Vsevolod A Tkachuk

List of Publications by Year
in descending order

120 papers	4,421 citations	101543 36 h-index	123424 61 g-index
121 all docs	121 docs citations	121 times ranked	5502 citing authors

#	Article	IF	Citations
1	An attempt to prevent senescence: A mitochondrial approach. Biochimica Et Biophysica Acta - Bioenergetics, 2009, 1787, 437-461.	1.0	359
2	Adipose-Derived Stem Cells Stimulate Regeneration of Peripheral Nerves: BDNF Secreted by These Cells Promotes Nerve Healing and Axon Growth De Novo. PLoS ONE, 2011, 6, e17899.	2.5	248
3	Adipose Stromal Cells Stimulate Angiogenesis via Promoting Progenitor Cell Differentiation, Secretion of Angiogenic Factors, and Enhancing Vessel Maturation. Tissue Engineering - Part A, 2009, 15, 2039-2050.	3.1	184
4	Stretch affects phenotype and proliferation of vascular smooth muscle cells. Molecular and Cellular Biochemistry, 1995, 144, 131-139.	3.1	175
5	COVID-19 and metabolic disease: mechanisms and clinical management. Lancet Diabetes and Endocrinology,the, 2021, 9, 786-798.	11.4	155
6	Does Cellular Hydrogen Peroxide Diffuse or Act Locally?. Antioxidants and Redox Signaling, 2011, 14, 1-7.	5.4	137
7	Analysis of the DNA-Binding Profile and Function of TALE Homeoproteins Reveals Their Specialization and Specific Interactions with Hox Genes/Proteins. Cell Reports, 2013, 3, 1321-1333.	6.4	125
8	Cyclic AMP-Mobilizing Agents and Glucocorticoids Modulate Human Smooth Muscle Cell Migration. American Journal of Respiratory Cell and Molecular Biology, 2003, 29, 19-27.	2.9	119
9	The Chemotactic Action of Urokinase on Smooth Muscle Cells Is Dependent on Its Kringle Domain. Journal of Biological Chemistry, 2000, 275, 16450-16458.	3.4	108
10	Adipose-Derived Mesenchymal Stromal Cells From Aged Patients With Coronary Artery Disease Keep Mesenchymal Stromal Cell Properties but Exhibit Characteristics of Aging and Have Impaired Angiogenic Potential. Stem Cells Translational Medicine, 2014, 3, 32-41.	3.3	104
11	Cell adhesion molecule T-cadherin regulates vascular cell adhesion, phenotype and motility. Experimental Cell Research, 2004, 293, 207-218.	2.6	79
12	Diabetes mellitus, cachexia and obesity in heart failure: rationale and design of the Studies Investigating Coâ€morbidities Aggravating Heart Failure (SICAâ€HF). Journal of Cachexia, Sarcopenia and Muscle, 2010, 1, 187-194.	7.3	75
13	Disturbed angiogenic activity of adipose-derived stromal cells obtained from patients with coronary artery disease and diabetes mellitus type 2. Journal of Translational Medicine, 2014, 12, 337.	4.4	73
14	Urokinase Plasminogen Activator Stimulates Vascular Smooth Muscle Cell Proliferation Via Redox-Dependent Pathways. Arteriosclerosis, Thrombosis, and Vascular Biology, 2006, 26, 801-807.	2.4	72
15	Expression of adhesion molecule T-cadherin is increased during neointima formation in experimental restenosis. Histochemistry and Cell Biology, 2002, 118, 281-290.	1.7	69
16	Mesenchymal Stromal Cells as Critical Contributors to Tissue Regeneration. Frontiers in Cell and Developmental Biology, 2020, 8, 576176.	3.7	68
17	Nuclear translocation of urokinase-type plasminogen activator. Blood, 2008, 112, 100-110.	1.4	63
18	Activation of p38 MAP-Kinase and Caldesmon Phosphorylation Are Essential for Urokinase-Induced Human Smooth Muscle Cell Migration. Biological Chemistry, 2002, 383, 115-26.	2.5	60

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19	Urokinase-type Plasminogen Activator (uPA) Promotes Angiogenesis by Attenuating Proline-rich Homeodomain Protein (PRH) Transcription Factor Activity and De-repressing Vascular Endothelial Growth Factor (VEGF) Receptor Expression. Journal of Biological Chemistry, 2016, 291, 15029-15045.	3.4	58
20	Transplantation of modified human adipose derived stromal cells expressing VEGF165 results in more efficient angiogenic response in ischemic skeletal muscle. Journal of Translational Medicine, 2013, 11, 138.	4.4	57
21	T-cadherin suppresses angiogenesis in vivo by inhibiting migration of endothelial cells. Angiogenesis, 2007, 10, 183-195.	7.2	55
22	REGULATION AND ROLE OF UROKINASE PLASMINOGEN ACTIVATOR IN VASCULAR REMODELLING. Clinical and Experimental Pharmacology and Physiology, 1996, 23, 759-765.	1.9	54
23	Urokinase Gene Transfer Augments Angiogenesis in Ischemic Skeletal and Myocardial Muscle. Molecular Therapy, 2007, 15, 1939-1946.	8.2	53
24	Regulation of arterial remodeling and angiogenesis by urokinase-type plasminogen activatorThis article is one of a selection of papers from the NATO Advanced Research Workshop on Translational Knowledge for Heart Health (published in part 2 of a 2-part Special Issue).. Canadian Journal of Physiology and Pharmacology, 2009, 87, 231-251.	1.4	52
25	Molecular Mechanisms of Immunomodulation Properties of Mesenchymal Stromal Cells: A New Insight into the Role of ICAM-1. Stem Cells International, 2017, 2017, 1-15.	2.5	51
26	Urokinase upregulates matrix metalloproteinase-9 expression in THP-1 monocytes via gene transcription and protein synthesis. Biochemical Journal, 2002, 367, 833-839.	3.7	49
27	Interleukin-18 and Macrophage Migration Inhibitory Factor Are Associated With Increased Carotid Intimaâ€"Media Thickening. Arteriosclerosis, Thrombosis, and Vascular Biology, 2006, 26, 295-300.	2.4	47
28	Urokinase plasminogen activator augments cell proliferation and neointima formation in injured arteries via proteolytic mechanisms. Atherosclerosis, 2001, 159, 297-306.	0.8	44
29	Identification of an atypical lipoprotein-binding protein from human aortic smooth muscle as T-cadherin. FEBS Letters, 1998, 421, 208-212.	2.8	43
30	Polarisation of T-cadherin to the leading edge of migrating vascular cells in vitro: a function in vascular cell motility?. Histochemistry and Cell Biology, 2003, 120, 353-360.	1.7	43
31	Combined Transfer of Human VEGF165 and HGF Genes Renders Potent Angiogenic Effect in Ischemic Skeletal Muscle. PLoS ONE, 2012, 7, e38776.	2.5	43
32	Urokinase plasminogen activator induces human smooth muscle cell migration and proliferation via distinct receptor-dependent and proteolysis-dependent mechanisms. Molecular and Cellular Biochemistry, 1999, 195, 199-206.	3.1	42
33	Urokinase and urokinase receptor participate in regulation of neuronal migration, axon growth and branching. European Journal of Cell Biology, 2016, 95, 295-310.	3.6	42
34	Phosphoinositide and calcium signalling responses in smooth muscle cells: Comparison between lipoproteins, Ang II, and PDGF. Biochemical and Biophysical Research Communications, 1992, 188, 1295-1304.	2.1	41
35	Activation of Î²-adrenergic receptors is required for elevated Î±1A-adrenoreceptors expression and signaling in mesenchymal stromal cells. Scientific Reports, 2016, 6, 32835.	3.3	39
36	Urokinase plasminogen activator enhances neointima growth and reduces lumen size in injured carotid arteries. Journal of Hypertension, 2000, 18, 1065-1069.	0.5	36

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37	miR-92a regulates angiogenic activity of adipose-derived mesenchymal stromal cells. Experimental Cell Research, 2015, 339, 61-66.	2.6	36
38	Density- and proliferation status-dependent expression of T-cadherin, a novel lipoprotein-binding glycoprotein: a function in negative regulation of smooth muscle cell growth?. FEBS Letters, 1998, 434, 183-187.	2.8	35
39	Functional expression of adrenoreceptors in mesenchymal stromal cells derived from the human adipose tissue. Biochimica Et Biophysica Acta - Molecular Cell Research, 2014, 1843, 1899-1908.	4.1	35
40	Unveiling Mesenchymal Stromal Cellsâ€™ Organizing Function in Regeneration. International Journal of Molecular Sciences, 2019, 20, 823.	4.1	34
41	In Vitro Neuronal Induction of Adipose-Derived Stem Cells and their Fate after Transplantation into Injured Mouse Brain. Current Medicinal Chemistry, 2012, 19, 5170-5177.	2.4	32
42	Contrasting Effects of Urokinase and Tissue-Type Plasminogen Activators on Neointima Formation and Vessel Remodelling after Arterial Injury. Journal of Vascular Research, 2004, 41, 268-276.	1.4	30
43	Polyelectrolyte Nanoparticles Mediate Vascular Gene Delivery. Pharmaceutical Research, 2004, 21, 1656-1661.	3.5	30
44	Kinetic approach for evaluation of total antioxidant activity. Talanta, 2009, 80, 749-753.	5.5	28
45	Stimulation of non-selective cation channels providing Ca2+ influx into platelets by platelet-activating factor and other aggregation inducers. FEBS Journal, 1991, 198, 267-273.	0.2	27
46	Ligand selectivity of 105 kDa and 130 kDa lipoprotein-binding proteins in vascular-smooth-muscle-cell membranes is unique. Biochemical Journal, 1996, 317, 297-304.	3.7	27
47	Local angiotensin II promotes adipogenic differentiation of human adipose tissue mesenchymal stem cells through type 2 angiotensin receptor. Stem Cell Research, 2017, 25, 115-122.	0.7	27
48	Blood Circulating Exosomes Contain Distinguishable Fractions of Free and Cell-Surface-Associated Vesicles. Current Molecular Medicine, 2019, 19, 273-285.	1.3	27
49	Relationship between the inhibition of receptor-induced increase in cytosolic free calcium concentration and the vasodilator effects of nitrates in patients with congestive heart failure. International Journal of Cardiology, 1990, 26, 175-184.	1.7	26
50	Downregulation of uPAR promotes urokinase translocation into the nucleus and epithelial to mesenchymal transition in neuroblastoma. Journal of Cellular Physiology, 2020, 235, 6268-6286.	4.1	26
51	Characteristics of Smooth Muscle Cell Lipoprotein Binding Proteins (p105/p130) as T-Cadherin and Regulation by Positive and Negative Growth Regulators. Biochemical and Biophysical Research Communications, 1998, 246, 489-494.	2.1	25
52	Fibulin-5 binds urokinase-type plasminogen activator and mediates urokinase-stimulated Î²1-integrin-dependent cell migration. Biochemical Journal, 2012, 443, 491-503.	3.7	25
53	Nox4 and Duox1/2 Mediate Redox Activation of Mesenchymal Cell Migration by PDGF. PLoS ONE, 2016, 11, e0154157.	2.5	25
54	Vascular Signal Transduction and Atherosclerosis. Annals of the New York Academy of Sciences, 1990, 598, 167-181.	3.8	24

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55	Cellular Signalling by Lipoproteins in Cultured Smooth Muscle Cells from Spontaneously Hypertensive Rats. Journal of Vascular Research, 1993, 30, 169-180.	1.4	24
56	LDL binds to surface-expressed human T-cadherin in transfected HEK293 cells and influences homophilic adhesive interactions. FEBS Letters, 1999, 463, 29-34.	2.8	24
57	ChIP-Seq and RNA-Seq Analyses Identify Components of the Wnt and Fgf Signaling Pathways as Prep1 Target Genes in Mouse Embryonic Stem Cells. PLoS ONE, 2015, 10, e0122518.	2.5	24
58	CRISPR/Cas9 nickase mediated targeting of urokinase receptor gene inhibits neuroblastoma cell proliferation. Oncotarget, 2018, 9, 29414-29430.	1.8	24
59	Involvement of Ni protein in the functional coupling of the atrial natriuretic factor (ANF) receptor to adenylate cyclase in rat lung plasma membranes. FEBS Journal, 1988, 174, 531-535.	0.2	23
60	Novel mechanism regulating endothelial permeability via T-cadherin-dependent VE-cadherin phosphorylation and clathrin-mediated endocytosis. Molecular and Cellular Biochemistry, 2014, 387, 39-53.	3.1	23
61	Low- and High-Density Lipoproteins as Mitogenic Factors for Vascular Smooth Muscle Cells: Individual, Additive and Synergistic Effects. Journal of Vascular Research, 1995, 32, 328-338.	1.4	22
62	Plasminogen Activator Expression Correlates with Genetic Differences in Vascular Remodeling. Journal of Vascular Research, 2004, 41, 481-490.	1.4	22
63	A magic kick for regeneration: role of mesenchymal stromal cell secretome in spermatogonial stem cell niche recovery. Stem Cell Research and Therapy, 2019, 10, 342.	5.5	22
64	Angiotensin receptor subtypes regulate adipose tissue renewal and remodelling. FEBS Journal, 2020, 287, 1076-1087.	4.7	22
65	Unique genetic profile of hereditary hemochromatosis in Russians: High frequency of C282Y mutation in population, but not in patients. Blood Cells, Molecules, and Diseases, 2005, 35, 182-188.	1.4	21
66	Urokinase Induces Matrix Metalloproteinase-9/Gelatinase B Expression in THP-1 Monocytes via ERK1/2 and Cytosolic Phospholipase A₂ Activation and Eicosanoid Production. Journal of Vascular Research, 2006, 43, 482-490.	1.4	21
67	Identification of 130 kDa cell surface LDL-binding protein from smooth muscle cells as a partially processed T-cadherin precursor. Biochimica Et Biophysica Acta - Biomembranes, 1999, 1416, 155-160.	2.6	20
68	Urokinase Plasminogen Activator in Injured Adventitia Increases the Number of Myofibroblasts and Augments Early Proliferation. Journal of Vascular Research, 2006, 43, 437-446.	1.4	20
69	Tâ€cadherin modulates endothelial barrier function. Journal of Cellular Physiology, 2010, 223, 94-102.	4.1	20
70	Coupling of P2Y receptors to Ca2+ mobilization in mesenchymal stromal cells from the human adipose tissue. Cell Calcium, 2018, 71, 1-14.	2.4	20
71	Heterotrimeric Gi protein is associated with the inositol 1,4,5-trisphosphate receptor complex and modulates calcium flux. Cell Calcium, 1998, 23, 281-289.	2.4	18
72	Cell Sheets from Adipose Tissue MSC Induce Healing of Pressure Ulcer and Prevent Fibrosis via Trigger Effects on Granulation Tissue Growth and Vascularization. International Journal of Molecular Sciences, 2020, 21, 5567.	4.1	18

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73	Type 2 diabetes and metabolic syndrome: identification of the molecular mechanisms, key signaling pathways and transcription factors aimed to reveal new therapeutical targets. Diabetes Mellitus, 2018, 21, 364-375.	1.9	18
74	Atherogenic effects of beta blockers on cells cultured from normal and atherosclerotic aorta. American Journal of Cardiology, 1988, 61, 1116-1117.	1.6	17
75	Plasmin-dependent elimination of the growth-factor-like domain in urokinase causes its rapid cellular uptake and degradation. Biochemical Journal, 2001, 355, 639-645.	3.7	17
76	Oligonucleotide Microarrays Reveal Regulated Genes Related to Inward Arterial Remodeling Induced by Urokinase Plasminogen Activator. Journal of Vascular Research, 2009, 46, 177-187.	1.4	17
77	T-cadherin is located in the nucleus and centrosomes in endothelial cells. American Journal of Physiology - Cell Physiology, 2009, 297, C1168-C1177.	4.6	17
78	Blockade of receptor-operated calcium channels by mibefradil (Ro 40-5967): Effects on intracellular calcium and platelet aggregation. Cardiovascular Drugs and Therapy, 1995, 9, 815-821.	2.6	15
79	Scar-Free Healing of Endometrium: Tissue-Specific Program of Stromal Cells and Its Induction by Soluble Factors Produced After Damage. Frontiers in Cell and Developmental Biology, 2021, 9, 616893.	3.7	15
80	Monocyte Integrin Expression And Monocyte-Platelet Complex Formation In Humans With Coronary Restenosis. Clinical and Experimental Pharmacology and Physiology, 2001, 28, 804-808.	1.9	14
81	Prep1 prevents premature adipogenesis of mesenchymal progenitors. Scientific Reports, 2017, 7, 15573.	3.3	13
82	T-Cadherin Expression in Melanoma Cells Stimulates Stromal Cell Recruitment and Invasion by Regulating the Expression of Chemokines, Integrins and Adhesion Molecules. Cancers, 2015, 7, 1349-1370.	3.7	13
83	Functional Heterogeneity of Protein Kinase A Activation in Multipotent Stromal Cells. International Journal of Molecular Sciences, 2020, 21, 4442.	4.1	12
84	Platelet Calcium-Linked Abnormalities in Essential Hypertension. Annals of the New York Academy of Sciences, 1986, 488, 252-265.	3.8	11
85	Epinephrine potentiates activation of human platelets by low density lipoproteins. Biochimica Et Biophysica Acta - Molecular Basis of Disease, 1991, 1097, 123-127.	3.8	11
86	Characteristics and regulation of ganglioside-induced elevation of free cytoplasmic Ca2+ in human blood platelets. Lipids and Lipid Metabolism, 1992, 1127, 221-225.	2.6	11
87	Involvement of Protein Kinase C in Hypoxia-Induced Desensitization of the Î²-Adrenergic System in Human Endothelial Cells. Biochemical and Biophysical Research Communications, 1996, 222, 753-758.	2.1	11
88	Luteal phase defect is associated with impaired VEGF mRNA expression in the secretory phase endometrium. Reproductive Biology, 2015, 15, 65-68.	1.9	11
89	A Bicistronic Plasmid Encoding Brain-Derived Neurotrophic Factor and Urokinase Plasminogen Activator Stimulates Peripheral Nerve Regeneration After Injury. Journal of Pharmacology and Experimental Therapeutics, 2020, 372, 248-255.	2.5	11
90	UROKINASE PLASMINOGEN ACTIVATOR SYSTEM IN HUMANS WITH STABLE CORONARY ARTERY DISEASE. Clinical and Experimental Pharmacology and Physiology, 1999, 26, 354-357.	1.9	10

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91	The catalytically active secretory phospholipase A2 type IIA is involved in restenosis development after PTCA in human coronary arteries and generation of atherogenic LDL. Molecular and Cellular Biochemistry, 2005, 270, 107-113.	3.1	10
92	T-cadherin activates Rac1 and Cdc42 and changes endothelial permeability. Biochemistry (Moscow), 2009, 74, 362-370.	1.5	10
93	Different spatiotemporal organization of GPI-anchored T-cadherin in response to low-density lipoprotein and adiponectin. Biochimica Et Biophysica Acta - General Subjects, 2019, 1863, 129414.	2.4	10
94	MSC Secretome as a Promising Tool for Neuroprotection and Neuroregeneration in a Model of Intracerebral Hemorrhage. Pharmaceutics, 2021, 13, 2031.	4.5	10
95	Guanine-nucleotide-dependent inhibition of adenylate cyclase of rabbit heart by glucagon. FEBS Journal, 1984, 142, 323-328.	0.2	8
96	Involvement of pertussis-toxin-sensitive G protein in muscarinic-receptor-mediated inhibition of K+-activated 4-nitrophenylphosphatase activity of cardiac sarcolemma. FEBS Journal, 1990, 194, 155-160.	0.2	8
97	T-cadherin GPI-anchor is insufficient for apical targeting in MDCK cells. Biochemical and Biophysical Research Communications, 2005, 329, 624-631.	2.1	8
98	Opposite effects of native and oxidized lipoproteins on the activity of secretory phospholipase A2 group IIA. Prostaglandins and Other Lipid Mediators, 2009, 90, 37-41.	1.9	8
99	Decreased Insulin Sensitivity in Telomerase-Immortalized Mesenchymal Stem Cells Affects Efficacy and Outcome of Adipogenic Differentiation in vitro. Frontiers in Cell and Developmental Biology, 2021, 9, 662078.	3.7	8
100	Noradrenaline Sensitivity Is Severely Impaired in Immortalized Adipose-Derived Mesenchymal Stem Cell Line. International Journal of Molecular Sciences, 2018, 19, 3712.	4.1	7
101	Urokinase receptor and tissue plasminogen activator as immediateâ€early genes in pentylenetetrazoleâ€induced seizures in the mouse brain. European Journal of Neuroscience, 2020, 51, 1559-1572.	2.6	7
102	Therapeutic Angiogenesis by a â€œDynamic Duoâ€: Simultaneous Expression of HGF and VEGF165 by Novel Bicistronic Plasmid Restores Blood Flow in Ischemic Skeletal Muscle. Pharmaceutics, 2020, 12, 1231.	4.5	7
103	The transcription factor Prep1 controls hepatic insulin sensitivity and gluconeogenesis by targeting nuclear localization of FOXO1. Biochemical and Biophysical Research Communications, 2016, 481, 182-188.	2.1	5
104	Interleukin-2- and phytohemagglutinin-activated proliferation of human T-lymphocytes is accompanied by stimulation of phosphoinositide turnover. Biochimica Et Biophysica Acta - Molecular Cell Research, 1989, 1014, 173-177.	4.1	4
105	Self-Organization Provides Cell Fate Commitment in MSC Sheet Condensed Areas via ROCK-Dependent Mechanism. Biomedicines, 2021, 9, 1192.	3.2	4
106	Early Induction of Neurotrophin Receptor and miRNA Genes in Mouse Brain after Pentilenetetrazole-Induced Neuronal Activity. Biochemistry (Moscow), 2021, 86, 1326-1341.	1.5	3
107	Urokinase Receptor uPAR Downregulation in Neuroblastoma Leads to Dormancy, Chemoresistance and Metastasis. Cancers, 2022, 14, 994.	3.7	3
108	Plasma urokinase antigen and C-reactive protein predict angina recurrence after coronary angioplasty. Heart and Vessels, 2014, 29, 611-618.	1.2	2

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109	On new regulation of cell therapy and regenerative medicine in the Russian Federation. Cytotherapy, 2017, 19, 1125-1126.	0.7	2
110	Oligonucleotide Microarrays Identified Potential Regulatory Genes Related to Early Outward Arterial Remodeling Induced by Tissue Plasminogen Activator. Frontiers in Physiology, 2019, 10, 493.	2.8	2
111	T-Cadherin and the Ratio of Its Ligands as Predictors of Carotid Atherosclerosis: A Pilot Study. Biomedicines, 2021, 9, 1398.	3.2	2
112	Urokinase-Type Plasminogen Activator Enhances the Neuroprotective Activity of Brain-Derived Neurotrophic Factor in a Model of Intracerebral Hemorrhage. Biomedicines, 2022, 10, 1346.	3.2	2
113	Hormonal Sensitivity of Adenylate Cyclase Incorporated in Proteoliposomes. Membrane Biochemistry, 1987, 7, 41-54.	0.6	1
114	Inhibition by Pertussis Toxin of Guanyl Nucleotides Exchange on Transducin in Bovine Rod Cell Membranes. Membrane Biochemistry, 1989, 8, 115-126.	0.6	1
115	The 65-kDa protein from pig heart A new substrate forClostridium botulinumADP-ribosyltransferase (exoenzyme C3). FEBS Letters, 1991, 293, 59-61.	2.8	1
116	Apparent activation of rabbit lung membrane adenylate cyclase by cytosolic proteins possessing adenylate kinase activity. Biochimica Et Biophysica Acta - Molecular Cell Research, 1991, 1091, 213-221.	4.1	1
117	UKâ€"Russia Researcher Links Workshop: extracellular vesicles â€" mechanisms of biogenesis and roles in disease pathogenesis, M.V. Lomonosov Moscow State University, Moscow, Russia, 1â€"5ÂMarch 2015. Journal of Extracellular Vesicles, 2015, 4, 28094.	12.2	1
118	Book review on "Immunology" (2021) authored by academician of the Russian Academy of Sciences R.M. Khaitov. Russian Journal of Allergy, 0, , .	0.2	0
119	Genetic Variants Associated with the Development of Type 2 Diabetes: Approaches to Their Identification. Vestnik Rossiiskoi Akademii Meditsinskikh Nauk, 2019, 74, 44-53.	0.6	0
120	Immature Vascular Smooth Muscle Cells in Healthy Murine Arteries and Atherosclerotic Plaques: Localization and Activity. International Journal of Molecular Sciences, 2022, 23, 1744.	4.1	0