in mitochondrial cardiolipins. Chemistry and Physics of Lipids, 2005, 138, 38-49.	3.2	255
7	Deficiency of tetralinoleoyl-cardiolipin in Barth syndrome. Annals of Neurology, 2002, 51, 634-637.	5.3	253
8	Metabolism and function of mitochondrial cardiolipin. Progress in Lipid Research, 2014, 55, 1-16.	11.6	251
9	Cardiolipin Affects the Supramolecular Organization of ATP Synthase in Mitochondria. Biophysical Journal, 2011, 100, 2184-2192.	0.5	208
10	The role of cardiolipin in the structural organization of mitochondrial membranes. Biochimica Et Biophysica Acta - Biomembranes, 2009, 1788, 2080-2083.	2.6	195
11	Phospholipid abnormalities in children with Barth syndrome. Journal of the American College of Cardiology, 2003, 42, 1994-1999.	2.8	187
12	Remodeling of Cardiolipin by Phospholipid Transacylation. Journal of Biological Chemistry, 2003, 278, 51380-51385.	3.4	183
13	Mitochondrial cardiolipin in diverse eukaryotes. Comparison of biosynthetic reactions and molecular acyl species. FEBS Journal, 1993, 212, 727-733.	0.2	161
14	Comparison of lymphoblast mitochondria from normal subjects and patients with Barth syndrome using electron microscopic tomography. Laboratory Investigation, 2007, 87, 40-48.	3.7	156
15	A Drosophila model of Barth syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 11584-11588.	7.1	154
16	Biosynthesis, remodeling and turnover of mitochondrial cardiolipin. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2017, 1862, 3-7.	2.4	150
17	Characterization of lymphoblast mitochondria from patients with Barth syndrome. Laboratory Investigation, 2005, 85, 823-830.	3.7	132
18	Role of calcium-independent phospholipase A <sub>2</sub> in the pathogenesis of Barth syndrome. Proceedings of the National Academy of Sciences of the United States of America, 2009, 106, 2337-2341.	7.1	126

#	ARTICLE	IF	CITATIONS
19	Cardiolipin Biosynthesis and Mitochondrial Respiratory Chain Function Are Interdependent. Journal of Biological Chemistry, 2004, 279, 42612-42618.	3.4	124
20	Cardiolipin remodeling and the function of tafazzin. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2013, 1831, 582-588.	2.4	124
21	Characterization of a Transgenic Short Hairpin RNA-Induced Murine Model of Tafazzin Deficiency. Human Gene Therapy, 2011, 22, 865-871.	2.7	114
22	The physical state of lipid substrates provides transacylation specificity for tafazzin. Nature Chemical Biology, 2012, 8, 862-869.	8.0	101
23	Loss of protein association causes cardiolipin degradation in Barth syndrome. Nature Chemical Biology, 2016, 12, 641-647.	8.0	99
24	Tafazzin Knockdown in Mice Leads to a Developmental Cardiomyopathy With Early Diastolic Dysfunction Preceding Myocardial Noncompaction. Journal of the American Heart Association, 2012, 1, .	3.7	81
25	De novo biosynthesis of the late endosome lipid, bis(monoacylglycero)phosphate. Journal of Lipid Research, 2007, 48, 1997-2008.	4.2	71
26	Formation of molecular species of mitochondrial cardiolipin. 1. A novel transacylation mechanism to shuttle fatty acids between sn-1 and sn-2 positions of multiple phospholipid species. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2009, 1791, 314-320.	2.4	71
27	Distinct effects of tafazzin deletion in differentiated and undifferentiated mitochondria. Mitochondrion, 2009, 9, 86-95.	3.4	68
28	Microanalysis of cardiolipin in small biopsies including skeletal muscle from patients with mitochondrial disease. Journal of Lipid Research, 1999, 40, 1585-1592.	4.2	63
29	Molecular species of cardiolipin in relation to other mitochondrial phospholipids. Is there an acyl specificity of the interaction between cardiolipin and the ADP/ATP carrier?. FEBS Journal, 1991, 199, 459-466.	0.2	62
30	AAV Gene Therapy Prevents and Reverses Heart Failure in a Murine Knockout Model of Barth Syndrome. Circulation Research, 2020, 126, 1024-1039.	4.5	62
31	Assembly of the complexes of oxidative phosphorylation triggers the remodeling of cardiolipin. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 11235-11240.	7.1	60
32	Analysis of cardiolipin molecular species by high-performance liquid chromatography of its derivative 1,3-bisphosphatidyl-2-benzoyl-sn-glycerol dimethyl ester. Analytical Biochemistry, 1991, 195, 290-295.	2.4	55
33	Characterization of Tafazzin Splice Variants from Humans and Fruit Flies. Journal of Biological Chemistry, 2009, 284, 29230-29239.	3.4	55
34	Membrane curvature modulation of protein activity determined by NMR. Biochimica Et Biophysica Acta - Biomembranes, 2015, 1848, 220-228.	2.6	50
35	Increased Reactive Oxygen Species Mediated $Ca^{2+}$ /Calmodulin-Dependent Protein Kinase II Activation Contributes to Calcium Handling Abnormalities and Impaired Contraction in Barth Syndrome. Circulation, 2021, 143, 1894-1911.	1.6	42
36	The Basis for Acyl Specificity in the Tafazzin Reaction. Journal of Biological Chemistry, 2017, 292, 5499-5506.	3.4	35

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37	Intraoperative Two- and Three-Dimensional Transesophageal Echocardiography in Combined Myectomy-Mitral Operations for Hypertrophic Cardiomyopathy. Journal of the American Society of Echocardiography, 2018, 31, 275-288.	2.8	35
38	Extramitochondrial cardiolipin suggests a novel function of mitochondria in spermatogenesis. Journal of Cell Biology, 2019, 218, 1491-1502.	5.2	33
39	The turnover of glycerol and acyl moieties of cardiolipin. Chemistry and Physics of Lipids, 2014, 179, 17-24.	3.2	32
40	Loss of tafazzin results in decreased myoblast differentiation in C2C12 cells: A myoblast model of Barth syndrome and cardiolipin deficiency. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2018, 1863, 857-865.	2.4	32
41	Cardiolipin-induced activation of pyruvate dehydrogenase links mitochondrial lipid biosynthesis to TCA cycle function. Journal of Biological Chemistry, 2019, 294, 11568-11578.	3.4	31
42	The Function of Tafazzin, a Mitochondrial Phospholipidâ€“Lysophospholipid Acyltransferase. Journal of Molecular Biology, 2020, 432, 5043-5051.	4.2	29
43	Protein crowding in the inner mitochondrial membrane. Biochimica Et Biophysica Acta - Bioenergetics, 2021, 1862, 148305.	1.0	29
44	Enrichment of NPC1-deficient cells with the lipid LBPA stimulates autophagy, improves lysosomal function, and reduces cholesterol storage. Journal of Biological Chemistry, 2021, 297, 100813.	3.4	29
45	Plasmalogen loss caused by remodeling deficiency in mitochondria. Life Science Alliance, 2019, 2, e201900348.	2.8	29
46	Cardiolipin Synthase Is Associated with a Large Complex in Yeast Mitochondria. Journal of Biological Chemistry, 1998, 273, 2402-2408.	3.4	27
47	Substantial Decrease in Plasmalogen in the Heart Associated with Tafazzin Deficiency. Biochemistry, 2018, 57, 2162-2175.	2.5	27
48	A Bayesian Analysis to Determine the Prevalence of Barth Syndrome in the Pediatric Population. Journal of Pediatrics, 2020, 217, 139-144.	1.8	27
49	Effect of Cardiolipin Oxidation on Solid-Phase Immunoassay for Antiphospholipid Antibodies. Thrombosis and Haemostasis, 2001, 86, 1475-1482.	3.4	25
50	Comparison of cardiolipins from Drosophila strains with mutations in putative remodeling enzymes. Chemistry and Physics of Lipids, 2012, 165, 512-519.	3.2	23
51	Formation of molecular species of mitochondrial cardiolipin2. A mathematical model of pattern formation by phospholipid transacylation. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2009, 1791, 321-325.	2.4	21
52	A critical appraisal of the tafazzin knockdown mouse model of Barth syndrome: what have we learned about pathogenesis and potential treatments?. American Journal of Physiology - Heart and Circulatory Physiology, 2019, 317, H1183-H1193.	3.2	20
53	Cardiolipin remodeling enables protein crowding in the inner mitochondrial membrane. EMBO Journal, 2021, 40, e108428.	7.8	20
54	[39] Mammalian cardiolipin biosynthesis. Methods in Enzymology, 1992, 209, 330-337.	1.0	18

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55	Lipidome-wide <sup>13</sup> C flux analysis: a novel tool to estimate the turnover of lipids in organisms and cultures. <i>Journal of Lipid Research</i> , 2020, 61, 95-104.	4.2	18
56	Assays of Cardiolipin Levels. <i>Methods in Cell Biology</i> , 2007, 80, 223-240.	1.1	16
57	Kinetic analysis of cardiolipin synthase: A membrane enzyme with two glycerophospholipid substrates. <i>Lipids</i> , 1995, 30, 633-640.	1.7	15
58	Cardiolipin deficiency in Barth syndrome is not associated with increased $\text{O}_2^-$ production in heart and skeletal muscle mitochondria. <i>FEBS Letters</i> , 2021, 595, 415-432.	2.8	14
59	LPGAT1 controls the stearate/palmitate ratio of phosphatidylethanolamine and phosphatidylcholine in sn-1 specific remodeling. <i>Journal of Biological Chemistry</i> , 2022, 298, 101685.	3.4	14
60	Structural basis for potassium transport in prokaryotes by KdpFABC. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	12
61	Tafazzins from <i>Drosophila</i> and mammalian cells assemble in large protein complexes with a short half-life. <i>Mitochondrion</i> , 2015, 21, 27-32.	3.4	11
62	Analysis of phospholipid synthesis in mitochondria. <i>Methods in Cell Biology</i> , 2020, 155, 321-335.	1.1	11
63	Mitochondrial cristae as insulated transformers of metabolic energy. <i>EMBO Journal</i> , 2019, 38, e103472.	7.8	9
64	Condensed Mitochondria Assemble Into the Acrosomal Matrix During Spermiogenesis. <i>Frontiers in Cell and Developmental Biology</i> , 2022, 10, 867175.	3.7	5
65	A simple mechanistic explanation for Barth syndrome and cardiolipin remodeling. <i>Journal of Inherited Metabolic Disease</i> , 2022, 45, 51-59.	3.6	3
66	Purification and Characterization of <i>Drosophila</i> Taffazin: Discovery of the First Phospholipid Transacylase. <i>FASEB Journal</i> , 2007, 21, A666.	0.5	0
67	<i>Drosophila</i> Mitochondrial Membrane-bound Tafazzin Protein Is A Transacylase. <i>FASEB Journal</i> , 2007, 21, A667.	0.5	0
68	Star-related lipid transfer-like domain-containing protein CLDP43 affects cardiolipin synthesis and mitochondrial function in <i>Trypanosoma brucei</i> . <i>PLoS ONE</i> , 2022, 17, e0259752.	2.5	0