

# Alireza R Rezaie

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/4934177/publications.pdf>

Version: 2024-02-01

113  
papers

4,036  
citations

87888

38  
h-index

133252

59  
g-index

113  
all docs

113  
docs citations

113  
times ranked

5106  
citing authors

#	ARTICLE	IF	CITATIONS
1	The ligand occupancy of endothelial protein C receptor switches the protease-activated receptor 1-dependent signaling specificity of thrombin from a permeability-enhancing to a barrier-protective response in endothelial cells. <i>Blood</i> , 2007, 110, 3909-3916.	1.4	205
2	Receptors of the protein C activation and activated protein C signaling pathways are colocalized in lipid rafts of endothelial cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2007, 104, 2867-2872.	7.1	173
3	Protein C Inhibitor Is a Potent Inhibitor of the Thrombin-Thrombomodulin Complex. <i>Journal of Biological Chemistry</i> , 1995, 270, 25336-25339.	3.4	153
4	Activated protein C inhibits high mobility group box 1 signaling in endothelial cells. <i>Blood</i> , 2011, 118, 3952-3959.	1.4	132
5	The Endothelial Cell Protein C Receptor. <i>Journal of Biological Chemistry</i> , 1996, 271, 17491-17498.	3.4	123
6	Regulation of the Protein C Anticoagulant and Antiinflammatory Pathways. <i>Current Medicinal Chemistry</i> , 2010, 17, 2059-2069.	2.4	122
7	Protease activated receptor 1 (PAR-1) activation by thrombin is protective in human pulmonary artery endothelial cells if endothelial protein C receptor is occupied by its natural ligand. <i>Thrombosis and Haemostasis</i> , 2008, 100, 101-109.	3.4	118
8	Recombinant human activated protein C inhibits integrin-mediated neutrophil migration. <i>Blood</i> , 2009, 113, 4078-4085.	1.4	108
9	Polyphosphate amplifies proinflammatory responses of nuclear proteins through interaction with receptor for advanced glycation end products and P2Y1 purinergic receptor. <i>Blood</i> , 2014, 123, 935-945.	1.4	99
10	Protease-activated receptor signalling by coagulation proteases in endothelial cells. <i>Thrombosis and Haemostasis</i> , 2014, 112, 876-882.	3.4	98
11	Engineering a Disulfide Bond to Stabilize the Calcium-binding Loop of Activated Protein C Eliminates Its Anticoagulant but Not Its Protective Signaling Properties. <i>Journal of Biological Chemistry</i> , 2007, 282, 9251-9259.	3.4	96
12	The function of calcium in protein C activation by thrombin and the thrombin-thrombomodulin complex can be distinguished by mutational analysis of protein C derivatives. <i>Journal of Biological Chemistry</i> , 1992, 267, 26104-9.	3.4	94
13	Activated protein C protects against myocardial ischemic/reperfusion injury through AMP-activated protein kinase signaling. <i>Journal of Thrombosis and Haemostasis</i> , 2011, 9, 1308-1317.	3.8	78
14	Concentration dependent dual effect of thrombin in endothelial cells via PAR-1 and Pi3 Kinase. <i>Journal of Cellular Physiology</i> , 2009, 219, 744-751.	4.1	74
15	Sodium Binding Site of Factor Xa: A Role of Sodium in the Prothrombinase Complex. <i>Biochemistry</i> , 2000, 39, 1817-1825.	2.5	64
16	Occupancy of human EPCR by protein C induces $\beta$ -arrestin-2 biased PAR1 signaling by both APC and thrombin. <i>Blood</i> , 2016, 128, 1884-1893.	1.4	63
17	Contribution of Basic Residues of the 70~80-Loop to Heparin Binding and Anticoagulant Function of Activated Protein C. <i>Biochemistry</i> , 2002, 41, 6149-6157.	2.5	59
18	Anticoagulant and signaling functions of antithrombin. <i>Journal of Thrombosis and Haemostasis</i> , 2020, 18, 3142-3153.	3.8	59

#	ARTICLE	IF	CITATIONS
19	Role of Basic Residues of the Autolysis Loop in the Catalytic Function of Factor Xa. <i>Biochemistry</i> , 2002, 41, 6780-6788.	2.5	58
20	Whole-exome sequencing in evaluation of patients with venous thromboembolism. <i>Blood Advances</i> , 2017, 1, 1224-1237.	5.2	55
21	Identification of a Specific Exosite on Activated Protein C for Interaction with Protease-activated Receptor 1. <i>Journal of Biological Chemistry</i> , 2007, 282, 25493-25500.	3.4	54
22	Adenosine Regulates the Proinflammatory Signaling Function of Thrombin in Endothelial Cells. <i>Journal of Cellular Physiology</i> , 2014, 229, 1292-1300.	4.1	54
23	Localization of the Heparin Binding Exosite of Factor IXa. <i>Journal of Biological Chemistry</i> , 2002, 277, 50756-50760.	3.4	53
24	Thrombomodulin allosterically modulates the activity of the anticoagulant thrombin. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2003, 100, 12051-12056.	7.1	53
25	Proexosite-1 on Prothrombin Is a Factor Va-dependent Recognition Site for the Prothrombinase Complex. <i>Journal of Biological Chemistry</i> , 2003, 278, 27564-27569.	3.4	50
26	Inorganic polyphosphate promotes cyclin D1 synthesis through activation of mTOR/Wnt/ $\beta$ -catenin signaling in endothelial cells. <i>Journal of Thrombosis and Haemostasis</i> , 2016, 14, 2261-2273.	3.8	50
27	Antithrombin up-regulates AMP-activated protein kinase signalling during myocardial ischaemia/reperfusion injury. <i>Thrombosis and Haemostasis</i> , 2015, 113, 338-349.	3.4	48
28	Thrombin inhibits nuclear factor $\kappa$ B and RhoA pathways in cytokine-stimulated vascular endothelial cells when EPCR is occupied by protein C. <i>Thrombosis and Haemostasis</i> , 2009, 101, 513-520.	3.4	47
29	The occupancy of endothelial protein C receptor by its ligand modulates the $\beta$ 1 dependent signaling specificity of coagulation proteases. <i>IUBMB Life</i> , 2011, 63, 390-396.	3.4	46
30	Antithrombin is protective against myocardial ischemia and reperfusion injury. <i>Journal of Thrombosis and Haemostasis</i> , 2013, 11, 1020-1028.	3.8	46
31	Mutation of Glu-80 $\rightarrow$ Lys results in a protein C mutant that no longer requires Ca <sup>2+</sup> for rapid activation by the thrombin-thrombomodulin complex. <i>Journal of Biological Chemistry</i> , 1994, 269, 3151-4.	3.4	44
32	Identification and Characterization of the Sodium-binding Site of Activated Protein C. <i>Journal of Biological Chemistry</i> , 1999, 274, 4970-4976.	3.4	43
33	Exosite-Dependent Regulation of the Protein C Anticoagulant Pathway. <i>Trends in Cardiovascular Medicine</i> , 2003, 13, 8-15.	4.9	42
34	Activation of protein C by the thrombin-thrombomodulin complex: Cooperative roles of Arg-35 of thrombin and Arg-67 of protein C. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2006, 103, 879-884.	7.1	42
35	Analysis of the functions of the first epidermal growth factor-like domain of factor X. <i>Journal of Biological Chemistry</i> , 1993, 268, 8176-80.	3.4	42
36	Role of Residue 99 at the S2 Subsite of Factor Xa and Activated Protein C in Enzyme Specificity. <i>Journal of Biological Chemistry</i> , 1996, 271, 23807-23814.	3.4	41

#	ARTICLE	IF	CITATIONS
37	Activated protein C modulates cardiac metabolism and augments autophagy in the ischemic heart. <i>Journal of Thrombosis and Haemostasis</i> , 2012, 10, 1736-1744.	3.8	41
38	The Critical Role of the 185-189-Loop in the Factor Xa Interaction with Na <sup>+</sup> and Factor Va in the Prothrombinase Complex. <i>Journal of Biological Chemistry</i> , 2004, 279, 48262-48269.	3.4	40
39	Influence of Arginines 93, 97, and 101 of Thrombin to Its Functional Specificity. <i>Biochemistry</i> , 1997, 36, 8969-8976.	2.5	39
40	Protein Z-dependent Protease Inhibitor Binds to the C-terminal Domain of Protein Z. <i>Journal of Biological Chemistry</i> , 2008, 283, 19922-19926.	3.4	39
41	The Fourth Epidermal Growth Factor-like Domain of Thrombomodulin Interacts with the Basic Exosite of Protein C. <i>Journal of Biological Chemistry</i> , 2003, 278, 10484-10490.	3.4	35
42	Asp-70→Lys mutant of factor X lacks high affinity Ca <sup>2+</sup> binding site yet retains function. <i>Journal of Biological Chemistry</i> , 1994, 269, 21495-9.	3.4	35
43	Thrombomodulin Increases the Rate of Thrombin Inhibition by BPTI. <i>Biochemistry</i> , 1998, 37, 693-699.	2.5	33
44	Conversion of glutamic acid 192 to glutamine in activated protein C changes the substrate specificity and increases reactivity toward macromolecular inhibitors. <i>Journal of Biological Chemistry</i> , 1993, 268, 19943-8.	3.4	33
45	Molecular Basis of Residue 192 Participation in Determination of Coagulation Protease Specificity. <i>FEBS Journal</i> , 1996, 242, 477-484.	0.2	32
46	Heparin-Binding Exosite of Factor Xa. <i>Trends in Cardiovascular Medicine</i> , 2000, 10, 333-338.	4.9	32
47	The Conformation of the Activation Peptide of Protein C Is Influenced by Ca <sup>2+</sup> and Na <sup>+</sup> Binding. <i>Journal of Biological Chemistry</i> , 2004, 279, 38519-38524.	3.4	32
48	Contribution of Basic Residues of the Autolysis Loop to the Substrate and Inhibitor Specificity of Factor IXa. <i>Journal of Biological Chemistry</i> , 2003, 278, 25032-25038.	3.4	31
49	Identification of Factor Xa Residues Critical for Interaction with Protein Z-dependent Protease Inhibitor. <i>Journal of Biological Chemistry</i> , 2005, 280, 32722-32728.	3.4	31
50	L-SIGN is a receptor on liver sinusoidal endothelial cells for SARS-CoV-2 virus. <i>JCI Insight</i> , 2021, 6, .	5.0	31
51	Thrombin inhibits nuclear factor kappaB and RhoA pathways in cytokine-stimulated vascular endothelial cells when EPCR is occupied by protein C. <i>Thrombosis and Haemostasis</i> , 2009, 101, 513-20.	3.4	31
52	Tryptophans 231 and 234 in Protein C Report the Ca <sup>2+</sup> -Dependent Conformational Change Required for Activation by the Thrombin-Thrombomodulin Complex. <i>Biochemistry</i> , 1995, 34, 12221-12226.	2.5	30
53	Reactivities of the S2 and S3 subsite residues of thrombin with the native and heparin-induced conformers of antithrombin. <i>Protein Science</i> , 1998, 7, 349-357.	7.6	29
54	Exosite-dependent regulation of factor VIIIa by activated protein C. <i>Blood</i> , 2003, 101, 4802-4807.	1.4	29

#	ARTICLE	IF	CITATIONS
55	Probing the molecular basis of factor Xa specificity by mutagenesis of the serpin, antithrombin. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2001, 1528, 167-176.	2.4	28
56	Mechanism by Which Exosites Promote the Inhibition of Blood Coagulation Proteases by Heparin-activated Antithrombin. <i>Journal of Biological Chemistry</i> , 2007, 282, 33609-33622.	3.4	28
57	Thrombomodulin is essential for maintaining quiescence in vascular endothelial cells. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2021, 118, .	7.1	28
58	Intraperitoneal administration of activated protein C prevents postsurgical adhesion band formation. <i>Blood</i> , 2015, 125, 1339-1348.	1.4	27
59	Conformational Activation of Antithrombin by Heparin Involves an Altered Exosite Interaction with Protease. <i>Journal of Biological Chemistry</i> , 2014, 289, 34049-34064.	3.4	25
60	Inorganic Polyphosphate Amplifies High Mobility Group Box 1 Mediated Von Willebrand Factor Release and Platelet String Formation on Endothelial Cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2018, 38, 1868-1877.	2.4	25
61	Analysis of protein missense alterations by combining sequence and structure based methods. <i>Molecular Genetics &amp; Genomic Medicine</i> , 2020, 8, e1166.	1.2	25
62	Calcium-binding sites of the thrombin-thrombomodulin-protein C complex: Possible implications for the effect of platelet factor 4 on the activation of vitamin K-dependent coagulation factors. <i>Thrombosis and Haemostasis</i> , 2007, 97, 899-906.	3.4	21
63	Mutagenesis studies toward understanding the intracellular signaling mechanism of antithrombin. <i>Journal of Thrombosis and Haemostasis</i> , 2009, 7, 803-810.	3.8	21
64	Contribution of exosite occupancy by heparin to the regulation of coagulation proteases by antithrombin. <i>Thrombosis and Haemostasis</i> , 2010, 103, 277-283.	3.4	21
65	Protein C Thr315Ala variant results in gain of function but manifests as type II deficiency in diagnostic assays. <i>Blood</i> , 2015, 125, 2428-2434.	1.4	20
66	Characterization of the Heparin-Binding Site of the Protein Z-Dependent Protease Inhibitor. <i>Biochemistry</i> , 2012, 51, 4078-4085.	2.5	18
67	The high affinity calcium-binding site involved in protein C activation is outside the first epidermal growth factor homology domain. <i>Journal of Biological Chemistry</i> , 1992, 267, 11701-4.	3.4	18
68	Activated protein C inhibits lipopolysaccharide mediated acetylation and secretion of high mobility group box 1 in endothelial cells. <i>Journal of Thrombosis and Haemostasis</i> , 2019, 17, 803-817.	3.8	17
69	Antithrombin: An anticoagulant, anti-inflammatory and antibacterial serpin. <i>Journal of Thrombosis and Haemostasis</i> , 2020, 18, 528-533.	3.8	15
70	Partial Activation of Antithrombin without Heparin through Deletion of a Unique Sequence on the Reactive Site Loop of the Serpin. <i>Journal of Biological Chemistry</i> , 2002, 277, 1235-1239.	3.4	14
71	Heparin chain-length dependence of factor Xa inhibition by antithrombin in plasma. <i>Thrombosis Research</i> , 2007, 119, 481-488.	1.7	14
72	Mutagenesis Studies toward Understanding Allostery in Thrombin. <i>Biochemistry</i> , 2009, 48, 8261-8270.	2.5	14

#	ARTICLE	IF	CITATIONS
73	Podocyte Integrin- $\beta$ 3 and Activated Protein C Coordinately Restrict RhoA Signaling and Ameliorate Diabetic Nephropathy. <i>Journal of the American Society of Nephrology: JASN</i> , 2020, 31, 1762-1780.	6.1	14
74	Kinetics of Factor Xa Inhibition by Recombinant Tick Anticoagulant Peptide: Both Active Site and Exosite Interactions Are Required for a Slow- and Tight-Binding Inhibition Mechanism. <i>Biochemistry</i> , 2004, 43, 3368-3375.	2.5	13
75	Mutagenesis Studies toward Understanding the Mechanism of Differential Reactivity of Factor Xa with the Native and Heparin-Activated Antithrombin. <i>Biochemistry</i> , 2004, 43, 2898-2905.	2.5	13
76	Activated protein C protects against pressure overload-induced hypertrophy through AMPK signaling. <i>Biochemical and Biophysical Research Communications</i> , 2018, 495, 2584-2594.	2.1	13
77	The Cardioprotective Signaling Activity of Activated Protein C in Heart Failure and Ischemic Heart Diseases. <i>International Journal of Molecular Sciences</i> , 2019, 20, 1762.	4.1	13
78	Paradoxical bleeding and thrombotic episodes of dysprothrombinaemia due to a homozygous Arg382His mutation. <i>Thrombosis and Haemostasis</i> , 2017, 117, 479-490.	3.4	11
79	Thrombomodulin Regulation of Mitogen-Activated Protein Kinases. <i>International Journal of Molecular Sciences</i> , 2019, 20, 1851.	4.1	11
80	Activated Protein C Strengthens Cardiac Tolerance to Ischemic Insults in Aging. <i>Circulation Research</i> , 2022, 130, 252-272.	4.5	11
81	Thrombomodulin modulates cell migration in human melanoma cell lines. <i>Melanoma Research</i> , 2014, 24, 11-19.	1.2	10
82	Activated protein C protects against renal ischaemia/reperfusion injury, independent of its anticoagulant properties. <i>Thrombosis and Haemostasis</i> , 2016, 116, 124-133.	3.4	9
83	Plasmodium falciparum histidine rich protein HRP-II inhibits the anti-inflammatory function of antithrombin. <i>Journal of Thrombosis and Haemostasis</i> , 2020, 18, 1473-1483.	3.8	9
84	Extracellular Histones Bind Vascular Glycosaminoglycans and Inhibit the Anti-Inflammatory Function of Antithrombin. <i>Cellular Physiology and Biochemistry</i> , 2021, 55, 605-617.	1.6	9
85	Contribution of the NH <sub>2</sub> -terminal EGF-domain of factor IXa to the specificity of intrinsic tenase. <i>Thrombosis and Haemostasis</i> , 2012, 108, 1154-1164.	3.4	8
86	Gly74Ser mutation in protein C causes thrombosis due to a defect in protein S-dependent anticoagulant function. <i>Thrombosis and Haemostasis</i> , 2017, 117, 1358-1369.	3.4	8
87	Ile73Asn mutation in protein C introduces a new N-linked glycosylation site on the first EGF-domain of protein C and causes thrombosis. <i>Haematologica</i> , 2020, 105, 1712-1722.	3.5	8
88	PKC (Protein Kinase C) Modulates AT (Antithrombin) Signaling in Vascular Endothelial Cells. <i>Arteriosclerosis, Thrombosis, and Vascular Biology</i> , 2020, 40, 1748-1762.	2.4	8
89	Protective Role of Activated Protein C against Viral Mimetic Poly(I:C)-Induced Inflammation. <i>Thrombosis and Haemostasis</i> , 2021, 121, 1448-1463.	3.4	8
90	TR47, a PAR1-based peptide, inhibits melanoma cell migration in vitro and metastasis in vivo. <i>Biochemical and Biophysical Research Communications</i> , 2018, 495, 1300-1304.	2.1	7

#	ARTICLE	IF	CITATIONS
91	Expression and functional characterization of two natural heparin-binding site variants of antithrombin. <i>Journal of Thrombosis and Haemostasis</i> , 2018, 16, 330-341.	3.8	7
92	Mutagenesis studies toward understanding the mechanism of the cofactor function of thrombomodulin. <i>Biophysical Chemistry</i> , 2005, 117, 255-261.	2.8	6
93	Role of the Residues of the 39-Loop in Determining the Substrate and Inhibitor Specificity of Factor IXa. <i>Journal of Biological Chemistry</i> , 2010, 285, 28488-28495.	3.4	6
94	Molecular basis of the clotting defect in a bleeding patient missing the Asp-185 codon in the factor X gene. <i>Thrombosis Research</i> , 2014, 134, 1103-1109.	1.7	6
95	Characterization of the protein Z-dependent protease inhibitor interactive-sites of protein Z. <i>Biochimica Et Biophysica Acta - Proteins and Proteomics</i> , 2014, 1844, 1631-1637.	2.3	6
96	Activated Protein C Attenuates Severe Inflammation by Targeting VLA-3high Neutrophil Subpopulation in Mice. <i>Journal of Immunology</i> , 2017, 199, 2930-2936.	0.8	6
97	Whole Exome Sequencing and Extended Thrombophilia Testing in Patients with Venous Thromboembolism. <i>Blood</i> , 2018, 132, 2506-2506.	1.4	6
98	Calcium inhibition of the activation of protein C by thrombin Role of the P3 and P3' residues. <i>FEBS Journal</i> , 1994, 223, 575-579.	0.2	5
99	Factor Va Alters the Conformation of the Na <sup>+</sup> -Binding Loop of Factor Xa in the Prothrombinase Complex. <i>Biochemistry</i> , 2008, 47, 5976-5985.	2.5	5
100	Residues of the 39-Loop Restrict the Plasma Inhibitor Specificity of Factor IXa. <i>Journal of Biological Chemistry</i> , 2013, 288, 12692-12698.	3.4	5
101	Engineering D-helix of antithrombin in alpha-1-proteinase inhibitor confers antiinflammatory properties on the chimeric serpin. <i>Thrombosis and Haemostasis</i> , 2014, 112, 164-175.	3.4	5
102	Gly197Arg mutation in protein C causes recurrent thrombosis in a heterozygous carrier. <i>Journal of Thrombosis and Haemostasis</i> , 2020, 18, 1141-1153.	3.8	5
103	Thr90Ser Mutation in Antithrombin is Associated with Recurrent Thrombosis in a Heterozygous Carrier. <i>Thrombosis and Haemostasis</i> , 2020, 120, 1045-1055.	3.4	5
104	Vascular inflammation in aging. <i>Aging</i> , 2018, 10, 3634-3635.	3.1	4
105	Rapid activation of protein C by factor Xa and thrombin in the presence of polyanionic compounds. <i>Blood</i> , 1998, 91, 4572-80.	1.4	4
106	Antithrombin protects against <i>Plasmodium falciparum</i> histidine-rich protein II-mediated inflammation and coagulation. <i>Blood Advances</i> , 2022, 6, 931-945.	5.2	2
107	Role of Gly197 in the structure and function of protein C. <i>Biochimica Et Biophysica Acta - General Subjects</i> , 2021, 1865, 129892.	2.4	1
108	Proline at the P2 position in protein C is important for calcium-mediated regulation of protein C activation and secretion. <i>Blood</i> , 1994, 83, 2526-31.	1.4	1

#	ARTICLE	IF	CITATIONS
109	Characterization of Protein Z-Dependent Protease Inhibitor/Antithrombin Chimeras Provides Insight into the Serpin Specificity of Coagulation Proteases. ACS Omega, 2017, 2, 3276-3283.	3.5	0
110	Antithrombin Resistance Rescues Clotting Defect of Homozygous Prothrombin-Y510N Dysprothrombinemia. Thrombosis and Haemostasis, 2021, , .	3.4	0
111	Engineering a Disulfide Bond To Stabilize the Calcium Binding Loop of Activated Protein C Eliminates Its Anticoagulant but Not Protective Signaling Properties.. Blood, 2006, 108, 62-62.	1.4	0
112	Recombinant Activated Protein C Regulates Integrin $\alpha$ 6 $\beta$ 1-Mediated Neutrophil Migration. FASEB Journal, 2008, 22, 666.5.	0.5	0
113	Role of the Reactive Center Loop of Protein Z Dependent Protease Inhibitor in Determining Specificity of the Protease Reaction. FASEB Journal, 2010, 24, 837.7.	0.5	0