Silvia Muro

List of Publications by Year
in descending order

76 papers	4,852 citations	94381 37 h-index	95218 68 g-index
81 all docs	81 docs citations	81 times ranked	5375 citing authors

#	Article	IF	Citations
1	Comparison between Nanoparticle Encapsulation and Surface Loading for Lysosomal Enzyme Replacement Therapy. International Journal of Molecular Sciences, 2022, 23, 4034.	1.8	7
2	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
3	Intracellular Delivery of Active Proteins by Polyphosphazene Polymers. Pharmaceutics, 2021, 13, 249.	2.0	9
4	Drug Delivery Systems: A Few Examples of Applications, Drug Cargoes, and Administration Routes. Current Pharmaceutical Design, 2021, 27, 1975-1976.	0.9	0
5	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
6	<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
7	Unprecedently high targeting specificity toward lung ICAM-1 using 3DNA nanocarriers. Journal of Controlled Release, 2019, 305, 41-49.	4.8	19
8	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
9	Targeting superoxide dismutase to endothelial caveolae profoundly alleviates inflammation caused by endotoxin. Journal of Controlled Release, 2018, 272, 1-8.	4.8	47
10	Alterations in Cellular Processes Involving Vesicular Trafficking and Implications in Drug Delivery. Biomimetics, 2018, 3, 19.	1.5	23
11	Lysosomal enzyme replacement therapies: Historical development, clinical outcomes, and future perspectives. Advanced Drug Delivery Reviews, 2017, 118, 109-134.	6.6	107
12	Biodegradable â€œSmartâ€•Polyphosphazenes with Intrinsic Multifunctionality as Intracellular Protein Delivery Vehicles. Biomacromolecules, 2017, 18, 2000-2011.	2.6	41
13	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
14	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
15	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
16	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
17	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
18	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

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19	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
20	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
21	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
22	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
23	A Comparative Study on the Alterations of Endocytic Pathways in Multiple Lysosomal Storage Disorders. Molecular Pharmaceutics, 2016, 13, 357-368.	2.3	36
24	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
25	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
26	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
27	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
28	Open challenges in magnetic drug targeting. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2015, 7, 446-457.	3.3	113
29	Lysosomes and Nanotherapeutics: Diseases, Treatments, and Side Effects. Frontiers in Nanobiomedical Research, 2014, , 261-305.	0.1	2
30	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
31	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
32	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
33	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
34	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
35	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
36	Models and Methods to Evaluate Transport of Drug Delivery Systems Across Cellular Barriers. Journal of Visualized Experiments, 2013, , e50638.	0.2	34

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37	InÂvivo performance of polymer nanocarriers dually-targeted to epitopes of the same or different receptors. Biomaterials, 2013, 34, 3459-3466.	5.7	41
38	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
39	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
40	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
41	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
42	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
43	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
44	Challenges in design and characterization of ligand-targeted drug delivery systems. Journal of Controlled Release, 2012, 164, 125-137.	4.8	227
45	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
46	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
47	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
48	Endothelial targeting of polymeric nanoparticles stably labeled with the PET imaging radioisotope iodine-124. Biomaterials, 2012, 33, 5406-5413.	5.7	75
49	Effect of flow on endothelial endocytosis of nanocarriers targeted to ICAM-1. Journal of Controlled Release, 2012, 157, 485-492.	4.8	91
50	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
51	A fibrinogenâ€derived peptide induces clathrinâ€and caveolaeindependent endocytosis in endothelial cells. FASEB Journal, 2012, 26, 605.3.	0.2	0
52	Endothelial Targeting of Antibody-Decorated Polymeric Filomicelles. ACS Nano, 2011, 5, 6991-6999.	7.3	102
53	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
54	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

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55	Targeting delivery of drugs in the vascular system. International Journal of Transport Phenomena, 2011, 12, 41-49.	0.0	15
56	New biotechnological and nanomedicine strategies for treatment of lysosomal storage disorders. Wiley Interdisciplinary Reviews: Nanomedicine and Nanobiotechnology, 2010, 2, 189-204.	3.3	69
57	Flow dynamics, binding and detachment of spherical carriers targeted to ICAM-1 on endothelial cells. Biorheology, 2009, 46, 323-341.	1.2	59
58	Oxygen Microscopy by Twoâ€Photonâ€Excited Phosphorescence. ChemPhysChem, 2008, 9, 1673-1679.	1.0	238
59	Differential intra-endothelial delivery of polymer nanocarriers targeted to distinct PECAM-1 epitopes. Journal of Controlled Release, 2008, 130, 226-233.	4.8	71
60	In Vivo Imaging of⁶⁴Cu-Labeled Polymer Nanoparticles Targeted to the Lung Endothelium. Journal of Nuclear Medicine, 2008, 49, 103-111.	2.8	120
61	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
62	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
63	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
64	Intercellular Adhesion Molecule-1 and Vascular Cell Adhesion Molecule-1. , 2007, , 1058-1070.		19
65	Lysosomal enzyme delivery by ICAM-1-targeted nanocarriers bypassing glycosylation- and clathrin-dependent endocytosis. Molecular Therapy, 2006, 13, 135-141.	3.7	113
66	Nanoscale Antioxidant Therapeutics. , 2006, , 1023-1043.		6
67	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
68	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
69	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
70	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
71	Characterization of Endothelial Internalization and Targeting of Antibodyâ€"Enzyme Conjugates in Cell Cultures and in Laboratory Animals. , 2004, 283, 021-036.		25
72	Endothelial Endocytic Pathways: Gates for Vascular Drug Delivery. Current Vascular Pharmacology, 2004, 2, 281-299.	0.8	104

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73	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
74	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
75	A novel endocytic pathway induced by clustering endothelial ICAM-1 or PECAM-1. Journal of Cell Science, 2003, 116, 1599-1609.	1.2	278
76	ICAM-directed vascular immunotargeting of antithrombotic agents to the endothelial luminal surface. Blood, 2003, 101, 3977-3984.	0.6	107