Silvia Muro

List of Publications by Year
in descending order

76	4,852	37	68
papers	citations	h-index	g-index
		94381	95218

81	81	81	5375
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	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.	3.7	506
2	A novel endocytic pathway induced by clustering endothelial ICAM-1 or PECAM-1. Journal of Cell Science, 2003, 116, 1599-1609.	1.2	278
3	Oxygen Microscopy by Twoâ€Photonâ€Excited Phosphorescence. ChemPhysChem, 2008, 9, 1673-1679.	1.0	238
4	Challenges in design and characterization of ligand-targeted drug delivery systems. Journal of Controlled Release, 2012, 164, 125-137.	4.8	227
5	Endothelial Targeting of High-Affinity Multivalent Polymer Nanocarriers Directed to Intercellular Adhesion Molecule 1. Journal of Pharmacology and Experimental Therapeutics, 2006, 317, 1161-1169.	1.3	176
6	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
7	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.	2.1	142
8	Immunotargeting of catalase to the pulmonary endothelium alleviates oxidative stress and reduces acute lung transplantation injury. Nature Biotechnology, 2003, 21, 392-398.	9.4	139
9	ICAM-1 recycling in endothelial cells: a novel pathway for sustained intracellular delivery and prolonged effects of drugs. Blood, 2005, 105, 650-658.	0.6	134
10	In Vivo Imaging of⁶⁴Cu-Labeled Polymer Nanoparticles Targeted to the Lung Endothelium. Journal of Nuclear Medicine, 2008, 49, 103-111.	2.8	120
11	Lysosomal enzyme delivery by ICAM-1-targeted nanocarriers bypassing glycosylation- and clathrin-dependent endocytosis. Molecular Therapy, 2006, 13, 135-141.	3.7	113
12	Open challenges in magnetic drug targeting. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2015, 7, 446-457.	3.3	113
13	ICAM-directed vascular immunotargeting of antithrombotic agents to the endothelial luminal surface. Blood, 2003, 101, 3977-3984.	0.6	107
14	Lysosomal enzyme replacement therapies: Historical development, clinical outcomes, and future perspectives. Advanced Drug Delivery Reviews, 2017, 118, 109-134.	6.6	107
15	Endothelial Endocytic Pathways: Gates for Vascular Drug Delivery. Current Vascular Pharmacology, 2004, 2, 281-299.	0.8	104
16	Endothelial Targeting of Antibody-Decorated Polymeric Filomicelles. ACS Nano, 2011, 5, 6991-6999.	7.3	102
17	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.	7.3	98
18	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.	1.3	97

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19	Chitosanâ€"Alginate Microcapsules Provide Gastric Protection and Intestinal Release of ICAMâ€1â€Targeting Nanocarriers, Enabling GI Targeting In Vivo. Advanced Functional Materials, 2016, 26, 3382-3393.	7.8	93
20	Effect of flow on endothelial endocytosis of nanocarriers targeted to ICAM-1. Journal of Controlled Release, 2012, 157, 485-492.	4.8	91
21	Enhanced endothelial delivery and biochemical effects of Î±-galactosidase by ICAM-1-targeted nanocarriers for Fabry disease. Journal of Controlled Release, 2011, 149, 323-331.	4.8	84
22	Endothelial targeting of polymeric nanoparticles stably labeled with the PET imaging radioisotope iodine-124. Biomaterials, 2012, 33, 5406-5413.	5.7	75
23	Optimizing endothelial targeting by modulating the antibody density and particle concentration of anti-ICAM coated carriers. Journal of Controlled Release, 2011, 150, 37-44.	4.8	73
24	Differential intra-endothelial delivery of polymer nanocarriers targeted to distinct PECAM-1 epitopes. Journal of Controlled Release, 2008, 130, 226-233.	4.8	71
25	New biotechnological and nanomedicine strategies for treatment of lysosomal storage disorders. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2010, 2, 189-204.	3.3	69
26	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.	1.3	66
27	Enhanced delivery of Î±-glucosidase for Pompe disease by ICAM-1-targeted nanocarriers: comparative performance of a strategy for three distinct lysosomal storage disorders. Nanomedicine: Nanotechnology, Biology, and Medicine, 2012, 8, 731-739.	1.7	66
28	Flow dynamics, binding and detachment of spherical carriers targeted to ICAM-1 on endothelial cells. Biorheology, 2009, 46, 323-341.	1.2	59
29	Intercellular Adhesion Molecule 1 Engagement Modulates Sphingomyelinase and Ceramide, Supporting Uptake of Drug Carriers by the Vascular Endothelium. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, 1178-1185.	1.1	59
30	Transport of nanocarriers across gastrointestinal epithelial cells by a new transcellular route induced by targeting ICAM-1. Journal of Controlled Release, 2012, 163, 25-33.	4.8	55
31	Comparative binding, endocytosis, and biodistribution of antibodies and antibodyâ€coated carriers for targeted delivery of lysosomal enzymes to ICAMâ€1 versus transferrin receptor. Journal of Inherited Metabolic Disease, 2013, 36, 467-477.	1.7	49
32	Flow shear stress differentially regulates endothelial uptake of nanocarriers targeted to distinct epitopes of PECAM-1. Journal of Controlled Release, 2015, 210, 39-47.	4.8	49
33	Targeting superoxide dismutase to endothelial caveolae profoundly alleviates inflammation caused by endotoxin. Journal of Controlled Release, 2018, 272, 1-8.	4.8	47
34	Strategies for delivery of therapeutics into the central nervous system for treatment of lysosomal storage disorders. Drug Delivery and Translational Research, 2012, 2, 169-186.	3.0	44
35	RhoA activation and actin reorganization involved in endothelial CAM-mediated endocytosis of anti-PECAM carriers: critical role for tyrosine 686 in the cytoplasmic tail of PECAM-1. Blood, 2008, 111, 3024-3033.	0.6	42
36	InÂvivo performance of polymer nanocarriers dually-targeted to epitopes of the same or different receptors. Biomaterials, 2013, 34, 3459-3466.	5.7	41

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37	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.	4.8	41
38	Biodegradable â€œSmartâ€•Polyphosphazenes with Intrinsic Multifunctionality as Intracellular Protein Delivery Vehicles. Biomacromolecules, 2017, 18, 2000-2011.	2.6	41
39	Specific Binding, Uptake, and Transport of ICAM-1-Targeted Nanocarriers Across Endothelial and Subendothelial Cell Components of the Bloodâ€“Brain Barrier. Pharmaceutical Research, 2014, 31, 1855-1866.	1.7	39
40	A Comparative Study on the Alterations of Endocytic Pathways in Multiple Lysosomal Storage Disorders. Molecular Pharmaceutics, 2016, 13, 357-368.	2.3	36
41	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.	4.8	36
42	Models and Methods to Evaluate Transport of Drug Delivery Systems Across Cellular Barriers. Journal of Visualized Experiments, 2013, , e50638.	0.2	34
43	Combination-targeting to multiple endothelial cell adhesion molecules modulates binding, endocytosis, and in vivo biodistribution of drug nanocarriers and their therapeutic cargoes. Journal of Controlled Release, 2014, 188, 87-98.	4.8	31
44	A Fibrinogen-Derived Peptide Provides Intercellular Adhesion Molecule-1-Specific Targeting and Intraendothelial Transport of Polymer Nanocarriers in Human Cell Cultures and Mice. Journal of Pharmacology and Experimental Therapeutics, 2012, 340, 638-647.	1.3	30
45	A DNA Device that Mediates Selective Endosomal Escape and Intracellular Delivery of Drugs and Biologicals. Advanced Functional Materials, 2014, 24, 2899-2906.	7.8	30
46	Biological Functionalization of Drug Delivery Carriers To Bypass Size Restrictions of Receptor-Mediated Endocytosis Independently from Receptor Targeting. ACS Nano, 2013, 7, 10597-10611.	7.3	29
47	Induced Pluripotent Stem Cells for Disease Modeling and Evaluation of Therapeutics for Niemann-Pick Disease Type A. Stem Cells Translational Medicine, 2016, 5, 1644-1655.	1.6	29
48	Biodistribution and endocytosis of ICAM-1-targeting antibodies versus nanocarriers in the gastrointestinal tract in mice. International Journal of Nanomedicine, 2012, 7, 4223.	3.3	27
49	Enhanced Delivery and Effects of Acid Sphingomyelinase by ICAM-1-Targeted Nanocarriers in Type B Niemann-Pick Disease Mice. Molecular Therapy, 2017, 25, 1686-1696.	3.7	27
50	Co-coating of receptor-targeted drug nanocarriers with anti-phagocytic moieties enhances specific tissue uptake versus non-specific phagocytic clearance. Biomaterials, 2017, 147, 14-25.	5.7	26
51	Characterization of Endothelial Internalization and Targeting of Antibodyâ€“Enzyme Conjugates in Cell Cultures and in Laboratory Animals. , 2004, 283, 021-036.		25
52	Enhancing Biodistribution of Therapeutic Enzymes <i>In Vivo</i> by Modulating Surface Coating and Concentration of ICAM-1-Targeted Nanocarriers. Journal of Biomedical Nanotechnology, 2014, 10, 345-354.	0.5	23
53	Alterations in Cellular Processes Involving Vesicular Trafficking and Implications in Drug Delivery. Biomimetics, 2018, 3, 19.	1.5	23
54	Clathrin-Mediated Endocytosis Is Impaired in Type Aâ€“B Niemannâ€“Pick Disease Model Cells and Can Be Restored by ICAM-1-Mediated Enzyme Replacement. Molecular Pharmaceutics, 2014, 11, 2887-2895.	2.3	20

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55	How Carrier Size and Valency Modulate Receptor-Mediated Signaling: Understanding the Link between Binding and Endocytosis of ICAM-1-Targeted Carriers. Biomacromolecules, 2016, 17, 3127-3137.	2.6	20
56	Intercellular Adhesion Molecule-1 and Vascular Cell Adhesion Molecule-1. , 2007, , 1058-1070.		19
57	Unprecedently high targeting specificity toward lung ICAM-1 using 3DNA nanocarriers. Journal of Controlled Release, 2019, 305, 41-49.	4.8	19
58	ICAMâ€•1â€•targeted nanocarriers attenuate endothelial release of soluble ICAMâ€•1, an inflammatory regulator. Bioengineering and Translational Medicine, 2017, 2, 109-119.	3.9	18
59	Targeting, Endocytosis, and Lysosomal Delivery of Active Enzymes to Model Human Neurons by ICAM-1-Targeted Nanocarriers. Pharmaceutical Research, 2015, 32, 1264-1278.	1.7	17
60	Distinct Subcellular Trafficking Resulting from Monomeric vs Multimeric Targeting to Endothelial ICAM-1: Implications for Drug Delivery. Molecular Pharmaceutics, 2014, 11, 4350-4362.	2.3	16
61	Targeting delivery of drugs in the vascular system. International Journal of Transport Phenomena, 2011, 12, 41-49.	0.0	15
62	Intertwined mechanisms define transport of anti-ICAM nanocarriers across the endothelium and brain delivery of a therapeutic enzyme. Journal of Controlled Release, 2020, 324, 181-193.	4.8	14
63	Altered Clathrin-Independent Endocytosis in Type A Niemann-Pick Disease Cells and Rescue by ICAM-1-Targeted Enzyme Delivery. Molecular Pharmaceutics, 2015, 12, 1366-1376.	2.3	13
64	ICAM-1 targeting, intracellular trafficking, and functional activity of polymer nanocarriers coated with a fibrinogen-derived peptide for lysosomal enzyme replacement. Journal of Drug Targeting, 2017, 25, 786-795.	2.1	10
65	DNA-Based Drug Carriers: The Paradox of a Classical â€œCargoâ€•Material Becoming a Versatile â€œCarrierâ€• to Overcome Barriers in Drug Delivery. Current Pharmaceutical Design, 2016, 22, 1245-1258.	0.9	10
66	Intracellular Delivery of Active Proteins by Polyphosphazene Polymers. Pharmaceutics, 2021, 13, 249.	2.0	9
67	Intra- and trans-cellular delivery of enzymes by direct conjugation with non-multivalent anti-ICAM molecules. Journal of Controlled Release, 2016, 238, 221-230.	4.8	7
68	Comparison between Nanoparticle Encapsulation and Surface Loading for Lysosomal Enzyme Replacement Therapy. International Journal of Molecular Sciences, 2022, 23, 4034.	1.8	7
69	Nanoscale Antioxidant Therapeutics. , 2006, , 1023-1043.		6
70	<i>Î´</i>-Tocopherol Effect on Endocytosis and Its Combination with Enzyme Replacement Therapy for Lysosomal Disorders: A New Type of Drug Interaction?. Journal of Pharmacology and Experimental Therapeutics, 2019, 370, 823-833.	1.3	6
71	A method to improve quantitative radiotracingâ€based analysis of the in vivo biodistribution of drug carriers. Bioengineering and Translational Medicine, 2021, 6, e10208.	3.9	4
72	Lysosomes and Nanotherapeutics: Diseases, Treatments, and Side Effects. Frontiers in Nanobiomedical Research, 2014, , 261-305.	0.1	2

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73	Editorial (Thematic Issue: Drug Delivery: Open Sesame Strategies for the One Thousand and One Body) Tj ETQq1 1 0.784314 rgBT /Ov	0.9	1
74	Drug Delivery Systems: A Few Examples of Applications, Drug Cargoes, and Administration Routes. Current Pharmaceutical Design, 2021, 27, 1975-1976.	0.9	0
75	A Novel Mechanism of Trancytosis of Drug Carriers Across Gastrointestinal Epithelial Cells Mediated by ICAMâ€1. FASEB Journal, 2012, 26, 605.4.	0.2	0
76	A fibrinogenâ€derived peptide induces clathrinâ€•and caveolaeindependent endocytosis in endothelial cells. FASEB Journal, 2012, 26, 605.3.	0.2	0