Mikhail A Panteleev

List of Publications by Year
in descending order

113 papers	3,565 citations	136950 32 h-index	161849 54 g-index
115 all docs	115 docs citations	115 times ranked	2783 citing authors

#	Article	IF	Citations
1	Characterization of the Role of Integrin Î±5Î²1 in Platelet Function, Hemostasis, and Experimental Thrombosis. Thrombosis and Haemostasis, 2022, 122, 767-776.	3.4	8
2	Analysis of microvascular thrombus mechanobiology with a novel particle-based model. Journal of Biomechanics, 2022, 130, 110801.	2.1	5
3	Healthy pediatric platelets are moderately hyporeactive in comparison with adultsâ€™ platelets. Platelets, 2022, 33, 727-734.	2.3	3
4	Longitudinal multiparametric characterization of platelet dysfunction in COVID-19: Effects of disease severity, anticoagulation therapy and inflammatory status. Thrombosis Research, 2022, 211, 27-37.	1.7	12
5	Ex vivo observation of granulocyte activity during thrombus formation. BMC Biology, 2022, 20, 32.	3.8	7
6	New Blood Coagulation Factor XIIa Inhibitors: Molecular Modeling, Synthesis, and Experimental Confirmation. Molecules, 2022, 27, 1234.	3.8	11
7	Analyzing the Interaction of Fluorescent-labeled Proteins with Artificial Phospholipid Microvesicles using Quantitative Flow Cytometry. Journal of Visualized Experiments, 2022, , .	0.3	0
8	Bioactive engineered scaffolds based on PCL-PEG-PCL and tumor cell-derived exosomes to minimize the foreign body reaction. Biomaterials and Biosystems, 2022, 7, 100055.	2.2	4
9	Determination of fibrin clot growth and spatial thrombin propagation in the presence of different types of phospholipid surfaces. Platelets, 2021, 32, 1031-1037.	2.3	3
10	Modeling Thrombus Shell: Linking Adhesion Receptor Properties and Macroscopic Dynamics. Biophysical Journal, 2021, 120, 334-351.	0.5	16
11	In vitro flowâ€based assay: From simple toward more sophisticated models for mimicking hemostasis and thrombosis. Journal of Thrombosis and Haemostasis, 2021, 19, 582-587.	3.8	14
12	Systems approaches meet biology and physiology: why do we need yet another journal?. Systems Biology and Physiology Reports, 2021, 1, 1-2.	0.4	2
13	Asymmetrical Forces Dictate the Distribution and Morphology of Platelets in Blood Clots. Cells, 2021, 10, 584.	4.1	9
14	Platelet functional responses and signalling: the molecular relationship. Part 1: responses.. Systems Biology and Physiology Reports, 2021, 1, 20-28.	0.4	11
15	Platelet function and bleeding at different phases of childhood immune thrombocytopenia. Scientific Reports, 2021, 11, 9401.	3.3	5
16	Platelets in COVID-19: â€œinnocent by-standersâ€•or active participants?. Pediatric Hematology/Oncology and Immunopathology, 2021, 20, 184-191.	0.3	4
17	Synthesis of 2H-pyrano[3,2-g]quinolin-2-ones containing a pyrimidinone moiety and characterization of their anticoagulant activity via inhibition of blood coagulation factors Xa and XIa. Chemistry of Heterocyclic Compounds, 2021, 57, 574-580.	1.2	3
18	A strong correlation exists between platelet consumption and platelet hyperactivation in COVID-19 patients. Pilot study of the patient cohort from CCH RAS Hospital (Troitsk).. Systems Biology and Physiology Reports, 2021, 1, 1-10.	0.4	3

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19	Platelet functional responses and signalling: the molecular relationship. Part 2: receptors.. Systems Biology and Physiology Reports, 2021, 1, 13-30.	0.4	4
20	Hypochlorite-induced oxidation of fibrinogen: Effects on its thermal denaturation and fibrin structure. Biochimica Et Biophysica Acta - General Subjects, 2021, 1865, 129970.	2.4	2
21	Wall shear rates in human and mouse arteries: Standardization of hemodynamics for in vitro blood flow assays: Communication from the ISTH SSC subcommittee on biorheology. Journal of Thrombosis and Haemostasis, 2021, 19, 588-595.	3.8	27
22	Systems Biology and Physiology Reports in 2021: a yearly report. Systems Biology and Physiology Reports, 2021, 1, 20-21.	0.4	0
23	Hypercoagulation detected by routine and global laboratory hemostasis assays in patients with infective endocarditis. PLoS ONE, 2021, 16, e0261429.	2.5	10
24	Immune thrombocytopenia: what can the systems biology and systems physiology offer?. Systems Biology and Physiology Reports, 2021, 1, 1-9.	0.4	1
25	Mechanisms of increased mitochondria-dependent necrosis in Wiskott-Aldrich syndrome platelets. Haematologica, 2020, 105, 1095-1106.	3.5	27
26	Platelet function and blood coagulation system status in childhood essential thrombocythemia. Platelets, 2020, 31, 1001-1011.	2.3	10
27	In vitro flow based systems to study platelet function and thrombus formation: Recommendations for standardization: Communication from the SSC on Biorheology of the ISTH. Journal of Thrombosis and Haemostasis, 2020, 18, 748-752.	3.8	33
28	Acylated 1H-1,2,4-Triazol-5-amines Targeting Human Coagulation Factor XIIa and Thrombin: Conventional and Microscale Synthesis, Anticoagulant Properties, and Mechanism of Action. Journal of Medicinal Chemistry, 2020, 63, 13159-13186.	6.4	21
29	Platelet-derived extracellular vesicles infiltrate and modify the bone marrow during inflammation. Blood Advances, 2020, 4, 3011-3023.	5.2	71
30	Effects of bacterial lipopolysaccharides on platelet function: inhibition of weak platelet activation. Scientific Reports, 2020, 10, 12296.	3.3	10
31	Pharmacological Blockade of Glycoprotein VI Promotes Thrombus Disaggregation in the Absence of Thrombin. Arteriosclerosis, Thrombosis, and Vascular Biology, 2020, 40, 2127-2142.	2.4	48
32	In Silico Hemostasis Modeling and Prediction. Hamostaseologie, 2020, 40, 524-535.	1.9	9
33	A dynamic remodeling bio-mimic extracellular matrix to reduce thrombotic and inflammatory complications of vascular implants. Biomaterials Science, 2020, 8, 6025-6036.	5.4	5
34	In vitro megakaryocyte culture from human bone marrow aspirates as a research and diagnostic tool. Platelets, 2020, 32, 1-8.	2.3	2
35	Control of Platelet CLEC-2-Mediated Activation by Receptor Clustering and Tyrosine Kinase Signaling. Biophysical Journal, 2020, 118, 2641-2655.	0.5	15
36	Platelet function and bleeding in chronic lymphocytic leukemia and mantle cell lymphoma patients on ibrutinib. Journal of Thrombosis and Haemostasis, 2020, 18, 2672-2684.	3.8	16

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37	Redistribution of TPA Fluxes in the Presence of PAI-1 Regulates Spatial Thrombolysis. Biophysical Journal, 2020, 119, 638-651.	0.5	14
38	Development of a Simple Kinetic Mathematical Model of Aggregation of Particles or Clustering of Receptors. Life, 2020, 10, 97.	2.4	5
39	Heterogeneity of Integrin Î±IIbÎ²3 Function in Pediatric Immune Thrombocytopenia Revealed by Continuous Flow Cytometry Analysis. International Journal of Molecular Sciences, 2020, 21, 3035.	4.1	15
40	Shear rate gradients promote a bi-phasic thrombus formation on weak adhesive proteins, such as fibrinogen in a VWF-dependent manner. Haematologica, 2020, 105, 2471-2483.	3.5	22
41	Differential Drug Target Selection in Blood Coagulation: What can we get from Computational Systems Biology Models?. Current Pharmaceutical Design, 2020, 26, 2109-2115.	1.9	5
42	Evolution of platelet function in adult patients with chronic immune thrombocytopenia on romiplostim treatment. British Journal of Haematology, 2019, 187, e38-e42.	2.5	11
43	Quantitative dynamics of reversible platelet aggregation: mathematical modelling and experiments. Scientific Reports, 2019, 9, 6217.	3.3	19
44	Binding of Coagulation Factor XIII Zymogen to Activated Platelet Subpopulations: Roles of Integrin Î±IIbÎ²3 and Fibrinogen. Thrombosis and Haemostasis, 2019, 119, 906-915.	3.4	13
45	Response by Nechipurenko et al to Letter Regarding Article, â€œClot Contraction Drives the Translocation of Procoagulant Platelets to Thrombus Surfaceâ€. Arteriosclerosis, Thrombosis, and Vascular Biology, 2019, 39, e290-e291.	2.4	0
46	Clot Contraction Drives the Translocation of Procoagulant Platelets to Thrombus Surface. Arteriosclerosis, Thrombosis, and Vascular Biology, 2019, 39, 37-47.	2.4	74
47	Impaired platelet activity and hypercoagulation in healthy term and moderately preterm newborns during the early neonatal period. Pediatric Research, 2019, 85, 63-71.	2.3	17
48	Flow cytometry for pediatric platelets. Platelets, 2019, 30, 428-437.	2.3	29
49	Modern aspects of the pathogenesis, diagnosis and therapy of hemostasis disorders in children with acute leukemias. Russian Journal of Pediatric Hematology and Oncology, 2019, 5, 74-85.	0.3	1
50	Mathematical modelling of platelet rich plasma clotting. Pointwise unified model. Russian Journal of Numerical Analysis and Mathematical Modelling, 2018, 33, 265-276.	0.6	7
51	Sensitivity and Robustness of Spatially Dependent Thrombin Generation and Fibrin Clot Propagation. Biophysical Journal, 2018, 115, 2461-2473.	0.5	23
52	Mathematical Techniques for Understanding Platelet Regulation and the Development of New Pharmacological Approaches. Methods in Molecular Biology, 2018, 1812, 255-279.	0.9	10
53	Coated platelets introduce significant delay in onset of peak thrombin production: Theoretical predictions. Journal of Theoretical Biology, 2018, 453, 108-116.	1.7	2
54	Bleeding tendency and platelet function during treatment with romiplostim in children with severe immune thrombocytopenic purpura. International Journal of Hematology, 2017, 105, 841-848.	1.6	25

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55	Substrate delivery mechanism and the role of membrane curvature in factor X activation by extrinsic tenase. Journal of Theoretical Biology, 2017, 435, 125-133.	1.7	11
56	Co-ordinated spatial propagation of blood plasma clotting and fibrinolytic fronts. PLoS ONE, 2017, 12, e0180668.	2.5	18
57	Coagulation factors bound to procoagulant platelets concentrate in cap structures to promote clotting. Blood, 2016, 128, 1745-1755.	1.4	90
58	Classic and Global Hemostasis Testing in Pregnancy and during Pregnancy Complications. Seminars in Thrombosis and Hemostasis, 2016, 42, 696-716.	2.7	26
59	Systems biology insights into the meaning of the platelet's dualâ€receptor thrombin signaling. Journal of Thrombosis and Haemostasis, 2016, 14, 2045-2057.	3.8	45
60	Dynamics of calcium spiking, mitochondrial collapse and phosphatidylserine exposure in platelet subpopulations during activation. Journal of Thrombosis and Haemostasis, 2016, 14, 1867-1881.	3.8	66
61	Hysteresis-like binding of coagulation factors X/Xa to procoagulant activated platelets and phospholipids results from multistep association and membrane-dependent multimerization. Biochimica Et Biophysica Acta - Biomembranes, 2016, 1858, 1216-1227.	2.6	21
62	Calpain-controlled detachment of major glycoproteins from the cytoskeleton regulates adhesive properties of activated phosphatidylserine-positive platelets. Biochemical Journal, 2016, 473, 435-448.	3.7	19
63	Untangling the complexity of blood coagulation network: use of computational modelling in pharmacology and diagnostics. Briefings in Bioinformatics, 2016, 17, 429-439.	6.5	23
64	Modelling of plateletâ€“fibrin clot formation in flow with a DPDâ€“PDE method. Journal of Mathematical Biology, 2016, 72, 649-681.	1.9	55
65	Epidemiology of venous thromboembolism (<scp>VTE</scp>) associated with pregnancy. Birth Defects Research Part C: Embryo Today Reviews, 2015, 105, 167-184.	3.6	57
66	Platelet Surface-Associated Activation and Secretion-Mediated Inhibition of Coagulation Factor XII. PLoS ONE, 2015, 10, e0116665.	2.5	31
67	New Infestin-4 Mutants with Increased Selectivity against Factor XIIa. PLoS ONE, 2015, 10, e0144940.	2.5	17
68	Continuous Modeling of Arterial Platelet Thrombus Formation Using a Spatial Adsorption Equation. PLoS ONE, 2015, 10, e0141068.	2.5	16
69	Compartmentalized calcium signaling triggers subpopulation formation upon platelet activation through PAR1. Molecular BioSystems, 2015, 11, 1052-1060.	2.9	43
70	Global/integral assays in hemostasis diagnostics: promises, successes, problems and prospects. Thrombosis Journal, 2015, 13, 5.	2.1	24
71	Threshold of Microvascular Occlusion: Injury Size Defines the Thrombosis Scenario. Biophysical Journal, 2015, 109, 450-456.	0.5	37
72	Kinetics and mechanisms of surface-dependent coagulation factor XII activation. Journal of Theoretical Biology, 2015, 382, 235-243.	1.7	8

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73	Hemostasis and thrombosis beyond biochemistry: roles of geometry, flow and diffusion. Thrombosis Research, 2015, 136, 699-711.	1.7	51
74	Procoagulant impact of the plasmapheresis procedure on coagulation state of collected plasma. Blood Transfusion, 2015, 13, 651-5.	0.4	4
75	Numerical Modelling of Cell Distribution in Blood Flow. Mathematical Modelling of Natural Phenomena, 2014, 9, 69-84.	2.4	29
76	Relationships of glycoproteins IIb-IIIa and Ib content with mean platelet volume and their genetic polymorphisms. Blood Coagulation and Fibrinolysis, 2014, 25, 128-134.	1.0	14
77	Interactions Outside the Proteinase-binding Loop Contribute Significantly to the Inhibition of Activated Coagulation Factor XII by Its Canonical Inhibitor from Corn. Journal of Biological Chemistry, 2014, 289, 14109-14120.	3.4	9
78	Effect of Pre-Analytical Conditions on the Thrombodynamics Assay. Thrombosis Research, 2014, 133, 472-476.	1.7	23
79	Drug-drug interaction of the anti-TFPI aptamer BAX499 and factor VIII: Studies of spatial dynamics of fibrin clot formation in hemophilia A. Thrombosis Research, 2014, 133, 112-119.	1.7	22
80	Circulating Contact-Pathway-Activating Microparticles Together with Factors IXa and XIa Induce Spontaneous Clotting in Plasma of Hematology and Cardiologic Patients. PLoS ONE, 2014, 9, e87692.	2.5	49
81	Modelling of thrombus growth in flow with a DPD-PDE method. Journal of Theoretical Biology, 2013, 337, 30-41.	1.7	60
82	Procoagulant Platelets Form an Î±-Granule Protein-covered â€œCapâ€•on Their Surface That Promotes Their Attachment to Aggregates. Journal of Biological Chemistry, 2013, 288, 29621-29632.	3.4	74
83	Investigation of the phenotype heterogeneity in severe hemophilia A using thromboelastography, thrombin generation, and thrombodynamics. Thrombosis Research, 2013, 131, e274-e280.	1.7	41
84	Factor XI and traveling waves: the key to understanding coagulation in hemophilia?. Expert Review of Hematology, 2013, 6, 111-113.	2.2	5
85	Antiplatelet Agents Can Promote Two-Peaked Thrombin Generation in Platelet Rich Plasma: Mechanism and Possible Applications. PLoS ONE, 2013, 8, e55688.	2.5	13
86	Predicting prothrombotic tendencies in sepsis using spatial clot growth dynamics. Blood Coagulation and Fibrinolysis, 2012, 23, 498-507.	1.0	56
87	Anticoagulant therapy. Blood Coagulation and Fibrinolysis, 2012, 23, 482-493.	1.0	25
88	Two Types of Procoagulant Platelets Are Formed Upon Physiological Activation and Are Controlled by Integrin Î± _{IIb} Î² ₃. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, 2475-2483.	2.4	46
89	Thrombin Activity Propagates in Space During Blood Coagulation as an Excitation Wave. Biophysical Journal, 2012, 103, 2233-2240.	0.5	79
90	Identification of Different Proaggregatory Abilities of Activated Platelet Subpopulations. Biophysical Journal, 2012, 102, 2261-2269.	0.5	48

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91	Identification of signal transduction pathways involved in the formation of platelet subpopulations upon activation. British Journal of Haematology, 2012, 157, 105-115.	2.5	36
92	Positive Feedback Loops for Factor V and Factor VII Activation Supply Sensitivity to Local Surface Tissue Factor Density During Blood Coagulation. Biophysical Journal, 2011, 101, 1816-1824.	0.5	27
93	Improvement of spatial fibrin formation by the anti-TFPI aptamer BAX499: changing clot size by targeting extrinsic pathway initiation. Journal of Thrombosis and Haemostasis, 2011, 9, 1825-1834.	3.8	48
94	Blood flow controls coagulation onset via the positive feedback of factor VII activation by factor Xa. BMC Systems Biology, 2010, 4, 5.	3.0	46
95	Thromboplastin immobilized on polystyrene surface exhibits kinetic characteristics close to those for the native protein and activates in vitro blood coagulation similarly to thromboplastin on fibroblasts. Biochemistry (Moscow), 2010, 75, 734-743.	1.5	30
96	Lymph node cortical sinus organization and relationship to lymphocyte egress dynamics and antigen exposure. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 20447-20452.	7.1	139
97	Task-Oriented Modular Decomposition of Biological Networks: Trigger Mechanism in Blood Coagulation. Biophysical Journal, 2010, 98, 1751-1761.	0.5	44
98	On Propagation of Excitation Waves in Moving Media: The FitzHugh-Nagumo Model. PLoS ONE, 2009, 4, e4454.	2.5	16
99	Formation of coated platelets is regulated by the dense granule secretion of adenosine 5â€²diphosphate acting via the P2Y12 receptor. Journal of Thrombosis and Haemostasis, 2008, 6, 1603-1605.	3.8	39
100	Mechanisms of action of recombinant activated factor VII in the context of tissue factor concentration and distribution. Blood Coagulation and Fibrinolysis, 2008, 19, 743-755.	1.0	28
101	Mathematical Models of Blood Coagulation and Platelet Adhesion: Clinical Applications. Current Pharmaceutical Design, 2007, 13, 1457-1467.	1.9	29
102	Platelet microparticle membranes have 50- to 100-fold higher specific procoagulant activity than activated platelets. Thrombosis and Haemostasis, 2007, 97, 425-434.	3.4	460
103	Platelet microparticle membranes have 50- to 100-fold higher specific procoagulant activity than activated platelets. Thrombosis and Haemostasis, 2007, 97, 425-34.	3.4	185
104	Spatial Propagation and Localization of Blood Coagulation Are Regulated by Intrinsic and Protein C Pathways, Respectively. Biophysical Journal, 2006, 90, 1489-1500.	0.5	126
105	Spatial Dynamics of Contact-Activated Fibrin Clot Formationin vitroandin silicoin Haemophilia B: Effects of Severity and Ahemphil B Treatment. Mathematical Modelling of Natural Phenomena, 2006, 1, 124-137.	2.4	20
106	Factor VIIIa regulates substrate delivery to the intrinsic factor X-activating complex. FEBS Journal, 2006, 273, 374-387.	4.7	24
107	Initiation and propagation of coagulation from tissue factorâ€bearing cell monolayers to plasma: initiator cells do not regulate spatial growth rate. Journal of Thrombosis and Haemostasis, 2005, 3, 321-331.	3.8	88
108	Two subpopulations of thrombin-activated platelets differ in their binding of the components of the intrinsic factor X-activating complex. Journal of Thrombosis and Haemostasis, 2005, 3, 2545-2553.	3.8	57

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109	Mathematical Modeling and Computer Simulation in Blood Coagulation. Pathophysiology of Haemostasis and Thrombosis: International Journal on Haemostasis and Thrombosis Research, 2005, 34, 60-70.	0.3	54
110	Towards Virtual Coagulation. Pathophysiology of Haemostasis and Thrombosis: International Journal on Haemostasis and Thrombosis Research, 2005, 34, 58-59.	0.3	0
111	Blood Coagulation and Propagation of Autowaves in Flow. Pathophysiology of Haemostasis and Thrombosis: International Journal on Haemostasis and Thrombosis Research, 2005, 34, 135-142.	0.3	33
112	Kinetics of Factor X activation by the membrane-bound complex of Factor IXa and Factor VIIIa. Biochemical Journal, 2004, 381, 779-794.	3.7	29
113	Tissue factor pathway inhibitor. FEBS Journal, 2002, 269, 2016-2031.	0.2	28