

Hieronim Jakubowski

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201
papers

7,756
citations

49
h-index

79
g-index

208
ext. papers

8,381
ext. citations

5.4
avg, IF

6.63
L-index

#	Paper	IF	Citations
201	Protein homocysteinylation: possible mechanism underlying pathological consequences of elevated homocysteine levels. <i>FASEB Journal</i> , 1999 , 13, 2277-2283	0.9	300
200	Calcium-dependent human serum homocysteine thiolactone hydrolase. A protective mechanism against protein N-homocysteinylation. <i>Journal of Biological Chemistry</i> , 2000 , 275, 3957-62	5.4	293
199	Editing of errors in selection of amino acids for protein synthesis. <i>Microbiological Reviews</i> , 1992 , 56, 412-29		239
198	Homocysteine thiolactone and protein homocysteinylation in human endothelial cells: implications for atherosclerosis. <i>Circulation Research</i> , 2000 , 87, 45-51	15.7	236
197	Mechanisms of homocysteine toxicity in humans. <i>Amino Acids</i> , 2007 , 32, 561-72	3.5	218
196	Metabolism of Homocysteine Thiolactone in Human Cell Cultures. <i>Journal of Biological Chemistry</i> , 1997 , 272, 1935-1942	5.4	215
195	Molecular basis of homocysteine toxicity in humans. <i>Cellular and Molecular Life Sciences</i> , 2004 , 61, 470-87	10.3	194
194	Homocysteine thiolactone: metabolic origin and protein homocysteinylation in humans. <i>Journal of Nutrition</i> , 2000 , 130, 377S-381S	4.1	179
193	Metabolism of homocysteine thiolactone in human cell cultures. Possible mechanism for pathological consequences of elevated homocysteine levels. <i>Journal of Biological Chemistry</i> , 1997 , 272, 1935-42	5.4	173
192	Pathophysiological consequences of homocysteine excess. <i>Journal of Nutrition</i> , 2006 , 136, 1741S-1749S	4.1	155
191	Alternative pathways for editing non-cognate amino acids by aminoacyl-tRNA synthetases. <i>Nucleic Acids Research</i> , 1981 , 9, 3105-17	20.1	151
190	Editing of errors in selection of amino acids for protein synthesis.. <i>Microbiological Reviews</i> , 1992 , 56, 412-429		140
189	Homocysteine is a protein amino acid in humans. Implications for homocysteine-linked disease. <i>Journal of Biological Chemistry</i> , 2002 , 277, 30425-8	5.4	131
188	Autoantibodies against N-homocysteinylation in humans: implications for atherosclerosis. <i>Stroke</i> , 2004 , 35, 1299-304	6.7	112
187	The determination of homocysteine-thiolactone in human plasma. <i>Analytical Biochemistry</i> , 2005 , 337, 271-7	3.1	101
186	Synthesis of homocysteine thiolactone by methionyl-tRNA synthetase in cultured mammalian cells. <i>FEBS Letters</i> , 1993 , 317, 237-40	3.8	100
185	Mutations in methylenetetrahydrofolate reductase or cystathionine beta-synthase gene, or a high-methionine diet, increase homocysteine thiolactone levels in humans and mice. <i>FASEB Journal</i> , 2007 , 21, 1707-13	0.9	92

184	Plasma homocysteine affects fibrin clot permeability and resistance to lysis in human subjects. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2006 , 26, 1397-404	9.4	92
183	Cross-talk between Cys34 and lysine residues in human serum albumin revealed by N-homocysteinylation. <i>Journal of Biological Chemistry</i> , 2004 , 279, 10864-71	5.4	92
182	Prevention of brain disease from severe 5,10-methylenetetrahydrofolate reductase deficiency. <i>Molecular Genetics and Metabolism</i> , 2007 , 91, 165-75	3.7	89
181	Genetic or nutritional disorders in homocysteine or folate metabolism increase protein N-homocysteinylation in mice. <i>FASEB Journal</i> , 2009 , 23, 1721-7	0.9	82
180	Proofreading in vivo: editing of homocysteine by methionyl-tRNA synthetase in Escherichia coli. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1990 , 87, 4504-8	11.5	82
179	Homocysteine Modification in Protein Structure/Function and Human Disease. <i>Physiological Reviews</i> , 2019 , 99, 555-604	47.9	82
178	Quantities of individual aminoacyl-tRNA families and their turnover in Escherichia coli. <i>Journal of Bacteriology</i> , 1984 , 158, 769-76	3.5	80
177	Protein homocysteinylation: possible mechanism underlying pathological consequences of elevated homocysteine levels. <i>FASEB Journal</i> , 1999 , 13, 2277-83	0.9	80
176	The determination of homocysteine-thiolactone in biological samples. <i>Analytical Biochemistry</i> , 2002 , 308, 112-9	3.1	79
175	Genetic determinants of homocysteine thiolactonase activity in humans: implications for atherosclerosis. <i>FEBS Letters</i> , 2001 , 491, 35-9	3.8	78
174	Paraoxonase 1 and homocysteine metabolism. <i>Amino Acids</i> , 2012 , 43, 1405-17	3.5	75
173	The molecular basis of homocysteine thiolactone-mediated vascular disease. <i>Clinical Chemistry and Laboratory Medicine</i> , 2007 , 45, 1704-16	5.9	73
172	Mutations in cystathionine beta-synthase or methylenetetrahydrofolate reductase gene increase N-homocysteinylation protein levels in humans. <i>FASEB Journal</i> , 2008 , 22, 4071-6	0.9	72
171	Catabolism of diadenosine 5',5'''-P1,P4-tetraphosphate in procaryotes. Purification and properties of diadenosine 5',5'''-P1,P4-tetraphosphate (symmetrical) pyrophosphohydrolase from Escherichia coli K12. <i>Journal of Biological Chemistry</i> , 1983 , 258, 14784-9	5.4	72
170	Urinary excretion of homocysteine-thiolactone in humans. <i>Clinical Chemistry</i> , 2005 , 51, 408-15	5.5	70
169	Paraoxonase 1 protects against protein N-homocysteinylation in humans. <i>FASEB Journal</i> , 2010 , 24, 931-6.	6.9	66
168	Protective mechanisms against homocysteine toxicity: the role of bleomycin hydrolase. <i>Journal of Biological Chemistry</i> , 2006 , 281, 22485-92	5.4	65
167	Proofreading in vivo: editing of homocysteine by methionyl-tRNA synthetase in the yeast <i>Saccharomyces cerevisiae</i> . <i>EMBO Journal</i> , 1991 , 10, 593-598	13	64

166	Enzymes hydrolyzing ApppA and/or AppppA in higher plants. Purification and some properties of diadenosine triphosphatase, diadenosine tetraphosphatase, and phosphodiesterase from yellow lupin (<i>Lupinus luteus</i>) seeds.. <i>Journal of Biological Chemistry</i> , 1983 , 258, 9982-9989	5.4	62
165	Protein N-homocysteinylation: implications for atherosclerosis. <i>Biomedicine and Pharmacotherapy</i> , 2001 , 55, 443-7	7.5	61
164	Homocysteine thiolactone and N-homocysteinylated protein induce pro-atherogenic changes in gene expression in human vascular endothelial cells. <i>Amino Acids</i> , 2015 , 47, 1319-39	3.5	60
163	Aminoacyl thioester chemistry of class II aminoacyl-tRNA synthetases. <i>Biochemistry</i> , 1997 , 36, 11077-85	3.2	59
162	Misacylation of tRNA ^{Lys} with noncognate amino acids by lysyl-tRNA synthetase. <i>Biochemistry</i> , 1999 , 38, 8088-93	3.2	58
161	Anti-N-homocysteinylated protein autoantibodies and cardiovascular disease. <i>Clinical Chemistry and Laboratory Medicine</i> , 2005 , 43, 1011-4	5.9	57
160	New method for the determination of protein N-linked homocysteine. <i>Analytical Biochemistry</i> , 2008 , 380, 257-61	3.1	56
159	Quality control in tRNA charging. <i>Wiley Interdisciplinary Reviews RNA</i> , 2012 , 3, 295-310	9.3	55
158	Antibodies to N-homocysteinylated albumin as a marker for early-onset coronary artery disease in men. <i>Thrombosis and Haemostasis</i> , 2005 , 93, 346-50	7	54
157	The relationship between synthetic and editing functions of the active site of an aminoacyl-tRNA synthetase. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1993 , 90, 11553-7	11.5	54
156	Modification by homocysteine thiolactone affects redox status of cytochrome C. <i>Biochemistry</i> , 2007 , 46, 6225-31	3.2	51
155	Uncharged tRNA, protein synthesis, and the bacterial stringent response. <i>Molecular Microbiology</i> , 1990 , 4, 2035-40	4.1	51
154	Translational incorporation of S-nitrosohomocysteine into protein. <i>Journal of Biological Chemistry</i> , 2000 , 275, 21813-6	5.4	49
153	The pathophysiological hypothesis of homocysteine thiolactone-mediated vascular disease. <i>Journal of Physiology and Pharmacology</i> , 2008 , 59 Suppl 9, 155-67	2.1	49
152	Chemical biology of homocysteine thiolactone and related metabolites. <i>Advances in Clinical Chemistry</i> , 2011 , 55, 81-103	5.8	48
151	Metabolism and neurotoxicity of homocysteine thiolactone in mice: evidence for a protective role of paraoxonase 1. <i>Journal of Alzheimer's Disease</i> , 2012 , 30, 225-31	4.3	47
150	Translational accuracy of aminoacyl-tRNA synthetases: implications for atherosclerosis. <i>Journal of Nutrition</i> , 2001 , 131, 2983S-7S	4.1	46
149	Effects of betaine on body composition, performance, and homocysteine thiolactone. <i>Journal of the International Society of Sports Nutrition</i> , 2013 , 10, 39	4.5	45

148	Immunohistochemical detection of N-homocysteinylated proteins in humans and mice. <i>Biomedicine and Pharmacotherapy</i> , 2008 , 62, 473-9	7.5	44
147	Homocysteine-thiolactone and S-nitroso-homocysteine mediate incorporation of homocysteine into protein in humans. <i>Clinical Chemistry and Laboratory Medicine</i> , 2003 , 41, 1462-6	5.9	44
146	Chromatography of plant aminoacyl-tRNA synthetases on omega-aminoalkyl sepharose columns. <i>FEBS Letters</i> , 1973 , 34, 150-4	3.8	44
145	Role of homocysteine in aortic calcification and osteogenic cell differentiation. <i>Atherosclerosis</i> , 2009 , 202, 557-66	3.1	43
144	Proofreading in Vivo. <i>Journal of Biological Chemistry</i> , 1995 , 270, 17672-17673	5.4	43
143	Synthesis of diadenosine 5',5'''-P1,P4-tetraphosphate (AppppA) from adenosine 5'-phosphosulfate and adenosine 5'-triphosphate catalyzed by yeast AppppA phosphorylase. <i>Biochemistry</i> , 1988 , 27, 2959-64 ²	3.2	43
142	Mechanism of the condensation of homocysteine thiolactone with aldehydes. <i>Chemistry - A European Journal</i> , 2006 , 12, 8039-43	4.8	41
141	The role of paraoxonase 1 in the detoxification of homocysteine thiolactone. <i>Advances in Experimental Medicine and Biology</i> , 2010 , 660, 113-27	3.6	40
140	Aminoacylation of coenzyme A and pantetheine by aminoacyl-tRNA synthetases: possible link between noncoded and coded peptide synthesis. <i>Biochemistry</i> , 1998 , 37, 5147-53	3.2	40
139	An on-column derivatization method for the determination of homocysteine-thiolactone and protein N-linked homocysteine. <i>Amino Acids</i> , 2011 , 41, 187-94	3.5	39
138	Folic acid administration and antibodies against homocysteinylated proteins in subjects with hyperhomocysteinemia. <i>Thrombosis and Haemostasis</i> , 2006 , 96, 342-7	7	39
137	Quality control in tRNA charging -- editing of homocysteine.. <i>Acta Biochimica Polonica</i> , 2011 , 58,	2	37
136	Valyl-tRNA synthetase from yellow lupin seeds: hydrolysis of the enzyme-bound noncognate aminoacyl adenylate as a possible mechanism of increasing specificity of the aminoacyl-tRNA synthetase. <i>Biochemistry</i> , 1980 , 19, 5071-8	3.2	36
135	Effect of 9p21.3 coronary artery disease locus neighboring genes on atherosclerosis in mice. <i>Circulation</i> , 2012 , 126, 1896-906	16.7	35
134	Letter by Undas and Jakubowski regarding article, "Relationship between homocysteine and mortality in chronic kidney disease". <i>Circulation</i> , 2006 , 114, e547; author reply e548	16.7	35
133	Phosphonate analogues of diadenosine 5',5'''-P1,P4-tetraphosphate as substrates or inhibitors of procaryotic and eucaryotic enzymes degrading dinucleoside tetraphosphates. <i>Biochemistry</i> , 1987 , 26, 3425-9	3.2	35
132	Metabolism and neurotoxicity of homocysteine thiolactone in mice: protective role of bleomycin hydrolase. <i>Amino Acids</i> , 2012 , 43, 1339-48	3.5	33
131	The effects of age and hyperhomocysteinemia on the redox forms of plasma thiols. <i>Translational Research</i> , 2004 , 144, 235-45		33

130	Effect of variation of charged and uncharged tRNA(Trp) levels on ppGpp synthesis in Escherichia coli. <i>Journal of Bacteriology</i> , 1989 , 171, 6493-502	3.5	33
129	The amino acid metabolite homocysteine activates mTORC1 to inhibit autophagy and form abnormal proteins in human neurons and mice. <i>FASEB Journal</i> , 2017 , 31, 598-609	0.9	32
128	Reduced homocysteine-thiolactonase activity in Alzheimer's disease. <i>Journal of Alzheimer's Disease</i> , 2010 , 19, 1177-83	4.3	32
127	The plant aminoacyl-tRNA synthetases. Purification and characterization of valyl-tRNA, tryptophanyl-tRNA and seryl-tRNA synthetases from yellow-lupin seeds. <i>FEBS Journal</i> , 1975 , 52, 301-10		32
126	Dysregulation of Epigenetic Mechanisms of Gene Expression in the Pathologies of Hyperhomocysteinemia. <i>International Journal of Molecular Sciences</i> , 2019 , 20,	6.3	31
125	Aggregation and structural changes of (S1)-, H and E caseins induced by homocysteinylation. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2011 , 1814, 1234-45	4	31
124	Sporulation of the yeast <i>Saccharomyces cerevisiae</i> is accompanied by synthesis of adenosine 5'-tetrphosphate and adenosine 5'-pentaphosphate. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1986 , 83, 2378-82	11.5	31
123	Identification of N-homocysteinylation sites in plasma proteins. <i>Amino Acids</i> , 2014 , 46, 235-44	3.5	30
122	Hyperhomocysteinemia and bleomycin hydrolase modulate the expression of mouse brain proteins involved in neurodegeneration. <i>Journal of Alzheimer's Disease</i> , 2014 , 40, 713-26	4.3	29
121	Relationship between protein synthesis and concentrations of charged and uncharged tRNA ^{Trp} in Escherichia coli. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1990 , 87, 1511-5	11.5	29
120	The synthetic/editing active site of an aminoacyl-tRNA synthetase: evidence for binding of thiols in the editing subsite. <i>Biochemistry</i> , 1996 , 35, 8252-9	3.2	28
119	Plasma homocysteine is a determinant of tissue necrosis factor-alpha in hypertensive patients. <i>Biomedicine and Pharmacotherapy</i> , 2008 , 62, 360-5	7.5	27
118	Garlic extract favorably modifies markers of endothelial function in obese patients -randomized double blind placebo-controlled nutritional intervention. <i>Biomedicine and Pharmacotherapy</i> , 2018 , 102, 792-797	7.5	26
117	Differential regulation of homocysteine transport in vascular endothelial and smooth muscle cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2007 , 27, 1976-83	9.4	26
116	The correlation of homocysteine-thiolactonase activity of the paraoxonase (PON1) protein with coronary heart disease status. <i>Cellular and Molecular Biology</i> , 2006 , 52, 4-10	1.1	26
115	N-Homocysteinylation impairs collagen cross-linking in cystathionine H synthase-deficient mice: a novel mechanism of connective tissue abnormalities. <i>FASEB Journal</i> , 2016 , 30, 3810-3821	0.9	25
114	Effects of endurance and endurance-strength exercise on biochemical parameters of liver function in women with abdominal obesity. <i>Biomedicine and Pharmacotherapy</i> , 2016 , 80, 1-7	7.5	25
113	Genomic association/linkage of sodium lithium countertransport in CEPH pedigrees. <i>Hypertension</i> , 2002 , 40, 619-28	8.5	25

112	Role of carboxy-terminal region in proofreading function of methionyl-tRNA synthetase in <i>Escherichia coli</i> . <i>Biochemistry</i> , 1994 , 33, 11528-35	3.2	25
111	Analysis of site-specific N-homocysteinylation of human serum albumin in vitro and in vivo using MALDI-ToF and LC-MS/MS mass spectrometry. <i>Journal of Proteomics</i> , 2011 , 74, 967-74	3.9	24
110	Direct monitoring of albumin lysine-525 N-homocysteinylation in human serum by liquid chromatography/mass spectrometry. <i>Analytical Biochemistry</i> , 2010 , 405, 132-4	3.1	24
109	Conformational changes during enzyme catalysis: role of water in the transition state. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 1980 , 77, 3374-8	11.5	24
108	Methylfolate Trap Promotes Bacterial Thymineless Death by Sulfa Drugs. <i>PLoS Pathogens</i> , 2016 , 12, e1005949	10.5	24
107	Urinary excretion of homocysteine thiolactone and the risk of acute myocardial infarction in coronary artery disease patients: the WENBIT trial. <i>Journal of Internal Medicine</i> , 2019 , 285, 232-244	10.8	24
106	Yeast cytoplasmic and mitochondrial methionyl-tRNA synthetases: two structural frameworks for identical functions. <i>Journal of Molecular Biology</i> , 2001 , 311, 205-16	6.5	23
105	Simultaneous Determination of Methionine and Homocysteine by on-column derivatization with o-phthalaldehyde. <i>Talanta</i> , 2016 , 161, 917-924	6.2	21
104	N-homocysteinylation of ovine prion protein induces amyloid-like transformation. <i>Archives of Biochemistry and Biophysics</i> , 2012 , 526, 29-37	4.1	20
103	Plasma total homocysteine is a determinant of carotid intima-media thickness and circulating endothelial progenitor cells in patients with newly diagnosed hypertension. <i>Clinical Chemistry and Laboratory Medicine</i> , 2012 , 50, 1107-13	5.9	20
102	Determinants of homocysteine-thiolactonase activity of the paraoxonase-1 (PON1) protein in humans. <i>Cellular and Molecular Biology</i> , 2004 , 50, 885-93	1.1	20
101	Homocysteine Editing, Thioester Chemistry, Coenzyme A, and the Origin of Coded Peptide Synthesis <i>Life</i> , 2017 , 7,	3	19
100	Homocysteine in Protein Structure/Function and Human Disease 2013 ,		19
99	Modulation of paraoxonase 1 and protein N-homocysteinylation by leptin and the synthetic liver X receptor agonist T0901317 in the rat. <i>Journal of Endocrinology</i> , 2010 , 204, 191-8	4.7	19
98	Identification and origin of N-homocysteinylyl-lysine isopeptide in humans and mice. <i>Amino Acids</i> , 2010 , 39, 1563-9	3.5	19
97	Synthesis of cysteine-containing dipeptides by aminoacyl-tRNA synthetases. <i>Nucleic Acids Research</i> , 1995 , 23, 4608-15	20.1	19
96	Evidence for cooperation between cells during sporulation of the yeast <i>Saccharomyces cerevisiae</i> . <i>Molecular and Cellular Biology</i> , 1988 , 8, 5166-78	4.8	19
95	Proofreading in vivo: editing of homocysteine by methionyl-tRNA synthetase in the yeast <i>Saccharomyces cerevisiae</i> . <i>EMBO Journal</i> , 1991 , 10, 593-8	13	19

94	Metabolism of homocysteine-thiolactone in plants. <i>Journal of Biological Chemistry</i> , 2003 , 278, 6765-70	5.4	18
93	Quality control in tRNA charging -- editing of homocysteine. <i>Acta Biochimica Polonica</i> , 2011 , 58, 149-63	2	18
92	Negative correlation between the abundance of Escherichia coli aminoacyl-tRNA families and their affinities for elongation factor Tu-GTP. <i>Journal of Theoretical Biology</i> , 1988 , 133, 363-70	2.3	17
91	Transfer RNA methyltransferases from yellow lupin seeds: purification and properties. <i>Nucleic Acids Research</i> , 1975 , 2, 101-11	20.1	17
90	Effects of Endurance and Endurance-strength Exercise on Renal Function in Abdominally Obese Women with Renal Hyperfiltration: A Prospective Randomized Trial. <i>Biomedical and Environmental Sciences</i> , 2016 , 29, 706-712	1.1	17
89	Amino acid selectivity in the aminoacylation of coenzyme A and RNA minihelices by aminoacyl-tRNA synthetases. <i>Journal of Biological Chemistry</i> , 2000 , 275, 34845-8	5.4	16
88	Valyl-tRNA synthetase from yellow lupin seeds. Instability of enzyme-bound noncognate adenylates versus cognate adenylate. <i>FEBS Letters</i> , 1978 , 95, 235-8	3.8	16
87	Paraoxonase 1 Q192R genotype and activity affect homocysteine thiolactone levels in humans. <i>FASEB Journal</i> , 2018 , 32, fj201800346R	0.9	15
86	Facile syntheses of [35S]homocysteine-thiolactone, [35S]homocystine, [35S]homocysteine, and [S-nitroso-35S]homocysteine. <i>Analytical Biochemistry</i> , 2007 , 370, 124-6	3.1	15
85	Methionine-mediated lethality in yeast cells at elevated temperature. <i>Journal of Bacteriology</i> , 1993 , 175, 5469-76	3.5	15
84	Proofreading and the evolution of a methyl donor function. Cyclization of methionine to S-methyl homocysteine thiolactone by Escherichia coli methionyl-tRNA synthetase. <i>Journal of Biological Chemistry</i> , 1993 , 268, 6549-53	5.4	15
83	Homocysteine editing and growth inhibition in Escherichia coli. <i>Microbiology (United Kingdom)</i> , 2009 , 155, 1858-1865	2.9	15
82	Filaggrin Expression and Processing Deficiencies Impair Corneocyte Surface Texture and Stiffness in Mice. <i>Journal of Investigative Dermatology</i> , 2020 , 140, 615-623.e5	4.3	15
81	Quantification of homocysteine and cysteine by derivatization with pyridoxal 5'-phosphate and hydrophilic interaction liquid chromatography. <i>Analytical and Bioanalytical Chemistry</i> , 2016 , 408, 1935-41.4	4.4	14
80	Purification of antibodies against N-homocysteinylated proteins by affinity chromatography on Nomega-homocysteinyl-aminohexyl-Agarose. <i>Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences</i> , 2004 , 807, 257-61	3.2	14
79	Energy cost of proofreading in vivo: the charging of methionine tRNAs in Escherichia coli. <i>FASEB Journal</i> , 1993 , 7, 168-72	0.9	14
78	The determination of aminoacyl adenylate by thin-layer chromatography. <i>Analytical Biochemistry</i> , 1977 , 82, 29-37	3.1	14
77	Proofreading and the evolution of a methyl donor function. Cyclization of methionine to S-methyl homocysteine thiolactone by Escherichia coli methionyl-tRNA synthetase.. <i>Journal of Biological Chemistry</i> , 1993 , 268, 6549-6553	5.4	14

76	Quantification of urinary S- and N-homocysteinylated protein and homocysteine-thiolactone in mice. <i>Analytical Biochemistry</i> , 2016 , 508, 118-23	3.1	13
75	The nomenclature of 1-aminoalkylphosphonic acids and derivatives: evolution of the code system. <i>Acta Biochimica Polonica</i> , 2015 , 62, 139-50	2	13
74	Elevated concentrations of Ne-homocysteinyll-lysine isopeptide in acute myocardial infarction: links with ADMA formation. <i>Clinical Chemistry and Laboratory Medicine</i> , 2011 , 49, 729-35	5.9	13
73	On-column derivatization with o-phthaldialdehyde for fast determination of homocysteine in human urine. <i>Analytical and Bioanalytical Chemistry</i> , 2010 , 396, 2363-6	4.4	13
72	Synergistic, random sequential binding of substrates in cobalamin-independent methionine synthase. <i>Biochemistry</i> , 2006 , 45, 5083-91	3.2	13
71	Editing function of Escherichia coli cysteinyl-tRNA synthetase: cyclization of cysteine to cysteine thiolactone. <i>Nucleic Acids Research</i> , 1994 , 22, 1155-60	20.1	13
70	Control of RNA and protein synthesis by the concentration of Trp-tRNA ^{Trp} in Escherichia coli infected with bacteriophage MS2. <i>Journal of Molecular Biology</i> , 1983 , 168, 747-63	6.5	13
69	A role for protein-protein interactions in the maintenance of active forms of aminoacyl-tRNA synthetases. <i>FEBS Letters</i> , 1979 , 103, 71-6	3.8	13
68	Evidence for cooperation between cells during sporulation of the yeast <i>Saccharomyces cerevisiae</i> . <i>Molecular and Cellular Biology</i> , 1988 , 8, 5166-5178	4.8	13
67	Methionine-induced hyperhomocysteinemia and bleomycin hydrolase deficiency alter the expression of mouse kidney proteins involved in renal disease. <i>Molecular Genetics and Metabolism</i> , 2014 , 112, 339-46	3.7	12
66	Polyamines and yellow lupin aminoacyl-tRNA synthetases. Spermine and spermidine help to maintain the active structures of aminoacyl-tRNA synthetases. <i>FEBS Letters</i> , 1980 , 109, 63-6	3.8	12
65	Adenosylhomocysteinase: adenosine complex. <i>Biochemical and Biophysical Research Communications</i> , 1978 , 84, 1060-8	3.4	12
64	Synthesis of diadenosine 5',5'''-P1,P4-tetraphosphate and related compounds by plant (<i>Lupinus luteus</i>) seryl-tRNA and phenylalanyl-tRNA synthetases. <i>Acta Biochimica Polonica</i> , 1983 , 30, 51-69	2	12
63	Aminoacyl-tRNA synthetases and the evolution of coded peptide synthesis: the Thioester World. <i>FEBS Letters</i> , 2016 , 590, 469-81	3.8	12
62	L-Arginine and vitamin C attenuate pro-atherogenic effects of high-fat diet on biomarkers of endothelial dysfunction in rats. <i>Biomedicine and Pharmacotherapy</i> , 2015 , 76, 100-6	7.5	11
61	Paraoxonase 1 deficiency and hyperhomocysteinemia alter the expression of mouse kidney proteins involved in renal disease. <i>Molecular Genetics and Metabolism</i> , 2014 , 113, 200-6	3.7	11
60	Bleomycin hydrolase and hyperhomocysteinemia modulate the expression of mouse proteins involved in liver homeostasis. <i>Amino Acids</i> , 2014 , 46, 1471-80	3.5	11
59	Proofreading in trans by an aminoacyl-tRNA synthetase: a model for single site editing by isoleucyl-tRNA synthetase. <i>Nucleic Acids Research</i> , 1996 , 24, 2505-10	20.1	11

58	Inactivation of the paraoxonase 1 gene affects the expression of mouse brain proteins involved in neurodegeneration. <i>Journal of Alzheimer's Disease</i> , 2014 , 42, 247-60	4.3	10
57	Energy cost of translational proofreading in vivo. The aminoacylation of transfer RNA in <i>Escherichia coli</i> . <i>Annals of the New York Academy of Sciences</i> , 1994 , 745, 4-20	6.5	10
56	S-Adenosylhomocysteinase from yellow lupin seeds: stoichiometry and reactions of the enzyme-adenosine complex. <i>Biochemistry</i> , 1981 , 20, 6877-81	3.2	10
55	Substrate specificity of S-adenosylhomocysteinase. Cysteine is a substrate of the plant and mammalian enzymes. <i>BBA - Proteins and Proteomics</i> , 1983 , 742, 250-6		10
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53	The Multispecies Probiotic Effectively Reduces Homocysteine Concentration in Obese Women: A Randomized Double-Blind Placebo-Controlled Study. <i>Journal of Clinical Medicine</i> , 2020 , 9,	5.1	10
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