Dmitri Simberg

List of Publications by Year
in descending order

61	3,179	236925 25	149698 56
papers	citations	h-index	g-index

64	64	64	5012
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Biomimetic amplification of nanoparticle homing to tumors. Proceedings of the National Academy of Sciences of the United States of America, 2007, 104, 932-936.	7.1	434
2	Complement proteins bind to nanoparticle protein corona and undergo dynamic exchange in vivo. Nature Nanotechnology, 2017, 12, 387-393.	31.5	411
3	Interactions of nanoparticles with plasma proteins: implication on clearance and toxicity of drug delivery systems. Expert Opinion on Drug Delivery, 2011, 8, 343-357.	5.0	299
4	Immunoglobulin deposition on biomolecule corona determines complement opsonization efficiency of preclinical and clinical nanoparticles. Nature Nanotechnology, 2019, 14, 260-268.	31.5	204
5	Differential proteomics analysis of the surface heterogeneity of dextran iron oxide nanoparticles and the implications for their in vivo clearance. Biomaterials, 2009, 30, 3926-3933.	11.4	148
6	Roadmap and strategy for overcoming infusion reactions to nanomedicines. Nature Nanotechnology, 2018, 13, 1100-1108.	31.5	130
7	C1q-Mediated Complement Activation and C3 Opsonization Trigger Recognition of Stealth Poly(2-methyl-2-oxazoline)-Coated Silica Nanoparticles by Human Phagocytes. ACS Nano, 2018, 12, 5834-5847.	14.6	86
8	Modulatory Role of Surface Coating of Superparamagnetic Iron Oxide Nanoworms in Complement Opsonization and Leukocyte Uptake. ACS Nano, 2015, 9, 10758-10768.	14.6	82
9	Mechanisms of complement activation by dextran-coated superparamagnetic iron oxide (SPIO) nanoworms in mouse versus human serum. Particle and Fibre Toxicology, 2014, 11, 64.	6.2	79
10	Direct Recognition of Superparamagnetic Nanocrystals by Macrophage Scavenger Receptor SR-AI. ACS Nano, 2013, 7, 4289-4298.	14.6	63
11	Recognition of Dextranâ€“Superparamagnetic Iron Oxide Nanoparticle Conjugates (Feridex) via Macrophage Scavenger Receptor Charged Domains. Bioconjugate Chemistry, 2012, 23, 1003-1009.	3.6	59
12	High-Relaxivity Superparamagnetic Iron Oxide Nanoworms with Decreased Immune Recognition and Long-Circulating Properties. ACS Nano, 2014, 8, 12437-12449.	14.6	58
13	The Interplay Between Blood Proteins, Complement, and Macrophages on Nanomedicine Performance and Responses. Journal of Pharmacology and Experimental Therapeutics, 2019, 370, 581-592.	2.5	47
14	Role of Carbohydrate Receptors in the Macrophage Uptake of Dextran-Coated Iron Oxide Nanoparticles. Advances in Experimental Medicine and Biology, 2012, 733, 115-123.	1.6	45
15	Targeting and depletion of circulating leukocytes and cancer cells by lipophilic antibody-modified erythrocytes. Journal of Controlled Release, 2014, 183, 146-153.	9.9	45
16	Activation of Human Complement System by Dextran-Coated Iron Oxide Nanoparticles Is Not Affected by Dextran/Fe Ratio, Hydroxyl Modifications, and Crosslinking. Frontiers in Immunology, 2016, 7, 418.	4.8	43
17	Contact activation of kallikreinâ€“kinin system by superparamagnetic iron oxide nanoparticles in vitro and in vivo. Journal of Controlled Release, 2009, 140, 301-305.	9.9	41
18	In Vitro and In Vivo Differences in Murine Third Complement Component (C3) Opsonization and Macrophage/Leukocyte Responses to Antibody-Functionalized Iron Oxide Nanoworms. Frontiers in Immunology, 2017, 8, 151.	4.8	40

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19	Distearoyl Anchorâ€Painted Erythrocytes with Prolonged Ligand Retention and Circulation Properties In Vivo. Advanced Healthcare Materials, 2014, 3, 142-148.	7.6	39
20	Complement activation by drug carriers and particulate pharmaceuticals: Principles, challenges and opportunities. Advanced Drug Delivery Reviews, 2020, 157, 83-95.	13.7	39
21	Variability of Complement Response toward Preclinical and Clinical Nanocarriers in the General Population. Bioconjugate Chemistry, 2017, 28, 2747-2755.	3.6	35
22	Different Effect of Hydrogelation on Antifouling and Circulation Properties of Dextranâ€“Iron Oxide Nanoparticles. Molecular Pharmaceutics, 2012, 9, 539-545.	4.6	33
23	Isolation of Rare Tumor Cells from Blood Cells with Buoyant Immuno-Microbubbles. PLoS ONE, 2013, 8, e58017.	2.5	33
24	Preclinical Applications of Multi-Platform Imaging in Animal Models of Cancer. Cancer Research, 2021, 81, 1189-1200.	0.9	31
25	Complement therapeutics meets nanomedicine: overcoming human complement activation and leukocyte uptake of nanomedicines with soluble domains of CD55. Journal of Controlled Release, 2019, 302, 181-189.	9.9	24
26	Watching the gorilla and questioning delivery dogma. Journal of Controlled Release, 2017, 262, 87-90.	9.9	23
27	Translational gaps in animal models of human infusion reactions to nanomedicines. Nanomedicine, 2018, 13, 973-975.	3.3	23
28	Feraheme (Ferumoxytol) Is Recognized by Proinflammatory and Anti-inflammatory Macrophages via Scavenger Receptor Type AI/II. Molecular Pharmaceutics, 2019, 16, 4274-4281.	4.6	23
29	Cell-penetrating peptide CGKRK mediates efficient and widespread targeting of bladder mucosa following focal injury. Nanomedicine: Nanotechnology, Biology, and Medicine, 2017, 13, 1925-1932.	3.3	21
30	Revealing Dynamics of Accumulation of Systemically Injected Liposomes in the Skin by Intravital Microscopy. ACS Nano, 2017, 11, 11584-11593.	14.6	21
31	Complement opsonization of nanoparticles: Differences between humans and preclinical species. Journal of Controlled Release, 2021, 338, 548-556.	9.9	20
32	Targeted Intracellular Delivery of Trastuzumab Using Designer Phage Lambda Nanoparticles Alters Cellular Programs in Human Breast Cancer Cells. ACS Nano, 2021, 15, 11789-11805.	14.6	18
33	Pro-inflammatory concerns with lipid nanoparticles. Molecular Therapy, 2022, 30, 2109-2110.	8.2	16
34	Targeting of perfluorocarbon microbubbles to selective populations of circulating blood cells. Journal of Drug Targeting, 2009, 17, 392-398.	4.4	15
35	Isolation of Breast cancer CTCs with multitargeted buoyant immunomicrobubbles. Colloids and Surfaces B: Biointerfaces, 2018, 161, 200-209.	5.0	15
36	Pharmacokinetic analysis reveals limitations and opportunities for nanomedicine targeting of endothelial and extravascular compartments of tumours. Journal of Drug Targeting, 2019, 27, 690-698.	4.4	15

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37	Liposomal Extravasation and Accumulation in Tumors as Studied by Fluorescence Microscopy and Imaging Depend on the Fluorescent Label. ACS Nano, 2021, 15, 11880-11890.	14.6	15
38	Dendrimer end-terminal motif-dependent evasion of human complement and complement activation through IgM hitchhiking. Nature Communications, 2021, 12, 4858.	12.8	14
39	Lipophilic indocarbocyanine conjugates for efficient incorporation of enzymes, antibodies and small molecules into biological membranes. Biomaterials, 2018, 161, 57-68.	11.4	11
40	Complement Inhibitors Block Complement C3 Opsonization and Improve Targeting Selectivity of Nanoparticles in Blood. Bioconjugate Chemistry, 2020, 31, 1844-1856.	3.6	11
41	Lipid nanoparticle formulation of niclosamide (nano NCM) effectively inhibits SARS-CoV-2 replication in vitro. Precision Nanomedicine, 2021, 4, 724-737.	0.8	11
42	Critical issues and pitfalls in serum and plasma handling for complement analysis in nanomedicine and bionanotechnology. Nano Today, 2022, 44, 101479.	11.9	10
43	Opening Windows into Tumors. ACS Nano, 2015, 9, 8647-8650.	14.6	9
44	Longitudinal monitoring of skin accumulation of nanocarriers and biologicals with fiber optic near infrared fluorescence spectroscopy (FONIRS). Journal of Controlled Release, 2017, 247, 167-174.	9.9	9
45	Binding and isolation of tumor cells in biological media with perfluorocarbon microbubbles. Methods, 2013, 64, 102-107.	3.8	8
46	Accelerated Blood Clearance of Antibodies by Nanosized Click Antidotes. ACS Nano, 2018, 12, 12523-12532.	14.6	8
47	Evaluation of Targeting Efficiency of Joints with Anticollagen II Antibodies. Molecular Pharmaceutics, 2019, 16, 2445-2451.	4.6	8
48	Iron oxide nanoparticles and the mechanisms of immune recognition of nanomedicines. Nanomedicine, 2016, 11, 741-743.	3.3	7
49	PEGylated Liposomes Accumulate in the Areas Relevant to Skin Toxicities via Passive Extravasation across â€œLeakyâ€•Endothelium. ACS Nano, 2022, 16, 6349-6358.	14.6	7
50	Antibody-Dependent Complement Responses toward SARS-CoV-2 Receptor-Binding Domain Immobilized on â€œPseudovirus-likeâ€•Nanoparticles. ACS Nano, 2022, , .	14.6	7
51	Interaction of extremophilic archaeal viruses with human and mouse complement system and viral biodistribution in mice. Molecular Immunology, 2017, 90, 273-279.	2.2	5
52	Delivery of a model lipophilic membrane cargo to bone marrow via cell-derived microparticles. Journal of Controlled Release, 2020, 326, 324-334.	9.9	4
53	C2 IgM Natural Antibody Enhances Inflammation and Its Use in the Recombinant Single Chain Antibody-Fused Complement Inhibitor C2-Crry to Target Therapeutics to Joints Attenuates Arthritis in Mice. Frontiers in Immunology, 2020, 11, 575154.	4.8	4
54	Tuning the Engines of Nanomedicine. Molecular Therapy, 2020, 28, 693-694.	8.2	4

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55	Clickable Methyltetrazine-Indocarbocyanine Lipids: A Multicolor Tool Kit for Efficient Modifications of Cell Membranes. Bioconjugate Chemistry, 2019, 30, 2106-2114.	3.6	3
56	Highly aminated iron oxide nanoworms for simultaneous manufacturing and labeling of chimeric antigen receptor T cells. Journal of Magnetism and Magnetic Materials, 2022, 541, 168480.	2.3	3
57	Complement Activation by Nanomaterials. Molecular and Integrative Toxicology, 2020, , 83-98.	0.5	3
58	Discrepancies in the in vitro and in vivo role of scavenger receptors in clearance of nanoparticles by Kupffer cells. Precision Nanomedicine, 2018, 1, 76-84.	0.8	3
59	Indocarbocyanine nanoparticles extravasate and distribute better than liposomes in brain tumors. Journal of Controlled Release, 2022, 349, 413-424.	9.9	2
60	Characteristics of liposomal encapsulation of an archetypal multi-kinase inhibitor in terms of antitumor activity and avoidance of systemic toxicity.. Journal of Clinical Oncology, 2015, 33, e13589-e13589.	1.6	0
61	Establishing In Situ Closed Circuit Perfusion of Lower Abdominal Organs and Hind Limbs in Mice. Journal of Visualized Experiments, 2020, , .	0.3	0