Christian J Kastrup

List of Publications by Year
in descending order

48 papers	1,926 citations	331670 21 h-index	254184 43 g-index
50 all docs	50 docs citations	50 times ranked	3000 citing authors

#	Article	IF	Citations
1	Aortic intimal resident macrophages are essential for maintenance of the non-thrombogenic intravascular state. , 2022, 1, 67-84.		17
2	Percutaneous delivery of self-propelling hemostatic powder for managing non-compressible abdominal hemorrhage: a proof-of-concept study in swine. Injury, 2022, 53, 1603-1609.	1.7	7
3	Suppression of fibrin(ogen)-driven pathologies in diseaseÂmodels through controlled knockdown byÂlipidÂnanoparticle delivery of siRNA. Blood, 2022, 139, 1302-1311.	1.4	9
4	Comparison of DLin-MC3-DMA and ALC-0315 for siRNA Delivery to Hepatocytes and Hepatic Stellate Cells. Molecular Pharmaceutics, 2022, 19, 2175-2182.	4.6	24
5	Nanomedicines for hemorrhage control. Journal of Thrombosis and Haemostasis, 2021, 19, 887-891.	3.8	4
6	Severe upper gastrointestinal bleeding is halted by endoscopically delivered self-propelling thrombin powder: A porcine pilot study. Endoscopy International Open, 2021, 09, E693-E698.	1.8	9
7	Emerging gene therapies for enhancing the hemostatic potential of platelets. Transfusion, 2021, 61, S275-S285.	1.6	1
8	Fracture mechanics of blood clots: Measurements of toughness and critical length scales. Extreme Mechanics Letters, 2021, 48, 101444.	4.1	16
9	Fibrin is a critical regulator of neutrophil effector function at the oral mucosal barrier. Science, 2021, 374, eabl5450.	12.6	75
10	Bleeding is increased in amyloid precursor protein knockout mouse. Research and Practice in Thrombosis and Haemostasis, 2020, 4, 823-828.	2.3	4
11	Post-Translational Modifications of Platelet-Derived Amyloid Precursor Protein by Coagulation Factor XIII-A*. Biochemistry, 2020, 59, 4449-4455.	2.5	3
12	The adhesion of clots in wounds contributes to hemostasis and can be enhanced by coagulation factor XIII. Scientific Reports, 2020, 10, 20116.	3.3	10
13	Diatom Frustule Silica Exhibits Superhydrophilicity and Superhemophilicity. ACS Nano, 2020, 14, 4755-4766.	14.6	52
14	Coagulation factor XII contributes to hemostasis when activated by soil in wounds. Blood Advances, 2020, 4, 1737-1745.	5.2	21
15	Sustained depletion of FXIII-A by inducing acquired FXIII-B deficiency. Blood, 2020, 136, 2946-2954.	1.4	17
16	The evolution of factor XI and the kallikrein-kinin system. Blood Advances, 2020, 4, 6135-6147.	5.2	31
17	Topical tranexamic acid inhibits fibrinolysis more effectively when formulated with selfâ€propelling particles. Journal of Thrombosis and Haemostasis, 2019, 17, 1645-1654.	3.8	9
18	Coagulation factor XIII-A and activated FXIII-A decrease in some deep vein thrombosis patients following catheter-directed thrombolysis. Blood Coagulation and Fibrinolysis, 2019, 30, 176-180.	1.0	0

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19	Coagulation factor XIIIa cross-links amyloid Î² into dimers and oligomers and to blood proteins. Journal of Biological Chemistry, 2019, 294, 390-396.	3.4	20
20	Platelets loaded with liposomeâ€encapsulated thrombin have increased coagulability. Journal of Thrombosis and Haemostasis, 2018, 16, 1226-1235.	3.8	15
21	Rapid hemostasis in a sheep model using particles that propel thrombin and tranexamic acid. Laryngoscope, 2017, 127, 787-793.	2.0	16
22	Localization of Short-Chain Polyphosphate Enhances its Ability to Clot Flowing Blood Plasma. Scientific Reports, 2017, 7, 42119.	3.3	12
23	Conceptual and Experimental Tools to Understand Spatial Effects and Transport Phenomena in Nonlinear Biochemical Networks Illustrated with Patchy Switching. Annual Review of Biochemistry, 2017, 86, 333-356.	11.1	9
24	Self-Propelled Dressings Containing Thrombin and Tranexamic Acid Improve Short-Term Survival in a Swine Model of Lethal Junctional Hemorrhage. Shock, 2016, 46, 123-128.	2.1	23
25	Halting hemorrhage with self-propelling particles and local drug delivery. Thrombosis Research, 2016, 141, S36-S39.	1.7	24
26	Adhesion of Blood Clots Can Be Enhanced When Copolymerized with a Macromer That Is Crosslinked by Coagulation Factor XIIIa. Biomacromolecules, 2016, 17, 2248-2252.	5.4	11
27	Coagulation factor XIIIa is inactivated by plasmin. Blood, 2015, 126, 2329-2337.	1.4	34
28	A biochemical network can control formation of a synthetic material by sensing numerous specific stimuli. Scientific Reports, 2015, 5, 10274.	3.3	9
29	Controlled Transcription of Exogenous mRNA in Platelets Using Protocells. Angewandte Chemie - International Edition, 2015, 54, 13590-13593.	13.8	15
30	Self-propelled particles that transport cargo through flowing blood and halt hemorrhage. Science Advances, 2015, 1, e1500379.	10.3	159
31	Defects in Phosphate Acquisition and Storage Influence Virulence of Cryptococcus neoformans. Infection and Immunity, 2014, 82, 2697-2712.	2.2	52
32	Painting blood vessels and atherosclerotic plaques with an adhesive drug depot. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 21444-21449.	7.1	117
33	Rapid Discovery of Potent siRNA-Containing Lipid Nanoparticles Enabled by Controlled Microfluidic Formulation. Journal of the American Chemical Society, 2012, 134, 6948-6951.	13.7	288
34	Remotely Activated Protein-Producing Nanoparticles. Nano Letters, 2012, 12, 2685-2689.	9.1	100
35	Stem cell membrane engineering for cell rolling using peptide conjugation and tuning of cellâ€“selectin interaction kinetics. Biomaterials, 2012, 33, 5004-5012.	11.4	85
36	Nanoparticulate Cellular Patches for Cell-Mediated Tumoritropic Delivery. ACS Nano, 2010, 4, 625-631.	14.6	133

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37	Confinement Regulates Complex Biochemical Networks: Initiation of Blood Clotting by â€œDiffusion Actingâ€• Biophysical Journal, 2009, 97, 2137-2145.	0.5	19
38	Spatial localization of bacteria controls coagulation of human blood by 'quorum acting'. Nature Chemical Biology, 2008, 4, 742-750.	8.0	95
39	Using Chemistry and Microfluidics To Understand the Spatial Dynamics of Complex Biological Networks. Accounts of Chemical Research, 2008, 41, 549-558.	15.6	23
40	Effects of Shear Rate on Propagation of Blood Clotting Determined Using Microfluidics and Numerical Simulations. Journal of the American Chemical Society, 2008, 130, 3458-3464.	13.7	60
41	Threshold Response of Initiation of Blood Coagulation by Tissue Factor in Patterned Microfluidic Capillaries Is Controlled by Shear Rate. Arteriosclerosis, Thrombosis, and Vascular Biology, 2008, 28, 2035-2041.	2.4	109
42	Propagation of Blood Clotting in the Complex Biochemical Network of Hemostasis Is Described by a Simple Mechanism. Journal of the American Chemical Society, 2007, 129, 7014-7015.	13.7	41
43	Characterization of the Threshold Response of Initiation of Blood Clotting to Stimulus Patch Size. Biophysical Journal, 2007, 93, 2969-2977.	0.5	45
44	Response to Shape Emerges in a Complex Biochemical Network and Its Simple Chemical Analogue. Angewandte Chemie - International Edition, 2007, 46, 3660-3662.	13.8	18
45	A physical organic mechanistic approach to understanding the complex reaction network of hemostasis (blood clotting). Journal of Physical Organic Chemistry, 2007, 20, 711-715.	1.9	6
46	Understanding complex reaction networks in space and time using microfluidics. FASEB Journal, 2007, 21, A42.	0.5	1
47	Microfluidic Tools To Probe the Spatial Dynamics of Coagulation.. Blood, 2007, 110, 3934-3934.	1.4	0
48	Modular chemical mechanism predicts spatiotemporal dynamics of initiation in the complex network of hemostasis. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 15747-15752.	7.1	75