

# Edgars Liepinsh

## List of Publications by Year in descending order

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87  
papers

2,678  
citations

185998

28  
h-index

214527

47  
g-index

87  
all docs

87  
docs citations

87  
times ranked

3184  
citing authors

#	ARTICLE	IF	CITATIONS
1	Diabetes is Associated with Higher Trimethylamine N-oxide Plasma Levels. <i>Experimental and Clinical Endocrinology and Diabetes</i> , 2016, 124, 251-256.	0.6	175
2	Mildronate Cardioprotective Action through Carnitine-Lowering Effect. <i>Trends in Cardiovascular Medicine</i> , 2002, 12, 275-279.	2.3	119
3	Plasma acylcarnitine concentrations reflect the acylcarnitine profile in cardiac tissues. <i>Scientific Reports</i> , 2017, 7, 17528.	1.6	112
4	Acylcarnitines: Nomenclature, Biomarkers, Therapeutic Potential, Drug Targets, and Clinical Trials. <i>Pharmacological Reviews</i> , 2022, 74, 506-551.	7.1	106
5	Cardiac metabolism as a driver and therapeutic target of myocardial infarction. <i>Journal of Cellular and Molecular Medicine</i> , 2020, 24, 5937-5954.	1.6	101
6	Trimethylamine N-oxide impairs pyruvate and fatty acid oxidation in cardiac mitochondria. <i>Toxicology Letters</i> , 2017, 267, 32-38.	0.4	83
7	Long-chain acylcarnitines determine ischaemia/reperfusion-induced damage in heart mitochondria. <i>Biochemical Journal</i> , 2016, 473, 1191-1202.	1.7	77
8	Suppression of intestinal microbiota-dependent production of pro-atherogenic trimethylamine N-oxide by shifting L-carnitine microbial degradation. <i>Life Sciences</i> , 2014, 117, 84-92.	2.0	76
9	Energy substrate metabolism and mitochondrial oxidative stress in cardiac ischemia/reperfusion injury. <i>Free Radical Biology and Medicine</i> , 2021, 165, 24-37.	1.3	76
10	Mildronate, an Inhibitor of Carnitine Biosynthesis, Induces an Increase in Gamma-Butyrobetaine Contents and Cardioprotection in Isolated Rat Heart Infarction. <i>Journal of Cardiovascular Pharmacology</i> , 2006, 48, 314-319.	0.8	71
11	Structure and Function of CutC Choline Lyase from Human Microbiota Bacterium <i>Klebsiella pneumoniae</i> . <i>Journal of Biological Chemistry</i> , 2015, 290, 21732-21740.	1.6	70
12	Pharmacological effects of meldonium: Biochemical mechanisms and biomarkers of cardiometabolic activity. <i>Pharmacological Research</i> , 2016, 113, 771-780.	3.1	68
13	Comparative pharmacological activity of optical isomers of phenibut. <i>European Journal of Pharmacology</i> , 2008, 583, 128-134.	1.7	64
14	Protective effects of mildronate in an experimental model of type 2 diabetes in Goto-Kakizaki rats. <i>British Journal of Pharmacology</i> , 2009, 157, 1549-1556.	2.7	63
15	Mildronate decreases carnitine availability and up-regulates glucose uptake and related gene expression in the mouse heart. <i>Life Sciences</i> , 2008, 83, 613-619.	2.0	60
16	The heart is better protected against myocardial infarction in the fed state compared to the fasted state. <i>Metabolism: Clinical and Experimental</i> , 2014, 63, 127-136.	1.5	56
17	Altered mitochondrial metabolism in the insulin-resistant heart. <i>Acta Physiologica</i> , 2020, 228, e13430.	1.8	56
18	Meldonium decreases the diet-induced plasma levels of trimethylamine N-oxide, a metabolite associated with atherosclerosis. <i>Journal of Clinical Pharmacology</i> , 2013, 53, 1095-1098.	1.0	48

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19	The Cardioprotective Effect of Mildronate is Diminished After Co-Treatment With L-Carnitine. <i>Journal of Cardiovascular Pharmacology and Therapeutics</i> , 2012, 17, 215-222.	1.0	44
20	Long-chain acylcarnitine content determines the pattern of energy metabolism in cardiac mitochondria. <i>Molecular and Cellular Biochemistry</i> , 2014, 395, 1-10.	1.4	44
21	Association of reduced glyoxalase 1 activity and painful peripheral diabetic neuropathy in type 1 and 2 diabetes mellitus patients. <i>Journal of Diabetes and Its Complications</i> , 2013, 27, 262-267.	1.2	43
22	Mildronate treatment alters $\gamma$ -butyrobetaine and L-carnitine concentrations in healthy volunteers. <i>Journal of Pharmacy and Pharmacology</i> , 2011, 63, 1195-1201.	1.2	42
23	Targeting Carnitine Biosynthesis: Discovery of New Inhibitors against $\gamma$ -Butyrobetaine Hydroxylase. <i>Journal of Medicinal Chemistry</i> , 2014, 57, 2213-2236.	2.9	41
24	Activated peroxisomal fatty acid metabolism improves cardiac recovery in ischemia-reperfusion. <i>Naunyn-Schmiedeberg's Archives of Pharmacology</i> , 2013, 386, 541-550.	1.4	34
25	Decreased acylcarnitine content improves insulin sensitivity in experimental mice models of insulin resistance. <i>Pharmacological Research</i> , 2016, 113, 788-795.	3.1	34
26	Determination of trimethylamine N-oxide in combination with L-carnitine and $\gamma$ -butyrobetaine in human plasma by UPLC/MS/MS. <i>Biomedical Chromatography</i> , 2015, 29, 1670-1674.	0.8	31
27	Crystal structure of human gamma-butyrobetaine hydroxylase. <i>Biochemical and Biophysical Research Communications</i> , 2010, 398, 634-639.	1.0	30
28	Mildronate treatment improves functional recovery following middle cerebral artery occlusion in rats. <i>Behavioural Brain Research</i> , 2011, 222, 26-32.	1.2	29
29	The sensorimotor and cognitive deficits in rats following 90- and 120-min transient occlusion of the middle cerebral artery. <i>Journal of Neuroscience Methods</i> , 2012, 208, 197-204.	1.3	28
30	Effects of Long-Term Mildronate Treatment on Cardiac and Liver Functions in Rats. <i>Basic and Clinical Pharmacology and Toxicology</i> , 2009, 105, 387-394.	1.2	27
31	Inhibition of carnitine acetyltransferase by mildronate, a regulator of energy metabolism. <i>Journal of Enzyme Inhibition and Medicinal Chemistry</i> , 2009, 24, 1269-1275.	2.5	27
32	Mildronate, a Regulator of Energy Metabolism, Reduces Atherosclerosis in apoE/LDLR <sup>-/-</sup> Mice. <i>Pharmacology</i> , 2009, 83, 287-293.	0.9	27
33	Anti-diabetic effects of mildronate alone or in combination with metformin in obese Zucker rats. <i>European Journal of Pharmacology</i> , 2011, 658, 277-283.	1.7	27
34	Effect of inhibiting carnitine biosynthesis on male rat sexual performance. <i>Physiology and Behavior</i> , 2008, 95, 341-347.	1.0	26
35	Myocardial Infarct Size-Limiting and Anti-Arrhythmic Effects of Mildronate Orotate in the Rat Heart. <i>Cardiovascular Drugs and Therapy</i> , 2009, 23, 281-288.	1.3	25
36	Acute and long-term administration of palmitoylcarnitine induces muscle-specific insulin resistance in mice. <i>BioFactors</i> , 2017, 43, 718-730.	2.6	25

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37	Inhibition of L-carnitine biosynthesis and transport by methylcarnitine decreases fatty acid oxidation and protects against myocardial infarction. <i>British Journal of Pharmacology</i> , 2015, 172, 1319-1332.	2.7	24
38	Decreases in Circulating Concentrations of Long-Chain Acylcarnitines and Free Fatty Acids During the Glucose Tolerance Test Represent Tissue-Specific Insulin Sensitivity. <i>Frontiers in Endocrinology</i> , 2019, 10, 870.	1.5	23
39	The anti-inflammatory and antinociceptive effects of NF- $\kappa$ B inhibitory guanidine derivative ME10092. <i>International Immunopharmacology</i> , 2010, 10, 455-460.	1.7	22
40	Metformin decreases bacterial trimethylamine production and trimethylamine N-oxide levels in db/db mice. <i>Scientific Reports</i> , 2020, 10, 14555.	1.6	22
41	Low-intensity exercise stimulates bioenergetics and increases fat oxidation in mitochondria of blood mononuclear cells from sedentary adults. <i>Physiological Reports</i> , 2020, 8, e14489.	0.7	22
42	The MC3 receptor binding affinity of melanocortins correlates with the nitric oxide production inhibition in mice brain inflammation model. <i>Peptides</i> , 2006, 27, 1443-1450.	1.2	21
43	Empagliflozin Protects Cardiac Mitochondrial Fatty Acid Metabolism in a Mouse Model of Diet-Induced Lipid Overload. <i>Cardiovascular Drugs and Therapy</i> , 2020, 34, 791-797.	1.3	20
44	Model-Informed Drug Development for Antimicrobials: Translational PK and PK/PD Modeling to Predict an Efficacious Human Dose for Apramycin. <i>Clinical Pharmacology and Therapeutics</i> , 2021, 109, 1063-1073.	2.3	20
45	Metabolomic studies of experimental diabetic urine samples by 1H NMR spectroscopy and LC/MS method. <i>Chemometrics and Intelligent Laboratory Systems</i> , 2009, 97, 11-17.	1.8	19
46	Administration of L-carnitine and mildronate improves endothelial function and decreases mortality in hypertensive Dahl rats. <i>Pharmacological Reports</i> , 2011, 63, 752-762.	1.5	19
47	Mildronate, the inhibitor of l-carnitine transport, induces brain mitochondrial uncoupling and protects against anoxia-reoxygenation. <i>European Journal of Pharmacology</i> , 2014, 723, 55-61.	1.7	19
48	$\beta$ - and $\beta$ -melanocortins inhibit lipopolysaccharide induced nitric oxide production in mice brain. <i>Brain Research</i> , 2004, 995, 7-13.	1.1	18
49	Functional Evaluation of THIQ, a Melanocortin 4 Receptor Agonist, in Models of Food Intake and Inflammation. <i>Basic and Clinical Pharmacology and Toxicology</i> , 2007, 101, 416-420.	1.2	18
50	Mildronate exerts acute anticonvulsant and antihypnotic effects. <i>Behavioural Pharmacology</i> , 2010, 21, 548-555.	0.8	17
51	Seasonal Iodine Deficiency in Latvian School Children. <i>Thyroid</i> , 2012, 22, 1088-1089.	2.4	17
52	Glyoxalase 1 and glyoxalase 2 activities in blood and neuronal tissue samples from experimental animal models of obesity and type 2 diabetes mellitus. <i>Journal of Physiological Sciences</i> , 2012, 62, 469-478.	0.9	17
53	Risks and Benefits of Carnitine Supplementation in Diabetes. <i>Experimental and Clinical Endocrinology and Diabetes</i> , 2015, 123, 95-100.	0.6	16
54	Mitochondrial Function in the Kidney and Heart, but Not the Brain, is Mainly Altered in an Experimental Model of Endotoxaemia. <i>Shock</i> , 2019, 52, e153-e162.	1.0	16

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55	Selective inhibition of OCTN2 is more effective than inhibition of gamma-butyrobetaine dioxygenase to decrease the availability of l-carnitine and to reduce myocardial infarct size. <i>Pharmacological Research</i> , 2014, 85, 33-38.	3.1	15
56	Antibacterial activity of apramycin at acidic pH warrants wide therapeutic window in the treatment of complicated urinary tract infections and acute pyelonephritis. <i>EBioMedicine</i> , 2021, 73, 103652.	2.7	15
57	beta-MSH inhibits brain inflammation via MC3/4 receptors and impaired NF- $\kappa$ B signaling. <i>Journal of Neuroimmunology</i> , 2005, 169, 13-19.	1.1	14
58	Troubleshooting digital macro photography for image acquisition and the analysis of biological samples. <i>Journal of Pharmacological and Toxicological Methods</i> , 2013, 67, 98-106.	0.3	14
59	A cross-sectional survey of urinary iodine status in Latvia. <i>Medicina (Lithuania)</i> , 2014, 50, 124-129.	0.8	14
60	Methyl- $^{13}$ C-butyrobetaine decreases levels of acylcarnitines and attenuates the development of atherosclerosis. <i>Vascular Pharmacology</i> , 2015, 72, 101-107.	1.0	13
61	The neuroprotective effects of R-phenibut after focal cerebral ischemia. <i>Pharmacological Research</i> , 2016, 113, 796-801.	3.1	13
62	Loop diuretics decrease the renal elimination rate and increase the plasma levels of trimethylamine-N-oxide. <i>British Journal of Clinical Pharmacology</i> , 2018, 84, 2634-2644.	1.1	13
63	The unusual pharmacokinetics of meldonium: Implications for doping. <i>Pharmacological Research</i> , 2016, 111, 100.	3.1	12
64	Carnitine and $^{13}$ C-Butyrobetaine Stimulate Elimination of Meldonium due to Competition for OCTN2-mediated Transport. <i>Basic and Clinical Pharmacology and Toxicology</i> , 2017, 120, 450-456.	1.2	12
65	Inhibition of CPT2 exacerbates cardiac dysfunction and inflammation in experimental endotoxaemia. <i>Journal of Cellular and Molecular Medicine</i> , 2020, 24, 11903-11911.	1.6	11
66	EPR investigation of in vivo inhibitory effect of guanidine compounds on nitric oxide production in rat tissues. <i>Journal of Physiology and Pharmacology</i> , 2003, 54, 339-47.	1.1	11
67	The methylester of $\gamma$ -butyrobetaine, but not $\gamma$ -butyrobetaine itself, induces muscarinic receptor-dependent vasodilatation. <i>Naunyn-Schmiedeberg's Archives of Pharmacology</i> , 2004, 369, 533-539.	1.4	10
68	High l-carnitine concentrations do not prevent late diabetic complications in type 1 and 2 diabetic patients. <i>Nutrition Research</i> , 2012, 32, 320-327.	1.3	9
69	Fasting-Mimicking Diet Reduces Trimethylamine N-Oxide Levels and Improves Serum Biochemical Parameters in Healthy Volunteers. <i>Nutrients</i> , 2022, 14, 1093.	1.7	9
70	Quantitative analysis of phenibut in rat brain tissue extracts by liquid chromatography-tandem mass spectrometry. <i>Biomedical Chromatography</i> , 2008, 22, 1321-1324.	0.8	8
71	Magnesium nitrate attenuates blood pressure rise in SHR rats. <i>Magnesium Research</i> , 2014, 27, 16-24.	0.4	8
72	Low cardiac content of long-chain acylcarnitines in TMLHE knockout mice prevents ischaemia-reperfusion-induced mitochondrial and cardiac damage. <i>Free Radical Biology and Medicine</i> , 2021, 177, 370-380.	1.3	8

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73	Long-Chain Acylcarnitines Decrease the Phosphorylation of the Insulin Receptor at Tyr1151 Through a PTP1B-Dependent Mechanism. <i>International Journal of Molecular Sciences</i> , 2021, 22, 6470.	1.8	7
74	The Regulation of Energy Metabolism Pathways Through L-Carnitine Homeostasis. , 0, , .		6
75	Flow cytometric analysis of glyoxalaseâ€1 expression in human leukocytes. <i>Cell Biochemistry and Function</i> , 2011, 29, 171-174.	1.4	6
76	A short-term high-dose administration of sodium pivalate impairs pyruvate metabolism without affecting cardiac function. <i>Cardiovascular Toxicology</i> , 2012, 12, 298-303.	1.1	5
77	Investigations on the Pharmacology of the Cardioprotective Guanidine ME10092. <i>Journal of Cardiovascular Pharmacology</i> , 2004, 44, 178-186.	0.8	4
78	Response to comment by Sergei V. Jargin: â€œMeldonium (Mildronate): primum nâ€n nocereâ€. <i>Pharmacological Research</i> , 2016, 114, 295-296.	3.1	4
79	S -phenylpiracetam, a selective DAT inhibitor, reduces body weight gain without influencing locomotor activity. <i>Pharmacology Biochemistry and Behavior</i> , 2017, 160, 21-29.	1.3	4
80	Protective Effects of Meldonium in Experimental Models of Cardiovascular Complications with a Potential Application in COVID-19. <i>International Journal of Molecular Sciences</i> , 2022, 23, 45.	1.8	4
81	Decrease in Longâ€Chain Acylcarnitine Tissue Content Determines the Duration of and Correlates with the Cardioprotective Effect of Methylâ€GGBâ€. <i>Basic and Clinical Pharmacology and Toxicology</i> , 2017, 121, 106-112.	1.2	3
82	Letter to the Editor: â€œSerum Carnitine Metabolites and Incident Type 2 Diabetes Mellitus in Patients With Suspected Stable Angina Pectorisâ€. <i>Journal of Clinical Endocrinology and Metabolism</i> , 2018, 103, 4037-4038.	1.8	3
83	Inhibition of Fatty Acid Metabolism Increases EPA and DHA Levels and Protects against Myocardial Ischaemia-Reperfusion Injury in Zucker Rats. <i>Oxidative Medicine and Cellular Longevity</i> , 2021, 2021, 1-13.	1.9	3
84	Rats with congenital hydronephrosis show increased susceptibility to renal ischemiaâ€reperfusion injury. <i>Physiological Reports</i> , 2020, 8, e14638.	0.7	2
85	Risk prediction system for pharmacological problems. <i>Automatic Control and Computer Sciences</i> , 2012, 46, 57-65.	0.4	1
86	Excretion of the Polymyxin Derivative NAB739 in Murine Urine. <i>Antibiotics</i> , 2020, 9, 143.	1.5	1
87	Rodent Heart and Brain Tissue Preparation for Digital Macro Photography after Ischemia-reperfusion. <i>Journal of Visualized Experiments</i> , 2022, , .	0.2	1