Emile Van Schaftingen

List of Publications by Year
in descending order

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216 papers	14,972 citations	12330 69 h-index	23533 111 g-index
217 all docs	217 docs citations	217 times ranked	12665 citing authors

#	Article	IF	Citations
1	A Kinetic Study of Pyrophosphate: Fructose-6-Phosphate Phosphotransferase from Potato Tubers. Application to a Microassay of Fructose 2,6-Bisphosphate. FEBS Journal, 1982, 129, 191-195.	0.2	619
2	Vitaminâ€ƒC. FEBS Journal, 2007, 274, 1-22.	4.7	604
3	Mutations in PMM2, a phosphomannomutase gene on chromosome 16p13 in carbohydrate-deficient glycoprotein type I syndrome (Jaeken syndrome). Nature Genetics, 1997, 16, 88-92.	21.4	333
4	The glucose-6-phosphatase system. Biochemical Journal, 2002, 362, 513-532.	3.7	333
5	Phosphomannomutase deficiency is a cause of carbohydrate-deficient glycoprotein syndrome type I. FEBS Letters, 1995, 377, 318-320.	2.8	315
6	The glucose-6-phosphatase system. Biochemical Journal, 2002, 362, 513.	3.7	258
7	Inhibition of fructose-1,6-bisphosphatase by fructose 2,6-biphosphate.. Proceedings of the National Academy of Sciences of the United States of America, 1981, 78, 2861-2863.	7.1	253
8	Metabolite damage and its repair or pre-emption. Nature Chemical Biology, 2013, 9, 72-80.	8.0	248
9	A New Class of Phosphotransferases Phosphorylated on an Aspartate Residue in an Amino-terminal DXDX(T/V) Motif. Journal of Biological Chemistry, 1998, 273, 14107-14112.	3.4	241
10	Multiple Phenotypes in Phosphoglucomutase 1 Deficiency. New England Journal of Medicine, 2014, 370, 533-542.	27.0	236
11	Shortâ€term control of glucokinase activity: role of a regulatory protein. FASEB Journal, 1994, 8, 414-419.	0.5	229
12	Control of liver 6-phosphofructokinase by fructose 2,6-bisphosphate and other effectors.. Proceedings of the National Academy of Sciences of the United States of America, 1981, 78, 3483-3486.	7.1	213
13	A broad spectrum of clinical presentations in congenital disorders of glycosylation I: a series of 26 cases. Journal of Medical Genetics, 2001, 38, 14-19.	3.2	204
14	Control of the fructose 6-phosphate/fructose 1,6-bisphosphate cycle in isolated hepatocytes by glucose and glucagon. Role of a low-molecular-weight stimulator of phosphofructokinase. Biochemical Journal, 1980, 192, 887-895.	3.7	202
15	Sequence of a putative glucose 6-phosphate translocase, mutated in glycogen storage disease type Ib1. FEBS Letters, 1997, 419, 235-238.	2.8	200
16	Congenital disorders of glycosylation (CDG): Quo vadis?. European Journal of Medical Genetics, 2018, 61, 643-663.	1.3	191
17	3-Phosphoglycerate dehydrogenase deficiency: an inborn error of serine biosynthesis.. Archives of Disease in Childhood, 1996, 74, 542-545.	1.9	179
18	IDH2 Mutations in Patients with <scp>d</scp> -2-Hydroxyglutaric Aciduria. Science, 2010, 330, 336-336.	12.6	177

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19	A protein from rat liver confers to glucokinase the property of being antagonistically regulated by fructose 6-phosphate and fructose 1-phosphate. FEBS Journal, 1989, 179, 179-184.	0.2	171
20	Phosphomannose Isomerase Deficiency: A Carbohydrate-Deficient Glycoprotein Syndrome with Hepatic-Intestinal Presentation. American Journal of Human Genetics, 1998, 62, 1535-1539.	6.2	167
21	A gene encoding a putative FAD-dependent L-2-hydroxyglutarate dehydrogenase is mutated in L-2-hydroxyglutaric aciduria. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 16849-16854.	7.1	166
22	Molecular Identification of Carnosine Synthase as ATP-grasp Domain-containing Protein 1 (ATPGD1). Journal of Biological Chemistry, 2010, 285, 9346-9356.	3.4	165
23	TMEM165 Deficiency Causes a Congenital Disorder of Glycosylation. American Journal of Human Genetics, 2012, 91, 15-26.	6.2	162
24	Mutations in the d-2-Hydroxyglutarate Dehydrogenase Gene Cause d-2-Hydroxyglutaric Aciduria. American Journal of Human Genetics, 2005, 76, 358-360.	6.2	156
25	Fructose 2,6-Bisphosphate. Advances in Enzymology and Related Areas of Molecular Biology, 2006, 59, 315-395.	1.3	147
26	The mechanism by which glucose increases fructose 2,6-bisphosphate concentration in Saccharomyces cerevisiae. A cyclic-AMP-dependent activation of phosphofructokinase 2. FEBS Journal, 1984, 145, 187-193.	0.2	144
27	Molecular identification of aspartate N-acetyltransferase and its mutation in hypoacetylaspartia. Biochemical Journal, 2010, 425, 127-139.	3.7	144
28	Lack of Homozygotes for the Most Frequent Disease Allele in Carbohydrate-Deficient Glycoprotein Syndrome Type 1A. American Journal of Human Genetics, 1998, 62, 542-550.	6.2	142
29	Fructose-2,6-bisphosphatase from Rat Liver. FEBS Journal, 1982, 124, 143-149.	0.2	140
30	Identification, cloning, and heterologous expression of a mammalian fructosamine-3-kinase.. Diabetes, 2000, 49, 1627-1634.	0.6	135
31	The glucose sensor protein glucokinase is expressed in glucagon-producing alpha-cells.. Proceedings of the National Academy of Sciences of the United States of America, 1996, 93, 7036-7041.	7.1	132
32	Newly characterized Golgi-localized family of proteins is involved in calcium and pH homeostasis in yeast and human cells. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 6859-6864.	7.1	129
33	RNAi screening in glioma stem-like cells identifies PFKFB4 as a key molecule important for cancer cell survival. Oncogene, 2012, 31, 3235-3243.	5.9	123
34	Deficiency in SLC25A1, Encoding the Mitochondrial Citrate Carrier, Causes Combined D-2- and L-2-Hydroxyglutaric Aciduria. American Journal of Human Genetics, 2013, 92, 627-631.	6.2	122
35	Identification of a Pathway for the Utilization of the Amadori Product Fructoselysine in Escherichia coli. Journal of Biological Chemistry, 2002, 277, 42523-42529.	3.4	121
36	A Gene on Chromosome 11q23 Coding for a Putative Glucose- 6-Phosphate Translocase Is Mutated in Glycogen-Storage Disease Types Ib and Ic. American Journal of Human Genetics, 1998, 63, 976-983.	6.2	116

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37	ISPD produces CDP-ribitol used by FKTN and FKRP to transfer ribitol phosphate onto Î±-dystroglycan. Nature Communications, 2016, 7, 11534.	12.8	113
38	Phosphofructokinase 2 the enzyme that forms fructose 2,6-bisphosphate from fructose 6-phosphate and ATP. Biochemical and Biophysical Research Communications, 1981, 101, 1078-1084.	2.1	112
39	Mechanistic Studies of Phosphoserine Phosphatase, an Enzyme Related to P-type ATPases. Journal of Biological Chemistry, 1999, 274, 33985-33990.	3.4	111
40	Identification of a dehydrogenase acting on D-2-hydroxyglutarate. Biochemical Journal, 2004, 381, 35-42.	3.7	105
41	Phosphoserine Aminotransferase Deficiency: A Novel Disorder of the Serine Biosynthesis Pathway. American Journal of Human Genetics, 2007, 80, 931-937.	6.2	105
42	Inactivation of phosphofructokinase 2 by cyclic AMP-dependent protein kinase. Biochemical and Biophysical Research Communications, 1981, 103, 362-368.	2.1	104
43	The mechanism by which rat liver glucokinase is inhibited by the regulatory protein. FEBS Journal, 1990, 191, 483-489.	0.2	104
44	Fructosamine 3-kinase is involved in an intracellular deglycation pathway in human erythrocytes. Biochemical Journal, 2002, 365, 801-808.	3.7	104
45	Extremely Conserved ATP- or ADP-dependent Enzymatic System for Nicotinamide Nucleotide Repair. Journal of Biological Chemistry, 2011, 286, 41246-41252.	3.4	100
46	Failure to eliminate a phosphorylated glucose analog leads to neutropenia in patients with G6PT and G6PC3 deficiency. Proceedings of the National Academy of Sciences of the United States of America, 2019, 116, 1241-1250.	7.1	98
47	Pathway and regulation of erythritol formation in Leuconostoc oenos. Journal of Bacteriology, 1993, 175, 3941-3948.	2.2	97
48	The putative glucose 6-phosphate translocase gene is mutated in essentially all cases of glycogen storage disease type I non-a. European Journal of Human Genetics, 1999, 7, 717-723.	2.8	97
49	High Residual Activity of PMM2 in Patientsâ€™ Fibroblasts: Possible Pitfall in the Diagnosis of CDG-Ia (Phosphomannomutase Deficiency). American Journal of Human Genetics, 2001, 68, 347-354.	6.2	93
50	Synthesis of a stimulator of phosphofructokinase, most likely fructose 2,6-bisphosphate, from phosphoric acid and fructose 6-phosphoric acid. Biochemical and Biophysical Research Communications, 1980, 96, 1524-1531.	2.1	92
51	Cloning, sequencing and expression of rat liver 3-phosphoglycerate dehydrogenase. Biochemical Journal, 1997, 323, 365-370.	3.7	92
52	Formation of Fructose 2,6â€Bisphosphate from Fructose 1,6â€Bisphosphate by Intramolecular Cyclisation followed by Alkaline Hydrolysis. FEBS Journal, 1981, 117, 319-323.	0.2	90
53	Treating neutropenia and neutrophil dysfunction in glycogen storage disease type Ib with an SGLT2 inhibitor. Blood, 2020, 136, 1033-1043.	1.4	90
54	Glucokinase regulatory protein is essential for the proper subcellular localisation of liver glucokinase. FEBS Letters, 1999, 456, 332-338.	2.8	89

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55	A conserved phosphatase destroys toxic glycolytic side products in mammals and yeast. Nature Chemical Biology, 2016, 12, 601-607.	8.0	88
56	Stimulation of Trypanosoma brucei pyruvate kinase by fructose 2,6-bisphosphate. FEBS Journal, 1985, 153, 403-406.	0.2	87
57	Insights into the Structure and Regulation of Glucokinase from a Novel Mutation (V62M), Which Causes Maturity-onset Diabetes of the Young. Journal of Biological Chemistry, 2005, 280, 14105-14113.	3.4	87
58	Beneficial effects ofL-serine and glycine in the management of seizures in 3-phosphoglycerate dehydrogenase deficiency. Annals of Neurology, 1998, 44, 261-265.	5.3	84
59	Competitive inhibition of liver glucokinase by its regulatory protein. FEBS Journal, 1991, 200, 545-551.	0.2	83
60	The regulatory protein of liver glucokinase. Advances in Enzyme Regulation, 1992, 32, 133-148.	2.6	83
61	The regulatory protein of glucokinase. Biochemical Society Transactions, 1997, 25, 136-140.	3.4	79
62	Stimulation of glucose phosphorylation by fructose in isolated rat hepatocytes. FEBS Journal, 1989, 179, 173-177.	0.2	78
63	Fructose 2,6-bisphosphate. Trends in Biochemical Sciences, 1982, 7, 329-331.	7.5	77
64	Fructose 2,6-bisphosphate in yeast. Biochemical and Biophysical Research Communications, 1981, 103, 1281-1287.	2.1	75
65	Fructose 2,6-bisphosphate in relation with the resumption of metabolic activity in slices of Jerusalem artichoke tubers. FEBS Letters, 1983, 164, 195-200.	2.8	75
66	Enzymatic repair of Amadori products. Amino Acids, 2012, 42, 1143-1150.	2.7	74
67	Regulation of glucokinase by a fructose-1-phosphate-sensitive protein in pancreatic islets. FEBS Journal, 1990, 190, 539-545.	0.2	72
68	Identification of Fructosamine Residues Deglycated by Fructosamine-3-kinase in Human Hemoglobin. Journal of Biological Chemistry, 2004, 279, 27613-27620.	3.4	71
69	Inhibition of Phosphomannose Isomerase by Fructose 1-Phosphate: An Explanation for Defective N-Glycosylation in Hereditary Fructose Intolerance. Pediatric Research, 1996, 40, 764-766.	2.3	71
70	The stimulation of yeast phosphofructokinase by fructose 2,6-bisphosphate. FEBS Letters, 1982, 143, 137-140.	2.8	70
71	Increased protein glycation in fructosamine 3-kinase-deficient mice. Biochemical Journal, 2006, 399, 257-264.	3.7	70
72	Metabolite proofreading, a neglected aspect of intermediary metabolism. Journal of Inherited Metabolic Disease, 2013, 36, 427-434.	3.6	69

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73	PMM (PMM1), the Human Homologue ofSEC53or Yeast Phosphomannomutase, Is Localized on Chromosome 22q13. Genomics, 1997, 40, 41-47.	2.9	68
74	Effectors of the regulatory protein acting on liver glucokinase: a kinetic investigation. FEBS Journal, 1991, 200, 553-561.	0.2	66
75	Humanl-3-phosphoserine phosphatase: sequence, expression and evidence for a phosphoenzyme intermediate. FEBS Letters, 1997, 408, 281-284.	2.8	64
76	Effect of mutations found in carbohydrate-deficient glycoprotein syndrome type IA on the activity of phosphomannomutase 2. FEBS Letters, 1999, 452, 319-322.	2.8	64
77	Binding of mannoseâ€binding lectin to fructosamines: a potential link between hyperglycaemia and complement activation in diabetes. Diabetes/Metabolism Research and Reviews, 2010, 26, 254-260.	4.0	62
78	Purification and properties of phosphofructokinase 2/fructose 2,6-bisphosphatase from chicken liver and from pigeon muscle. FEBS Journal, 1986, 159, 359-365.	0.2	59
79	Fructose 1-phosphate and the regulation of glucokinase activity in isolated hepatocytes. FEBS Journal, 1990, 192, 283-289.	0.2	59
80	Investigation on the mechanism by which fructose, hexitols and other compounds regulate the translocation of glucokinase in rat hepatocytes. Biochemical Journal, 1997, 321, 239-246.	3.7	58
81	Identification of Fructose 6-Phosphate- and Fructose 1-Phosphate-binding Residues in the Regulatory Protein of Glucokinase. Journal of Biological Chemistry, 2002, 277, 8466-8473.	3.4	58
82	Effects of various metabolic conditions and of the trivalent arsenical melarsen oxide on the intracellular levels of fructose 2,6-bisphosphate and of glycolytic intermediates in Trypanosoma brucei. FEBS Journal, 1987, 166, 653-661.	0.2	57
83	Characterization of phosphofructokinase 2 and of enzymes involved in the degradation of fructose 2,6-bisphosphate in yeast. FEBS Journal, 1988, 171, 599-608.	0.2	57
84	Amino Acid Conservation in Animal Glucokinases. Journal of Biological Chemistry, 1996, 271, 6292-6297.	3.4	57
85	Kinetic properties and tissular distribution of mammalian phosphomannomutase isozymes. Biochemical Journal, 1999, 339, 201-207.	3.7	57
86	Mutations in GMPPA Cause a Glycosylation Disorder Characterized by Intellectual Disability and Autonomic Dysfunction. American Journal of Human Genetics, 2013, 93, 727-734.	6.2	57
87	Molecular Identification of NAT8 as the Enzyme That Acetylates Cysteine S-Conjugates to Mercapturic Acids. Journal of Biological Chemistry, 2010, 285, 18888-18898.	3.4	56
88	Identification of the cDNA encoding human 6-phosphogluconolactonase, the enzyme catalyzing the second step of the pentose phosphate pathway. FEBS Letters, 1999, 459, 223-226.	2.8	53
89	Tissue Distribution and Evolution of Fructosamine 3-Kinase and Fructosamine 3-Kinase-related Protein. Journal of Biological Chemistry, 2004, 279, 46606-46613.	3.4	53
90	Erythritol feeds the pentose phosphate pathway via three new isomerases leading to D-erythrose-4-phosphate in Brucella. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, 17815-17820.	7.1	53

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91	Metabolite Repair Enzymes Control Metabolic Damage in Glycolysis. Trends in Biochemical Sciences, 2020, 45, 228-243.	7.5	53
92	Presence of a fructose-2,6-bisphosphate-insensitive pyrophosphate: fructose-6-phosphate phosphotransferase in the anaerobic protozoa Tritrichomonas foetus, Trichomonas vaginalis and Isotricha prostoma. Molecular and Biochemical Parasitology, 1989, 37, 183-190.	1.1	51
93	Molecular damage in aging. Nature Aging, 2021, 1, 1096-1106.	11.6	51
94	Purification and properties of spinach leaf phosphofructokinase 2/fructose 2,6-bisphosphatase. FEBS Journal, 1986, 161, 351-357.	0.2	50
95	Molecular Identification of Pseudouridine-metabolizing Enzymes. Journal of Biological Chemistry, 2008, 283, 25238-25246.	3.4	50
96	A Mammalian Protein Homologous to Fructosamine-3-Kinase Is a Ketosamine-3-Kinase Acting on Psicosamines and Ribulosamines but not on Fructosamines. Diabetes, 2003, 52, 2888-2895.	0.6	49
97	Carbohydrate-deficient glycoprotein syndrome type IA (phosphomannomutase-deficiency). Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1999, 1455, 155-165.	3.8	48
98	A Mouse Model of L-2-Hydroxyglutaric Aciduria, a Disorder of Metabolite Repair. PLoS ONE, 2015, 10, e0119540.	2.5	47
99	How calcium inhibits the magnesium-dependent enzyme human phosphoserine phosphatase. FEBS Journal, 2004, 271, 3421-3427.	0.2	46
100	Molecular identification of Ï‰-amidase, the enzyme that is functionally coupled with glutamine transaminases, as the putative tumor suppressor Nit2. Biochimie, 2009, 91, 1066-1071.	2.6	46
101	Ethylmalonyl-CoA Decarboxylase, a New Enzyme Involved in Metabolite Proofreading. Journal of Biological Chemistry, 2011, 286, 42992-43003.	3.4	46
102	Molecular Identification of Hydroxylysine Kinase and of Ammoniophospholyases Acting on 5-Phosphohydroxy-l-lysine and Phosphoethanolamine. Journal of Biological Chemistry, 2012, 287, 7246-7255.	3.4	46
103	Molecular Identification of N-Acetylaspartylglutamate Synthase and Î²-Citrylglutamate Synthase. Journal of Biological Chemistry, 2010, 285, 29826-29833.	3.4	45
104	Demonstration of glycosomes (microbodies) in the bodonid flagellate Trypanoplasma borelli (protozoa, kinetoplastida). Molecular and Biochemical Parasitology, 1988, 30, 155-163.	1.1	44
105	Identification of the gene encoding hydroxyacid-oxoacid transhydrogenase, an enzyme that metabolizes 4-hydroxybutyrate. FEBS Letters, 2006, 580, 2347-2350.	2.8	43
106	Molecular Identification of Mammalian Phosphopentomutase and Glucose-1,6-bisphosphate Synthase, Two Members of the Î±-D-Phosphohexomutase Family. Journal of Biological Chemistry, 2007, 282, 31844-31851.	3.4	43
107	Occurrence and subcellular distribution of the NAD(P)HX repair system in mammals. Biochemical Journal, 2014, 460, 49-60.	3.7	43
108	C7orf10 encodes succinateâ€hydroxymethylglutarate CoAâ€transferase, the enzyme that converts glutarate to glutarylâ€CoA. Journal of Inherited Metabolic Disease, 2014, 37, 13-19.	3.6	43

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109	Structure of the gene mutated in glycogen storage disease type Ib. Gene, 1999, 227, 189-195.	2.2	42
110	Magnesium-dependent Phosphatase-1 Is a Protein-Fructosamine-6-phosphatase Potentially Involved in Glycation Repair. Journal of Biological Chemistry, 2006, 281, 18378-18385.	3.4	42
111	Identification of 3-deoxyglucosone dehydrogenase as aldehyde dehydrogenase 1A1 (retinaldehyde) Tj ETQq1 1 0.784314 rgBT /Overlo	2.6	41
112	Identification of TP53-induced glycolysis and apoptosis regulator (TIGAR) as the phosphoglycolate-independent 2,3-bisphosphoglycerate phosphatase. Biochemical Journal, 2014, 458, 439-448.	3.7	41
113	Identification of enzymes acting on Î±-glycated amino acids inBacillus subtilis. FEBS Letters, 2004, 577, 469-472.	2.8	40
114	Identification of the sequence encoding N-acetylneuraminate-9-phosphate phosphatase. Glycobiology, 2006, 16, 165-172.	2.5	39
115	2-Keto-4-methylthiobutyrate, an intermediate in the methionine salvage pathway, is a good substrate for CtBP1. Biochemical and Biophysical Research Communications, 2007, 352, 903-906.	2.1	39
116	Glycerol formation after the breaking of dormancy of Phycomyces blakesleeanus spores. Role of an interconvertible glycerol-3-phosphatase. FEBS Journal, 1985, 148, 399-404.	0.2	38
117	Mutations responsible for 3-phosphoserine phosphatase deficiency. European Journal of Human Genetics, 2004, 12, 163-166.	2.8	38
118	A Serine Synthesis Defect Presenting With a Charcot-Marie-Toothâ€“Like Polyneuropathy. Archives of Neurology, 2012, 69, 908-11.	4.5	38
119	Comparison of PMM1 with the phosphomannomutases expressed in rat liver and in human cells. FEBS Letters, 1997, 411, 251-254.	2.8	37
120	Prenatal diagnosis in CDG1 families: beware of heterogeneity. European Journal of Human Genetics, 1998, 6, 99-104.	2.8	37
121	Evidence for glucose-6-phosphate transport in rat liver microsomes. FEBS Letters, 2002, 517, 257-260.	2.8	37
122	acs1 of Haemophilus influenzae Type a Capsulation Locus Region II Encodes a Bifunctional Ribulose 5-Phosphate Reductaseâ€“ CDP-Ribitol Pyrophosphorylase. Journal of Bacteriology, 1999, 181, 2001-2007.	2.2	37
123	NAT6 acetylates the Nâ€terminus of different forms of actin. FEBS Journal, 2018, 285, 3299-3316.	4.7	36
124	Effect of benzoate on the metabolism of fructose 2,6-bisphosphate in yeast. FEBS Journal, 1986, 154, 141-145.	0.2	35
125	D-Glycerate kinase deficiency as a cause of D-glyceric aciduria. FEBS Letters, 1989, 243, 127-131.	2.8	35
126	Fructose administration stimulates glucose phosphorylation in the livers of anesthetized rats. FASEB Journal, 1991, 5, 326-330.	0.5	34

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127	HDHD1, which is often deleted in X-linked ichthyosis, encodes a pseudouridine-5â€²-phosphatase. Biochemical Journal, 2010, 431, 237-244.	3.7	34
128	Limitations of galactose therapy in phosphoglucomutase 1 deficiency. Molecular Genetics and Metabolism Reports, 2017, 13, 33-40.	1.1	34
129	On the Mechanism of Inhibition of Neutral Liver Fructose 1,6-Bisphosphatase by Fructose 2,6-Bisphosphate. FEBS Journal, 1983, 134, 269-273.	0.2	33
130	Pyruvate kinase from Trichomonas vaginalis, an allosteric enzyme stimulated by ribose 5-phosphate and glycerate 3-phosphate. Molecular and Biochemical Parasitology, 1992, 54, 13-20.	1.1	33
131	Plant ribulosamine/erythrulosamine 3-kinase, a putative protein-repair enzyme. Biochemical Journal, 2005, 388, 795-802.	3.7	33
132	How many forms of glycogen storage disease type I?. European Journal of Pediatrics, 2000, 159, 314-318.	2.7	32
133	Glucose-6-Phosphatase Mutation G188R Confers an Atypical Glycogen Storage Disease Type 1b Phenotype. Pediatric Research, 2000, 48, 329-334.	2.3	32
134	Mammalian Phosphomannomutase PMM1 Is the Brain IMP-sensitive Glucose-1,6-bisphosphatase. Journal of Biological Chemistry, 2008, 283, 33988-33993.	3.4	32
135	Nit1 is a metabolite repair enzyme that hydrolyzes deaminated glutathione. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E3233-E3242.	7.1	32
136	Phosphate dependency of phosphofructokinase 2. FEBS Journal, 1985, 148, 155-159.	0.2	31
137	Conversion of fructose to glucose in the rabbit small intestine. A reappraisal of the direct pathway. FEBS Journal, 1993, 213, 721-726.	0.2	31
138	Cloning and sequencing of rat liver cDNAs encoding the regulatory protein of glucokinase. FEBS Letters, 1993, 321, 111-115.	2.8	31
139	The stimulation of phosphofructokinase from human erythrocytes by fructose 2,6-bisphosphate. FEBS Letters, 1982, 143, 141-143.	2.8	30
140	Many fructosamine 3â€kinase homologues in bacteria are ribulosamine/erythrulosamine 3â€kinases potentially involved in protein deglycation. FEBS Journal, 2007, 274, 4360-4374.	4.7	30
141	Inborn errors of metabolite repair. Journal of Inherited Metabolic Disease, 2020, 43, 14-24.	3.6	30
142	High-resolution structure of human phosphoserine phosphatase in open conformation. Acta Crystallographica Section D: Biological Crystallography, 2003, 59, 971-977.	2.5	29
143	Fructosamine 3-kinase-related protein and deglycation in human erythrocytes. Biochemical Journal, 2004, 382, 137-143.	3.7	29
144	Parkinson's disease protein PARK7 prevents metabolite and protein damage caused by a glycolytic metabolite. Proceedings of the National Academy of Sciences of the United States of America, 2022, 119, .	7.1	29

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145	Cloning and Expression of a Xenopus Liver cDNA Encoding a Fructose-Phosphate-Insensitive Regulatory Protein of Glucokinase. FEBS Journal, 1994, 225, 43-51.	0.2	28
146	Identification of glucoselysine-6-phosphate deglycase, an enzyme involved in the metabolism of the fructation product glucoselysine. Biochemical Journal, 2005, 392, 263-269.	3.7	28
147	Metabolite Proofreading in Carnosine and Homocarnosine Synthesis. Journal of Biological Chemistry, 2014, 289, 19726-19736.	3.4	28
148	Mutations in phenotypically mildD-2-hydroxyglutaric aciduria. Annals of Neurology, 2005, 58, 626-630.	5.3	27
149	Cloning and sequencing of rat liver carboxylesterase ES-4 (microsomal palmitoyl-CoA hydrolase). Biochemical Journal, 1996, 313, 821-826.	3.7	26
150	Fructoselysine 3-epimerase, an enzyme involved in the metabolism of the unusual Amadori compound psicoselysine in Escherichia coli. Biochemical Journal, 2004, 378, 1047-1052.	3.7	26
151	Structure and Configuration of Fructose 2,6â€Bisphosphate by ³¹P and ¹³C Nuclear Magnetic Resonance. FEBS Journal, 1981, 117, 325-327.	0.2	25
152	Coenzyme specificity of mammalian liver d-glycerate dehydrogenase. FEBS Journal, 1989, 186, 355-359.	0.2	25
153	Determinants of the enzymatic activity and the subcellular localization of aspartate N-acetyltransferase. Biochemical Journal, 2012, 441, 105-112.	3.7	25
154	Analysis of the Cooperativity of Human Î²-Cell Glucokinase through the Stimulatory Effect of Glucose on Fructose Phosphorylation. Journal of Biological Chemistry, 2001, 276, 3872-3878.	3.4	24
155	The prenatal diagnosis of congenital disorders of glycosylation(CDG). Prenatal Diagnosis, 2004, 24, 114-116.	2.3	24
156	The synthesis of branched-chain fatty acids is limited by enzymatic decarboxylation of ethyl- and methylmalonyl-CoA. Biochemical Journal, 2019, 476, 2427-2447.	3.7	24
157	Is the glucose-induced stimulation of glycolysis in pancreatic islets attributable to activation of phosphofructokinase by fructose 2,6-bisphosphate?. FEBS Letters, 1981, 125, 217-219.	2.8	23
158	Presence of fructokinase in pancreatic islets. FEBS Letters, 1989, 255, 175-178.	2.8	23
159	Characterization of mammalian sedoheptulokinase and mechanism of formation of erythritol in sedoheptulokinase deficiency. FEBS Letters, 2008, 582, 3330-3334.	2.8	23
160	Identification, purification and separation of different isozymes of NADP-specific malic enzyme from Tritrichomonas foetus. Molecular and Biochemical Parasitology, 1993, 57, 253-260.	1.1	22
161	Rapid Stimulation of Free Glucuronate Formation by Non-glucuronidable Xenobiotics in Isolated Rat Hepatocytes. Journal of Biological Chemistry, 2003, 278, 36328-36333.	3.4	22
162	Glucuronate, the precursor of vitamin C, is directly formed from UDP-glucuronate in liver. FEBS Journal, 2006, 273, 1516-1527.	4.7	22

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163	Molecular Identification of Î²-Citrylglutamate Hydrolase as Glutamate Carboxypeptidase 3. Journal of Biological Chemistry, 2011, 286, 38220-38230.	3.4	22
164	SLC13A3 variants cause acute reversible leukoencephalopathy and Î±â€ketoglutarate accumulation. Annals of Neurology, 2019, 85, 385-395.	5.3	22
165	Evolution of vertebrate glucokinase regulatory protein from a bacterial N-acetylmuramate 6-phosphate etherase. Biochemical Journal, 2009, 423, 323-332.	3.7	20
166	Erythritol Availability in Bovine, Murine and Human Models Highlights a Potential Role for the Host Aldose Reductase during Brucella Infection. Frontiers in Microbiology, 2017, 8, 1088.	3.5	20
167	Kinetic properties and tissular distribution of mammalian phosphomannomutase isozymes. Biochemical Journal, 1999, 339, 201.	3.7	19
168	Fructose 2,6-Bisphosphate Hydrolyzing Enzymes in Higher Plants. Plant Physiology, 1989, 90, 827-834.	4.8	18
169	A new family of phosphotransferases related to P-type ATPases. Trends in Biochemical Sciences, 1998, 23, 284.	7.5	18
170	Enzyme complexity in intermediary metabolism. Journal of Inherited Metabolic Disease, 2015, 38, 721-727.	3.6	18
171	Fructose 2,6-Bisphosphate versus Cyclic AMP in the Liver and in Lower Eukaryotic Cells. Current Topics in Cellular Regulation, 1985, 27, 399-410.	9.6	18
172	Fructose 2,6-bisphosphate and the control of the energy charge in higher plants. FEBS Letters, 1987, 221, 124-128.	2.8	17
173	Effect of ethylene treatment on the concentration of fructose-2,6-bisphosphate and on the activity of phosphofructokinase 2/fructose-2,6-bisphosphatase in banana. FEBS Journal, 1987, 167, 579-583.	0.2	17
174	Overexpression and Purification of Fructose-1-Phosphate Kinase from Escherichia coli: Application to the Assay of Fructose 1-Phosphate. Protein Expression and Purification, 2000, 19, 48-52.	1.3	17
175	Fructosamine 3-kinase and other enzymes involved in protein deglycation. Advances in Enzyme Regulation, 2007, 47, 261-269.	2.6	17
176	Conversion of a synthetic fructosamine into its 3-phospho derivative in human erythrocytes. Biochemical Journal, 2000, 352, 835-839.	3.7	17
177	Successful use of empagliflozin to treat neutropenia in two <scp>G6PC3</scp>â€deficient children: Impact of a mutation in <scp>SGLT5</scp>. Journal of Inherited Metabolic Disease, 2022, 45, 759-768.	3.6	17
178	Reaction of phosphofructokinase 2/fructose 2,6-bisphosphatase with monoclonal antibodies. A proof of the bifunctionality of the enzyme. FEBS Journal, 1986, 159, 367-373.	0.2	15
179	Vertebrate AcylÂCoA synthetase family memberÂ4 (<scp>ACSF</scp>4â€U26) is a Î²â€alanineâ€activating enzyme homologous to bacterial nonâ€ribosomal peptide synthetase. FEBS Journal, 2014, 281, 1585-1597.	4.7	15
180	The fuel concept for insulin release: regulation of glucose phosphorylation in pancreatic islets. Biochemical Society Transactions, 1990, 18, 107-108.	3.4	14

#	Article	IF	Citations
181	NAA80 bi-allelic missense variants result in high-frequency hearing loss, muscle weakness and developmental delay. Brain Communications, 2021, 3, fcab256.	3.3	14
182	Convergent evolution of zoonotic Brucella species toward the selective use of the pentose phosphate pathway. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 26374-26381.	7.1	13
183	C2orf69 mutations disrupt mitochondrial function and cause a multisystem human disorder with recurring autoinflammation. Journal of Clinical Investigation, 2021, 131, .	8.2	13
184	Evidence for Phosphotransferases Phosphorylated on Aspartate Residue in N-Terminal DXDX(T/V) Motif. Methods in Enzymology, 2002, 354, 177-188.	1.0	12
185	The role of fructose 2,6-bisphosphate in the long-term control of phosphofructokinase in rat liver. Biochemical and Biophysical Research Communications, 1983, 113, 548-554.	2.1	11
186	Involvement of Phosphorylase Kinase Inhibition in the Effect of Resorcinol and Proglycosyn on Glycogen Metabolism in the Liver. FEBS Journal, 1995, 234, 301-307.	0.2	11
187	Identification of protein-ribulosamine-5-phosphatase as human low-molecular-mass protein tyrosine phosphatase-A. Biochemical Journal, 2007, 406, 139-145.	3.7	11
188	The Fructose 6-Phosphate/Fructose 1,6-Bisphosphate Cycle. Current Topics in Cellular Regulation, 1981, 18, 199-210.	9.6	11
189	Enzymatic Assays of Fructose-1-phosphate and Fructose-1,6-bisphosphate in the Picomole Range. Analytical Biochemistry, 1996, 235, 243-244.	2.4	9
190	A novel mutation in GMPPA in siblings with apparent intellectual disability, epilepsy, dysmorphism, and autonomic dysfunction. American Journal of Medical Genetics, Part A, 2017, 173, 2246-2250.	1.2	9
191	Phosphoglycolate has profound metabolic effects but most likely no role in a metabolic DNA response in cancer cell lines. Biochemical Journal, 2019, 476, 629-643.	3.7	9
192	Impaired glucose-1,6-biphosphate production due to bi-allelic PGM2L1 mutations is associated with a neurodevelopmental disorder. American Journal of Human Genetics, 2021, 108, 1151-1160.	6.2	9
193	Role of cysteine in the dietary control of the expression of 3-phosphoglycerate dehydrogenase in rat liver. Biochemical Journal, 1999, 344, 15.	3.7	8
194	A spectrophotometric assay of d-glucuronate based on Escherichia coli uronate isomerase and mannonate dehydrogenase. Protein Expression and Purification, 2004, 37, 352-360.	1.3	8
195	Dâ€2â€hydroxyglutaric aciduria Type I: Functional analysis of D2HGDH missense variants. Human Mutation, 2019, 40, 975-982.	2.5	8
196	Mechanism of the stimulatory effect of a potassium-rich medium on the phosphorylation of glucose in isolated rat hepatocytes. FEBS Journal, 1992, 204, 363-369.	0.2	7
197	Effect of proglycosyn and other phenolic compounds on glycogen metabolism in isolated hepatocytes. Potential role of glucuronidated metabolites. FEBS Journal, 1993, 218, 745-751.	0.2	7
198	Conversion of a synthetic fructosamine into its 3-phospho derivative in human erythrocytes. Biochemical Journal, 2000, 352, 835.	3.7	7

#	Article	IF	Citations
199	Energy Metabolism | Hexokinase/Glucokinase. , 2021, , 149-161.		7
200	Heterologous expression of an active rat regulatory protein of glucokinase. FEBS Letters, 1994, 355, 27-29.	2.8	6
201	The gene encoding rat 3-phosphoglycerate dehydrogenase. Mammalian Genome, 2000, 11, 1034-1036.	2.2	6
202	Purification, crystallization and preliminary X-ray diffraction analysis of human phosphoserine phosphatase. Acta Crystallographica Section D: Biological Crystallography, 2002, 58, 133-134.	2.5	6
203	ECHDC1 knockout mice accumulate ethyl-branched lipids and excrete abnormal intermediates of branched-chain fatty acid metabolism. Journal of Biological Chemistry, 2021, 297, 101083.	3.4	6
204	Pyridoxamine-phosphate oxidases and pyridoxamine-phosphate oxidase-related proteins catalyze the oxidation of 6-NAD(P)H to NAD(P)+. Biochemical Journal, 2019, 476, 3033-3052.	3.7	6
205	The putative Escherichia coli dehydrogenase YjhC metabolises two dehydrated forms of N-acetylneuraminate produced by some sialidases. Bioscience Reports, 2020, 40, .	2.4	6
206	SLC37A4â€CDG : Second patient. JIMD Reports, 2021, 58, 122-128.	1.5	5
207	The metalloprotein YhcH is an anomerase providing N-acetylneuraminate aldolase with the open form of its substrate. Journal of Biological Chemistry, 2021, 296, 100699.	3.4	5
208	Impaired catabolism of free oligosaccharides due to MAN2C1 variants causes a neurodevelopmental disorder. American Journal of Human Genetics, 2022, 109, 345-360.	6.2	4
209	Human cytosolic transaminases: side activities and patterns of discrimination towards physiologically available alternative substrates. Cellular and Molecular Life Sciences, 2022, 79, .	5.4	4
210	Mutations in the AGXT2L2 gene cause phosphohydroxylysinuria. Journal of Inherited Metabolic Disease, 2013, 36, 961-966.	3.6	3
211	Signal Recognition. Advances in Molecular and Cell Biology, 1999, 29, 199-226.	0.1	2
212	Corrigendum to: Identification of enzymes acting on Î±-glycated amino acids inBacillus subtilis(Febs) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 5	2.8	1
213	The 2,3-bisphosphoglycerate-independent phosphoglycerate mutase from Trypanosoma brucei: metal-ion dependency and phosphoenzyme formation. FEMS Microbiology Letters, 2001, 204, 39-44.	1.8	1
214	CHAPTER 6. The Biochemistry of Enzymes Producing Carnosine and Anserine. Food and Nutritional Components in Focus, 2015, , 99-117.	0.1	1
215	Accumulation of metabolic side products might favor the production of ethanol in Pho13 knockout strains. Microbial Cell, 2016, 3, 495-499.	3.2	1
216	Phosphomannomutase. , 2002, , 587-594.		0