Hieronim Jakubowski

List of Publications by Year in Descending Order

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	Neuroprotective Effects of Cranberry Juice Treatment in a Rat Model of Parkinson Disease. *Nutrients*, **2022**, 14, 2014	6.7	0
200	B Vitamins Prevent Iron-Associated Brain Atrophy and Domain-Specific Effects of Iron, Copper, Aluminum, and Silicon on Cognition in Mild Cognitive Impairment. *Journal of Alzheimer s Disease*, **2021**, 84, 1039-1055	4.3	1
199	Proteome-Wide Analysis of Protein Lysine -Homocysteinylation in. *Journal of Proteome Research*, **2021**, 20, 2458-2476	5.6	1
198	Changes in redox plasma proteome of Pon1-/- mice are exacerbated by a hyperhomocysteinemic diet. *Free Radical Biology and Medicine*, **2021**, 169, 169-180	7.8	0
197	Paraoxonase 1, B Vitamins Supplementation, and Mild Cognitive Impairment. *Journal of Alzheimer s Disease*, **2021**, 81, 1211-1229	4.3	4
196	Copper, heart disease and homocysteine thiolactone. *Journal of Internal Medicine*, **2021**, 290, 229-230	10.8	0
195	Anti--homocysteine-protein autoantibodies are associated with impaired cognition. *Alzheimer s and Dementia: Translational Research and Clinical Interventions*, **2021**, 7, e12159	6	3
194	The Cbs Locus Affects the Expression of Senescence Markers and mtDNA Copy Number, but not Telomere Dynamics in Mice. *International Journal of Molecular Sciences*, **2020**, 21,	6.3	1
193	Quantification of homocysteine thiolactone in human saliva and urine by gas chromatography-mass spectrometry. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2020**, 1149, 122155	3.2	5
192	Filaggrin Expression and Processing Deficiencies Impair Corneocyte Surface Texture and Stiffness in Mice. *Journal of Investigative Dermatology*, **2020**, 140, 615-623.e5	4.3	15
191	Cystathionine synthase deficiency: different changes in proteomes of thrombosis-resistant Cbs mice and thrombosis-prone CBS humans. *Scientific Reports*, **2020**, 10, 10726	4.9	5
190	Genetic Attenuation of Paraoxonase 1 Activity Induces Proatherogenic Changes in Plasma Proteomes of Mice and Humans. *Antioxidants*, **2020**, 9,	7.1	4
189	Telomere length and mtDNA copy number in human cystathionine synthase deficiency. *Free Radical Biology and Medicine*, **2020**, 160, 219-226	7.8	
188	Proteomic exploration of cystathionine synthase deficiency: implications for the clinic. *Expert Review of Proteomics*, **2020**, 17, 751-765	4.2	3
187	The Multispecies Probiotic Effectively Reduces Homocysteine Concentration in Obese Women: A Randomized Double-Blind Placebo-Controlled Study. *Journal of Clinical Medicine*, **2020**, 9,	5.1	10
186	Sex affects N-homocysteinylation at lysine residue 212 of albumin in mice. *Scientific Reports*, **2019**, 9, 2669	4.9	4
185	Dysregulation of Epigenetic Mechanisms of Gene Expression in the Pathologies of Hyperhomocysteinemia. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	31

184	Serum Proteome Alterations in Human Cystathionine ß-Synthase Deficiency and Ischemic Stroke Subtypes. *International Journal of Molecular Sciences*, **2019**, 20,	6.3	8
183	Urinary excretion of homocysteine thiolactone and the risk of acute myocardial infarction in coronary artery disease patients: the WENBIT trial. *Journal of Internal Medicine*, **2019**, 285, 232-244	10.8	24
182	Homocysteine Modification in Protein Structure/Function and Human Disease. *Physiological Reviews*, **2019**, 99, 555-604	47.9	82
181	Protein N-Homocysteinylation and Colorectal Cancer. *Trends in Cancer*, **2019**, 5, 7-10	12.5	6
180	Demethylation of methionine and keratin damage in human hair. *Amino Acids*, **2018**, 50, 537-546	3.5	8
179	Garlic extract favorably modifies markers of endothelial function in obese patients -randomized double blind placebo-controlled nutritional intervention. *Biomedicine and Pharmacotherapy*, **2018**, 102, 792-797	7.5	26
178	Paraoxonase 1 Q192R genotype and activity affect homocysteine thiolactone levels in humans. *FASEB Journal*, **2018**, 32, fj201800346R	0.9	15
177	Mutations in Homocysteine Metabolism Genes Increase Keratin -Homocysteinylation and Damage in Mice. *International Journal of Genomics*, **2018**, 2018, 7570850	2.5	2
176	The amino acid metabolite homocysteine activates mTORC1 to inhibit autophagy and form abnormal proteins in human neurons and mice. *FASEB Journal*, **2017**, 31, 598-609	0.9	32
175	Homocysteine Editing, Thioester Chemistry, Coenzyme A, and the Origin of Coded Peptide Synthesis *Life*, **2017**, 7,	3	19
174	N-Homocysteinylation impairs collagen cross-linking in cystathionine ß-synthase-deficient mice: a novel mechanism of connective tissue abnormalities. *FASEB Journal*, **2016**, 30, 3810-3821	0.9	25
173	Simultaneous Determination of Methionine and Homocysteine by on-column derivatization with o-phtaldialdehyde. *Talanta*, **2016**, 161, 917-924	6.2	21
172	Quantification of urinary S- and N-homocysteinylated protein and homocysteine-thiolactone in mice. *Analytical Biochemistry*, **2016**, 508, 118-23	3.1	13
171	Quantification of homocysteine and cysteine by derivatization with pyridoxal 5'-phosphate and hydrophilic interaction liquid chromatography. *Analytical and Bioanalytical Chemistry*, **2016**, 408, 1935-41	4.4	14
170	Effects of endurance and endurance-strength exercise on biochemical parameters of liver function in women with abdominal obesity. *Biomedicine and Pharmacotherapy*, **2016**, 80, 1-7	7.5	25
169	Methylfolate Trap Promotes Bacterial Thymineless Death by Sulfa Drugs. *PLoS Pathogens*, **2016**, 12, e1005949	7.5	24
168	Protective mechanisms against protein damage in hyperhomocysteinemia: Systemic and renal detoxification of homocysteine-thiolactone **2016**, 1, 40-43		5
167	Effects of Endurance and Endurance-strength Exercise on Renal Function in Abdominally Obese Women with Renal Hyperfiltration: A Prospective Randomized Trial. *Biomedical and Environmental Sciences*, **2016**, 29, 706-712	1.1	17

166	Aminoacyl-tRNA synthetases and the evolution of coded peptide synthesis: the Thioester World. *FEBS Letters*, **2016**, 590, 469-81	3.8	12
165	Homocysteine thiolactone and N-homocysteinylated protein induce pro-atherogenic changes in gene expression in human vascular endothelial cells. *Amino Acids*, **2015**, 47, 1319-39	3.5	60
164	L-Arginine and vitamin C attenuate pro-atherogenic effects of high-fat diet on biomarkers of endothelial dysfunction in rats. *Biomedicine and Pharmacotherapy*, **2015**, 76, 100-6	7.5	11
163	The nomenclature of 1-aminoalkylphosphonic acids and derivatives: evolution of the code system. *Acta Biochimica Polonica*, **2015**, 62, 139-50	2	13
162	Abstract 19250: Urinary Homocysteine Thiolactone Predicts Acute Myocardial Infarction in a Randomized Controlled Homocysteine-lowering B-vitamin Trial. *Circulation*, **2015**, 132,	16.7	6
161	Paraoxonase 1 deficiency and hyperhomocysteinemia alter the expression of mouse kidney proteins involved in renal disease. *Molecular Genetics and Metabolism*, **2014**, 113, 200-6	3.7	11
160	Labeled EF-Tus for rapid kinetic studies of pretranslocation complex formation. *ACS Chemical Biology*, **2014**, 9, 2421-31	4.9	3
159	Bleomycin hydrolase and hyperhomocysteinemia modulate the expression of mouse proteins involved in liver homeostasis. *Amino Acids*, **2014**, 46, 1471-80	3.5	11
158	Methionine-induced hyperhomocysteinemia and bleomycin hydrolase deficiency alter the expression of mouse kidney proteins involved in renal disease. *Molecular Genetics and Metabolism*, **2014**, 112, 339-46	3.7	12
157	Inactivation of the paraoxonase 1 gene affects the expression of mouse brain proteins involved in neurodegeneration. *Journal of Alzheimer's Disease*, **2014**, 42, 247-60	4.3	10
156	The influence of selected antihypertensive drugs on zinc, copper, and iron status in spontaneously hypertensive rats. *European Journal of Pharmacology*, **2014**, 738, 326-31	5.3	6
155	Hyperhomocysteinemia and bleomycin hydrolase modulate the expression of mouse brain proteins involved in neurodegeneration. *Journal of Alzheimer's Disease*, **2014**, 40, 713-26	4.3	29
154	Identification of N-homocysteinylation sites in plasma proteins. *Amino Acids*, **2014**, 46, 235-44	3.5	30
153	Paraoxonase 1 and dietary hyperhomocysteinemia modulate the expression of mouse proteins involved in liver homeostasis.. *Acta Biochimica Polonica*, **2014**, 61,	2	7
152	Paraoxonase 1 and dietary hyperhomocysteinemia modulate the expression of mouse proteins involved in liver homeostasis. *Acta Biochimica Polonica*, **2014**, 61, 815-23	2	3
151	Design and properties of efficient tRNA:EF-Tu FRET system for studies of ribosomal translation. *Protein Engineering, Design and Selection*, **2013**, 26, 347-57	1.9	3
150	Effects of betaine on body composition, performance, and homocysteine thiolactone. *Journal of the International Society of Sports Nutrition*, **2013**, 10, 39	4.5	45
149	Homocysteine in Protein Structure/Function and Human Disease **2013**,		19

148	Homocysteine-Thiolactone **2013**, 19-53		1
147	Discoveries of Protein S- and N-Homocysteinylation **2013**, 55-57		
146	S-Homocysteinylated Proteins **2013**, 121-135		
145	The Mechanism and Consequences of Homocysteine Incorporation Into Protein in Humans. *Phosphorus, Sulfur and Silicon and the Related Elements*, **2013**, 188, 384-395	1	2
144	An Overview of Homocysteine Metabolism **2013**, 7-18		2
143	Pathophysiological Consequences of Protein N-Homocysteinylation **2013**, 107-119		
142	N-Homocysteinyl-Proteins **2013**, 59-105		
141	Paraoxonase 1 and homocysteine metabolism. *Amino Acids*, **2012**, 43, 1405-17	3.5	75
140	N-homocysteinylation of ovine prion protein induces amyloid-like transformation. *Archives of Biochemistry and Biophysics*, **2012**, 526, 29-37	4.1	20
139	Metabolism and neurotoxicity of homocysteine thiolactone in mice: protective role of bleomycin hydrolase. *Amino Acids*, **2012**, 43, 1339-48	3.5	33
138	Quality control in tRNA charging. *Wiley Interdisciplinary Reviews RNA*, **2012**, 3, 295-310	9.3	55
137	Metabolism and neurotoxicity of homocysteine thiolactone in mice: evidence for a protective role of paraoxonase 1. *Journal of Alzheimer's Disease*, **2012**, 30, 225-31	4.3	47
136	Effect of 9p21.3 coronary artery disease locus neighboring genes on atherosclerosis in mice. *Circulation*, **2012**, 126, 1896-906	16.7	35
135	Plasma total homocysteine is a determinant of carotid intima-media thickness and circulating endothelial progenitor cells in patients with newly diagnosed hypertension. *Clinical Chemistry and Laboratory Medicine*, **2012**, 50, 1107-13	5.9	20
134	Chemical biology of homocysteine thiolactone and related metabolites. *Advances in Clinical Chemistry*, **2011**, 55, 81-103	5.8	48
133	An on-column derivatization method for the determination of homocysteine-thiolactone and protein N-linked homocysteine. *Amino Acids*, **2011**, 41, 187-94	3.5	39
132	Cation exchange HPLC analysis of desmosines in elastin hydrolysates. *Analytical and Bioanalytical Chemistry*, **2011**, 401, 2473-9	4.4	7
131	Aggregation and structural changes of (S1)-, and -caseins induced by homocysteinylation. *Biochimica Et Biophysica Acta - Proteins and Proteomics*, **2011**, 1814, 1234-45	4	31

130	Analysis of site-specific N-homocysteinylation of human serum albumin in vitro and in vivo using MALDI-ToF and LC-MS/MS mass spectrometry. *Journal of Proteomics*, **2011**, 74, 967-74	3.9	24
129	Elevated concentrations of Ne-homocysteinyl-lysine isopeptide in acute myocardial infarction: links with ADMA formation. *Clinical Chemistry and Laboratory Medicine*, **2011**, 49, 729-35	5.9	13
128	Quality control in tRNA charging -- editing of homocysteine.. *Acta Biochimica Polonica*, **2011**, 58,	2	37
127	Quality control in tRNA charging -- editing of homocysteine. *Acta Biochimica Polonica*, **2011**, 58, 149-63	2	18
126	Modulation of paraoxonase 1 and protein N-homocysteinylation by leptin and the synthetic liver X receptor agonist T0901317 in the rat. *Journal of Endocrinology*, **2010**, 204, 191-8	4.7	19
125	Properties of Escherichia coli EF-Tu mutants designed for fluorescence resonance energy transfer from tRNA molecules. *Protein Engineering, Design and Selection*, **2010**, 23, 129-36	1.9	8
124	Paraoxonase 1 protects against protein N-homocysteinylation in humans. *FASEB Journal*, **2010**, 24, 931-6	0.9	66
123	Reduced homocysteine-thiolactonase activity in Alzheimer's disease. *Journal of Alzheimer's Disease*, **2010**, 19, 1177-83	4.3	32
122	The role of paraoxonase 1 in the detoxification of homocysteine thiolactone. *Advances in Experimental Medicine and Biology*, **2010**, 660, 113-27	3.6	40
121	On-column derivatization with o-phthaldialdehyde for fast determination of homocysteine in human urine. *Analytical and Bioanalytical Chemistry*, **2010**, 396, 2363-6	4.4	13
120	Identification and origin of N-homocysteinyl-lysine isopeptide in humans and mice. *Amino Acids*, **2010**, 39, 1563-9	3.5	19
119	Direct monitoring of albumin lysine-525 N-homocysteinylation in human serum by liquid chromatography/mass spectrometry. *Analytical Biochemistry*, **2010**, 405, 132-4	3.1	24
118	Genetic or nutritional disorders in homocysteine or folate metabolism increase protein N-homocysteinylation in mice. *FASEB Journal*, **2009**, 23, 1721-7	0.9	82
117	Role of homocysteine in aortic calcification and osteogenic cell differentiation. *Atherosclerosis*, **2009**, 202, 557-66	3.1	43
116	Homocysteine editing and growth inhibition in Escherichia coli. *Microbiology (United Kingdom)*, **2009** , 155, 1858-1865	2.9	15
115	Paraoxonase 1 (PON1), A Junction Between the Metabolisms of Homocysteine and Lipids **2008**, 87-102		2
114	Plasma homocysteine is a determinant of tissue necrosis factor-alpha in hypertensive patients. *Biomedicine and Pharmacotherapy*, **2008**, 62, 360-5	7.5	27
113	Immunohistochemical detection of N-homocysteinylated proteins in humans and mice. *Biomedicine and Pharmacotherapy*, **2008**, 62, 473-9	7.5	44

112	Mutations in cystathionine beta-synthase or methylenetetrahydrofolate reductase gene increase N-homocysteinylated protein levels in humans. *FASEB Journal*, **2008**, 22, 4071-6	0.9	72
111	Fluorescence enhancement on silver nanostructures: studies of components of ribosomal translation in vitro **2008**,		2
110	New method for the determination of protein N-linked homocysteine. *Analytical Biochemistry*, **2008** , 380, 257-61	3.1	56
109	The pathophysiological hypothesis of homocysteine thiolactone-mediated vascular disease. *Journal of Physiology and Pharmacology*, **2008**, 59 Suppl 9, 155-67	2.1	49
108	Modification by homocysteine thiolactone affects redox status of cytochrome C. *Biochemistry*, **2007** , 46, 6225-31	3.2	51
107	The molecular basis of homocysteine thiolactone-mediated vascular disease. *Clinical Chemistry and Laboratory Medicine*, **2007**, 45, 1704-16	5.9	73
106	Facile syntheses of [35S]homocysteine-thiolactone, [35S]homocystine, [35S]homocysteine, and [S-nitroso-35S]homocysteine. *Analytical Biochemistry*, **2007**, 370, 124-6	3.1	15
105	Mechanisms of homocysteine toxicity in humans. *Amino Acids*, **2007**, 32, 561-72	3.5	218
104	Differential regulation of homocysteine transport in vascular endothelial and smooth muscle cells. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2007**, 27, 1976-83	9.4	26
103	Mutations in methylenetetrahydrofolate reductase or cystathionine beta-synthase gene, or a high-methionine diet, increase homocysteine thiolactone levels in humans and mice. *FASEB Journal*, **2007**, 21, 1707-13	0.9	92
102	Prevention of brain disease from severe 5,10-methylenetetrahydrofolate reductase deficiency. *Molecular Genetics and Metabolism*, **2007**, 91, 165-75	3.7	89
101	Mechanism of the condensation of homocysteine thiolactone with aldehydes. *Chemistry - A European Journal*, **2006**, 12, 8039-43	4.8	41
100	Letter by Undas and Jakubowski regarding article, "Relationship between homocysteine and mortality in chronic kidney disease". *Circulation*, **2006**, 114, e547; author reply e548	16.7	35
99	Protective mechanisms against homocysteine toxicity: the role of bleomycin hydrolase. *Journal of Biological Chemistry*, **2006**, 281, 22485-92	5.4	65
98	Synergistic, random sequential binding of substrates in cobalamin-independent methionine synthase. *Biochemistry*, **2006**, 45, 5083-91	3.2	13
97	Plasma homocysteine affects fibrin clot permeability and resistance to lysis in human subjects. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2006**, 26, 1397-404	9.4	92
96	Folic acid administration and antibodies against homocysteinylated proteins in subjects with hyperhomocysteinemia. *Thrombosis and Haemostasis*, **2006**, 96, 342-7	7	39
95	Pathophysiological consequences of homocysteine excess. *Journal of Nutrition*, **2006**, 136, 1741S-1749S	4.1	155

94	The correlation of homocysteine-thiolactonase activity of the paraoxonase (PON1) protein with coronary heart disease status. *Cellular and Molecular Biology*, **2006**, 52, 4-10	1.1	26
93	Urinary excretion of homocysteine-thiolactone in humans. *Clinical Chemistry*, **2005**, 51, 408-15	5.5	70
92	Transfer RNA Synthetase Editing of Amino Acids **2005**,		4
91	The determination of homocysteine-thiolactone in human plasma. *Analytical Biochemistry*, **2005**, 337, 271-7	3.1	101
90	Anti-N-homocysteinylated protein autoantibodies and cardiovascular disease. *Clinical Chemistry and Laboratory Medicine*, **2005**, 43, 1011-4	5.9	57
89	Antibodies to N-homocysteinylated albumin as a marker for early-onset coronary artery disease in men. *Thrombosis and Haemostasis*, **2005**, 93, 346-50	7	54
88	Cross-talk between Cys34 and lysine residues in human serum albumin revealed by N-homocysteinylation. *Journal of Biological Chemistry*, **2004**, 279, 10864-71	5.4	92
87	Autoantibodies against N-homocysteinylated proteins in humans: implications for atherosclerosis. *Stroke*, **2004**, 35, 1299-304	6.7	112
86	The effects of age and hyperhomocysteinemia on the redox forms of plasma thiols. *Translational Research*, **2004**, 144, 235-45		33
85	Molecular basis of homocysteine toxicity in humans. *Cellular and Molecular Life Sciences*, **2004**, 61, 470-87	10.3	194
84	Purification of antibodies against N-homocysteinylated proteins by affinity chromatography on Nomega-homocysteinyl-aminohexyl-Agarose. *Journal of Chromatography B: Analytical Technologies in the Biomedical and Life Sciences*, **2004**, 807, 257-61	3.2	14
83	Determinants of homocysteine-thiolactonase activity of the paraoxonase-1 (PON1) protein in humans. *Cellular and Molecular Biology*, **2004**, 50, 885-93	1.1	20
82	Homocysteine-thiolactone and S-nitroso-homocysteine mediate incorporation of homocysteine into protein in humans. *Clinical Chemistry and Laboratory Medicine*, **2003**, 41, 1462-6	5.9	44
81	Metabolism of homocysteine-thiolactone in plants. *Journal of Biological Chemistry*, **2003**, 278, 6765-70	5.4	18
80	The determination of homocysteine-thiolactone in biological samples. *Analytical Biochemistry*, **2002**, 308, 112-9	3.1	79
79	Homocysteine is a protein amino acid in humans. Implications for homocysteine-linked disease. *Journal of Biological Chemistry*, **2002**, 277, 30425-8	5.4	131
78	Genomic association/linkage of sodium lithium countertransport in CEPH pedigrees. *Hypertension*, **2002**, 40, 619-28	8.5	25
77	Transfer RNA Synthetase Proofreading of Amino Acids **2001**,		1

76	Translational accuracy of aminoacyl-tRNA synthetases: implications for atherosclerosis. *Journal of Nutrition*, **2001**, 131, 2983S-7S	4.1	46
75	Yeast cytoplasmic and mitochondrial methionyl-tRNA synthetases: two structural frameworks for identical functions. *Journal of Molecular Biology*, **2001**, 311, 205-16	6.5	23
74	Protein N-homocysteinylation: implications for atherosclerosis. *Biomedicine and Pharmacotherapy*, **2001**, 55, 443-7	7.5	61
73	Genetic determinants of homocysteine thiolactonase activity in humans: implications for atherosclerosis. *FEBS Letters*, **2001**, 491, 35-9	3.8	78
72	Homocysteine thiolactone: metabolic origin and protein homocysteinylation in humans. *Journal of Nutrition*, **2000**, 130, 377S-381S	4.1	179
71	Calcium-dependent human serum homocysteine thiolactone hydrolase. A protective mechanism against protein N-homocysteinylation. *Journal of Biological Chemistry*, **2000**, 275, 3957-62	5.4	293
70	Homocysteine thiolactone and protein homocysteinylation in human endothelial cells: implications for atherosclerosis. *Circulation Research*, **2000**, 87, 45-51	15.7	236
69	Amino acid selectivity in the aminoacylation of coenzyme A and RNA minihelices by aminoacyl-tRNA synthetases. *Journal of Biological Chemistry*, **2000**, 275, 34845-8	5.4	16
68	Translational incorporation of S-nitrosohomocysteine into protein. *Journal of Biological Chemistry*, **2000**, 275, 21813-6	5.4	49
67	Protein homocysteinylation: possible mechanism underlying pathological consequences of elevated homocysteine levels. *FASEB Journal*, **1999**, 13, 2277-2283	0.9	300
66	Misacylation of tRNALys with noncognate amino acids by lysyl-tRNA synthetase. *Biochemistry*, **1999** , 38, 8088-93	3.2	58
65	Protein homocysteinylation: possible mechanism underlying pathological consequences of elevated homocysteine levels. *FASEB Journal*, **1999**, 13, 2277-83	0.9	80
64	Aminoacylation of coenzyme A and pantetheine by aminoacyl-tRNA synthetases: possible link between noncoded and coded peptide synthesis. *Biochemistry*, **1998**, 37, 5147-53	3.2	40
63	Aminoacyl thioester chemistry of class II aminoacyl-tRNA synthetases. *Biochemistry*, **1997**, 36, 11077-85	3.2	59
62	Metabolism of Homocysteine Thiolactone in Human Cell Cultures. *Journal of Biological Chemistry*, **1997**, 272, 1935-1942	5.4	215
61	Synthesis of Homocysteine Thiolactone in Normal and Malignant Cells. *Developments in Cardiovascular Medicine*, **1997**, 157-165		6
60	Metabolism of homocysteine thiolactone in human cell cultures. Possible mechanism for pathological consequences of elevated homocysteine levels. *Journal of Biological Chemistry*, **1997**, 272, 1935-42	5.4	173
59	The synthetic/editing active site of an aminoacyl-tRNA synthetase: evidence for binding of thiols in the editing subsite. *Biochemistry*, **1996**, 35, 8252-9	3.2	28

58	Proofreading in trans by an aminoacyl-tRNA synthetase: a model for single site editing by isoleucyl-tRNA synthetase. *Nucleic Acids Research*, **1996**, 24, 2505-10	20.1	11
57	Royal academy of medicine in Ireland international conference on homocysteine metabolism from basic science to clinical medicine. *Irish Journal of Medical Science*, **1995**, 164, 56-83	1.9	
56	Proofreading in Vivo. *Journal of Biological Chemistry*, **1995**, 270, 17672-17673	5.4	43
55	Evidence that uncharged tRNA can inhibit a programmed translational frameshift in Escherichia coli. *Journal of Molecular Biology*, **1995**, 251, 210-6	6.5	9
54	Synthesis of cysteine-containing dipeptides by aminoacyl-tRNA synthetases. *Nucleic Acids Research*, **1995**, 23, 4608-15	20.1	19
53	Proofreading in vivo. Editing of homocysteine by aminoacyl-tRNA synthetases in Escherichia coli. *Journal of Biological Chemistry*, **1995**, 270, 17672-3	5.4	9
52	Energy cost of translational proofreading in vivo. The aminoacylation of transfer RNA in Escherichia coli. *Annals of the New York Academy of Sciences*, **1994**, 745, 4-20	6.5	10
51	Editing function of Escherichia coli cysteinyl-tRNA synthetase: cyclization of cysteine to cysteine thiolactone. *Nucleic Acids Research*, **1994**, 22, 1155-60	20.1	13
50	Role of carboxy-terminal region in proofreading function of methionyl-tRNA synthetase in Escherichia coli. *Biochemistry*, **1994**, 33, 11528-35	3.2	25
49	The relationship between synthetic and editing functions of the active site of an aminoacyl-tRNA synthetase. *Proceedings of the National Academy of Sciences of the United States of America*, **1993**, 90, 11553-7	11.5	54
48	Energy cost of proofreading in vivo: the charging of methionine tRNAs in Escherichia coli. *FASEB Journal*, **1993**, 7, 168-72	0.9	14
47	Methionine-mediated lethality in yeast cells at elevated temperature. *Journal of Bacteriology*, **1993**, 175, 5469-76	3.5	15
46	Synthesis of homocysteine thiolactone by methionyl-tRNA synthetase in cultured mammalian cells. *FEBS Letters*, **1993**, 317, 237-40	3.8	100
45	Proofreading and the evolution of a methyl donor function. Cyclization of methionine to S-methyl homocysteine thiolactone by Escherichia coli methionyl-tRNA synthetase. *Journal of Biological Chemistry*, **1993**, 268, 6549-53	5.4	15
44	Proofreading and the evolution of a methyl donor function. Cyclization of methionine to S-methyl homocysteine thiolactone by Escherichia coli methionyl-tRNA synthetase.. *Journal of Biological Chemistry*, **1993**, 268, 6549-6553	5.4	14
43	Role of the metF and metJ genes on the vitamin B12 regulation of methionine gene expression: involvement of N5-methyltetrahydrofolic acid. *Biochemical and Biophysical Research Communications*, **1992**, 182, 651-8	3.4	8
42	Editing of errors in selection of amino acids for protein synthesis.. *Microbiological Reviews*, **1992**, 56, 412-429		140
41	Editing of errors in selection of amino acids for protein synthesis. *Microbiological Reviews*, **1992**, 56, 412-29		239

40	Proofreading in vivo: editing of homocysteine by methionyl-tRNA synthetase in the yeast Saccharomyces cerevisiae.. *EMBO Journal*, **1991**, 10, 593-598	13	64
39	Proofreading in vivo: editing of homocysteine by methionyl-tRNA synthetase in the yeast Saccharomyces cerevisiae. *EMBO Journal*, **1991**, 10, 593-8	13	19
38	Uncharged tRNA, protein synthesis, and the bacterial stringent response. *Molecular Microbiology*, **1990**, 4, 2035-40	4.1	51
37	Relationship between protein synthesis and concentrations of charged and uncharged tRNATrp in Escherichia coli. *Proceedings of the National Academy of Sciences of the United States of America*, **1990**, 87, 1511-5	11.5	29
36	Proofreading in vivo: editing of homocysteine by methionyl-tRNA synthetase in Escherichia coli. *Proceedings of the National Academy of Sciences of the United States of America*, **1990**, 87, 4504-8	11.5	82
35	Effect of variation of charged and uncharged tRNA(Trp) levels on ppGpp synthesis in Escherichia coli. *Journal of Bacteriology*, **1989**, 171, 6493-502	3.5	33
34	Negative correlation between the abundance of Escherichia coli aminoacyl-tRNA families and their affinities for elongation factor Tu-GTP. *Journal of Theoretical Biology*, **1988**, 133, 363-70	2.3	17
33	Synthesis of diadenosine 5',5'''-P1,P4-tetraphosphate (AppppA) from adenosine 5'-phosphosulfate and adenosine 5'-triphosphate catalyzed by yeast AppppA phosphorylase. *Biochemistry*, **1988**, 27, 2959-64	3.2	43
32	Evidence for cooperation between cells during sporulation of the yeast Saccharomyces cerevisiae. *Molecular and Cellular Biology*, **1988**, 8, 5166-78	4.8	19
31	Evidence for cooperation between cells during sporulation of the yeast Saccharomyces cerevisiae. *Molecular and Cellular Biology*, **1988**, 8, 5166-5178	4.8	13
30	Adenosylhomocysteinase from yellow lupine. *Methods in Enzymology*, **1987**, 143, 430--4	1.7	3
29	Phosphonate analogues of diadenosine 5',5'''-P1,P4-tetraphosphate as substrates or inhibitors of procaryotic and eucaryotic enzymes degrading dinucleoside tetraphosphates. *Biochemistry*, **1987**, 26, 3425-9	3.2	35
28	Sporulation of the yeast Saccharomyces cerevisiae is accompanied by synthesis of adenosine 5'-tetraphosphate and adenosine 5'-pentaphosphate. *Proceedings of the National Academy of Sciences of the United States of America*, **1986**, 83, 2378-82	11.5	31
27	Quantities of individual aminoacyl-tRNA families and their turnover in Escherichia coli. *Journal of Bacteriology*, **1984**, 158, 769-76	3.5	80
26	Control of RNA and protein synthesis by the concentration of Trp-tRNATrp in Escherichia coli infected with bacteriophage MS2. *Journal of Molecular Biology*, **1983**, 168, 747-63	6.5	13
25	Substrate specificity of S-adenosylhomocysteinase. Cysteine is a substrate of the plant and mammalian enzymes. *BBA - Proteins and Proteomics*, **1983**, 742, 250-6		10
24	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. *Journal of Biological Chemistry*, **1983**, 258, 14784-9	5.4	72
23	Synthesis of diadenosine 5',5'''-P1,P4-tetraphosphate and related compounds by plant (Lupinus luteus) seryl-tRNA and phenylalanyl-tRNA synthetases. *Acta Biochimica Polonica*, **1983**, 30, 51-69	2	12

22	Enzymes hydrolyzing ApppA and/or AppppA in higher plants. Purification and some properties of diadenosine triphosphatase, diadenosine tetraphosphatase, and phosphodiesterase from yellow lupin (Lupinus luteus) seeds.. *Journal of Biological Chemistry*, **1983**, 258, 9982-9989	5.4	62
21	The mechanism of inhibition of valyl-tRNA synthetase by S-adenosylhomocysteine. *BBA - Proteins and Proteomics*, **1982**, 709, 325-31		1
20	S-Adenosylhomocysteinase from yellow lupin seeds: stoichiometry and reactions of the enzyme-adenosine complex. *Biochemistry*, **1981**, 20, 6877-81	3.2	10
19	Alternative pathways for editing non-cognate amino acids by aminoacyl-tRNA synthetases. *Nucleic Acids Research*, **1981**, 9, 3105-17	20.1	151
18	Conformational changes during enzyme catalysis: role of water in the transition state. *Proceedings of the National Academy of Sciences of the United States of America*, **1980**, 77, 3374-8	11.5	24
17	Polyamines and yellow lupin aminoacyl-tRNA synthetases. Spermine and spermidine help to maintain the active structures of aminoacyl-tRNA synthetases. *FEBS Letters*, **1980**, 109, 63-6	3.8	12
16	Valyl-tRNA synthetase form yellow lupin seeds: hydrolysis of the enzyme-bound noncognate aminoacyl adenylate as a possible mechanism of increasing specificity of the aminoacyl-tRNA synthetase. *Biochemistry*, **1980**, 19, 5071-8	3.2	36
15	A role for protein--protein interactions in the maintenance of active forms of aminoacyl-tRNA synthetases. *FEBS Letters*, **1979**, 103, 71-6	3.8	13
14	Adenosylhomocysteinase: adenosine complex. *Biochemical and Biophysical Research Communications*, **1978**, 84, 1060-8	3.4	12
13	Valyl-tRNA synthetase from yellow lupin seeds. Instability of enzyme-bound noncognate adenylates versus cognate adenylate. *FEBS Letters*, **1978**, 95, 235-8	3.8	16
12	The mechanism of the aminoacylation of transfer ribonucleic acid. The kinetics and stoichiometry of the lysis of aminoacyl-tRNA. *Nucleic Acids and Protein Synthesis*, **1978**, 520, 568-76		4
11	Incomplete aminoacylation of tRNALeu catalyzed in vitro by leucyl-tRNA synthetase from Escherichia coli B. *Nucleic Acids and Protein Synthesis*, **1978**, 518, 345-50		10
10	Yellow lupin (Lupinus luteus) aminoacyl-tRNA synthetases. Isolation and some properties of enzyme-bound valyl adenylate and seryl adenylate. *Nucleic Acids and Protein Synthesis*, **1978**, 521, 584-96		5
9	Use of omega-aminohexyl-sepharose in the fractionation of Escherichia coli B aminoacyl-tRNA synthetases. *Journal of Chromatography A*, **1977**, 139, 331-6	4.5	4
8	The determination of aminoacyl adenylate by thin-layer chromatography. *Analytical Biochemistry*, **1977**, 82, 29-37	3.1	14
7	The plant aminoacyl-tRNA synthetases. Purification and characterization of valyl-tRNA, tryptophanyl-tRNA and seryl-tRNA synthetases from yellow-lupin seeds. *FEBS Journal*, **1975**, 52, 301-10		32
6	□Aminohexyl-Sepharose 4B, a new support for tRNA fractionation. *Journal of Chromatography A*, **1975**, 103, 364-367	4.5	7
5	Transfer RNA methyltransferases from yellow lupin seeds: purification and properties. *Nucleic Acids Research*, **1975**, 2, 101-11	20.1	17

4	Fractionation of plant aminoacyl-tRNA synthetases on tRNA-Sepharose columns. *Nucleic Acids and Protein Synthesis*, **1975**, 407, 213-21		8
3	Chromatography of plant aminoacyl-tRNA synthetases on omega-aminoalkyl sepharose columns. *FEBS Letters*, **1973**, 34, 150-4	3.8	44
2	Homocysteine Metabolism and Pathological Implications: The Homocysteine Thiolactone Hypothesis of Vascular Disease363-411		
1	Transfer RNA Synthetase Editing of Errors in Amino Acid Selection1-18		2