Tatiana V Petrova

List of Publications by Year in descending order

79 papers	11,402 citations	70961 41 h-index	66788 78 g-index
82 all docs	82 docs citations	82 times ranked	12806 citing authors

#	Article	IF	Citations
1	Microenvironmental regulation of tumour angiogenesis. Nature Reviews Cancer, 2017, 17, 457-474.	12.8	1,299
2	Vascular endothelial growth factor C is required for sprouting of the first lymphatic vessels from embryonic veins. Nature Immunology, 2004, 5, 74-80.	7.0	1,208
3	Signalling via vascular endothelial growth factor receptor-3 is sufficient for lymphangiogenesis in transgenic mice. EMBO Journal, 2001, 20, 1223-1231.	3.5	583
4	Lymphatic endothelial reprogramming of vascular endothelial cells by the Prox-1 homeobox transcription factor. EMBO Journal, 2002, 21, 4593-4599.	3.5	544
5	Defective valves and abnormal mural cell recruitment underlie lymphatic vascular failure in lymphedema distichiasis. Nature Medicine, 2004, 10, 974-981.	15.2	515
6	Pathogenesis of persistent lymphatic vessel hyperplasia in chronic airway inflammation. Journal of Clinical Investigation, 2005, 115, 247-257.	3.9	475
7	Consensus guidelines for the use and interpretation of angiogenesis assays. Angiogenesis, 2018, 21, 425-532.	3.7	429
8	Lymphatic Neoangiogenesis in Human Kidney Transplants Is Associated with Immunologically Active Lymphocytic Infiltrates. Journal of the American Society of Nephrology: JASN, 2004, 15, 603-612.	3.0	427
9	STING activation of tumor endothelial cells initiates spontaneous and therapeutic antitumor immunity. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 15408-15413.	3.3	404
10	Vascular endothelial growth factor receptors in the regulation of angiogenesis and lymphangiogenesis. Oncogene, 2000, 19, 5598-5605.	2.6	374
11	Lymphatic vascular morphogenesis in development, physiology, and disease. Journal of Cell Biology, 2011, 193, 607-618.	2.3	344
12	Mechanotransduction, PROX1, and FOXC2 Cooperate to Control Connexin37 and Calcineurin during Lymphatic-Valve Formation. Developmental Cell, 2012, 22, 430-445.	3.1	339
13	Pathogenesis of persistent lymphatic vessel hyperplasia in chronic airway inflammation. Journal of Clinical Investigation, 2005, 115, 247-257.	3.9	326
14	Therapeutic differentiation and maturation of lymphatic vessels after lymph node dissection and transplantation. Nature Medicine, 2007, 13, 1458-1466.	15.2	321
15	FOXC2 controls formation and maturation of lymphatic collecting vessels through cooperation with NFATc1. Journal of Cell Biology, 2009, 185, 439-457.	2.3	295
16	Organ-specific lymphatic vasculature: From development to pathophysiology. Journal of Experimental Medicine, 2018, 215, 35-49.	4.2	231
17	Biological functions of lymphatic vessels. Science, 2020, 369, .	6.0	220
18	FOXC2 and fluid shear stress stabilize postnatal lymphatic vasculature. Journal of Clinical Investigation, 2015, 125, 3861-3877.	3.9	186

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19	GATA2 is required for lymphatic vessel valve development and maintenance. Journal of Clinical Investigation, 2015, 125, 2979-2994.	3.9	177
20	Transcription Factor PROX1 Induces Colon Cancer Progression by Promoting the Transition from Benign to Highly Dysplastic Phenotype. Cancer Cell, 2008, 13, 407-419.	7.7	166
21	Intestinal lymphatic vasculature: structure, mechanisms and functions. Nature Reviews Gastroenterology and Hepatology, 2017, 14, 510-526.	8.2	163
22	DLL4 promotes continuous adult intestinal lacteal regeneration and dietary fat transport. Journal of Clinical Investigation, 2015, 125, 4572-4586.	3.9	145
23	The NAD-Booster Nicotinamide Riboside Potently Stimulates Hematopoiesis through Increased Mitochondrial Clearance. Cell Stem Cell, 2019, 24, 405-418.e7.	5.2	143
24	An Unexpected Role of Semaphorin3Aâ€“Neuropilin-1 Signaling in Lymphatic Vessel Maturation and Valve Formation. Circulation Research, 2012, 111, 426-436.	2.0	129
25	Molecular lymphangiogenesis: new players. Trends in Cell Biology, 2005, 15, 434-441.	3.6	118
26	Angiopoietin 2 regulates the transformation and integrity of lymphatic endothelial cell junctions. Genes and Development, 2014, 28, 1592-1603.	2.7	115
27	Developmental and pathological lymphangiogenesis: from models to human disease. Histochemistry and Cell Biology, 2008, 130, 1063-1078.	0.8	95
28	Adrenomedullin Induces Cardiac Lymphangiogenesis After Myocardial Infarction and Regulates Cardiac Edema Via Connexin 43. Circulation Research, 2019, 124, 101-113.	2.0	86
29	Multiple roles of lymphatic vessels in peripheral lymph node development. Journal of Experimental Medicine, 2018, 215, 2760-2777.	4.2	85
30	Pkd1 Regulates Lymphatic Vascular Morphogenesis during Development. Cell Reports, 2014, 7, 623-633.	2.9	77
31	Stability and function of adult vasculature is sustained by Akt/Jagged1 signalling axis in endothelium. Nature Communications, 2016, 7, 10960.	5.8	77
32	PROX1 Promotes Metabolic Adaptation and Fuels Outgrowth of Wnt high Metastatic Colon Cancer Cells. Cell Reports, 2014, 8, 1957-1973.	2.9	66
33	The transcription factor Prox1 is essential for satellite cell differentiation and muscle fibre-type regulation. Nature Communications, 2016, 7, 13124.	5.8	62
34	High-resolution 3D analysis of mouse small-intestinal stroma. Nature Protocols, 2016, 11, 1617-1629.	5.5	60
35	Organâ€specific lymphangiectasia, arrested lymphatic sprouting, and maturation defects resulting from geneâ€targeting of the PI3K regulatory isoforms p85Î±, p55Î±, and p50Î±. Developmental Dynamics, 2009, 238, 2670-2679.	0.8	54
36	Disrupting Myelin-Specific Th17 Cell Gut Homing Confers Protection in an Adoptive Transfer Experimental Autoimmune Encephalomyelitis. Cell Reports, 2019, 29, 378-390.e4.	2.9	51

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37	Uncoupling protein 2 reprograms the tumor microenvironment to support the anti-tumor immune cycle. Nature Immunology, 2019, 20, 206-217.	7.0	51
38	A fluorescent Tie1 reporter allows monitoring of vascular development and endothelial cell isolation from transgenic mouse embryos. FASEB Journal, 2002, 16, 1764-1774.	0.2	49
39	Phosphorylation Regulates FOXC2-Mediated Transcription in Lymphatic Endothelial Cells. Molecular and Cellular Biology, 2013, 33, 3749-3761.	1.1	48
40	Dielectric elastomer actuator for mechanical loading of 2D cell cultures. Lab on A Chip, 2016, 16, 3788-3794.	3.1	47
41	Liprin Î²1 is highly expressed in lymphatic vasculature and is important for lymphatic vessel integrity. Blood, 2010, 115, 906-909.	0.6	44
42	Development and aging of the lymphatic vascular system. Advanced Drug Delivery Reviews, 2021, 169, 63-78.	6.6	44
43	Endothelial Cell Responses to Biomechanical Forces in Lymphatic Vessels. Antioxidants and Redox Signaling, 2016, 25, 451-465.	2.5	43
44	FOXC2 controls adult lymphatic endothelial specialization, function, and gut lymphatic barrier preventing multiorgan failure. Science Advances, 2021, 7, .	4.7	43
45	Shear stimulation of FOXC1 and FOXC2 differentially regulates cytoskeletal activity during lymphatic valve maturation. ELife, 2020, 9, .	2.8	43
46	Cdk5 controls lymphatic vessel development and function by phosphorylation of Foxc2. Nature Communications, 2015, 6, 7274.	5.8	42
47	Connexins in lymphatic vessel physiology and disease. FEBS Letters, 2014, 588, 1271-1277.	1.3	37
48	Tannins from Syzygium guineense suppress Wnt signaling and proliferation of Wnt-dependent tumors through a direct effect on secreted Wnts. Cancer Letters, 2018, 435, 110-120.	3.2	35
49	Antiangiogenic immunotherapy suppresses desmoplastic and chemoresistant intestinal tumors in mice. Journal of Clinical Investigation, 2020, 130, 1199-1216.	3.9	35
50	Molecular Regulation of Lymphangiogenesis. Annals of the New York Academy of Sciences, 2004, 1014, 76-87.	1.8	33
51	Interplay of Mechanotransduction, FOXC2, Connexins, and Calcineurin Signaling in Lymphatic Valve Formation. Advances in Anatomy, Embryology and Cell Biology, 2014, 214, 67-80.	1.0	32
52	Human venous valve disease caused by mutations in FOXC2 and GJC2. Journal of Experimental Medicine, 2017, 214, 2437-2452.	4.2	29
53	PROX1 is a transcriptional regulator of MMP14. Scientific Reports, 2018, 8, 9531.	1.6	26
54	Mouse model of postsurgical primary tumor recurrence and regional lymph node metastasis progression in <scp>HPV</scp>â€related head and neck cancer. International Journal of Cancer, 2018, 142, 2518-2528.	2.3	25

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55	Macrophage depletion induces edema through release of matrix-degrading proteases and proteoglycan deposition. Science Translational Medicine, 2021, 13, .	5.8	24
56	Therapeutic Regeneration of Lymphatic and Immune Cell Functions upon Lympho-organoid Transplantation. Stem Cell Reports, 2019, 12, 1260-1268.	2.3	20
57	Optimized lowâ€dose combinatorial drug treatment boosts selectivity and efficacy of colorectal carcinoma treatment. Molecular Oncology, 2020, 14, 2894-2919.	2.1	20
58	IFN-Î³â€“dependent tumor-antigen cross-presentation by lymphatic endothelial cells promotes their killing by T cells and inhibits metastasis. Science Advances, 2022, 8, .	4.7	20
59	ADAMTS18+ villus tip telocytes maintain a polarized VEGFA signaling domain and fenestrations in nutrient-absorbing intestinal blood vessels. Nature Communications, 2022, 13, .	5.8	20
60	Characterization of Mouse Mesenteric Lymphatic Valve Structure and Function. Methods in Molecular Biology, 2018, 1846, 97-129.	0.4	18
61	Cx47 fine-tunes the handling of serum lipids but is dispensable for lymphatic vascular function. PLoS ONE, 2017, 12, e0181476.	1.1	17
62	Loss of vascular endothelial notch signaling promotes spontaneous formation of tertiary lymphoid structures. Nature Communications, 2022, 13, 2022.	5.8	16
63	Correlation between podoplanin expression and extracapsular spread in squamous cell carcinoma of the oral cavity using subjective immunoreactivity scores and semiquantitative image analysis. Head and Neck, 2017, 39, 98-108.	0.9	15
64	Endothelial Calcineurin Signaling Restrains Metastatic Outgrowth by Regulating Bmp2. Cell Reports, 2019, 26, 1227-1241.e6.	2.9	15
65	Transcription factor FOXP2 is a flowâ€induced regulator of collecting lymphatic vessels. EMBO Journal, 2021, 40, e107192.	3.5	14
66	Prediction of Occult Lymph Node Metastasis in Head and Neck Cancer with CD31 Vessel Quantification. Otolaryngology - Head and Neck Surgery, 2019, 160, 277-283.	1.1	13
67	Palmdelphin Regulates Nuclear Resilience to Mechanical Stress in the Endothelium. Circulation, 2021, 144, 1629-1645.	1.6	13
68	Apelin-driven endothelial cell migration sustains intestinal progenitor cells and tumor growth. , 2022, 1, 476-490.		13
69	All TIEd up: mechanisms of Schlemmâ€™s canal maintenance. Journal of Clinical Investigation, 2017, 127, 3594-3597.	3.9	10
70	Mechanosensitive ACKR4 scavenges CCR7 chemokines to facilitate TÂcell de-adhesion and passive transport by flow in inflamed afferent lymphatics. Cell Reports, 2022, 38, 110334.	2.9	10
71	Soluble trivalent engagers redirect cytolytic TÂcell activity toward tumor endothelial marker 1. Cell Reports Medicine, 2021, 2, 100362.	3.3	9
72	Meet Me in the Middle. Circulation Research, 2015, 116, 1630-1632.	2.0	8

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73	The C5a-C5aR1 complement axis is essential for neutrophil recruitment to draining lymph nodes via high endothelial venules in cutaneous leishmaniasis. Cell Reports, 2022, 39, 110777.	2.9	7
74	Prediction of occult lymph node metastasis in squamous cell carcinoma of the oral cavity and the oropharynx using peritumoral Prospero homeobox protein 1 lymphatic nuclear quantification. Head and Neck, 2016, 38, 1407-1415.	0.9	6
75	Lef1 restricts ectopic crypt formation and tumor cell growth in intestinal adenomas. Science Advances, 2021, 7, eabj0512.	4.7	6
76	Expression of Prox1 in Medullary Thyroid Carcinoma Is Associated with Chromogranin A and Calcitonin Expression and with Ki67 Proliferative Index, but Not with Prognosis. Endocrine Pathology, 2019, 30, 138-145.	5.2	4
77	Stem-cell-like TÂcells have a specific entry gate to the tumor. Cancer Cell, 2022, 40, 243-245.	7.7	4
78	The double life of TLR2. Science Signaling, 2021, 14, eabf4701.	1.6	1
79	Abstract 18661: Regulation of Lymphatic Physiology by Connexin47. Circulation, 2015, 132, .	1.6	0