## Yoshiharu Shimomura

List of Publications by Year in descending order

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72 papers 2,306 citations

201674 27 h-index 214800 47 g-index

72 all docs 72 docs citations

times ranked

72

2811 citing authors

#	Article	IF	CITATIONS
1	Exercise Promotes BCAA Catabolism: Effects of BCAA Supplementation on Skeletal Muscle during Exercise. Journal of Nutrition, 2004, 134, 1583S-1587S.	2.9	265
2	Nutraceutical Effects of Branched-Chain Amino Acids on Skeletal Muscle. Journal of Nutrition, 2006, 136, 529S-532S.	2.9	199
3	Regulation of branched-chain amino acid catabolism: nutritional and hormonal regulation of activity and expression of the branched-chain α-keto acid dehydrogenase kinase. Current Opinion in Clinical Nutrition and Metabolic Care, 2001, 4, 419-423.	2.5	112
4	Branched-Chain Amino Acid Catabolism in Exercise and Liver Disease. Journal of Nutrition, 2006, 136, 250S-253S.	2.9	97
5	Leucine and Protein Metabolism in Obese Zucker Rats. PLoS ONE, 2013, 8, e59443.	2.5	91
6	Purification and partial characterization of branched-chain $\hat{l}_{\pm}$ -ketoacid dehydrogenase kinase from rat liver and rat heart. Archives of Biochemistry and Biophysics, 1990, 283, 293-299.	3.0	89
7	Branched-chain amino acids alleviate hepatic steatosis and liver injury in choline-deficient high-fat diet induced NASH mice. Metabolism: Clinical and Experimental, 2017, 69, 177-187.	3.4	80
8	Distribution of Key Enzymes of Branched-chain Amino Acid Metabolism in Glial and Neuronal Cells in Culture. Journal of Histochemistry and Cytochemistry, 2001, 49, 407-418.	2.5	69
9	Regulation of the branched-chain $\hat{l}\pm$ -ketoacid dehydrogenase and elucidation of a molecular basis for maple syrup urine disease. Advances in Enzyme Regulation, 1990, 30, 245-263.	2.6	68
10	Clofibric acid stimulates branched-chain amino acid catabolism by three mechanisms. Archives of Biochemistry and Biophysics, 2002, 407, 231-240.	3.0	64
11	Regulation of branched-chain amino acid catabolism in rat models for spontaneous type 2 diabetes mellitus. Biochemical and Biophysical Research Communications, 2008, 373, 94-98.	2.1	61
12	Bacteroides spp. promotes branched-chain amino acid catabolism in brown fat and inhibits obesity. IScience, 2021, 24, 103342.	4.1	58
13	Regulation of Branched-Chain α-Keto Acid Dehydrogenase Kinase Expression in Rat Liver. Journal of Nutrition, 2001, 131, 841S-845S.	2.9	56
14	Physiological and pathological roles of branched-chain amino acids in the regulation of protein and energy metabolism and neurological functions. Pharmacological Research, 2018, 133, 215-217.	7.1	51
15	Determination of Branched-Chain α-Keto Acid Dehydrogenase Activity State and Branched-Chain α-Keto Acid Dehydrogenase Kinase Activity and Protein in Mammalian Tissues. Methods in Enzymology, 2000, 324, 48-62.	1.0	50
16	Effect of branched-chain amino acid supplementation during unloading on regulatory components of protein synthesis in atrophied soleus muscles. European Journal of Applied Physiology, 2011, 111, 1815-1828.	2.5	44
17	Determinants of Disuse-Induced Skeletal Muscle Atrophy: Exercise and Nutrition Countermeasures to Prevent Protein Loss. Journal of Nutritional Science and Vitaminology, 2006, 52, 233-247.	0.6	42
18	Regulation of hepatic branched-chain $\hat{l}$ ±-keto acid dehydrogenase kinase in a rat model for type 2 diabetes mellitus at different stages of the disease. Biochemical and Biophysical Research Communications, 2010, 393, 303-307.	2.1	40

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19	Bolus ingestion of individual branched-chain amino acids alters plasma amino acid profiles in young healthy men. SpringerPlus, 2014, 3, 35.	1.2	40
20	An Alteration in the Cecal Microbiota Composition by Feeding of 1-Kestose Results in a Marked Increase in the Cecal Butyrate Content in Rats. PLoS ONE, 2016, 11, e0166850.	2.5	40
21	Downregulation of the skeletal muscle pyruvate dehydrogenase complex in the Otsuka Long-Evans Tokushima Fatty rat both before and after the onset of diabetes mellitus. Life Sciences, 2004, 75, 2117-2130.	4.3	36
22	Regulation of the activity of branched-chain 2-oxo acid dehydrogenase (BCODH) complex by binding BCODH kinase. FEBS Letters, 2001, 491, 50-54.	2.8	34
23	Metabolism and Physiological Function of Branched-Chain Amino Acids: Discussion of Session $1$ ,. Journal of Nutrition, 2006, $136$ , $232S$ - $233S$ .	2.9	34
24	Estrogen Controls Branched-Chain Amino Acid Catabolism in Female Rats. Journal of Nutrition, 2004, 134, 2628-2633.	2.9	33
25	Effects of Branched-Chain Amino Acid Supplementation on Plasma Concentrations of Free Amino Acids, Insulin, and Energy Substrates in Young Men. Journal of Nutritional Science and Vitaminology, 2011, 57, 114-117.	0.6	33
26	Hepatic Branched-Chain .ALPHAKeto Acid Dehydrogenase Complex in Female Rats: Activation by Exercise and Starvation Journal of Nutritional Science and Vitaminology, 1999, 45, 303-309.	0.6	32
27	Mechanism of Activation of Branched-Chain α-Keto Acid Dehydrogenase Complex by Exercise. Biochemical and Biophysical Research Communications, 2001, 287, 752-756.	2.1	31
28	Effects of Squat Exercise and Branched-Chain Amino Acid Supplementation on Plasma Free Amino Acid Concentrations in Young Women. Journal of Nutritional Science and Vitaminology, 2009, 55, 288-291.	0.6	27
29	Effects of liver failure on branched-chain α-keto acid dehydrogenase complex in rat liver and muscle: comparison between acute and chronic liver failure. Journal of Hepatology, 2004, 40, 439-445.	3.7	26
30	Dissociation of Branched-Chain .ALPHAKeto Acid Dehydrogenase Kinase (BDK) from Branched-Chain .ALPHAKeto Acid Dehydrogenase Complex (BCKDC) by BDK Inhibitors. Journal of Nutritional Science and Vitaminology, 2005, 51, 48-50.	0.6	26
31	Regulation of hepatic branched-chain α-ketoacid dehydrogenase complex in rats fed a high-fat diet. Obesity Research and Clinical Practice, 2013, 7, e439-e444.	1.8	24
32	Roles of Amino Acid Residues Surrounding Phosphorylation Site 1 of Branched-chain $\hat{l}$ ±-Ketoacid Dehydrogenase (BCKDH) in Catalysis and Phosphorylation Site Recognition by BCKDH Kinase. Journal of Biological Chemistry, 1995, 270, 31071-31076.	3.4	23
33	Clofibrate treatment promotes branched-chain amino acid catabolism and decreases the phosphorylation state of mTOR, eIF4E-BP1, and S6K1 in rat liver. Life Sciences, 2006, 79, 737-743.	4.3	23
34	Branched-chain amino acids regulate type I tropocollagen and type III tropocollagen syntheses via modulation of mTOR in the skin. Bioscience, Biotechnology and Biochemistry, 2018, 82, 611-615.	1.3	21
35	Clofibrate-Induced Reduction of Plasma Branched-Chain Amino Acid Concentrations Impairs Glucose Tolerance in Rats. Journal of Parenteral and Enteral Nutrition, 2012, 36, 337-343.	2.6	20
36	Muscle-specific deletion of BDK amplifies loss of myofibrillar protein during protein undernutrition. Scientific Reports, 2017, 7, 39825.	3.3	20

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37	Novel Physiological Functions of Branched-Chain Amino Acids. Journal of Nutritional Science and Vitaminology, 2015, 61, S112-S114.	0.6	19
38	Effects of liver failure on the enzymes in the branched-chain amino acid catabolic pathway. Biochemical and Biophysical Research Communications, 2004, 313, 381-385.	2.1	18
39	Attenuated Response of the Serum Triglyceride Concentration to Ingestion of a Chocolate Containing Polydextrose and Lactitol in Place of Sugar. Bioscience, Biotechnology and Biochemistry, 2005, 69, 1819-1823.	1.3	18
40	Endurance performance and energy metabolism during exercise in mice with a muscle-specific defect in the control of branched-chain amino acid catabolism. PLoS ONE, 2017, 12, e0180989.	2.5	18
41	Tolerable amounts of amino acids for human supplementation: summary and lessons from published peer-reviewed studies. Amino Acids, 2021, 53, 1313-1328.	2.7	18
42	Modification by Exercise Training of Activity and Enzyme Expression of Hepatic Branched-Chain .ALPHAKetoacid Dehydrogenase Complex in Streptozotocin-Induced Diabetic Rats Journal of Nutritional Science and Vitaminology, 2001, 47, 345-350.	0.6	17
43	Regulation of branched-chain amino acid metabolism and pharmacological effects of branched-chain amino acids. Hepatology Research, 2004, 30, 3-8.	3.4	15
44	Branched-chain amino acid supplementation ameliorates angiotensin II-induced skeletal muscle atrophy. Life Sciences, 2020, 250, 117593.	4.3	11
45	Supplementation of 1-Kestose Modulates the Gut Microbiota Composition to Ameliorate Glucose Metabolism in Obesity-Prone Hosts. Nutrients, 2021, 13, 2983.	4.1	11
46	Octanoic acid promotes branched-chain amino acid catabolisms via the inhibition of hepatic branched-chain alpha-keto acid dehydrogenase kinase in rats. Metabolism: Clinical and Experimental, 2015, 64, 1157-1164.	3.4	10
47	<scp>mTORC</scp> 1 is involved in the regulation of branchedâ€chain amino acid catabolism in mouse heart. FEBS Open Bio, 2016, 6, 43-49.	2.3	10
48	Ca2+-dependent inhibition of branched-chain $\hat{l}$ ±-ketoacid dehydrogenase kinase by thiamine pyrophosphate. Biochemical and Biophysical Research Communications, 2018, 504, 916-920.	2.1	9
49	Experimental Determination of the Threshold Dose for Bifidogenic Activity of Dietary 1-Kestose in Rats. Foods, 2020, 9, 4.	4.3	9
50	Enhanced oleate uptake and lipotoxicity associated with laurate. FEBS Open Bio, 2015, 5, 485-491.	2.3	8
51	Regulation of the plasma amino acid profile by leucine via the system L amino acid transporter. Bioscience, Biotechnology and Biochemistry, 2015, 79, 2057-2062.	1.3	8
52	1-Kestose supplementation mitigates the progressive deterioration of glucose metabolism in type 2 diabetes OLETF rats. Scientific Reports, 2020, 10, 15674.	3.3	8
53	Branched-chain amino acid (BCAA) supplementation enhances adaptability to exercise training of mice with a muscle-specific defect in the control of BCAA catabolism. Bioscience, Biotechnology and Biochemistry, 2018, 82, 896-899.	1.3	7
54	BDK Deficiency in Cerebral Cortex Neurons Causes Neurological Abnormalities and Affects Endurance Capacity. Nutrients, 2020, 12, 2267.	4.1	5

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55	Antihypertensive drug valsartan as a novel BDK inhibitor. Pharmacological Research, 2021, 167, 105518.	7.1	5
56	Dietary Reference Intakes for Japanese 2010: Protein. Journal of Nutritional Science and Vitaminology, 2012, 59, S36-S43.	0.6	3
57	Feeding of 1-Kestose Induces Glutathione-S-Transferase Expression in Mouse Liver. Foods, 2019, 8, 69.	4.3	3
58	Inhibition of Branched-Chain α-Ketoacid Dehydrogenase Kinase by Thiamine Pyrophosphate at Different Potassium Ionic Levels. Bioscience, Biotechnology and Biochemistry, 2009, 73, 1189-1191.	1.3	2
59	Modified Method for Purifying Rat Liver Branched-Chain α-Ketoacid Dehydrogenase Complex. Bioscience, Biotechnology and Biochemistry, 2009, 73, 766-768.	1.3	2
60	Analysis of branched-chain $\hat{l}$ -keto acid dehydrogenase complex activity in rat tissues using $\hat{l}$ -keto [1-13C] isocaproate as substrate. Analytical Biochemistry, 2010, 399, 1-6.	2.4	2
61	Reply to Comment on Watanabe, A.; Kadota, Y.; Yokoyama, H.; Tsuruda, S.; Kamio, R.; Tochio, T.; Shimomura, Y.; Kitaura, Y. Experimental Determination of the Threshold Dose for Bifidogenic Activity of Dietary 1-Kestose in Rats. Foods 2020, 9, 4. Foods, 2020, 9, 527.	4.3	2
62	Effects of branchedâ€chain amino acid (BCAA) supplementation before and after exercise on delayedâ€onset muscle soreness (DOMS) and fatigue. FASEB Journal, 2007, 21, A331.	0.5	2
63	Effects of protein and amino acid supplementation on muscle protein metabolism in relation to exercise. The Journal of Physical Fitness and Sports Medicine, 2012, 1, 219-225.	0.3	2
64	Regulation of Branched-Chain Amino Acid Metabolism. Nihon EiyŕShokuryŕGakkai Shi = Nippon Eiyŕ ShokuryŕGakkaishi = Journal of Japanese Society of Nutrition and Food Science, 2012, 65, 97-103.	0.2	2
65	Biology and Biochemistry: Discussion of Session 2. Journal of Nutrition, 2007, 137, 1548S.	2.9	1
66	Branchedâ€chain amino acid (BCAA) supplementation decreases delayedâ€onset muscle soreness (DOMS) induced by squat exercise in humans. FASEB Journal, 2006, 20, A1043.	0.5	1
67	BDK knockout skeletal muscle satellite cells exhibit enhanced protein translation initiation signal in response to BCAA in vitro. Bioscience, Biotechnology and Biochemistry, 2022, 86, 610-617.	1.3	1
68	Branched-chain amino acids regulate hyaluronan synthesis and PPARÎ $\pm$ expression in the skin. Bioscience, Biotechnology and Biochemistry, 2021, 85, 2292-2294.	1.3	0
69	Effects of endotoxin infusion on plasma amino acid concentrations in rats. FASEB Journal, 2007, 21, A332.	0.5	0
70	Analysis of Branchedâ€Chain αâ€Keto Acid Dehydrogenase Complex Activity in Rat Tissues Using αâ€Keto[1―1 C]isocaproate as Substrate FASEB Journal, 2010, 24, .	3 <sub>0.5</sub>	0
71	Effects of long-term supplementation with tetrahydrocurcumin and branched-chain amino acids on glucose tolerance and muscle protein content in mature rats. The Journal of Physical Fitness and Sports Medicine, 2013, 2, 509-513.	0.3	0
72	Branched-chain amino acid metabolism and insulin resistance. The Japanese Journal of SURGICAL METABOLISM and NUTRITION, 2015, 49, 177-182.	0.1	0