

The Science and Translation of Lactate Shuttle Theory

Cell Metabolism

27, 757-785

DOI: [10.1016/j.cmet.2018.03.008](https://doi.org/10.1016/j.cmet.2018.03.008)

Citation Report

#	ARTICLE	IF	CITATIONS
1	Transport-exclusion pharmacology to localize lactate dehydrogenase activity within cells. <i>Cancer & Metabolism</i> , 2018, 6, 19.	2.4	6
2	Red blood cells as an organ? How deep omics characterization of the most abundant cell in the human body highlights other systemic metabolic functions beyond oxygen transport. <i>Expert Review of Proteomics</i> , 2018, 15, 855-864.	1.3	81
3	Strengthening the Brain's Resistance Training with Blood Flow Restriction an Effective Strategy for Cognitive Improvement?. <i>Journal of Clinical Medicine</i> , 2018, 7, 337.	1.0	22
4	Trajectories of Brain Lactate and Re-visited Oxygen-Glucose Index Calculations Do Not Support Elevated Non-oxidative Metabolism of Glucose Across Childhood. <i>Frontiers in Neuroscience</i> , 2018, 12, 631.	1.4	12
6	Lactate administration activates the ERK1/2, mTORC1, and AMPK pathways differentially according to skeletal muscle type in mouse. <i>Physiological Reports</i> , 2018, 6, e13800.	0.7	46
7	Utilization of lactic acid in human myotubes and interplay with glucose and fatty acid metabolism. <i>Scientific Reports</i> , 2018, 8, 9814.	1.6	40
8	Early Adaptations to a Two-Week Uphill Run Sprint Interval Training and Cycle Sprint Interval Training. <i>Sports</i> , 2018, 6, 72.	0.7	3
9	Do we have to consider acidosis induced by exercise as deleterious in sickle cell disease?. <i>Experimental Physiology</i> , 2018, 103, 1213-1220.	0.9	11
10	A <i>Drosophila</i> model of combined D-2- and L-2-hydroxyglutaric aciduria reveals a mechanism linking mitochondrial citrate export with oncometabolite accumulation. <i>DMM Disease Models and Mechanisms</i> , 2018, 11, .	1.2	25
11	Performance Enhancing Effect of Metabolic Pre-conditioning on Upper-Body Strength-Endurance Exercise. <i>Frontiers in Physiology</i> , 2018, 9, 963.	1.3	8
12	Tyrosine Kinase Signaling in Cancer Metabolism: PKM2 Paradox in the Warburg Effect. <i>Frontiers in Cell and Developmental Biology</i> , 2018, 6, 79.	1.8	58
13	Association between mild anemia and physical fitness in a military male cohort: The CHIEF study. <i>Scientific Reports</i> , 2019, 9, 11165.	1.6	38
14	Stay Fit, Stay Young: Mitochondria in Movement: The Role of Exercise in the New Mitochondrial Paradigm. <i>Oxidative Medicine and Cellular Longevity</i> , 2019, 2019, 1-18.	1.9	56
15	Functional and/or structural brain changes in response to resistance exercises and resistance training lead to cognitive improvements – a systematic review. <i>European Review of Aging and Physical Activity</i> , 2019, 16, 10.	1.3	164
16	Discovery of potential genes contributing to the biosynthesis of short-chain fatty acids and lactate in gut microbiota from systematic investigation in <i>E. coli</i> . <i>Npj Biofilms and Microbiomes</i> , 2019, 5, 19.	2.9	39
17	Antagonism between Antiviral Signaling and Glycolysis. <i>Trends in Endocrinology and Metabolism</i> , 2019, 30, 571-573.	3.1	10
18	Lactate-Based Improvement of Energetic Charge and Protection of Rat Liver. <i>Liver Transplantation</i> , 2019, 25, 1571-1575.	1.3	1
19	Natural Tolerance to Ischemia and Hypoxemia in Diving Mammals: A Review. <i>Frontiers in Physiology</i> , 2019, 10, 1199.	1.3	32

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20	Effects of lactate administration on mitochondrial enzyme activity and monocarboxylate transporters in mouse skeletal muscle. <i>Physiological Reports</i> , 2019, 7, e14224.	0.7	23
21	Aerobic Capacity, Lactate Concentration, and Work Assessment During Maximum Exercise at Sea Level and High Altitude in Miners Exposed to Chronic Intermittent Hypobaric Hypoxia (3,800 m). <i>Frontiers in Physiology</i> , 2019, 10, 1149.	1.3	12
22	Differential contribution of pyruvate carboxylation to anaplerosis and cataplerosis during non-gluconeogenic and gluconeogenic conditions in HepG2 cells. <i>Archives of Biochemistry and Biophysics</i> , 2019, 676, 108124.	1.4	6
23	Hydrogen Rich Water Improved Ventilatory, Perceptual and Lactate Responses to Exercise. <i>International Journal of Sports Medicine</i> , 2019, 40, 879-885.	0.8	32
24	Glutamine and type 1 diabetes mellitus. <i>Current Opinion in Clinical Nutrition and Metabolic Care</i> , 2019, 22, 91-95.	1.3	11
25	Catalytically inactive carbonic anhydrase-related proteins enhance transport of lactate by MCT1. <i>FEBS Open Bio</i> , 2019, 9, 1204-1211.	1.0	13
26	Bioenergetic basis of skeletal muscle fatigue. <i>Current Opinion in Physiology</i> , 2019, 10, 118-127.	0.9	53
27	Thinking forward: promising but unproven ideas for future intensive care. <i>Critical Care</i> , 2019, 23, 197.	2.5	2
28	Determination of lactate levels in biological fluids using a disposable ion-selective potentiometric sensor based on polypyrrole films. <i>Sensors and Actuators B: Chemical</i> , 2019, 296, 126663.	4.0	27
29	AMPK activation inhibits the functions of myeloid-derived suppressor cells (MDSC): impact on cancer and aging. <i>Journal of Molecular Medicine</i> , 2019, 97, 1049-1064.	1.7	78
30	The many acid-base manifestations and consequences of hypoxia. <i>Current Opinion in Physiology</i> , 2019, 7, 72-81.	0.9	2
31	Lactate Dehydrogenases as Metabolic Links between Tumor and Stroma in the Tumor Microenvironment. <i>Cancers</i> , 2019, 11, 750.	1.7	172
32	Abnormal blood lactate accumulation during repeated exercise testing in myalgic encephalomyelitis/chronic fatigue syndrome. <i>Physiological Reports</i> , 2019, 7, e14138.	0.7	41
33	Fructose co-ingestion to increase carbohydrate availability in athletes. <i>Journal of Physiology</i> , 2019, 597, 3549-3560.	1.3	29
34	HIF1 α -Induced Glycolysis in Macrophage Is Essential for the Protective Effect of Ouabain during Endotoxemia. <i>Oxidative Medicine and Cellular Longevity</i> , 2019, 2019, 1-10.	1.9	10
35	High-Throughput Metabolomics. <i>Methods in Molecular Biology</i> , 2019, . .	0.4	6
36	Blood Biomarkers in Sports Medicine and Performance and the Future of Metabolomics. <i>Methods in Molecular Biology</i> , 2019, 1978, 431-446.	0.4	10
37	Exercise and health – emerging roles of IL-6. <i>Current Opinion in Physiology</i> , 2019, 10, 49-54.	0.9	33

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38	A Metabolism Toolbox for CAR T Therapy. <i>Frontiers in Oncology</i> , 2019, 9, 322.	1.3	54
39	The Warburg metabolism fuels tumor metastasis. <i>Cancer and Metastasis Reviews</i> , 2019, 38, 157-164.	2.7	146
40	Understanding Lactatemia in Human Sepsis. Potential Impact for Early Management. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2019, 200, 582-589.	2.5	90
41	Physiological comparison of hemorrhagic shock and V _E TM O ₂ max: A conceptual framework for defining the limitation of oxygen delivery. <i>Experimental Biology and Medicine</i> , 2019, 244, 690-701.	1.1	11
42	Glioblastoma heterogeneity and the tumour microenvironment: implications for preclinical research and development of new treatments. <i>Biochemical Society Transactions</i> , 2019, 47, 625-638.	1.6	104
43	Tricarboxylic Acid Cycle Activity and Remodeling of Glycerophosphocholine Lipids Support Cytokine Induction in Response to Fungal Patterns. <i>Cell Reports</i> , 2019, 27, 525-536.e4.	2.9	31
44	Red Blood Cell Metabolic Responses to Torpor and Arousal in the Hibernator Arctic Ground Squirrel. <i>Journal of Proteome Research</i> , 2019, 18, 1827-1841.	1.8	34
45	Determining the Upper Limit of the Metabolic Steady State. <i>Medicine and Science in Sports and Exercise</i> , 2019, 51, 602-602.	0.2	4
46	Comparison of a Genetic Algorithm Variable Selection and Interval Partial Least Squares for quantitative analysis of lactate in PBS. , 2019, 2019, 3239-3242.		2
47	Doseâ€“Response Matters! â€“ A Perspective on the Exercise Prescription in Exerciseâ€“Cognition Research. <i>Frontiers in Psychology</i> , 2019, 10, 2338.	1.1	98
48	Lactate in the Regulation of Tumor Microenvironment and Therapeutic Approaches. <i>Frontiers in Oncology</i> , 2019, 9, 1143.	1.3	522
49	Lactobacillus amylovorus KU4 ameliorates diet-induced obesity in mice by promoting adipose browning through PPAR β signaling. <i>Scientific Reports</i> , 2019, 9, 20152.	1.6	37
50	Lifestyle Modification for Enhancing Autonomic Cardiac Regulation in Children: The Role of Exercise. <i>Children</i> , 2019, 6, 127.	0.6	4
51	Effect of Lactobacillus plantarum TWK10 on Exercise Physiological Adaptation, Performance, and Body Composition in Healthy Humans. <i>Nutrients</i> , 2019, 11, 2836.	1.7	62
52	New On-Water Test for the Assessment of Blood Lactate Response to Exercise in Elite Kayakers. <i>Medicine and Science in Sports and Exercise</i> , 2019, 51, 2595-2602.	0.2	3
53	Kefir micro-organisms: their role in grain assembly and health properties of fermented milk. <i>Journal of Applied Microbiology</i> , 2019, 126, 686-700.	1.4	116
54	Pivotal role of carnosine in the modulation of brain cells activity: Multimodal mechanism of action and therapeutic potential in neurodegenerative disorders. <i>Progress in Neurobiology</i> , 2019, 175, 35-53.	2.8	72
55	Brain Glucose Metabolism: Integration of Energetics with Function. <i>Physiological Reviews</i> , 2019, 99, 949-1045.	13.1	442

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56	Simultaneous determination of lactic acid and pyruvic acid in tissue and cell culture media by gas chromatography after in situ derivatization-ultrasound-assisted emulsification microextraction. <i>Analytical and Bioanalytical Chemistry</i> , 2019, 411, 787-795.	1.9	9
57	Hepatocyte-Macrophage Acetoacetate Shuttle Protects against Tissue Fibrosis. <i>Cell Metabolism</i> , 2019, 29, 383-398.e7.	7.2	87
58	Lactate: A Metabolic Driver in the Tumour Landscape. <i>Trends in Biochemical Sciences</i> , 2019, 44, 153-166.	3.7	263
59	Lactate dehydrogenase supports lactate oxidation in mitochondria isolated from different mouse tissues. <i>Redox Biology</i> , 2020, 28, 101339.	3.9	70
60	Cellular mechanisms of hereditary photoreceptor degeneration – Focus on cGMP. <i>Progress in Retinal and Eye Research</i> , 2020, 74, 100772.	7.3	85
61	Lactate: Fueling the fire starter. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2020, 12, e1474.	6.6	29
62	Lactate and Acidity in the Cancer Microenvironment. <i>Annual Review of Cancer Biology</i> , 2020, 4, 141-158.	2.3	64
63	The emerging roles of lactate as a redox substrate and signaling molecule in adipose tissues. <i>Journal of Physiology and Biochemistry</i> , 2020, 76, 241-250.	1.3	26
64	Lactate-Protected Hypoglycemia (LPH). <i>Frontiers in Neuroscience</i> , 2020, 14, 920.	1.4	6
65	Periodized versus non-periodized swimming training with equal total training load: Physiological, molecular and performance adaptations in Wistar rats. <i>PLoS ONE</i> , 2020, 15, e0239876.	1.1	10
66	Differentiated cancer cell-originated lactate promotes the self-renewal of cancer stem cells in patient-derived colorectal cancer organoids. <i>Cancer Letters</i> , 2020, 493, 236-244.	3.2	28
67	Heat acclimation mediated cardioprotection is controlled by mitochondrial metabolic remodeling involving HIF-1 α . <i>Journal of Thermal Biology</i> , 2020, 93, 102691.	1.1	8
68	Distal control of mitochondrial biogenesis and respiratory activity by extracellular lactate caused by large-scale deletion of mitochondrial DNA. <i>Pharmacological Research</i> , 2020, 160, 105204.	3.1	4
69	Lactate Elicits ER-Mitochondrial Mg ²⁺ Dynamics to Integrate Cellular Metabolism. <i>Cell</i> , 2020, 183, 474-489.e17.	13.5	84
70	Translocase of the outer mitochondrial membrane complex subunit 20 (TOMM20) facilitates cancer aggressiveness and therapeutic resistance in chondrosarcoma. <i>Biochimica Et Biophysica Acta - Molecular Basis of Disease</i> , 2020, 1866, 165962.	1.8	16
71	Brain and muscle adaptation to high-fat diets and exercise: Metabolic transporters, enzymes and substrates in the rat cortex and muscle. <i>Brain Research</i> , 2020, 1749, 147126.	1.1	3
72	Lactate Dehydrogenase A Governs Cardiac Hypertrophic Growth in Response to Hemodynamic Stress. <i>Cell Reports</i> , 2020, 32, 108087.	2.9	43
73	Modulation of oral microbiota: A new frontier in exercise supplementation. <i>PharmaNutrition</i> , 2020, 14, 100230.	0.8	7

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74	Dynamic Variations in Brain Glycogen are Involved in Modulating Isoflurane Anesthesia in Mice. <i>Neuroscience Bulletin</i> , 2020, 36, 1513-1523.	1.5	8
75	Lactate: the ugly duckling of energy metabolism. <i>Nature Metabolism</i> , 2020, 2, 566-571.	5.1	371
76	Energy System Contributions and Physical Activity in Specific Age Groups during Exergames. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 4905.	1.2	3
77	Lactate as a fulcrum of metabolism. <i>Redox Biology</i> , 2020, 35, 101454.	3.9	291
78	Lactate Attenuates Synaptic Transmission and Affects Brain Rhythms Featuring High Energy Expenditure. <i>IScience</i> , 2020, 23, 101316.	1.9	33
79	Muscle structural, energetic and functional benefits of endurance exercise training in sickle cell disease. <i>American Journal of Hematology</i> , 2020, 95, 1257-1268.	2.0	9
80	Neuronal and astroglial monocarboxylate transporters play key but distinct roles in hippocampus-dependent learning and memory formation. <i>Progress in Neurobiology</i> , 2020, 194, 101888.	2.8	41
81	Output Regulation and Function Optimization of Mitochondria in Eukaryotes. <i>Frontiers in Cell and Developmental Biology</i> , 2020, 8, 598112.	1.8	6
82	Beyond energy storage: roles of glycogen metabolism in health and disease. <i>FEBS Journal</i> , 2021, 288, 3772-3783.	2.2	27
83	Evidence of Mitochondrial Dysfunction in Fibromyalgia: Deviating Muscle Energy Metabolism Detected Using Microdialysis and Magnetic Resonance. <i>Journal of Clinical Medicine</i> , 2020, 9, 3527.	1.0	17
84	Hypoxia Dictates Metabolic Rewiring of Tumors: Implications for Chemoresistance. <i>Cells</i> , 2020, 9, 2598.	1.8	62
85	Effect of post-exercise lactate administration on glycogen repletion and signaling activation in different types of mouse skeletal muscle. <i>Current Research in Physiology</i> , 2020, 3, 34-43.	0.8	8
86	Decreased Blood Glucose and Lactate: Is a Useful Indicator of Recovery Ability in Athletes?. <i>International Journal of Environmental Research and Public Health</i> , 2020, 17, 5470.	1.2	30
87	Effects of Lactate on One Class of Group III (CT3) Muscle Afferents. <i>Frontiers in Cellular Neuroscience</i> , 2020, 14, 215.	1.8	2
88	The Precious Few Grams of Glucose During Exercise. <i>International Journal of Molecular Sciences</i> , 2020, 21, 5733.	1.8	28
89	Metabolic programming of nephron progenitor cell fate. <i>Pediatric Nephrology</i> , 2020, 36, 2155-2164.	0.9	5
90	Lactate Transporters Mediate Glia-Neuron Metabolic Crosstalk in Homeostasis and Disease. <i>Frontiers in Cellular Neuroscience</i> , 2020, 14, 589582.	1.8	35
91	Mitochondrial pyruvate carriers are required for myocardial stress adaptation. <i>Nature Metabolism</i> , 2020, 2, 1248-1264.	5.1	87

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92	Lung mitochondria adaptation to endurance training in rats. <i>Free Radical Biology and Medicine</i> , 2020, 161, 163-174.	1.3	13
93	AMPK-Regulated Astrocytic Lactate Shuttle Plays a Non-Cell-Autonomous Role in Neuronal Survival. <i>Cell Reports</i> , 2020, 32, 108092.	2.9	61
94	Quantitative Assessment of Blood Lactate in Shock: Measure of Hypoxia or Beneficial Energy Source. <i>BioMed Research International</i> , 2020, 2020, 1-24.	0.9	13
95	Comparison of wavelength selection methods for in-vitro estimation of lactate: a new unconstrained, genetic algorithm-based wavelength selection. <i>Scientific Reports</i> , 2020, 10, 16905.	1.6	12
96	Differential processing and localization of human Nocturnin controls metabolism of mRNA and nicotinamide adenine dinucleotide cofactors. <i>Journal of Biological Chemistry</i> , 2020, 295, 15112-15133.	1.6	6
98	Changes in γ H2AX and H4K16ac levels are involved in the biochemical response to a competitive soccer match in adolescent players. <i>Scientific Reports</i> , 2020, 10, 14481.	1.6	3
99	Elevated plasma lactate levels via exogenous lactate infusion do not alter resistance exercise-induced signaling or protein synthesis in human skeletal muscle. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2020, 319, E792-E804.	1.8	11
100	The Role of Pi, Glutamine and the Essential Amino Acids in Modulating the Metabolism in Diabetes and Cancer. <i>Journal of Diabetes and Metabolic Disorders</i> , 2020, 19, 1731-1775.	0.8	6
101	Primary, Secondary, and Tertiary Effects of Carbohydrate Ingestion During Exercise. <i>Sports Medicine</i> , 2020, 50, 1863-1871.	3.1	13
102	Predicting Health Care Workers' Tolerance of Personal Protective Equipment: An Observational Simulation Study. <i>Clinical Simulation in Nursing</i> , 2020, 47, 65-72.	1.5	4
103	Effect of lactate administration on exercise-induced PGC-1 α mRNA expression in Thoroughbreds. <i>Comparative Exercise Physiology</i> , 2020, 16, 253-258.	0.3	2
104	Revisiting lactate dynamics in cancer: a metabolic expertise or an alternative attempt to survive?. <i>Journal of Molecular Medicine</i> , 2020, 98, 1397-1414.	1.7	10
105	Acid-base disorders in sick goats and their association with mortality: A simplified strong ion difference approach. <i>Journal of Veterinary Internal Medicine</i> , 2020, 34, 2776-2786.	0.6	7
106	Metabolic Control of Epilepsy: A Promising Therapeutic Target for Epilepsy. <i>Frontiers in Neurology</i> , 2020, 11, 592514.	1.1	25
107	Failure of Lactate Clearance Predicts the Outcome of Critically Ill Septic Patients. <i>Diagnostics</i> , 2020, 10, 1105.	1.3	16
109	Dietary Lactate Supplementation Protects against Obesity by Promoting Adipose Browning in Mice. <i>Journal of Agricultural and Food Chemistry</i> , 2020, 68, 14841-14849.	2.4	19
110	Biological effects of the oxygen molecule in critically ill patients. <i>Journal of Intensive Care</i> , 2020, 8, 95.	1.3	22
111	ITGB2-mediated metabolic switch in CAFs promotes OSCC proliferation by oxidation of NADH in mitochondrial oxidative phosphorylation system. <i>Theranostics</i> , 2020, 10, 12044-12059.	4.6	62

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112	Metabolomics of Endurance Capacity in World Tour Professional Cyclists. <i>Frontiers in Physiology</i> , 2020, 11, 578.	1.3	32
113	Endothelial Lactate Controls Muscle Regeneration from Ischemia by Inducing M2-like Macrophage Polarization. <i>Cell Metabolism</i> , 2020, 31, 1136-1153.e7.	7.2	233
114	Nothing Is Yet Set in (Hi)stone: Novel Post-Translational Modifications Regulating Chromatin Function. <i>Trends in Biochemical Sciences</i> , 2020, 45, 829-844.	3.7	63
115	Coevolution of body size and metabolic rate in vertebrates: a life-history perspective. <i>Biological Reviews</i> , 2020, 95, 1393-1417.	4.7	73
116	Short-term hypoxic training increases monocarboxylate transporter 4 and phosphofructokinase activity in Thoroughbreds. <i>Physiological Reports</i> , 2020, 8, e14473.	0.7	3
117	Plasma Lactate as a Marker for Metabolic Health. <i>Exercise and Sport Sciences Reviews</i> , 2020, 48, 119-124.	1.6	23
118	Intensity Thresholds and Maximal Lactate Steady State in Small Muscle Group Exercise. <i>Sports</i> , 2020, 8, 77.	0.7	2
119	Functional Studies with Primary Cells Provide a System for Genome-to-Phenome Investigations in Marine Mammals. <i>Integrative and Comparative Biology</i> , 2020, 60, 348-360.	0.9	5
120	A Novel, Multi-Faceted Perception of Lactate in Neurology. <i>Frontiers in Neuroscience</i> , 2020, 14, 460.	1.4	8
121	Protein S-glutathionylation reactions as a global inhibitor of cell metabolism for the desensitization of hydrogen peroxide signals. <i>Redox Biology</i> , 2020, 32, 101472.	3.9	73
122	Oral Lactate Administration Additively Enhances Endurance Training-Induced Increase in Cytochrome C Oxidase Activity in Mouse Soleus Muscle. <i>Nutrients</i> , 2020, 12, 770.	1.7	15
123	Diurnal variation in the glycogen content of the human liver using ¹³ C MRS. <i>NMR in Biomedicine</i> , 2020, 33, e4289.	1.6	13
124	Lactic acidosis induces resistance to the pan-Akt inhibitor uprosertib in colon cancer cells. <i>British Journal of Cancer</i> , 2020, 122, 1298-1308.	2.9	32
125	Neuroendocrine and Behavioral Consequences of Hyperglycemia in Cancer. <i>Endocrinology</i> , 2020, 161, .	1.4	4
126	The Contribution of Functional Magnetic Resonance Imaging to the Understanding of the Effects of Acute Physical Exercise on Cognition. <i>Brain Sciences</i> , 2020, 10, 175.	1.1	36
127	Effects of Chlorhexidine mouthwash on the oral microbiome. <i>Scientific Reports</i> , 2020, 10, 5254.	1.6	141
128	Greater lactate accumulation following an acute bout of high-intensity exercise in males suppresses acylated ghrelin and appetite postexercise. <i>Journal of Applied Physiology</i> , 2020, 128, 1321-1328.	1.2	15
129	Redox Signaling in Widespread Health Benefits of Exercise. <i>Antioxidants and Redox Signaling</i> , 2020, 33, 745-760.	2.5	31

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130	Fluid Brain Glycolysis: Limits, Speed, Location, Moonlighting, and the Fates of Glycogen and Lactate. <i>Neurochemical Research</i> , 2020, 45, 1328-1334.	1.6	14
131	5Åkm front crawl in pool and open water swimming: breath-by-breath energy expenditure and kinematic analysis. <i>European Journal of Applied Physiology</i> , 2020, 120, 2005-2018.	1.2	12
132	The tortuous path of lactate shuttle discovery: From cinders and boards to the lab and ICU. <i>Journal of Sport and Health Science</i> , 2020, 9, 446-460.	3.3	32
133	Fermentation Products of Commensal Bacteria Alter Enterocyte Lipid Metabolism. <i>Cell Host and Microbe</i> , 2020, 27, 358-375.e7.	5.1	97
134	Glycolysis/gluconeogenesis- and tricarboxylic acid cycle-related metabolites, Mediterranean diet, and type 2 diabetes. <i>American Journal of Clinical Nutrition</i> , 2020, 111, 835-844.	2.2	56
135	Metabolite Concentration Changes in Humans After a Bout of Exercise: a Systematic Review of Exercise Metabolomics Studies. <i>Sports Medicine - Open</i> , 2020, 6, 11.	1.3	127
136	Is Lactate an Oncometabolite? Evidence Supporting a Role for Lactate in the Regulation of Transcriptional Activity of Cancer-Related Genes in MCF7 Breast Cancer Cells. <i>Frontiers in Oncology</i> , 2019, 9, 1536.	1.3	63
137	Cancer metabolism. , 2020, , 15-52.		1
138	Lactic acid and its transport system. , 2020, , 99-123.		0
139	Increased blood lactate levels during exercise and mitochondrial DNA alterations converge on mitochondrial dysfunction in schizophrenia. <i>Schizophrenia Research</i> , 2020, 220, 61-68.	1.1	12
140	Glycolysis – a key player in the inflammatory response. <i>FEBS Journal</i> , 2020, 287, 3350-3369.	2.2	250
141	Metabolic Regulation of Myeloid-Derived Suppressor Cell Function in Cancer. <i>Cells</i> , 2020, 9, 1011.	1.8	30
142	Nuclear Magnetic Resonance Metabolomics Biomarkers for Identifying High Risk Patients with Extranodal Extension in Oral Squamous Cell Carcinoma. <i>Journal of Clinical Medicine</i> , 2020, 9, 951.	1.0	17
143	New Insights into Mechanical, Metabolic and Muscle Oxygenation Signals During and After High-Intensity Tethered Running. <i>Scientific Reports</i> , 2020, 10, 6336.	1.6	15
144	Short-Term Repeated Wingate Training in Hypoxia and Normoxia in Sprinters. <i>Frontiers in Sports and Active Living</i> , 2020, 2, 43.	0.9	5
145	A Cluster Set Protocol in the Half Squat Exercise Reduces Mechanical Fatigue and Lactate Concentrations in Comparison with a Traditional Set Configuration. <i>Sports</i> , 2020, 8, 45.	0.7	5
146	Mitochondrial lactate metabolism: history and implications for exercise and disease. <i>Journal of Physiology</i> , 2021, 599, 863-888.	1.3	97
147	Retinal energy metabolism in health and glaucoma. <i>Progress in Retinal and Eye Research</i> , 2021, 81, 100881.	7.3	52

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148	Domesticated and optimized mitochondria: Mitochondrial modifications based on energetic status and cellular stress. <i>Life Sciences</i> , 2021, 265, 118766.	2.0	5
149	Lactate fluxes mediated by the monocarboxylate transporter-1 are key determinants of the metabolic activity of beige adipocytes. <i>Journal of Biological Chemistry</i> , 2021, 296, 100137.	1.6	22
150	Preventive measures for the critical postexercise period in sickle cell trait and disease. <i>Journal of Applied Physiology</i> , 2021, 130, 485-490.	1.2	3
151	Prognostic stratification in septic patients with overt and cryptic shock by speckle tracking echocardiography. <i>Internal and Emergency Medicine</i> , 2021, 16, 757-764.	1.0	10
152	Metabolic regulation of the bone marrow microenvironment in leukemia. <i>Blood Reviews</i> , 2021, 48, 100786.	2.8	19
153	Hypoperfusion is a potential inducer of immunosuppressive network in Alzheimer's disease. <i>Neurochemistry International</i> , 2021, 142, 104919.	1.9	7
154	Lactate and TGF α antagonistically regulate inflammasome activation in the tumor microenvironment. <i>Journal of Cellular Physiology</i> , 2021, 236, 4528-4537.	2.0	19
156	Structural basis of human monocarboxylate transporter 1 inhibition by anti-cancer drug candidates. <i>Cell</i> , 2021, 184, 370-383.e13.	13.5	143
157	Effects of including sprints during prolonged cycling on hormonal and muscular responses and recovery in elite cyclists. <i>Scandinavian Journal of Medicine and Science in Sports</i> , 2021, 31, 529-541.	1.3	4
158	The anaerobic threshold: 50+ years of controversy. <i>Journal of Physiology</i> , 2021, 599, 737-767.	1.3	156
159	Lactate modulation of immune responses in inflammatory versus tumour microenvironments. <i>Nature Reviews Immunology</i> , 2021, 21, 151-161.	10.6	330
160	The MCT1 gene Glu490Asp polymorphism (rs1049434) is associated with endurance athlete status, lower blood lactate accumulation and higher maximum oxygen uptake. <i>Biology of Sport</i> , 2021, 38, 465-474.	1.7	14
161	Effects of lactate and carbon monoxide interactions on neuroprotection and neuropreservation. <i>Medical Gas Research</i> , 2021, 11, 158.	1.2	7
162	Influence of Imidazole-Dipeptides on Cognitive Status and Preservation in Elders: A Narrative Review. <i>Nutrients</i> , 2021, 13, 397.	1.7	10
163	Novel standardized method for extracellular flux analysis of oxidative and glycolytic metabolism in peripheral blood mononuclear cells. <i>Scientific Reports</i> , 2021, 11, 1662.	1.6	15
164	Etiology of lactic acidosis in malaria. <i>PLoS Pathogens</i> , 2021, 17, e1009122.	2.1	29
165	Lactate dehydrogenase B regulates macrophage metabolism in the tumor microenvironment. <i>Theranostics</i> , 2021, 11, 7570-7588.	4.6	26
166	Carbohydrate metabolism in prostate cancer. , 2021, , 271-294.		0

#	ARTICLE	IF	CITATIONS
167	Tuning multilayered polymeric self-standing films for controlled release of L-lactate by electrical stimulation. <i>Journal of Controlled Release</i> , 2021, 330, 669-683.	4.8	13
168	Targeting Diet and Exercise for Neuroprotection and Neurorecovery in Glaucoma. <i>Cells</i> , 2021, 10, 295.	1.8	21
169	Lactate in contemporary biology: a phoenix risen. <i>Journal of Physiology</i> , 2022, 600, 1229-1251.	1.3	85
170	Low-Dose Ammonium Preconditioning Enhances Endurance in Submaximal Physical Exercises. <i>Sports</i> , 2021, 9, 29.	0.7	0
172	Lactate Metabolism and Signaling in Tuberculosis and Cancer: A Comparative Review. <i>Frontiers in Cellular and Infection Microbiology</i> , 2021, 11, 624607.	1.8	18
173	The Source of Glycolytic Intermediates in Mammalian Tissues. <i>Cell Metabolism</i> , 2021, 33, 367-378.e5.	7.2	80
174	Lactate anions participate in T cell cytokine production and function. <i>Science China Life Sciences</i> , 2021, 64, 1895-1905.	2.3	12
175	The Dynamic Computer Workstation—A Pilot Study of Clinical and Biochemical Investigation during Work at Static Respectively Mobile Keyboards. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 1493.	1.2	0
176	Hydrogen Rich Water Consumption Positively Affects Muscle Performance, Lactate Response, and Alleviates Delayed Onset of Muscle Soreness After Resistance Training. <i>Journal of Strength and Conditioning Research</i> , 2022, 36, 2792-2799.	1.0	11
177	L-lactate promotes intestinal epithelial cell migration to inhibit colitis. <i>FASEB Journal</i> , 2021, 35, e21554.	0.2	6
178	Biocompatible nanoreactors of catalase and nanozymes for anticancer therapeutics. <i>Nano Select</i> , 2021, 2, 1849-1873.	1.9	8
179	Compartmentalised metabolic programmes in human anagen hair follicles: New targets to modulate epithelial stem cell behaviour, keratinocyte proliferation and hair follicle immune status?. <i>Experimental Dermatology</i> , 2021, 30, 645-651.	1.4	6
180	Exercise-Stimulated ROS Sensitive Signaling Pathways in Skeletal Muscle. <i>Antioxidants</i> , 2021, 10, 537.	2.2	72
181	Remodeling of Cancer-Specific Metabolism under Hypoxia with Lactate Calcium Salt in Human Colorectal Cancer Cells. <i>Cancers</i> , 2021, 13, 1518.	1.7	3
182	A novel device for detecting anaerobic threshold using sweat lactate during exercise. <i>Scientific Reports</i> , 2021, 11, 4929.	1.6	31
183	The pentose phosphate pathway mediates hyperoxia-induced lung vascular dysgenesis and alveolar simplification in neonates. <i>JCI Insight</i> , 2021, 6, .	2.3	14
184	Clinical evaluation of a novel subcutaneous lactate monitor. <i>Journal of Clinical Monitoring and Computing</i> , 2021, , 1.	0.7	6
185	Understanding the Relationship between Intrinsic Cardiorespiratory Fitness and Serum and Skeletal Muscle Metabolomics Profile. <i>Journal of Proteome Research</i> , 2021, 20, 2397-2409.	1.8	10

#	ARTICLE	IF	CITATIONS
186	Overcoming the Immunosuppressive Tumor Microenvironment in Multiple Myeloma. <i>Cancers</i> , 2021, 13, 2018.	1.7	26
187	Role of the Heart in Lactate Shuttling. <i>Frontiers in Nutrition</i> , 2021, 8, 663560.	1.6	21
188	The effects of interval training on peripheral brain derived neurotrophic factor (BDNF) in young adults: a systematic review and meta-analysis. <i>Scientific Reports</i> , 2021, 11, 8937.	1.6	15
189	Re-Evaluating the Oxidative Phenotype: Can Endurance Exercise Save the Western World?. <i>Antioxidants</i> , 2021, 10, 609.	2.2	9
191	LDH Isotyping for Checkpoint Inhibitor Response Prediction in Patients with Metastatic Melanoma. <i>Immuno</i> , 2021, 1, 67-77.	0.6	3
192	The "Anaerobic Threshold" Concept Is Valid in Physiology and Medicine. <i>Medicine and Science in Sports and Exercise</i> , 2021, 53, 1089-1092.	0.2	3
193	The Effect of Lower Body Anaerobic Pre-loading on Upper Body Ergometer Time Trial Performance. <i>Sports</i> , 2021, 9, 79.	0.7	1
194	Lactate Reprograms Energy and Lipid Metabolism in Glucose-Deprived Oxidative Glioma Stem Cells. <i>Metabolites</i> , 2021, 11, 325.	1.3	11
195	Expression of lactate dehydrogenase A and B isoforms in the mouse kidney. <i>American Journal of Physiology - Renal Physiology</i> , 2021, 320, F706-F718.	1.3	18
196	The "Anaerobic Threshold" Concept Is Not Valid in Physiology and Medicine. <i>Medicine and Science in Sports and Exercise</i> , 2021, 53, 1093-1096.	0.2	5
197	Dynamics and metabolic profile of oral keratinocytes (NOK-si) and <i>Candida albicans</i> after interaction in co-culture. <i>Biofouling</i> , 2021, 37, 572-589.	0.8	2
198	The relationship between admission glucose and lactate with critical illness amongst adult patients presenting to the emergency department. <i>Acta Diabetologica</i> , 2021, 58, 1343-1349.	1.2	4
199	Cardiac Energy Metabolism in Heart Failure. <i>Circulation Research</i> , 2021, 128, 1487-1513.	2.0	433
200	Metabolic Interplay between the Immune System and Melanoma Cells: Therapeutic Implications. <i>Biomedicines</i> , 2021, 9, 607.	1.4	12
201	Early lactate and glucose kinetics following return to spontaneous circulation after out-of-hospital cardiac arrest. <i>BMC Research Notes</i> , 2021, 14, 183.	0.6	1
202	Lactylation, a Novel Metabolic Reprogramming Code: Current Status and Prospects. <i>Frontiers in Immunology</i> , 2021, 12, 688910.	2.2	76
203	The role of lactate in sepsis and COVID-19: Perspective from contracting skeletal muscle metabolism. <i>Experimental Physiology</i> , 2022, 107, 665-673.	0.9	28
204	Comparison of Physiological Responses and Training Load between Different CrossFit® Workouts with Equalized Volume in Men and Women. <i>Life</i> , 2021, 11, 586.	1.1	12

#	ARTICLE	IF	CITATIONS
205	Lactate Fluxes and Plasticity of Adipose Tissues: A Redox Perspective. <i>Frontiers in Physiology</i> , 2021, 12, 689747.	1.3	26
206	Pre-ischemic Lactate Levels Affect Post-ischemic Recovery in an Isolated Rat Heart Model of Donation After Circulatory Death (DCD). <i>Frontiers in Cardiovascular Medicine</i> , 2021, 8, 669205.	1.1	1
207	Environmental pollution and diabetes mellitus. <i>World Journal of Meta-analysis</i> , 2021, 9, 234-256.	0.1	1
208	What Are Good Muscle Endpoints for Translational Studies?. <i>Translational Medicine and Exercise Prescription</i> , 0, , 4-12.	0.0	0
209	Acute exercise and cognition: A review with testable questions for future research into cognitive enhancement with blood flow restriction. <i>Medical Hypotheses</i> , 2021, 151, 110586.	0.8	6
210	Sodium Lactate Accelerates M2 Macrophage Polarization and Improves Cardiac Function after Myocardial Infarction in Mice. <i>Cardiovascular Therapeutics</i> , 2021, 2021, 1-10.	1.1	20
211	Quantitative flux analysis in mammals. <i>Nature Metabolism</i> , 2021, 3, 896-908.	5.1	35
213	Chronic electrical stimulation reduces reliance on anaerobic metabolism in locust jumping muscle. <i>Comparative Biochemistry and Physiology Part A, Molecular & Integrative Physiology</i> , 2021, 257, 110954.	0.8	1
214	Complementary Nuclear Magnetic Resonance-Based Metabolomics Approaches for Glioma Biomarker Identification in a <i>Drosophila melanogaster</i> Model. <i>Journal of Proteome Research</i> , 2021, 20, 3977-3991.	1.8	4
215	An integrated overview on the regulation of sperm metabolism (glycolysis-Krebs cycle-oxidative) Tj ETQq1 1 0.784314 rgBT /Overlock 10 0,5 22		
216	Altered Metabolic Phenotype of Immune Cells in a Spontaneous Autoimmune Uveitis Model. <i>Frontiers in Immunology</i> , 2021, 12, 601619.	2.2	2
217	Lactate sensing mechanisms in arterial chemoreceptor cells. <i>Nature Communications</i> , 2021, 12, 4166.	5.8	38
218	Anticonvulsant Effects of Carbonic Anhydrase Inhibitors: The Enigmatic Link Between Carbonic Anhydrases and Electrical Activity of the Brain. <i>Neurochemical Research</i> , 2021, 46, 2783-2799.	1.6	13
219	Lactate: a multifunctional signaling molecule. <i>Yeungnam University Journal of Medicine</i> , 2021, 38, 183-193.	0.7	39
220	Lactic acid in macrophage polarization: The significant role in inflammation and cancer. <i>International Reviews of Immunology</i> , 2022, 41, 4-18.	1.5	57
221	Immunometabolism Modulation in Therapy. <i>Biomedicines</i> , 2021, 9, 798.	1.4	5
222	Metabolic Changes of Hepatocytes in NAFLD. <i>Frontiers in Physiology</i> , 2021, 12, 710420.	1.3	46
223	Four Weeks of 16/8 Time Restrictive Feeding in Endurance Trained Male Runners Decreases Fat Mass, without Affecting Exercise Performance. <i>Nutrients</i> , 2021, 13, 2941.	1.7	16

#	ARTICLE	IF	CITATIONS
224	Serum lactate dehydrogenase level as a possible predictor of treatment preference in psoriasis. <i>Journal of Dermatological Science</i> , 2021, 103, 109-115.	1.0	5
225	Astrocyte-neuron metabolic cooperation shapes brain activity. <i>Cell Metabolism</i> , 2021, 33, 1546-1564.	7.2	143
226	Oxygen gradient and tumor heterogeneity: The chronicle of a toxic relationship. <i>Biochimica Et Biophysica Acta: Reviews on Cancer</i> , 2021, 1876, 188553.	3.3	17
227	Rationale and methods to characterize the acute exercise response in aging and Alzheimer's Disease: the AEROBIC pilot study. <i>Contemporary Clinical Trials</i> , 2021, 107, 106457.	0.8	1
228	Lactate and Myocardial Energy Metabolism. <i>Frontiers in Physiology</i> , 2021, 12, 715081.	1.3	26
229	The Influence of Epigenetic Modifications on Metabolic Changes in White Adipose Tissue and Liver and Their Potential Impact in Exercise. <i>Frontiers in Physiology</i> , 2021, 12, 686270.	1.3	4
230	Glycolysis: How a 300yr long research journey that started with the desire to improve alcoholic beverages kept revolutionizing biochemistry. <i>Current Opinion in Systems Biology</i> , 2021, 28, 100380.	1.3	8
231	APO β 4 lowers energy expenditure in females and impairs glucose oxidation by increasing flux through aerobic glycolysis. <i>Molecular Neurodegeneration</i> , 2021, 16, 62.	4.4	34
232	Agreement between the Heart Rate Variability Threshold and Ventilatory Threshold in Young Women: Impact of Cardiac Parasympathetic Status and Cardiorespiratory Fitness. <i>Measurement in Physical Education and Exercise Science</i> , 0, , 1-12.	1.3	3
233	The effects of 7000 meter race on haematological and biochemical parameters in racing greyhounds. <i>Topics in Companion Animal Medicine</i> , 2021, 45, 100583.	0.4	0
234	Changes in Glycolytic Pathway in SARS-COV 2 Infection and Their Importance in Understanding the Severity of COVID-19. <i>Frontiers in Chemistry</i> , 2021, 9, 685196.	1.8	36
235	Chronic Fatigue Syndrome and Cardiovascular Disease. <i>Journal of the American College of Cardiology</i> , 2021, 78, 1056-1067.	1.2	17
236	The Effect of Betulin Diphosphate in Wound Dressings of Bacterial Cellulose-ZnO NPs on Platelet Aggregation and the Activity of Oxidoreductases Regulated by NAD(P) ⁺ /NAD(P)H-Balance in Burns on Rats. <i>Molecules</i> , 2021, 26, 5478.	1.7	1
237	Saliva and Plasma Reflect Metabolism Altered by Diabetes and Periodontitis. <i>Frontiers in Molecular Biosciences</i> , 2021, 8, 742002.	1.6	15
238	Technological advancements to study cellular signaling pathways in inherited retinal degenerative diseases. <i>Current Opinion in Pharmacology</i> , 2021, 60, 102-110.	1.7	2
239	A portable system for photoelectrochemical detection of lactate on TiO ₂ nanoparticles and [Ni(salen)] polymeric film. <i>Sensors and Actuators B: Chemical</i> , 2021, 345, 130390.	4.0	20
240	A distance-based paper sensor for rapid detection of blood lactate concentration using gold nanoparticles synthesized by <i>Satureja hortensis</i> . <i>Sensors and Actuators B: Chemical</i> , 2021, 345, 130445.	4.0	10
241	Can polarization of macrophage metabolism enhance cardiac regeneration?. <i>Journal of Molecular and Cellular Cardiology</i> , 2021, 160, 87-96.	0.9	7

#	ARTICLE	IF	CITATIONS
242	Lactic acid in tumor invasion. <i>Clinica Chimica Acta</i> , 2021, 522, 61-69.	0.5	23
243	Quantum dots-based hydrogel microspheres for visual determination of lactate and simultaneous detection coupled with microfluidic device. <i>Microchemical Journal</i> , 2021, 171, 106801.	2.3	15
244	Cerebrospinal Fluid Lactate Levels, Brain Lactate Metabolism and Neurologic Outcome in Patients with Out-of-Hospital Cardiac Arrest. <i>Neurocritical Care</i> , 2021, 35, 262-270.	1.2	7
245	Effect of lactate administration on mouse skeletal muscle under calorie restriction. <i>Current Research in Physiology</i> , 2021, 4, 202-208.	0.8	5
246	Negative central venous to arterial lactate gradient in patients receiving vasopressors is associated with higher ICU 30-day mortality: a retrospective cohort study. <i>BMC Anesthesiology</i> , 2021, 21, 25.	0.7	1
247	No Influence of Acute Moderate Normobaric Hypoxia on Performance and Blood Lactate Concentration Responses to Repeated Wingates. <i>International Journal of Sports Physiology and Performance</i> , 2021, 16, 154-157.	1.1	3
248	Gut lactate-producing bacteria promote CD4 T cell recovery on Anti-retroviral therapy in HIV-infected patients. <i>Computational and Structural Biotechnology Journal</i> , 2021, 19, 2928-2937.	1.9	3
252	Different Signatures of High Cardiorespiratory Capacity Revealed With Metabolomic Profiling in Elite Athletes. <i>International Journal of Sports Physiology and Performance</i> , 2020, 15, 1156-1167.	1.1	11
253	Identification, pathophysiology, and clinical implications of primary insulin hypersecretion in nondiabetic adults and adolescents. <i>JCI Insight</i> , 2018, 3, .	2.3	87
254	Determination of Anaerobic Capacity - Reliability and Validity of Sprint Running Tests. <i>Exercise Science</i> , 2020, 29, 129-137.	0.1	3
255	The effect of short-term creatine intake on blood lactic acid and muscle fatigue measured by accelerometer-based tremor response to acute resistance exercise. <i>Journal of Exercise Nutrition & Biochemistry</i> , 2020, 24, 29-36.	1.3	5
256	Effects of exogenous lactate administration on fat metabolism and glycogen synthesis factors in rats. <i>Journal of Exercise Nutrition & Biochemistry</i> , 2020, 24, 1-5.	1.3	6
257	Lactate as a key metabolic intermediate in cancer. <i>Annals of Translational Medicine</i> , 2019, 7, 210-210.	0.7	8
258	Lactate and cancer: a "lactatic" perspective on spinal tumor metabolism (part 1). <i>Annals of Translational Medicine</i> , 2019, 7, 220-220.	0.7	23
259	Anaerobic Fitness Testing in Crossfit. <i>Acta Facultatis Educationis Physicae Universitatis Comenianae</i> , 2020, 60, 217-228.	0.0	2
260	Body Fluid pH Balance in Metabolic Health and Possible Benefits of Dietary Alkaline Foods. <i>EFood</i> , 2020, 1, 12-23.	1.7	18
261	Letter to the Editor. Hyperglycolysis as a common cause for elevated lactate in subarachnoid hemorrhage. <i>Journal of Neurosurgery</i> , 2020, , 1-2.	0.9	1
262	Training-Induced Acute Neuromuscular Responses to Military Specific Test during a Six-Month Military Operation. <i>International Journal of Environmental Research and Public Health</i> , 2021, 18, 215.	1.2	3

#	ARTICLE	IF	CITATIONS
263	From Obesity to Hippocampal Neurodegeneration: Pathogenesis and Non-Pharmacological Interventions. <i>International Journal of Molecular Sciences</i> , 2021, 22, 201.	1.8	35
264	Impaired skeletal muscle mitochondrial pyruvate uptake rewires glucose metabolism to drive whole-body leanness. <i>ELife</i> , 2019, 8, .	2.8	54
265	Relationship between skeletal muscle mass and blood lactate level reduction after short squat jumps in healthy adult non-athletes. <i>Journal of Physical Therapy Science</i> , 2021, 33, 717-721.	0.2	3
266	Oligomerized polyphenols in lychee fruit extract supplements may improve high-intensity exercise performance in male athletes: a pilot study. <i>Physical Activity and Nutrition</i> , 2021, 25, 8-15.	0.4	0
267	Can Wearable Sweat Lactate Sensors Contribute to Sports Physiology?. <i>ACS Sensors</i> , 2021, 6, 3496-3508.	4.0	45
269	Exhausted local lactate accumulation via injectable nanozyme-functionalized hydrogel microsphere for inflammation relief and tissue regeneration. <i>Bioactive Materials</i> , 2022, 12, 153-168.	8.6	40
270	mRNA alternative polyadenylation (APA) in regulation of gene expression and diseases. <i>Genes and Diseases</i> , 2023, 10, 165-174.	1.5	5
271	Putative Role of MCT1 rs1049434 Polymorphism in High-Intensity Endurance Performance: Concept and Basis to Understand Possible Individualization Stimulus. <i>Sports</i> , 2021, 9, 143.	0.7	8
272	Basigin deficiency prevents anaplerosis and ameliorates insulin resistance and hepatosteatosis. <i>JCI Insight</i> , 2021, 6, .	2.3	3
274	Warburg Effect, Glutamine, Succinate, Alanine, When Oxygen Matters. <i>Biology</i> , 2021, 10, 1000.	1.3	7
275	Hyperlactatemia in diabetic ketoacidosis. <i>Diabetic Medicine</i> , 2022, 39, e14723.	1.2	7
276	Lactate Is a Metabolic Mediator That Shapes Immune Cell Fate and Function. <i>Frontiers in Physiology</i> , 2021, 12, 688485.	1.3	55
277	Modelling of Blood Lactate Time-Courses During Exercise and/or the Subsequent Recovery: Limitations and Few Perspectives. <i>Frontiers in Physiology</i> , 2021, 12, 702252.	1.3	5
278	Rheb-regulated mitochondrial pyruvate metabolism of Schwann cells linked to axon stability. <i>Developmental Cell</i> , 2021, 56, 2980-2994.e6.	3.1	26
279	Comparison and Performance Validation of Calculated and Established Anaerobic Lactate Thresholds in Running. <i>Medicina (Lithuania)</i> , 2021, 57, 1117.	0.8	1
280	Understanding critically ill sepsis patients with normal serum lactate levels: results from U.S. and European ICU cohorts. <i>Scientific Reports</i> , 2021, 11, 20076.	1.6	18
281	Clinical Utility and Evolution of Donor Serum Lactate During Normothermic Regional Perfusion in Uncontrolled Donation After Circulatory Death. <i>Transplantation Proceedings</i> , 2021, 53, 2650-2654.	0.3	1
282	Lactate in the tumour microenvironment: From immune modulation to therapy. <i>EBioMedicine</i> , 2021, 73, 103627.	2.7	132

#	ARTICLE	IF	CITATIONS
283	Tricarboxylic Acid Cycle Activity and Glycerophosphocholine Lipid Recycling Support Dendritic Cell Cytokine Induction in Response to Fungal Patterns. SSRN Electronic Journal, 0, , .	0.4	0
284	Sportmedizinische Anwendung: Laktat- und Leistungsdiagnostik. , 2019, , 1-27.		0
285	Metformin poisoning treated with high dose insulin dextrose therapy: a case series. Acta Medica Lituanica, 2019, 26, 72-78.	0.2	1
286	Priming exercise increases Wingate cycling peak power output. European Journal of Sport Science, 2021, 21, 705-713.	1.4	3
287	Determination of Anaerobic Capacity - Reliability and Validity of Sprint Running Tests. Exercise Science, 2020, 29, 129-137.	0.1	0
290	Targeting lactate metabolism and glycolytic pathways in the tumor microenvironment by natural products: A promising strategy in combating cancer. BioFactors, 2022, 48, 359-383.	2.6	28
291	The blood lactate/pyruvate equilibrium affair. American Journal of Physiology - Endocrinology and Metabolism, 2022, 322, E34-E43.	1.8	8
292	Ferroptosis-mediated Crosstalk in the Tumor Microenvironment Implicated in Cancer Progression and Therapy. Frontiers in Cell and Developmental Biology, 2021, 9, 739392.	1.8	17
293	Oxygen, pH, Lactate, and Metabolism—How Old Knowledge and New Insights Might Be Combined for New Wound Treatment. Medicina (Lithuania), 2021, 57, 1190.	0.8	17
294	Lactate consumption mediates repeated high-intensity interval exercise-enhanced executive function in adult males. Physical Activity and Nutrition, 2020, 24, 15-23.	0.4	0
295	Mathematical Modeling of Retinal Degeneration: Aerobic Glycolysis in a Single Cone. Association for Women in Mathematics Series, 2021, , 135-178.	0.1	2
297	Intrinsic Connectivity Changes Mediate the Beneficial Effect of Cardiovascular Exercise on Sustained Visual Attention. Cerebral Cortex Communications, 2020, 1, tgaa075.	0.7	2
298	Sportmedizinische Anwendung: Laktat- und Leistungsdiagnostik. , 2020, , 1-27.		0
299	Detection of glucose-derived d- and l-lactate in cancer cells by the use of a chiral NMR shift reagent. Cancer & Metabolism, 2021, 9, 38.	2.4	8
300	Effects of Lactanase on the plasma lactate response to intense exercise in horses. Comparative Exercise Physiology, 2020, 16, 409-413.	0.3	0
301	Regional venous—arterial CO ₂ to arterial—venous O ₂ content difference ratio in experimental circulatory shock and hypoxia. Intensive Care Medicine Experimental, 2020, 8, 64.	0.9	2
302	Dichloroacetate-induced metabolic reprogramming improves lifespan in a Drosophila model of surviving sepsis. PLoS ONE, 2020, 15, e0241122.	1.1	8
303	Metabolic Energy Contributions During High-Intensity Hatha Yoga and Physiological Comparisons Between Active and Passive () Recovery. Frontiers in Physiology, 2021, 12, 743859.	1.3	0

#	ARTICLE	IF	CITATIONS
304	A Competitive Sprinter's Resting Blood Lactate Levels Fluctuate with a One-Year Training Cycle: Case Reports. <i>Journal of Functional Morphology and Kinesiology</i> , 2021, 6, 95.	1.1	5
305	Hepatic Glucose Metabolism and Its Disorders in Fish. <i>Advances in Experimental Medicine and Biology</i> , 2022, 1354, 207-236.	0.8	14
306	Editorial: Mechanisms Linking Transport and Utilization of Metabolic Fuels to the Impact of Nutrition and Exercise Upon Health. <i>Frontiers in Nutrition</i> , 2021, 8, 803369.	1.6	0
307	Continuous assessment of sweat lactic acid secretion using microfluidic sweat lactic acid monitoring system. <i>IOP Conference Series: Materials Science and Engineering</i> , 2021, 1192, 012006.	0.3	0
308	Lactate Supply from Astrocytes to Neurons and its Role in Ischemic Stroke-induced Neurodegeneration. <i>Neuroscience</i> , 2022, 481, 219-231.	1.1	19
309	Astrocytes in depression and Alzheimer's disease. <i>Frontiers of Medicine</i> , 2021, 15, 829-841.	1.5	16
310	Cerebral and Systemic Stress Parameters in Correlation with Jugulo-Arterial CO ₂ Gap as a Marker of Cerebral Perfusion during Carotid Endarterectomy. <i>Journal of Clinical Medicine</i> , 2021, 10, 5479.	1.0	0
311	Tumor Lymphatic Interactions Induce CXCR2-CXCL5 Axis and Alter Cellular Metabolism and Lymphangiogenic Pathways to Promote Cholangiocarcinoma. <i>Cells</i> , 2021, 10, 3093.	1.8	12
312	The Role of Ancestral Duplicated Genes in Adaptation to Growth on Lactate, a Non-Fermentable Carbon Source for the Yeast <i>Saccharomyces cerevisiae</i> . <i>International Journal of Molecular Sciences</i> , 2021, 22, 12293.	1.8	1
313	Newer Perspectives in Lactate Threshold Estimation for Endurance Sports – A Mini-Review. <i>Central European Journal of Sport Sciences and Medicine</i> , 2021, 35, 99-116.	0.1	0
314	Renormalization of metabolic coupling treats age-related degenerative disorders: an oxidative RPE niche fuels the more glycolytic photoreceptors. <i>Eye</i> , 2022, 36, 278-283.	1.1	6
315	Central Nervous System Control of Glucose Homeostasis: A Therapeutic Target for Type 2 Diabetes?. <i>Annual Review of Pharmacology and Toxicology</i> , 2022, 62, 55-84.	4.2	24
316	Trophoblast-derived Lactic Acid Orchestrates Decidual Macrophage Differentiation via SRC/LDHA Signaling in Early Pregnancy. <i>International Journal of Biological Sciences</i> , 2022, 18, 599-616.	2.6	24
317	Las funciones metabólicas, endocrinas y reguladoras de la expresión genética del lactato. <i>Revista De La Facultad De Medicina, Universidad Nacional Autonoma De Mexico</i> , 2020, 63, 7-17.	0.0	1
318	Post-exercise upside-down recovery does accelerate the heart rate recovery but does not improve subsequent sprint performance. <i>Journal of Sports Medicine and Physical Fitness</i> , 2022, 62, .	0.4	1
319	The Influence of Acute Sprint Interval Training on Cognitive Performance of Healthy Younger Adults. <i>International Journal of Environmental Research and Public Health</i> , 2022, 19, 613.	1.2	8
320	Astrocytes as Key Regulators of Brain Energy Metabolism: New Therapeutic Perspectives. <i>Frontiers in Physiology</i> , 2021, 12, 825816.	1.3	76
321	OUP accepted manuscript. <i>European Heart Journal: Acute Cardiovascular Care</i> , 2022, , .	0.4	2

#	ARTICLE	IF	CITATIONS
322	Lactate Is a Key Mediator That Links Obesity to Insulin Resistance via Modulating Cytokine Production From Adipose Tissue. <i>Diabetes</i> , 2022, 71, 637-652.	0.3	24
323	The Response to Oxidative Damage Correlates with Driver Mutations and Clinical Outcome in Patients with Myelofibrosis. <i>Antioxidants</i> , 2022, 11, 113.	2.2	6
324	Metabolic, Cardiac, and Hemorheological Responses to Submaximal Exercise under Light and Moderate Hypobaric Hypoxia in Healthy Men. <i>Biology</i> , 2022, 11, 144.	1.3	6
325	Hyperpolarised ¹³ C-MRI identifies the emergence of a glycolytic cell population within intermediate-risk human prostate cancer. <i>Nature Communications</i> , 2022, 13, 466.	5.8	27
326	Effect of endurance training and PGC-1 α overexpression on calculated lactate production volume during exercise based on blood lactate concentration. <i>Scientific Reports</i> , 2022, 12, 1635.	1.6	4
327	Serum-free cultures of C2C12 cells show different muscle phenotypes which can be estimated by metabolic profiling. <i>Scientific Reports</i> , 2022, 12, 827.	1.6	17
328	Priming cardiovascular exercise improves complex motor skill learning by affecting the trajectory of learning-related brain plasticity. <i>Scientific Reports</i> , 2022, 12, 1107.	1.6	6
329	Tissue-specific responses that constrain glucose oxidation and increase lactate production with the severity of hypoxemia in fetal sheep. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2022, 322, E181-E196.	1.8	5
330	Thylakoid Membrane-Inspired Capsules with Fortified Cofactor Shuttling for Enzyme-Photocoupled Catalysis. <i>Journal of the American Chemical Society</i> , 2022, 144, 4168-4177.	6.6	27
331	Ketogenic diet and chemotherapy combine to disrupt pancreatic cancer metabolism and growth. <i>Med</i> , 2022, 3, 119-136.e8.	2.2	31
332	Lactic acid, a driver of tumor-stroma interactions. <i>International Immunopharmacology</i> , 2022, 106, 108597.	1.7	14
333	Supermeres are functional extracellular nanoparticles replete with disease biomarkers and therapeutic targets. <i>Nature Cell Biology</i> , 2021, 23, 1240-1254.	4.6	171
334	A Dual Electrode Biosensor for Glucose and Lactate Measurement in Normal and Prolonged Obese Mice Using Single Drop of Whole Blood. <i>Biosensors</i> , 2021, 11, 507.	2.3	10
335	Physiological Profiling and Energy System Contributions During Simulated EpAe Matches in Elite Fencers. <i>International Journal of Sports Physiology and Performance</i> , 2022, 17, 943-950.	1.1	10
336	Relationships between Sex and Adaptation to Physical Exercise in Young Athletes: A Pilot Study. <i>Healthcare (Switzerland)</i> , 2022, 10, 358.	1.0	7
338	A century of exercise physiology: key concepts on coupling respiratory oxygen flow to muscle energy demand during exercise. <i>European Journal of Applied Physiology</i> , 2022, 122, 1317-1365.	1.2	20
339	Intestinal Microbiota Contributes to the Improvement of Alcoholic Hepatitis in Mice Treated With Schisandra chinensis Extract. <i>Frontiers in Nutrition</i> , 2022, 9, 822429.	1.6	6
340	The Stallion Spermatozoa: A Valuable Model to Help Understand the Interplay Between Metabolism and Redox (De)regulation in Sperm Cells. <i>Antioxidants and Redox Signaling</i> , 2022, 37, 521-537.	2.5	6

#	ARTICLE	IF	CITATIONS
341	The regulatory effects of lactic acid on neuropsychiatric disorders. <i>Discover Mental Health</i> , 2022, 2, 1.	1.0	8
342	Clarifying the Link Between the Blood Lactate Concentration and Cardiovascular Risk. <i>International Journal of Sports Medicine</i> , 2022, 43, 1106-1112.	0.8	1
343	Effects of short-term betaine supplementation on muscle endurance and indices of endocrine function following acute high-intensity resistance exercise in young athletes. <i>Journal of the International Society of Sports Nutrition</i> , 2022, 19, 1-16.	1.7	11
344	Chronic Lactate Exposure Decreases Mitochondrial Function by Inhibition of Fatty Acid Uptake and Cardioplipin Alterations in Neonatal Rat Cardiomyocytes. <i>Frontiers in Nutrition</i> , 2022, 9, 809485.	1.6	17
345	Endothelium-derived lactate is required for pericyte function and blood-brain barrier maintenance. <i>EMBO Journal</i> , 2022, 41, e109890.	3.5	27
346	Comparison of two methods of cardiopulmonary exercise testing for assessing physical fitness in children and adolescents with extreme obesity. <i>European Journal of Pediatrics</i> , 2022, , 1.	1.3	0
347	Moderate l-lactate administration suppresses adipose tissue macrophage M1 polarization to alleviate obesity-associated insulin resistance. <i>Journal of Biological Chemistry</i> , 2022, 298, 101768.	1.6	18
349	Scaling with body mass and age in glycolytic enzymes of domestic dogs. <i>Veterinary Research Communications</i> , 2023, 47, 39-50.	0.6	1
350	The lactate sensor GPR81 regulates glycolysis and tumor growth of breast cancer. <i>Scientific Reports</i> , 2022, 12, 6261.	1.6	32
351	The blood-brain barrier is a metabolic ecosystem. <i>EMBO Journal</i> , 2022, 41, e111189.	3.5	5
352	Adding protein to a carbohydrate pre-exercise beverage does not influence running performance and metabolism. <i>Journal of Sports Medicine and Physical Fitness</i> , 2022, 63, .	0.4	2
359	The lactate receptor GPR81 mediates hepatic lipid metabolism and the therapeutic effect of metformin on experimental NAFLDs. <i>European Journal of Pharmacology</i> , 2022, 924, 174959.	1.7	10
360	Metabolic Energy Contributions During High-Intensity Hatha Yoga and Physiological Comparisons Between Active and Passive (Savasana) Recovery. <i>Frontiers in Physiology</i> , 2021, 12, 743859.	1.3	6
361	Lactate modulates cardiac gene expression in mice during acute physical exercise. <i>Brazilian Journal of Medical and Biological Research</i> , 2022, 55, e11820.	0.7	2
362	Lactate Is Answerable for Brain Function and Treating Brain Diseases: Energy Substrates and Signal Molecule. <i>Frontiers in Nutrition</i> , 2022, 9, 800901.	1.6	15
363	Myoglobin Interaction with Lactate Rapidly Releases Oxygen: Studies on Binding Thermodynamics, Spectroscopy, and Oxygen Kinetics. <i>International Journal of Molecular Sciences</i> , 2022, 23, 4747.	1.8	6
364	LDH-A Modulation and the Variability of LDH Isoenzyme Profiles in Murine Gliomas: A Link with Metabolic and Growth Responses. <i>Cancers</i> , 2022, 14, 2303.	1.7	1
365	Chronic Supplementation of 2S-Hesperidin Improves Acid-Base Status and Decreases Lactate at FatMax, at Ventilatory Threshold 1 and 2 and After an Incremental Test in Amateur Cyclists. <i>Biology</i> , 2022, 11, 736.	1.3	1

#	ARTICLE	IF	CITATIONS
366	Nitrogen monoxide participation in the mechanisms of realization of the infarction-limiting effect of post-conditioning using lactate during myocardial ischemia-reperfusion in young and old rats. , 2022, 66, 206-216.	0.0	0
367	The lactate-NAD ⁺ axis activates cancer-associated fibroblasts by downregulating p62. Cell Reports, 2022, 39, 110792.	2.9	22
369	Determining the protective effects of Ma-Mu-Ran Antidiarrheal Capsules against acute DSS-induced enteritis using 16S rRNA gene sequencing and fecal metabolomics. Chinese Journal of Natural Medicines, 2022, 20, 364-377.	0.7	1
370	Regulation of physiological pH and consumption of potential food ingredients for maintaining homeostasis and metabolic function: An overview. Food Reviews International, 0, , 1-17.	4.3	0
371	Low Cancer Incidence in Naked Mole-Rats May Be Related to Their Inability to Express the Warburg Effect. Frontiers in Physiology, 2022, 13, .	1.3	4
372	Dual Closed-Loop of Catalyzed Lactate Depletion and Immune Response to Potentiate Photothermal Immunotherapy. ACS Applied Materials & Interfaces, 2022, 14, 23260-23276.	4.0	19
373	Unraveling the Rewired Metabolism in Lung Cancer Using Quantitative NMR Metabolomics. International Journal of Molecular Sciences, 2022, 23, 5602.	1.8	3
374	The Lactate and the Lactate Dehydrogenase in Inflammatory Diseases and Major Risk Factors in COVID-19 Patients. Inflammation, 2022, 45, 2091-2123.	1.7	26
375	Handcycling with concurrent lower body low-frequency electromyostimulation significantly increases acute oxygen uptake: implications for rehabilitation and prevention. PeerJ, 0, 10, e13333.	0.9	2
376	Impact of body fat, body water content, and skeletal muscle mass index on peak salivary lactate levels after squat jump exercise in healthy non-athlete adult males. BMC Sports Science, Medicine and Rehabilitation, 2022, 14, .	0.7	2
377	Inhibiting Warburg Effect Can Suppress the Biological Activity and Secretion Function of Keloid Fibroblasts. Aesthetic Plastic Surgery, 0, , .	0.5	0
378	Physiological Regulation of Growth, Hematology and Blood Gases in Chicken Embryos in Response to Low and High Incubation Humidity. Frontiers in Physiology, 2022, 13, .	1.3	1
379	Physical exercise improves mitochondrial function in ovariectomized rats. Journal of Endocrinology, 2022, 254, 77-90.	1.2	5
380	Trimetazidine Blocks Lipid Oxidation—Should it be Repurposed for Prevention and Treatment of Diabetic Ketoacidosis?. Journal of Diabetes Science and Technology, 0, , 193229682211001.	1.3	0
381	Systematic Investigations on the Metabolic and Transcriptomic Regulation of Lactate in the Human Colon Epithelial Cells. International Journal of Molecular Sciences, 2022, 23, 6262.	1.8	2
382	Ultrastable Lactate Biosensor Linearly Responding in Whole Sweat for Noninvasive Monitoring of Hypoxia. Analytical Chemistry, 2022, 94, 9201-9207.	3.2	11
383	Complex Network Model Reveals the Impact of Inspiratory Muscle Pre-Activation on Interactions among Physiological Responses and Muscle Oxygenation during Running and Passive Recovery. Biology, 2022, 11, 963.	1.3	4
384	Comparative evaluation of infarct-limiting efficiency of postconditioning with lactate in ischemia-reperfusion of the myocardium in young and old rats and rats with transient hypercholesterolemia. Proceedings of the National Academy of Sciences of Belarus, Medical Series, 2022, 19, 135-150.	0.2	0

#	ARTICLE	IF	CITATIONS
385	Evaluating immune response and metabolic related biomarkers pre-allogenic hematopoietic stem cell transplant in acute myeloid leukemia. <i>PLoS ONE</i> , 2022, 17, e0268963.	1.1	0
388	“Warburg effect” controls tumor growth, bacterial, viral infections and immunity “ Genetic deconstruction and therapeutic perspectives. <i>Seminars in Cancer Biology</i> , 2022, 86, 334-346.	4.3	43
389	Flexible microfluidic nanoplasmonic sensors for refreshable and portable recognition of sweat biochemical fingerprint. <i>Npj Flexible Electronics</i> , 2022, 6, .	5.1	40
390	A Drug-Free, Hair Follicle Cycling Regulatable, Separable, Antibacterial Microneedle Patch for Hair Regeneration Therapy. <i>Advanced Healthcare Materials</i> , 2022, 11, .	3.9	28
391	Effects of different inspiratory muscle warm-up loads on mechanical, physiological and muscle oxygenation responses during high-intensity running and recovery. <i>Scientific Reports</i> , 2022, 12, .	1.6	6
393	The generation of a lactate-rich environment stimulates cell cycle progression and modulates gene expression on neonatal and hiPSC-derived cardiomyocytes. , 2022, 139, 213035.		10
394	A Novel Risk Score Model of Lactate Metabolism for Predicting over Survival and Immune Signature in Lung Adenocarcinoma. <i>Cancers</i> , 2022, 14, 3727.	1.7	9
395	Fetoplacental oxygen homeostasis in pregnancies with maternal diabetes mellitus and obesity. <i>Nature Reviews Endocrinology</i> , 2022, 18, 593-607.	4.3	10
396	Light-Harvesting Artificial Cells Containing Cyanobacteria for CO ₂ Fixation and Further Metabolism Mimicking. <i>Small</i> , 2023, 19, .	5.2	6
397	Lactate promotes metastasis of normoxic colorectal cancer stem cells through PGC-1 β -mediated oxidative phosphorylation. <i>Cell Death and Disease</i> , 2022, 13, .	2.7	16
398	A Wearable Biosensor for Sweat Lactate as a Proxy for Sport Performance Monitoring. <i>Analysis & Sensing</i> , 2023, 3, .	1.1	1
399	Myoglobin-Pyruvate Interactions: Binding Thermodynamics, Structure-Function Relationships, and Impact on Oxygen Release Kinetics. <i>International Journal of Molecular Sciences</i> , 2022, 23, 8766.	1.8	1
400	Effects of lactate administration on hypertrophy and mTOR signaling activation in mouse skeletal muscle. <i>Physiological Reports</i> , 2022, 10, .	0.7	6
402	Effects of Citrulline Supplementation on Different Aerobic Exercise Performance Outcomes: A Systematic Review and Meta-Analysis. <i>Nutrients</i> , 2022, 14, 3479.	1.7	6
403	Lactate as a major myokine and exerkine. <i>Nature Reviews Endocrinology</i> , 2022, 18, 712-712.	4.3	15
405	Hyperlactatemia and other perioperative metabolic disturbances in neuroanesthesia. <i>Current Opinion in Anaesthesiology</i> , 0, Publish Ahead of Print, .	0.9	0
406	Energy crisis links to autophagy and ferroptosis in Alzheimer’s disease: current evidence and future avenues. <i>Current Neuropharmacology</i> , 2022, 20, .	1.4	2
408	Metabolic heterogeneity protects metastatic mucosal melanomas cells from ferroptosis. <i>International Journal of Molecular Medicine</i> , 2022, 50, .	1.8	5

#	ARTICLE	IF	CITATIONS
409	Intervention on lactate in cancer: A promising approach for the development of cancer therapeutics. <i>Advances in Cancer Biology Metastasis</i> , 2022, 5, 100058.	1.1	5
410	Biomarker Changes in Oxygen Metabolism, Acid-Base Status, and Performance after the Off-Season in Well-Trained Cyclists. <i>Nutrients</i> , 2022, 14, 3808.	1.7	2
411	Murine blastocysts generated by in vitro fertilization show increased Warburg metabolism and altered lactate production. <i>ELife</i> , 0, 11, .	2.8	5
412	Repeated Simulated Match-Induced Changes in Finger Flexor Force and Blood Acid-Base Balance in World-Class Female Judokas. <i>International Journal of Sports Physiology and Performance</i> , 2022, 17, 1499-1506.	1.1	0
413	A performance improvement of enzyme-based electrochemical lactate sensor fabricated by electroplating novel PdCu mediator on a laser induced graphene electrode. <i>Bioelectrochemistry</i> , 2022, 148, 108259.	2.4	13
414	Metabokines in the regulation of systemic energy metabolism. <i>Current Opinion in Pharmacology</i> , 2022, 67, 102286.	1.7	10
415	The Effect of Training on Skeletal Muscle and Exercise Metabolism. <i>Physiology in Health and Disease</i> , 2022, , 215-242.	0.2	1
416	Energiestoffwechsel des Muskels. , 2022, , 29-47.		0
417	Die Bedeutung des Laktats im historischen Kontext. , 2022, , 5-28.		0
419	Kefir microbiota and metabolites stimulate intestinal mucosal immunity and its early development. <i>Critical Reviews in Food Science and Nutrition</i> , 2024, 64, 1371-1384.	5.4	6
420	Cardioprotective efficiency of postconditioning using L-lactate during ischemia-reperfusion of myocardium in young and old rats under conditions of the systemic action in the animal body of the blocker of M-cholinoreactive systems atropine. <i>Proceedings of the National Academy of Sciences of Belarus, Medical Series</i> , 2022, 19, 290-299.	0.2	0
421	Lactate metabolism in human health and disease. <i>Signal Transduction and Targeted Therapy</i> , 2022, 7, .	7.1	196
422	Tracing the lactate shuttle to the mitochondrial reticulum. <i>Experimental and Molecular Medicine</i> , 2022, 54, 1332-1347.	3.2	20
423	Unlocking a novel determinant of athletic performance: The role of the gut microbiota, short-chain fatty acids, and "probiotics" in exercise. <i>Journal of Sport and Health Science</i> , 2023, 12, 36-44.	3.3	12
424	Lactate increases stemness of CD8 ⁺ T cells to augment anti-tumor immunity. <i>Nature Communications</i> , 2022, 13, .	5.8	88
425	Effects of apnoea training on aerobic and anaerobic performance: A systematic review and meta-analysis. <i>Frontiers in Physiology</i> , 0, 13, .	1.3	2
427	Inhibition of monocarboxylate transporters (<sc>MCT</sc>) 1 and 4 reduces exercise capacity in mice. <i>Physiological Reports</i> , 2022, 10, .	0.7	5
429	Tracing metabolic flux in vivo: motion pictures differ from snapshots. <i>Experimental and Molecular Medicine</i> , 2022, 54, 1309-1310.	3.2	0

#	ARTICLE	IF	CITATIONS
431	The relationship between objective measures of physical function and serum lactate dehydrogenase in older adults with cancer prior to treatment. <i>PLoS ONE</i> , 2022, 17, e0275782.	1.1	0
432	Repurposing an Antiepileptic Drug for the Treatment of Glioblastoma. <i>Pharmaceutical Research</i> , 2022, 39, 2871-2883.	1.7	4
433	Myocardial Infarct-Size Limiting Effect of Postconditioning with L-Lactate in Young and Old Rats under Atropine-Induced Blockade of M-Cholinoreceptors. <i>Journal of Evolutionary Biochemistry and Physiology</i> , 2022, 58, 1321-1331.	0.2	0
434	Mitochondrial VDAC1: A Potential Therapeutic Target of Inflammation-Related Diseases and Clinical Opportunities. <i>Cells</i> , 2022, 11, 3174.	1.8	15
435	The Relationship between Training Cycle-Dependent Fluctuations in Resting Blood Lactate Levels and Exercise Performance in College-Aged Rugby Players. <i>Journal of Functional Morphology and Kinesiology</i> , 2022, 7, 93.	1.1	0
436	Dietary Lactate Intake Facilitates Inflammatory Resolution by Modulating M1 Macrophage Polarization. <i>Molecular Nutrition and Food Research</i> , 2022, 66, .	1.5	5
437	Ultrasensitive sensors reveal the spatiotemporal landscape of lactate metabolism in physiology and disease. <i>Cell Metabolism</i> , 2023, 35, 200-211.e9.	7.2	28
438	Structure and barrier functions of the perineurium and its relationship with associated sensory corpuscles: A review. <i>Biomedical Research</i> , 2022, 43, 145-159.	0.3	3
439	A simulation study to compare physiological responses to hypoxia and exercise between anaemic subjects and healthy controls. <i>Indian Journal of Physiology and Pharmacology</i> , 0, 66, 181-187.	0.4	0
440	Novel Insight into the Role of the Kiss1/GPR54 System in Energy Metabolism in Major Metabolic Organs. <i>Cells</i> , 2022, 11, 3148.	1.8	3
441	Bombyxin-stimulated ecdysteroidogenesis in relation to sugar transporter/trehalase expressions in Bombyx prothoracic glands. <i>Insect Biochemistry and Molecular Biology</i> , 2022, 151, 103864.	1.2	2
442	Natural compounds targeting glycolysis as promising therapeutics for gastric cancer: A review. <i>Frontiers in Pharmacology</i> , 0, 13, .	1.6	6
443	Lactate Activates AMPK Remodeling of the Cellular Metabolic Profile and Promotes the Proliferation and Differentiation of C2C12 Myoblasts. <i>International Journal of Molecular Sciences</i> , 2022, 23, 13996.	1.8	6
444	Label-free electrochemical detection of glucose and glycated hemoglobin (HbA1c). <i>Biosensors and Bioelectronics</i> , 2023, 221, 114907.	5.3	10
445	Mutual regulation of lactate dehydrogenase and redox robustness. <i>Frontiers in Physiology</i> , 0, 13, .	1.3	13
446	Discovery of Mitochondrial Complex I Inhibitors as Anticancer and Radiosensitizer Drugs Based on Compensatory Stimulation of Lactate Release. <i>Cancers</i> , 2022, 14, 5454.	1.7	3
447	Effects of Intestinal Bacterial Hydrogen Gas Production on Muscle Recovery following Intense Exercise in Adult Men: A Pilot Study. <i>Nutrients</i> , 2022, 14, 4875.	1.7	1
448	Local Metabolic Factors and Vasoactivity. , 2022, , 153-171.		0

#	ARTICLE	IF	CITATIONS
449	The physiological mechanism and effect of resistance exercise on cognitive function in the elderly people. <i>Frontiers in Public Health</i> , 0, 10, .	1.3	7
450	Tumor microenvironment-associated lactate metabolism regulates the prognosis and precise checkpoint immunotherapy outcomes of patients with lung adenocarcinoma. <i>European Journal of Medical Research</i> , 2022, 27, .	0.9	3
451	Revisiting the Warburg Effect with Focus on Lactate. <i>Cancers</i> , 2022, 14, 6028.	1.7	13
452	The effect of acute heat exposure on the determination of exercise thresholds from ramp and step incremental exercise. <i>European Journal of Applied Physiology</i> , 2023, 123, 847-856.	1.2	2
453	Functional noninvasive detection of glycolytic pancreatic ductal adenocarcinoma. <i>Cancer & Metabolism</i> , 2022, 10, .	2.4	2
454	Development of a prehospital lactic acidosis score for early-mortality. A prospective, multicenter, ambulance-based, cohort study. <i>American Journal of Emergency Medicine</i> , 2023, 65, 16-23.	0.7	3
455	Acute pre-exercise hydrogen rich water intake does not improve running performance at maximal aerobic speed in trained track and field runners: A randomized, double-blind, placebo-controlled crossover study. <i>PLoS ONE</i> , 2022, 17, e0279307.	1.1	3
456	Lactate: a pearl dropped in the ocean—an overlooked signal molecule in physiology and pathology. <i>Cell Biology International</i> , 2023, 47, 295-307.	1.4	7
457	Illuminating lactate in cells, mice, and patient samples. <i>Cell Metabolism</i> , 2023, 35, 5-7.	7.2	1
458	A Novel Approach to Determining the Alactic Time Span in Connection with Assessment of the Maximal Rate of Lactate Accumulation in Elite Track Cyclists. <i>International Journal of Sports Physiology and Performance</i> , 2023, 18, 157-163.	1.1	3
459	Lactate oxidase/catalase-displaying nanoparticles efficiently consume lactate in the tumor microenvironment to effectively suppress tumor growth. <i>Journal of Nanobiotechnology</i> , 2023, 21, .	4.2	10
460	Simultaneous noninvasive monitoring of diabetes and hypoxia using core-shell nanozyme “oxidase enzyme biosensors. <i>Sensors and Actuators B: Chemical</i> , 2023, 380, 133337.	4.0	4
461	Lactate as a myokine and exerkine: drivers and signals of physiology and metabolism. <i>Journal of Applied Physiology</i> , 2023, 134, 529-548.	1.2	27
462	MCT1-dependent energetic failure and neuroinflammation underlie optic nerve degeneration in Wolfram syndrome mice. <i>ELife</i> , 0, 12, .	2.8	5
463	Pengaruh Gula Merah Tebu terhadap Laktat Darah dan Glikogen Hati pada Tikus dengan Olahraga Renang. <i>Indonesian Journal of Human Nutrition</i> , 2022, 9, 132.	0.1	0
464	Lactate-Mediated Signaling in the Brain—An Update. <i>Brain Sciences</i> , 2023, 13, 49.	1.1	2
465	Probing Single-Cell Fermentation Fluxes and Exchange Networks via pH-Sensing Hybrid Nanofibers. <i>ACS Nano</i> , 2023, 17, 3313-3323.	7.3	3
466	Metabolic reprogramming by miRNAs in the tumor microenvironment: Focused on immunometabolism. <i>Frontiers in Oncology</i> , 0, 12, .	1.3	7

#	ARTICLE	IF	CITATIONS
467	The effect of pre-exercise alkalosis on lactate/pH regulation and mitochondrial respiration following sprint-interval exercise in humans. <i>Frontiers in Physiology</i> , 0, 14, .	1.3	0
468	Targeting monocarboxylate transporters (MCTs) in cancer: How close are we to the clinics?. <i>Seminars in Cancer Biology</i> , 2023, 90, 1-14.	4.3	20
469	Modulating Glycolysis to Improve Cancer Therapy. <i>International Journal of Molecular Sciences</i> , 2023, 24, 2606.	1.8	40
470	Lactate Mediates the Bone Anabolic Effect of High-Intensity Interval Training by Inducing Osteoblast Differentiation. <i>Journal of Bone and Joint Surgery - Series A</i> , 2023, 105, 369-379.	1.4	5
471	Beyond metabolic waste: lysine lactylation and its potential roles in cancer progression and cell fate determination. <i>Cellular Oncology (Dordrecht)</i> , 2023, 46, 465-480.	2.1	8
472	Intestinal protection and management in cardiopulmonary bypass. , 2023, , 751-767.		0
474	Identifying the Optimal Arm Priming Exercise Intensity to Improve Maximal Leg Sprint Cycling Performance. <i>Journal of Sports Science and Medicine</i> , 0, , 58-67.	0.7	0
475	Hypoxia enhances IPF mesenchymal progenitor cell fibrogenicity via the lactate/GPR81/HIF1 β pathway. <i>JCI Insight</i> , 2023, 8, .	2.3	9
476	Physiological significance of elevated levels of lactate by exercise training in the brain and body. <i>Journal of Bioscience and Bioengineering</i> , 2023, 135, 167-175.	1.1	5
477	Cancerâ€“nerve interplay in cancer progression and cancer-induced bone pain. <i>Journal of Bone and Mineral Metabolism</i> , 2023, 41, 415-427.	1.3	1
478	Evolutionary Acquisition of Multifunctionality by Glycolytic Enzymes. <i>Journal of Evolutionary Biochemistry and Physiology</i> , 2023, 59, 107-118.	0.2	0
479	The Key Role of Mitochondrial Function in Health and Disease. <i>Antioxidants</i> , 2023, 12, 782.	2.2	30
480	Lactylation: novel epigenetic regulatory and therapeutic opportunities. <i>American Journal of Physiology - Endocrinology and Metabolism</i> , 2023, 324, E330-E338.	1.8	6
481	The anorectic and thermogenic effects of pharmacological lactate in male mice are confounded by treatment osmolarity and co-administered counterions. <i>Nature Metabolism</i> , 2023, 5, 677-698.	5.1	15
482	The pyruvate dehydrogenase complex: Lifeâ€™s essential, vulnerable and druggable energy homeostat. <i>Mitochondrion</i> , 2023, 70, 59-102.	1.6	8
483	Monocarboxylate transporter 1 in the liver modulates high-fat diet-induced obesity and hepatic steatosis in mice. <i>Metabolism: Clinical and Experimental</i> , 2023, 143, 155537.	1.5	1
484	Role of L-lactate as an energy substrate in primary rat podocytes under physiological and glucose deprivation conditions. <i>European Journal of Cell Biology</i> , 2023, 102, 151298.	1.6	1
485	Multifaceted roles of aerobic glycolysis and oxidative phosphorylation in hepatocellular carcinoma. <i>PeerJ</i> , 0, 11, e14797.	0.9	3

#	ARTICLE	IF	CITATIONS
486	Lactate promotes endothelial-to-mesenchymal transition via Snail1 lactylation after myocardial infarction. <i>Science Advances</i> , 2023, 9, .	4.7	42
487	Lactate modulates microglial inflammatory responses after oxygen-glucose deprivation through HIF-1 α -mediated inhibition of NF- κ B. <i>Brain Research Bulletin</i> , 2023, 195, 1-13.	1.4	1
488	Impact of aging on meningeal gene expression. <i>Fluids and Barriers of the CNS</i> , 2023, 20, .	2.4	3
489	The Degree of Hydrolysis and Peptide Profile Affect the Anti-Fatigue Activities of Whey Protein Hydrolysates in Promoting Energy Metabolism in Exercise Mice. <i>Journal of Agricultural and Food Chemistry</i> , 2023, 71, 3010-3021.	2.4	5
490	Targeted lactate dehydrogenase genes silencing in probiotic lactic acid bacteria: A possible paradigm shift in colorectal cancer treatment?. <i>Biomedicine and Pharmacotherapy</i> , 2023, 160, 114371.	2.5	10
491	Lactate oxidase/SIRP α conjugates efficiently consume tumor-produced lactates and locally produce tumor-necrotic H ₂ O ₂ to suppress tumor growth. <i>International Journal of Biological Macromolecules</i> , 2023, 231, 123577.	3.6	0
492	Lactate secreted via MCT4 from bone α 2 colonizing breast cancer excites sensory neurons via GPR81. <i>International Journal of Oncology</i> , 2023, 62, .	1.4	2
493	Astrocytic lactate dehydrogenase A regulates neuronal excitability and depressive-like behaviors through lactate homeostasis in mice. <i>Nature Communications</i> , 2023, 14, .	5.8	19
494	N-acetylcysteine and cysteamine bitartrate prevent azide-induced neuromuscular decompensation by restoring glutathione balance in two novel <i>surf1</i> Δ zebrafish deletion models of Leigh syndrome. <i>Human Molecular Genetics</i> , 2023, 32, 1988-2004.	1.4	1
496	Inhibition of Succinate Dehydrogenase by Pesticides (SDHIs) and Energy Metabolism. <i>International Journal of Molecular Sciences</i> , 2023, 24, 4045.	1.8	7
497	NF- κ B mediated regulation of tumor cell proliferation in hypoxic microenvironment. <i>Frontiers in Pharmacology</i> , 0, 14, .	1.6	6
498	Functional heterogeneity of MCT1 and MCT4 in metabolic reprogramming affects osteosarcoma growth and metastasis. <i>Journal of Orthopaedic Surgery and Research</i> , 2023, 18, .	0.9	3
499	How Warburg-Associated Lactic Acidosis Rewires Cancer Cell Energy Metabolism to Resist Glucose Deprivation. <i>Cancers</i> , 2023, 15, 1417.	1.7	8
500	Postoperative hyperlactataemia and preoperative cardiopulmonary exercise testing in an elective noncardiac surgical cohort: a retrospective observational study. , 2023, 5, 100124.		0
501	Risk Factors for Mortality in Sepsis Patients without Lactate Levels Increasing Early. <i>Emergency Medicine International</i> , 2023, 2023, 1-10.	0.3	1
502	Lactate exposure shapes the metabolic and transcriptomic profile of CD8+ T cells. <i>Frontiers in Immunology</i> , 0, 14, .	2.2	8
503	The crosstalking of lactate α Histone lactylation and tumor. <i>Proteomics - Clinical Applications</i> , 2023, 17, .	0.8	2
505	Sportmedizinische Anwendung: Laktat- und Leistungsdiagnostik. , 2023, , 641-667.		0

#	ARTICLE	IF	CITATIONS
506	PYRUVATE DEHYDROGENASE COMPLEX ACTIVITY IN THE RAT'S KIDNEYS UNDER CONDITIONS OF TOXIC ACETAMINOPHEN DAMAGE WITH PROTEIN DEFICIENCY. <i>Biologichni Systemy</i> , 2022, 14, 100-105.	0.0	0
507	The Efficacy of Chlorella Supplementation on Multiple Indices of Cycling Performance. <i>Journal of Dietary Supplements</i> , 2024, 21, 99-115.	1.4	2
508	Effects of High-Intensity Interval Training Protocols on Blood Lactate Levels and Cognition in Healthy Adults: Systematic Review and Meta-Regression. <i>Sports Medicine</i> , 2023, 53, 977-991.	3.1	3
509	Implications of the Onset of Sweating on the Sweat Lactate Threshold. <i>Sensors</i> , 2023, 23, 3378.	2.1	7
511	Lysophosphatidylcholine facilitates the pathogenesis of psoriasis through activating keratinocytes and T cells differentiation via glycolysis. <i>Journal of the European Academy of Dermatology and Venereology</i> , 2023, 37, 1344-1360.	1.3	1
512	LncRNA GLTC targets LDHA for succinylation and enzymatic activity to promote progression and radioiodine resistance in papillary thyroid cancer. <i>Cell Death and Differentiation</i> , 2023, 30, 1517-1532.	5.0	6
513	A modified formula using energy system contributions to calculate pure maximal rate of lactate accumulation during a maximal sprint cycling test. <i>Frontiers in Physiology</i> , 0, 14, .	1.3	3
514	Case report: Transient lactate elevation by intravenous insulin infusion therapy for diabetic ketoacidosis in a patient with mitochondrial DNA 3243 A→G mutation: A glycolysis rebooting syndrome?. <i>Frontiers in Cardiovascular Medicine</i> , 0, 10, .	1.1	1
515	Octopamine metabolically reprograms astrocytes to confer neuroprotection against α -synuclein. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2023, 120, .	3.3	2
516	Physical Performance and Skeletal Muscle Transcriptional Adaptations Are Not Impacted by Exercise Training Frequency in Mice with Lower Extremity Peripheral Artery Disease. <i>Metabolites</i> , 2023, 13, 562.	1.3	2
551	Measuring the Release of Lactate from Wild-Type and rd1 Mouse Retina. <i>Advances in Experimental Medicine and Biology</i> , 2023, , 429-434.	0.8	1
561	How pH deregulation favors the hallmarks of cancer. , 2023, , 101-121.		0
567	Breast cancers as ecosystems: a metabolic perspective. <i>Cellular and Molecular Life Sciences</i> , 2023, 80, .	2.4	2
586	The Impact of Microbial Metabolites on Host Health and Disease. <i>Endocrinology</i> , 2023, , 1-40.	0.1	0
607	Glycolysis: breaking paradigms since Meyerhof's contribution. , 2024, , 3-14.		0
608	Glucose utilization by the trained heart: the molecular mechanisms behind fuel choice. , 2024, , 75-90.		0
609	Glycolysis and skeletal muscle plasticity: lactate as a key signaling molecule. , 2024, , 51-74.		0
614	Hypoxia-induced signaling in the cardiovascular system: pathogenesis and therapeutic targets. <i>Signal Transduction and Targeted Therapy</i> , 2023, 8, .	7.1	2

#	ARTICLE	IF	CITATIONS
618	Lactate: Anaerobic Threshold and New Discoveries. , 0, , .		0
646	Glycolytic enzymes in non-glycolytic web: functional analysis of the key players. Cell Biochemistry and Biophysics, 0, , .	0.9	0
666	The Impact of Microbial Metabolites on Host Health and Disease. Endocrinology, 2024, , 71-109.	0.1	0