Vladimir R Muzykantov

List of Publications by Year
in descending order

201	13,338	16451 64	28297 105
papers	citations	h-index	g-index

205	205	205	12915
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Multifunctional Nanoparticles: Cost Versus Benefit of Adding Targeting and Imaging Capabilities. Science, 2012, 338, 903-910.	12.6	1,166
2	Control of Endothelial Targeting and Intracellular Delivery of Therapeutic Enzymes by Modulating the Size and Shape of ICAM-1-targeted Carriers. Molecular Therapy, 2008, 16, 1450-1458.	8.2	506
3	Targeting vascular (endothelial) dysfunction. British Journal of Pharmacology, 2017, 174, 1591-1619.	5.4	355
4	Drug delivery by red blood cells: vascular carriers designed by mother nature. Expert Opinion on Drug Delivery, 2010, 7, 403-427.	5.0	323
5	A novel endocytic pathway induced by clustering endothelial ICAM-1 or PECAM-1. Journal of Cell Science, 2003, 116, 1599-1609.	2.0	278
6	Delivering Nanoparticles to Lungs while Avoiding Liver and Spleen through Adsorption on Red Blood Cells. ACS Nano, 2013, 7, 11129-11137.	14.6	276
7	Red blood cells: Supercarriers for drugs, biologicals, and nanoparticles and inspiration for advanced delivery systems. Advanced Drug Delivery Reviews, 2016, 106, 88-103.	13.7	273
8	Red blood cell-hitchhiking boosts delivery of nanocarriers to chosen organs by orders of magnitude. Nature Communications, 2018, 9, 2684.	12.8	247
9	The shape of things to come: importance of design in nanotechnology for drug delivery. Therapeutic Delivery, 2012, 3, 181-194.	2.2	209
10	Endothelial Targeting of High-Affinity Multivalent Polymer Nanocarriers Directed to Intercellular Adhesion Molecule 1. Journal of Pharmacology and Experimental Therapeutics, 2006, 317, 1161-1169.	2.5	176
11	Polymeric carriers: role of geometry in drug delivery. Expert Opinion on Drug Delivery, 2008, 5, 1283-1300.	5.0	175
12	Prophylactic fibrinolysis through selective dissolution of nascent clots by tPA-carrying erythrocytes. Nature Biotechnology, 2003, 21, 891-896.	17.5	168
13	Targeting of superoxide dismutase and catalase to vascular endothelium. Journal of Controlled Release, 2001, 71, 1-21.	9.9	162
14	Vascular Targeting of Nanocarriers: Perplexing Aspects of the Seemingly Straightforward Paradigm. ACS Nano, 2014, 8, 4100-4132.	14.6	154
15	Microphysiological Engineering of Self-Assembled and Perfusable Microvascular Beds for the Production of Vascularized Three-Dimensional Human Microtissues. ACS Nano, 2019, 13, 7627-7643.	14.6	148
16	Advanced Drug Delivery Systems That Target The Vascular Endothelium. Molecular Interventions: Pharmacological Perspectives From Biology, Chemistry and Genomics, 2006, 6, 98-112.	3.4	147
17	Slow intracellular trafficking of catalase nanoparticles targeted to ICAM-1 protects endothelial cells from oxidative stress. American Journal of Physiology - Cell Physiology, 2003, 285, C1339-C1347.	4.6	142
18	Immunotargeting of catalase to the pulmonary endothelium alleviates oxidative stress and reduces acute lung transplantation injury. Nature Biotechnology, 2003, 21, 392-398.	17.5	139

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19	ICAM-1 recycling in endothelial cells: a novel pathway for sustained intracellular delivery and prolonged effects of drugs. Blood, 2005, 105, 650-658.	1.4	134
20	In Vivo Imaging of⁶⁴Cu-Labeled Polymer Nanoparticles Targeted to the Lung Endothelium. Journal of Nuclear Medicine, 2008, 49, 103-111.	5.0	120
21	Lung uptake of antibodies to endothelial antigens: key determinants of vascular immunotargeting. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2001, 280, L1335-L1347.	2.9	116
22	Computational model for nanocarrier binding to endothelium validated using in vivo, in vitro, and atomic force microscopy experiments. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 16530-16535.	7.1	116
23	Lysosomal enzyme delivery by ICAM-1-targeted nanocarriers bypassing glycosylation- and clathrin-dependent endocytosis. Molecular Therapy, 2006, 13, 135-141.	8.2	113
24	Antioxidant Strategies in Respiratory Medicine. Treatments in Respiratory Medicine, 2006, 5, 47-78.	1.4	109
25	ICAM-directed vascular immunotargeting of antithrombotic agents to the endothelial luminal surface. Blood, 2003, 101, 3977-3984.	1.4	107
26	PECAM-1 directed re-targeting of exogenous mRNA providing two orders of magnitude enhancement of vascular delivery and expression in lungs independent of apolipoprotein E-mediated uptake. Journal of Controlled Release, 2018, 291, 106-115.	9.9	106
27	Endothelial targeting of semi-permeable polymer nanocarriers for enzyme therapies. Biomaterials, 2008, 29, 215-227.	11.4	105
28	Endothelial delivery of antioxidant enzymes loaded into non-polymeric magnetic nanoparticles. Journal of Controlled Release, 2010, 146, 144-151.	9.9	104
29	Endothelial Endocytic Pathways: Gates for Vascular Drug Delivery. Current Vascular Pharmacology, 2004, 2, 281-299.	1.7	104
30	Endothelial Targeting of Antibody-Decorated Polymeric Filomicelles. ACS Nano, 2011, 5, 6991-6999.	14.6	102
31	Targeted delivery of therapeutics to endothelium. Cell and Tissue Research, 2009, 335, 283-300.	2.9	100
32	Size-dependent intracellular immunotargeting of therapeutic cargoes into endothelial cells. Blood, 2002, 99, 912-922.	1.4	99
33	Polymer nanocarriers protecting active enzyme cargo against proteolysis. Journal of Controlled Release, 2005, 102, 427-439.	9.9	99
34	Acute and Chronic Shear Stress Differently Regulate Endothelial Internalization of Nanocarriers Targeted to Platelet-Endothelial Cell Adhesion Molecule-1. ACS Nano, 2012, 6, 8824-8836.	14.6	98
35	Delivery of Acid Sphingomyelinase in Normal and Niemann-Pick Disease Mice Using Intercellular Adhesion Molecule-1-Targeted Polymer Nanocarriers. Journal of Pharmacology and Experimental Therapeutics, 2008, 325, 400-408.	2.5	97
36	Selective targeting of nanomedicine to inflamed cerebral vasculature to enhance the bloodâ€“brain barrier. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 3405-3414.	7.1	97

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37	Reduction of Nanoparticle Avidity Enhances the Selectivity of Vascular Targeting and PET Detection of Pulmonary Inflammation. ACS Nano, 2013, 7, 2461-2469.	14.6	94
38	Pharmacokinetic and Pharmacodynamic Properties of Drug Delivery Systems. Journal of Pharmacology and Experimental Therapeutics, 2019, 370, 570-580.	2.5	94
39	Ferritin-based drug delivery systems: Hybrid nanocarriers for vascular immunotargeting. Journal of Controlled Release, 2018, 282, 13-24.	9.9	92
40	Effect of flow on endothelial endocytosis of nanocarriers targeted to ICAM-1. Journal of Controlled Release, 2012, 157, 485-492.	9.9	91
41	Delivery of drugs bound to erythrocytes: new avenues for an old intravascular carrier. Therapeutic Delivery, 2015, 6, 795-826.	2.2	91
42	Nanocarriers for vascular delivery of antioxidants. Nanomedicine, 2011, 6, 1257-1272.	3.3	90
43	The Effect of Polymeric Nanoparticles on Biocompatibility of Carrier Red Blood Cells. PLoS ONE, 2016, 11, e0152074.	2.5	90
44	PECAMâ€targeted delivery of SOD inhibits endothelial inflammatory response. FASEB Journal, 2011, 25, 348-357.	0.5	89
45	Highly efficient CD4+ TÂcell targeting and genetic recombination using engineered CD4+ cell-homing mRNA-LNPs. Molecular Therapy, 2021, 29, 3293-3304.	8.2	88
46	Endothelial targeting of liposomes encapsulating SOD/catalase mimetic EUK-134 alleviates acute pulmonary inflammation. Journal of Controlled Release, 2014, 177, 34-41.	9.9	86
47	Nanocarriers for Vascular Delivery of Anti-Inflammatory Agents. Annual Review of Pharmacology and Toxicology, 2014, 54, 205-226.	9.4	85
48	Nanoparticle Properties Modulate Their Attachment and Effect on Carrier Red Blood Cells. Scientific Reports, 2018, 8, 1615.	3.3	83
49	PECAM-directed delivery of catalase to endothelium protects against pulmonary vascular oxidative stress. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2003, 285, L283-L292.	2.9	81
50	Biomedical aspects of targeted delivery of drugs to pulmonary endothelium. Expert Opinion on Drug Delivery, 2005, 2, 909-926.	5.0	81
51	Endothelial targeting of nanocarriers loaded with antioxidant enzymes for protection against vascular oxidative stress and inflammation. Biomaterials, 2014, 35, 3708-3715.	11.4	80
52	Cerebrovascular Thromboprophylaxis in Mice by Erythrocyte-Coupled Tissue-Type Plasminogen Activator. Circulation, 2008, 118, 1442-1449.	1.6	77
53	Exploiting shape, cellular-hitchhiking and antibodies to target nanoparticles to lung endothelium: Synergy between physical, chemical and biological approaches. Biomaterials, 2015, 68, 1-8.	11.4	76
54	Endothelial targeting of polymeric nanoparticles stably labeled with the PET imaging radioisotope iodine-124. Biomaterials, 2012, 33, 5406-5413.	11.4	75

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55	Optimizing endothelial targeting by modulating the antibody density and particle concentration of anti-ICAM coated carriers. Journal of Controlled Release, 2011, 150, 37-44.	9.9	73
56	Flexible Nanoparticles Reach Sterically Obscured Endothelial Targets Inaccessible to Rigid Nanoparticles. Advanced Materials, 2018, 30, e1802373.	21.0	73
57	Blood Clearance and Activity of Erythrocyte-Coupled Fibrinolytics. Journal of Pharmacology and Experimental Therapeutics, 2005, 312, 1106-1113.	2.5	71
58	Differential intra-endothelial delivery of polymer nanocarriers targeted to distinct PECAM-1 epitopes. Journal of Controlled Release, 2008, 130, 226-233.	9.9	71
59	Antioxidant protection by PECAM-targeted delivery of a novel NADPH-oxidase inhibitor to the endothelium in vitro and in vivo. Journal of Controlled Release, 2012, 163, 161-169.	9.9	71
60	Targeted Detoxification of Selected Reactive Oxygen Species in the Vascular Endothelium. Journal of Pharmacology and Experimental Therapeutics, 2009, 331, 404-411.	2.5	70
61	Erythrocyte-driven immunization via biomimicry of their natural antigen-presenting function. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 17727-17736.	7.1	70
62	ICAM-1 Targeted Nanogels Loaded with Dexamethasone Alleviate Pulmonary Inflammation. PLoS ONE, 2014, 9, e102329.	2.5	68
63	Targeted nanocarriers for imaging and therapy of vascular inflammation. Current Opinion in Colloid and Interface Science, 2011, 16, 215-227.	7.4	67
64	Erythrocytes as Carriers for Drug Delivery in Blood Transfusion and Beyond. Transfusion Medicine Reviews, 2017, 31, 26-35.	2.0	67
65	Endothelial targeting of a recombinant construct fusing a PECAM-1 single-chain variable antibody fragment (scFv) with prourokinase facilitates prophylactic thrombolysis in the pulmonary vasculature. Blood, 2005, 106, 4191-4198.	1.4	66
66	Control of intracellular trafficking of ICAM-1-targeted nanocarriers by endothelial Na+/H+ exchanger proteins. American Journal of Physiology - Lung Cellular and Molecular Physiology, 2006, 290, L809-L817.	2.9	66
67	Catalase and Superoxide Dismutase Conjugated with Platelet-Endothelial Cell Adhesion Molecule Antibody Distinctly Alleviate Abnormal Endothelial Permeability Caused by Exogenous Reactive Oxygen Species and Vascular Endothelial Growth Factor. Journal of Pharmacology and Experimental Therapeutics, 2011, 338, 82-91.	2.5	66
68	Vascular Drug Delivery Using Carrier Red Blood Cells: Focus on RBC Surface Loading and Pharmacokinetics. Pharmaceutics, 2020, 12, 440.	4.5	66
69	Oxidative burst and NO generation as initial response to ischemia in flow-adapted endothelial cells. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H2126-H2135.	3.2	65
70	Microthrombosis after experimental subarachnoid hemorrhage: Time course and effect of red blood cell-bound thrombin-activated pro-urokinase and clazosentan. Experimental Neurology, 2012, 233, 357-363.	4.1	65
71	Non-affinity factors modulating vascular targeting of nano- and microcarriers. Advanced Drug Delivery Reviews, 2016, 99, 97-112.	13.7	65
72	Red Blood Cell Hitchhiking: A Novel Approach for Vascular Delivery of Nanocarriers. Annual Review of Biomedical Engineering, 2021, 23, 225-248.	12.3	62

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73	Platelet-Endothelial Cell Adhesion Molecule-1-Directed Immunotargeting to Cardiopulmonary Vasculature. Journal of Pharmacology and Experimental Therapeutics, 2002, 300, 777-786.	2.5	61
74	Targeting drug delivery in the vascular system: Focus on endothelium. Advanced Drug Delivery Reviews, 2020, 157, 96-117.	13.7	61
75	Human complement receptor type 1â€“directed loading of tissue plasminogen activator on circulating erythrocytes for prophylactic fibrinolysis. Blood, 2006, 108, 1895-1902.	1.4	60
76	Flow dynamics, binding and detachment of spherical carriers targeted to ICAM-1 on endothelial cells. Biorheology, 2009, 46, 323-341.	0.4	59
77	Cellâ€selective intracellular delivery of a foreign enzyme to endothelium in vivo using vascular immunotargeting. FASEB Journal, 2001, 15, 416-426.	0.5	57
78	Systemic tumour suppression via the preferential accumulation of erythrocyte-anchored chemokine-encapsulating nanoparticles in lung metastases. Nature Biomedical Engineering, 2021, 5, 441-454.	22.5	57
79	Supramolecular arrangement of protein in nanoparticle structures predicts nanoparticle tropism for neutrophils in acute lung inflammation. Nature Nanotechnology, 2022, 17, 86-97.	31.5	57
80	Immunotargeting of catalase to ACE or ICAM-1 protects perfused rat lungs against oxidative stress. American Journal of Physiology - Lung Cellular and Molecular Physiology, 1998, 275, L806-L817.	2.9	56
81	Delivery of Antioxidant Enzyme Proteins to the Lung. Antioxidants and Redox Signaling, 2001, 3, 39-62.	5.4	56
82	Acute administration of catalase targeted to ICAM-1 attenuates neuropathology in experimental traumatic brain injury. Scientific Reports, 2017, 7, 3846.	3.3	56
83	Regulation of the Complement-Mediated Elimination of Red Blood Cells Modified with Biotin and Streptavidin. Analytical Biochemistry, 1996, 241, 109-119.	2.4	55
84	Vascular Immunotargeting of Glucose Oxidase to the Endothelial Antigens Induces Distinct Forms of Oxidant Acute Lung Injury. American Journal of Pathology, 2002, 160, 1155-1169.	3.8	55
85	Anchoring Fusion Thrombomodulin to the Endothelial Lumen Protects against Injury-induced Lung Thrombosis and Inflammation. American Journal of Respiratory and Critical Care Medicine, 2009, 180, 247-256.	5.6	55
86	Effect of Polymer Amphiphilicity on Loading of a Therapeutic Enzyme into Protective Filamentous and Spherical Polymer Nanocarriers. Biomacromolecules, 2007, 8, 3914-3921.	5.4	54
87	Soluble urokinase receptor conjugated to carrier red blood cells binds latent pro-urokinase and alters its functional profile. Journal of Controlled Release, 2009, 139, 190-196.	9.9	52
88	Platelet-Endothelial Cell Adhesion Molecule-1-Directed Endothelial Targeting of Superoxide Dismutase Alleviates Oxidative Stress Caused by Either Extracellular or Intracellular Superoxide. Journal of Pharmacology and Experimental Therapeutics, 2007, 323, 450-457.	2.5	51
89	Modulation of endothelial targeting by size of antibodyâ€“antioxidant enzyme conjugates. Journal of Controlled Release, 2011, 149, 236-241.	9.9	51
90	Up-regulation of NADPH oxidase-mediated redox signaling contributes to the loss of barrier function in KRIT1 deficient endothelium. Scientific Reports, 2017, 7, 8296.	3.3	51

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91	Unintended effects of drug carriers: Big issues of small particles. Advanced Drug Delivery Reviews, 2018, 130, 90-112.	13.7	51
92	Targeted modulation of reactive oxygen species in the vascular endothelium. Journal of Controlled Release, 2011, 153, 56-63.	9.9	50
93	Anti-Inflammatory Effect of Targeted Delivery of SOD to Endothelium: Mechanism, Synergism with NO Donors and Protective Effects In Vitro and In Vivo. PLoS ONE, 2013, 8, e77002.	2.5	50
94	Flow shear stress differentially regulates endothelial uptake of nanocarriers targeted to distinct epitopes of PECAM-1. Journal of Controlled Release, 2015, 210, 39-47.	9.9	49
95	Targeting therapeutics to endothelium: are we there yet?. Drug Delivery and Translational Research, 2018, 8, 883-902.	5.8	49
96	Spatially controlled assembly of affinity ligand and enzyme cargo enables targeting ferritin nanocarriers to caveolae. Biomaterials, 2018, 185, 348-359.	11.4	49
97	Added to pre-existing inflammation, mRNA-lipid nanoparticles induce inflammation exacerbation (IE). Journal of Controlled Release, 2022, 344, 50-61.	9.9	49
98	Vascular Immunotargeting to Endothelial Determinant ICAM-1 Enables Optimal Partnering of Recombinant scFv-Thrombomodulin Fusion with Endogenous Cofactor. PLoS ONE, 2013, 8, e80110.	2.5	48
99	Immunotargeting of erythrocytes-bound streptokinase provides local lysis of a fibrin clot. Biochimica Et Biophysica Acta - General Subjects, 1986, 884, 355-362.	2.4	47
100	Targeting superoxide dismutase to endothelial caveolae profoundly alleviates inflammation caused by endotoxin. Journal of Controlled Release, 2018, 272, 1-8.	9.9	47
101	Prophylactic thrombolysis by thrombin-activated latent prourokinase targeted to PECAM-1 in the pulmonary vasculature. Blood, 2008, 111, 1999-2006.	1.4	46
102	Delivery of Anti-Platelet-Endothelial Cell Adhesion Molecule Single-Chain Variable Fragment-Urokinase Fusion Protein to the Cerebral Vasculature Lyses Arterial Clots and Attenuates Postischemic Brain Edema. Journal of Pharmacology and Experimental Therapeutics, 2007, 321, 947-952.	2.5	45
103	The Glycocalyx Protects Erythrocyte-Bound Tissue-Type Plasminogen Activator from Enzymatic Inhibition. Journal of Pharmacology and Experimental Therapeutics, 2007, 321, 158-164.	2.5	44
104	Red blood cells: The metamorphosis of a neglected carrier into the natural mothership for artificial nanocarriers. Advanced Drug Delivery Reviews, 2021, 178, 113992.	13.7	43
105	Biocompatible coupling of therapeutic fusion proteins to human erythrocytes. Blood Advances, 2018, 2, 165-176.	5.2	42
106	Size and targeting to PECAM vs ICAM control endothelial delivery, internalization and protective effect of multimolecular SOD conjugates. Journal of Controlled Release, 2016, 234, 115-123.	9.9	41
107	Superoxide Dismutaseâ€Loaded Porous Polymersomes as Highly Efficient Antioxidants for Treating Neuropathic Pain. Advanced Healthcare Materials, 2017, 6, 1700500.	7.6	41
108	Filamentous Polymer Nanocarriers of Tunable Stiffness that Encapsulate the Therapeutic Enzyme Catalase. Biomacromolecules, 2009, 10, 1324-1330.	5.4	39

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109	Targeted endothelial nanomedicine for common acute pathological conditions. Journal of Controlled Release, 2015, 219, 576-595.	9.9	39
110	Modulation of angiotensin-converting enzyme in cultured human vascular endothelial cells. In Vitro Cellular and Developmental Biology - Animal, 1998, 34, 545-554.	1.5	38
111	Vascular Targeting of Radiolabeled Liposomes with Bio-Orthogonally Conjugated Ligands: Single Chain Fragments Provide Higher Specificity than Antibodies. Bioconjugate Chemistry, 2018, 29, 3626-3637.	3.6	38
112	Pecam-directed immunotargeting of catalase: specific, rapid and transient protection against hydrogen peroxide. Free Radical Biology and Medicine, 2003, 34, 1035-1046.	2.9	37
113	Erythrocyte-Bound Tissue Plasminogen Activator is Neuroprotective in Experimental Traumatic Brain Injury. Journal of Neurotrauma, 2009, 26, 1585-1592.	3.4	37
114	Targeted interception of signaling reactive oxygen species in the vascular endothelium. Therapeutic Delivery, 2012, 3, 263-276.	2.2	37
115	Drug delivery by erythrocytes: â€œPrimum non nocereâ€. Transfusion and Apheresis Science, 2016, 55, 275-280.	1.0	37
116	Red Blood Cells-Coupled tPA Prevents Impairment of Cerebral Vasodilatory Responses and Tissue Injury in Pediatric Cerebral Hypoxia/Ischemia through Inhibition of ERK MAPK Activation. Journal of Cerebral Blood Flow and Metabolism, 2009, 29, 1463-1474.	4.3	36
117	Biomimetic channel modeling local vascular dynamics of pro-inflammatory endothelial changes. Biomicrofluidics, 2016, 10, 014101.	2.4	36
118	Combining vascular targeting and the local first pass provides 100-fold higher uptake of ICAM-1-targeted vs untargeted nanocarriers in the inflamed brain. Journal of Controlled Release, 2019, 301, 54-61.	9.9	36
119	Loading PEG-Catalase into Filamentous and Spherical Polymer Nanocarriers. Pharmaceutical Research, 2009, 26, 250-260.	3.5	35
120	Drug delivery carriers on the fringes: natural red blood cells versus synthetic multilayered capsules. Expert Opinion on Drug Delivery, 2013, 10, 1-4.	5.0	35
121	Streptavidinâ€"Biotin Crosslinking of Therapeutic Enzymes With Carrier Antibodies: Nanoconjugates for Protection Against Endothelial Oxidative Stress. , 2004, 283, 003-020.		34
122	Mechanisms that determine nanocarrier targeting to healthy versus inflamed lung regions. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 1495-1506.	3.3	34
123	Targeted Drug Delivery to Endothelial Adhesion Molecules. ISRN Vascular Medicine, 2013, 2013, 1-27.	0.7	33
124	Flow-dependent channel formation in clots by an erythrocyte-bound fibrinolytic agent. Blood, 2011, 117, 4964-4967.	1.4	32
125	Molecular engineering of antibodies for site-specific covalent conjugation using CRISPR/Cas9. Scientific Reports, 2018, 8, 1760.	3.3	32
126	Ferritin Nanocages with Biologically Orthogonal Conjugation for Vascular Targeting and Imaging. Bioconjugate Chemistry, 2018, 29, 1209-1218.	3.6	32

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127	In SituImaging of Intracellular Calcium with Ischemia in Lung Subpleural Microvascular Endothelial Cells. Antioxidants and Redox Signaling, 1999, 1, 145-154.	5.4	31
128	Factors modulating the delivery and effect of enzymatic cargo conjugated with antibodies targeted to the pulmonary endothelium. Journal of Controlled Release, 2007, 118, 235-244.	9.9	31
129	Long-circulating Janus nanoparticles made by electrohydrodynamic co-jetting for systemic drug delivery applications. Journal of Drug Targeting, 2015, 23, 750-758.	4.4	31
130	Collaborative Enhancement of Antibody Binding to Distinct PECAM-1 Epitopes Modulates Endothelial Targeting. PLoS ONE, 2012, 7, e34958.	2.5	30
131	Avidin attachment to red blood cells via a phoshpolipid derivative of biotin provides complement-resistant immunoerythrocytes. Journal of Immunological Methods, 1993, 158, 183-190.	1.4	29
132	Targeted Endothelial Delivery of Nanosized Catalase Immunoconjugates Protects Lung Grafts Donated After Cardiac Death. Transplantation, 2011, 92, 380-387.	1.0	29
133	Molecular engineering of high affinity single-chain antibody fragment for endothelial targeting of proteins and nanocarriers in rodents and humans. Journal of Controlled Release, 2016, 226, 229-237.	9.9	29
134	Development of 124I Immuno-PET Targeting Tumor Vascular TEM1/Endosialin. Journal of Nuclear Medicine, 2014, 55, 500-507.	5.0	28
135	Vascular Accessibility of Endothelial Targeted Ferritin Nanoparticles. Bioconjugate Chemistry, 2016, 27, 628-637.	3.6	28
136	Dynamic Factors Controlling Targeting Nanocarriers to Vascular Endothelium. Current Drug Metabolism, 2012, 13, 70-81.	1.2	27
137	Targeting thrombomodulin to circulating red blood cells augments its protective effects in models of endotoxemia and ischemiaâ€reperfusion injury. FASEB Journal, 2017, 31, 761-770.	0.5	27
138	Endothelial Targeted Strategies to Combat Oxidative Stress: Improving Outcomes in Traumatic Brain Injury. Frontiers in Neurology, 2019, 10, 582.	2.4	27
139	Nanocarrier Hydrodynamics and Binding in Targeted Drug Delivery: Challenges in Numerical Modeling and Experimental Validation. Journal of Nanotechnology in Engineering and Medicine, 2013, 4, 101011-1010115.	0.8	26
140	Biophysically inspired model for functionalized nanocarrier adhesion to cell surface: roles of protein expression and mechanical factors. Royal Society Open Science, 2016, 3, 160260.	2.4	26
141	ICAM-1â€“targeted thrombomodulin mitigates tissue factorâ€“driven inflammatory thrombosis in a human endothelialized microfluidic model. Blood Advances, 2017, 1, 1452-1465.	5.2	26
142	Site-Specific Modification of Single-Chain Antibody Fragments for Bioconjugation and Vascular Immunotargeting. Bioconjugate Chemistry, 2018, 29, 56-66.	3.6	26
143	Immunotargeting of drugs to the pulmonary vascular endothelium as a therapeutic strategy. Pathophysiology, 1998, 5, 15-33.	2.2	25
144	Characterization of Endothelial Internalization and Targeting of Antibodyâ€“Enzyme Conjugates in Cell Cultures and in Laboratory Animals. , 2004, 283, 021-036.		25

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145	Dual targeting of therapeutics to endothelial cells: collaborative enhancement of delivery and effect. FASEB Journal, 2015, 29, 3483-3492.	0.5	25
146	Erythrocytes as carriers of immunoglobulin-based therapeutics. Acta Biomaterialia, 2020, 101, 422-435.	8.3	25
147	Cross-linker-Modulated Nanogel Flexibility Correlates with Tunable Targeting to a Sterically Impeded Endothelial Marker. ACS Nano, 2019, 13, 11409-11421.	14.6	24
148	Dual Affinity to RBCs and Target Cells (DART) Enhances Both Organ- and Cell Type-Targeting of Intravascular Nanocarriers. ACS Nano, 2022, 16, 4666-4683.	14.6	24
149	Targeting to Endothelial Cells Augments the Protective Effect of Novel Dual Bioactive Antioxidant/Anti-Inflammatory Nanoparticles. Molecular Pharmaceutics, 2014, 11, 2262-2270.	4.6	23
150	Streptavidin-induced lysis of homologous biotinylated erythrocytes Evidence against the key role of the avidin charge in complement activation via the alternative pathway. FEBS Letters, 1991, 280, 112-114.	2.8	22
151	Collaborative Enhancement of Endothelial Targeting of Nanocarriers by Modulating Platelet-Endothelial Cell Adhesion Molecule-1/CD31 Epitope Engagement. ACS Nano, 2015, 9, 6785-6793.	14.6	22
152	Pathologically stiff erythrocytes impede contraction of blood clots. Journal of Thrombosis and Haemostasis, 2021, 19, 1990-2001.	3.8	22
153	Avidin attachment to biotinylated amino groups of the erythrocyte membrane eliminates homologous restriction of both classical and alternative pathways of the complement. FEBS Letters, 1993, 318, 108-112.	2.8	20
154	Targeting Antioxidant and Antithrombotic Biotherapeutics to Endothelium. Seminars in Thrombosis and Hemostasis, 2010, 36, 332-342.	2.7	20
155	Red blood cell-coupled tissue plasminogen activator prevents impairment of cerebral vasodilatory responses through inhibition of c-Jun-N-terminal kinase and potentiation of p38 mitogen-activated protein kinase after cerebral photothrombosis in the newborn pig. Pediatric Critical Care Medicine, 2011, 12, e369-e375.	0.5	20
156	Antibody-based tumor vascular theranostics targeting endosialin/TEM1 in a new mouse tumor vascular model. Cancer Biology and Therapy, 2014, 15, 443-451.	3.4	20
157	Molecularly Engineered Nanobodies for Tunable Pharmacokinetics and Drug Delivery. Bioconjugate Chemistry, 2020, 31, 1144-1155.	3.6	20
158	Combating Complement's Deleterious Effects on Nanomedicine by Conjugating Complement Regulatory Proteins to Nanoparticles. Advanced Materials, 2022, 34, e2107070.	21.0	20
159	Avidin-induced lysis of biotinylated erythrocytes by homologous complement via the alternative pathway depends on avidin's ability of multipoint binding with biotinylated membrane. Biochimica Et Biophysica Acta - Biomembranes, 1992, 1107, 119-125.	2.6	19
160	Systemic administration of platelet-activating factor in rat reduces specific pulmonary uptake of circulating monoclonal antibody to angiotensin-converting enzyme. Lung, 1992, 170, 349-58.	3.3	19
161	Platelet Endothelial Cell Adhesion Molecule Targeted Oxidant-Resistant Mutant Thrombomodulin Fusion Protein with Enhanced Potency In Vitro and In Vivo. Journal of Pharmacology and Experimental Therapeutics, 2013, 347, 339-345.	2.5	19
162	Immunotargeting of glucose oxidase: intracellular production of H₂O₂and endothelial oxidative stress. American Journal of Physiology - Lung Cellular and Molecular Physiology, 1999, 277, L271-L281.	2.9	18

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163	Target-sensitive immunoerythrocytes: interaction of biotinylated red blood cells with immobilized avidin induces their lysis by complement. Biochimica Et Biophysica Acta - Biomembranes, 1996, 1279, 137-143.	2.6	17
164	Targeting vascular inflammation through emerging methods and drug carriers. Advanced Drug Delivery Reviews, 2022, 184, 114180.	13.7	17
165	Stiffness can mediate balance between hydrodynamic forces and avidity to impact the targeting of flexible polymeric nanoparticles in flow. Nanoscale, 2019, 11, 6916-6928.	5.6	15
166	Targeting delivery of drugs in the vascular system. International Journal of Transport Phenomena, 2011, 12, 41-49.	0.0	15
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