Melody A Swartz

List of Publications by Year
in descending order

106 papers	16,646 citations	17405 63 h-index	28224 105 g-index
110 all docs	110 docs citations	110 times ranked	18304 citing authors

#	Article	IF	Citations
1	Pathogenic Exploitation of Lymphatic Vessels. Cells, 2022, 11, 979.	1.8	6
2	Masking the immunotoxicity of interleukin-12 by fusing it with a domain of its receptor via a tumour-protease-cleavable linker. Nature Biomedical Engineering, 2022, 6, 819-829.	11.6	32
3	Pro-lymphangiogenic VEGFR-3 signaling modulates memory T cell responses in allergic airway inflammation. Mucosal Immunology, 2021, 14, 144-151.	2.7	8
4	Prolonged residence of an albuminâ€“IL-4 fusion protein in secondary lymphoid organs ameliorates experimental autoimmune encephalomyelitis. Nature Biomedical Engineering, 2021, 5, 387-398.	11.6	20
5	Lymphangiogenesis-inducing vaccines elicit potent and long-lasting T cell immunity against melanomas. Science Advances, 2021, 7, .	4.7	36
6	Polymersomes Decorated with the SARS-CoV-2 Spike Protein Receptor-Binding Domain Elicit Robust Humoral and Cellular Immunity. ACS Central Science, 2021, 7, 1368-1380.	5.3	21
7	Lymph Node-Targeted Synthetically Glycosylated Antigen Leads to Antigen-Specific Immunological Tolerance. Frontiers in Immunology, 2021, 12, 714842.	2.2	10
8	Generation of potent cellular and humoral immunity against SARS-CoV-2 antigens via conjugation to a polymeric glyco-adjuvant. Biomaterials, 2021, 278, 121159.	5.7	23
9	Overcoming transport barriers to immunotherapy. Drug Delivery and Translational Research, 2021, 11, 2273-2275.	3.0	1
10	Growth factors with enhanced syndecan binding generate tonic signalling and promote tissue healing. Nature Biomedical Engineering, 2020, 4, 463-475.	11.6	53
11	Myeloid Cells Orchestrate Systemic Immunosuppression, Impairing the Efficacy of Immunotherapy against HPV+ Cancers. Cancer Immunology Research, 2020, 8, 131-145.	1.6	21
12	Lymphoidal chemokine CCL19 promoted the heterogeneity of the breast tumor cell motility within a 3D microenvironment revealed by a LÃ©vy distribution analysis. Integrative Biology (United Kingdom), 2020, 12, 12-20.	0.6	4
13	Adjuvant-free immunization with infective filarial larvae as lymphatic homing antigen carriers. Scientific Reports, 2020, 10, 1055.	1.6	1
14	Collagen-binding IL-12 enhances tumour inflammation and drives the complete remission of established immunologically cold mouse tumours. Nature Biomedical Engineering, 2020, 4, 531-543.	11.6	141
15	Lymphatic endothelial cells prime naÃ¯ve CD8+ T cells into memory cells under steady-state conditions. Nature Communications, 2020, 11, 538.	5.8	50
16	Engineering Targeting Materials for Therapeutic Cancer Vaccines. Frontiers in Bioengineering and Biotechnology, 2020, 8, 19.	2.0	23
17	Experimental Drainage Device to Reduce Lymphoedema in a Rat Model. European Journal of Vascular and Endovascular Surgery, 2019, 57, 859-867.	0.8	13
18	Inherent biomechanical traits enable infective filariae to disseminate through collecting lymphatic vessels. Nature Communications, 2019, 10, 2895.	5.8	17

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19	Trojan horses for immunotherapy. Nature Nanotechnology, 2019, 14, 196-197.	15.6	8
20	Targeted antibody and cytokine cancer immunotherapies through collagen affinity. Science Translational Medicine, 2019, 11, .	5.8	134
21	Tumor-associated factors are enriched in lymphatic exudate compared to plasma in metastatic melanoma patients. Journal of Experimental Medicine, 2019, 216, 1091-1107.	4.2	102
22	Combination of Synthetic Long Peptides and XCL1 Fusion Proteins Results in Superior Tumor Control. Frontiers in Immunology, 2019, 10, 294.	2.2	27
23	Recruitment of CD103 ⁺ dendritic cells via tumor-targeted chemokine delivery enhances efficacy of checkpoint inhibitor immunotherapy. Science Advances, 2019, 5, eaay1357.	4.7	87
24	Antigens reversibly conjugated to a polymeric glyco-adjuvant induce protective humoral and cellular immunity. Nature Materials, 2019, 18, 175-185.	13.3	172
25	Dorsal Ear Skin Window for Intravital Imaging and Functional Analysis of Lymphangiogenesis. Methods in Molecular Biology, 2018, 1846, 261-277.	0.4	8
26	Nanoparticle Conjugation of Human Papillomavirus 16 E7-long Peptides Enhances Therapeutic Vaccine Efficacy against Solid Tumors in Mice. Cancer Immunology Research, 2018, 6, 1301-1313.	1.6	27
27	Lymphatic vessel density is associated with CD8⁺ T cell infiltration and immunosuppressive factors in human melanoma. OncoImmunology, 2018, 7, e1462878.	2.1	47
28	Immune Checkpoint Ligand PD-L1 Is Upregulated in Pulmonary Lymphangioleiomyomatosis. American Journal of Respiratory Cell and Molecular Biology, 2018, 59, 723-732.	1.4	37
29	Improving Efficacy and Safety of Agonistic Anti-CD40 Antibody Through Extracellular Matrix Affinity. Molecular Cancer Therapeutics, 2018, 17, 2399-2411.	1.9	34
30	Transcellular Pathways in Lymphatic Endothelial Cells Regulate Changes in Solute Transport by Fluid Stress. Circulation Research, 2017, 120, 1440-1452.	2.0	90
31	Local induction of lymphangiogenesis with engineered fibrin-binding VEGF-C promotes wound healing by increasing immune cell trafficking and matrix remodeling. Biomaterials, 2017, 131, 160-175.	5.7	92
32	Toll-like receptor 8 agonist nanoparticles mimic immunomodulating effects of the live BCG vaccine and enhance neonatal innate and adaptive immune responses. Journal of Allergy and Clinical Immunology, 2017, 140, 1339-1350.	1.5	128
33	Vaccine nanocarriers: Coupling intracellular pathways and cellular biodistribution to control CD4 vs CD8 T cell responses. Biomaterials, 2017, 132, 48-58.	5.7	50
34	Oxidation-sensitive polymersomes as vaccine nanocarriers enhance humoral responses against Lassa virus envelope glycoprotein. Virology, 2017, 512, 161-171.	1.1	19
35	Tumor lymphangiogenesis promotes T cell infiltration and potentiates immunotherapy in melanoma. Science Translational Medicine, 2017, 9, .	5.8	174
36	Matrix-binding checkpoint immunotherapies enhance antitumor efficacy and reduce adverse events. Science Translational Medicine, 2017, 9, .	5.8	131

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37	Exploiting lymphatic vessels for immunomodulation: Rationale, opportunities, and challenges. Advanced Drug Delivery Reviews, 2017, 114, 43-59.	6.6	99
38	T Cells Redirected to a Minor Histocompatibility Antigen Instruct Intratumoral TNFÎ± Expression and Empower Adoptive Cell Therapy for Solid Tumors. Cancer Research, 2017, 77, 658-671.	0.4	30
39	Primary Human and Rat Î²-Cells Release the Intracellular Autoantigens GAD65, IA-2, and Proinsulin in Exosomes Together With Cytokine-Induced Enhancers of Immunity. Diabetes, 2017, 66, 460-473.	0.3	152
40	Perivascular Macrophages Limit Permeability. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 2203-2212.	1.1	97
41	Polypropylene Sulfide Nanoparticle p24 Vaccine Promotes Dendritic Cell-Mediated Specific Immune Responses against HIV-1. Journal of Investigative Dermatology, 2016, 136, 1172-1181.	0.3	17
42	Fibronectin EDA and CpG synergize to enhance antigen-specific Th1 and cytotoxic responses. Vaccine, 2016, 34, 2453-2459.	1.7	16
43	A Cationic Micelle Complex Improves CD8+ T Cell Responses in Vaccination Against Unmodified Protein Antigen. ACS Biomaterials Science and Engineering, 2016, 2, 231-240.	2.6	18
44	Connecting (T)issues: How Research in Fascia Biology Can Impact Integrative Oncology. Cancer Research, 2016, 76, 6159-6162.	0.4	34
45	Lymphatic vessels regulate immune microenvironments in human and murine melanoma. Journal of Clinical Investigation, 2016, 126, 3389-3402.	3.9	157
46	Nanoparticle conjugation enhances the immunomodulatory effects of intranasally delivered CpG in house dust mite-allergic mice. Scientific Reports, 2015, 5, 14274.	1.6	42
47	ADAM17 Promotes Motility, Invasion, and Sprouting of Lymphatic Endothelial Cells. PLoS ONE, 2015, 10, e0132661.	1.1	19
48	6-Thioguanine-loaded polymeric micelles deplete myeloid-derived suppressor cells and enhance the efficacy of T cell immunotherapy in tumor-bearing mice. Cancer Immunology, Immunotherapy, 2015, 64, 1033-1046.	2.0	56
49	Collecting Lymphatic Vessel Permeability Facilitates Adipose Tissue Inflammation and Distribution of Antigen to Lymph Nodeâ€“Homing Adipose Tissue Dendritic Cells. Journal of Immunology, 2015, 194, 5200-5210.	0.4	102
50	Cell jam. Nature Materials, 2015, 14, 970-971.	13.3	3
51	Combined CSL and p53 downregulation promotes cancer-associated fibroblast activation. Nature Cell Biology, 2015, 17, 1193-1204.	4.6	170
52	Engineering opportunities in cancer immunotherapy. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, 14467-14472.	3.3	111
53	Immunomodulatory Roles of Lymphatic Vessels in Cancer Progression. Cancer Immunology Research, 2014, 2, 701-707.	1.6	76
54	Steady-State Antigen Scavenging, Cross-Presentation, and CD8+ T Cell Priming: A New Role for Lymphatic Endothelial Cells. Journal of Immunology, 2014, 192, 5002-5011.	0.4	178

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55	Optimization and regeneration kinetics of lymphatic-specific photodynamic therapy in the mouse dermis. Angiogenesis, 2014, 17, 347-357.	3.7	29
56	Growth Factors Engineered for Super-Affinity to the Extracellular Matrix Enhance Tissue Healing. Science, 2014, 343, 885-888.	6.0	406
57	Enhancing Efficacy of Anticancer Vaccines by Targeted Delivery to Tumor-Draining Lymph Nodes. Cancer Immunology Research, 2014, 2, 436-447.	1.6	165
58	Introduction to the special issue on lymphangiogenesis in inflammation. Angiogenesis, 2014, 17, 323-324.	3.7	4
59	Targeting the tumor-draining lymph node with adjuvanted nanoparticles reshapes the anti-tumor immune response. Biomaterials, 2014, 35, 814-824.	5.7	256
60	Lymph node stromal cells acquire peptideâ€“MHCII complexes from dendritic cells and induce antigen-specific CD4+ T cell tolerance. Journal of Experimental Medicine, 2014, 211, 1153-1166.	4.2	210
61	Emerging roles of lymphatic endothelium in regulating adaptive immunity. Journal of Clinical Investigation, 2014, 124, 943-952.	3.9	188
62	Inflammatory lymphangiogenesis in postpartum breast tissue remodeling. Journal of Clinical Investigation, 2014, 124, 3704-3707.	3.9	4
63	Long-term Intravital Immunofluorescence Imaging of Tissue Matrix Components with Epifluorescence and Two-photon Microscopy. Journal of Visualized Experiments, 2014, , .	0.2	17
64	VEGFR-3 Neutralization Inhibits Ovarian Lymphangiogenesis, Follicle Maturation, and Murine Pregnancy. American Journal of Pathology, 2013, 183, 1596-1607.	1.9	22
65	Engineering synthetic vaccines using cues from natural immunity. Nature Materials, 2013, 12, 978-990.	13.3	500
66	Tunable T cell immunity towards a protein antigen using polymersomes vs. solid-core nanoparticles. Biomaterials, 2013, 34, 4339-4346.	5.7	116
67	Nanoparticle conjugation of CpG enhances adjuvancy for cellular immunity and memory recall at low dose. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 19902-19907.	3.3	223
68	Normal Dendritic Cell Mobilization to Lymph Nodes under Conditions of Severe Lymphatic Hypoplasia. Journal of Immunology, 2013, 190, 4608-4620.	0.4	53
69	Intravital Immunofluorescence for Visualizing the Microcirculatory and Immune Microenvironments in the Mouse Ear Dermis. PLoS ONE, 2013, 8, e57135.	1.1	56
70	Peripherally Administered Nanoparticles Target Monocytic Myeloid Cells, Secondary Lymphoid Organs and Tumors in Mice. PLoS ONE, 2013, 8, e61646.	1.1	116
71	Impaired Humoral Immunity and Tolerance in K14-VEGFR-3-Ig Mice That Lack Dermal Lymphatic Drainage. Journal of Immunology, 2012, 189, 2181-2190.	0.4	111
72	Interstitial Fluid and Lymph Formation and Transport: Physiological Regulation and Roles in Inflammation and Cancer. Physiological Reviews, 2012, 92, 1005-1060.	13.1	538

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73	Engineering Approaches to Immunotherapy. Science Translational Medicine, 2012, 4, 148rv9.	5.8	194
74	VEGF-C Promotes Immune Tolerance in B16 Melanomas and Cross-Presentation of Tumor Antigen by Lymph Node Lymphatics. Cell Reports, 2012, 1, 191-199.	2.9	284
75	Lymphatic and interstitial flow in the tumour microenvironment: linking mechanobiology with immunity. Nature Reviews Cancer, 2012, 12, 210-219.	12.8	461
76	Dendritic cell activation and T cell priming with adjuvant- and antigen-loaded oxidation-sensitive polymersomes. Biomaterials, 2012, 33, 6211-6219.	5.7	206
77	Nanoparticle conjugation of antigen enhances cytotoxic T-cell responses in pulmonary vaccination. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, E989-97.	3.3	160
78	Nanoparticle conjugation and pulmonary delivery enhance the protective efficacy of Ag85B and CpG against tuberculosis. Vaccine, 2011, 29, 6959-6966.	1.7	107
79	Regulation of tumor invasion by interstitial fluid flow. Physical Biology, 2011, 8, 015012.	0.8	96
80	Nano-sized drug-loaded micelles deliver payload to lymph node immune cells and prolong allograft survival. Journal of Controlled Release, 2011, 156, 154-160.	4.8	90
81	Induction of Lymphoidlike Stroma and Immune Escape by Tumors That Express the Chemokine CCL21. Science, 2010, 328, 749-752.	6.0	429
82	Transmural Flow Modulates Cell and Fluid Transport Functions of Lymphatic Endothelium. Circulation Research, 2010, 106, 920-931.	2.0	207
83	Antigen delivery to dendritic cells by poly(propylene sulfide) nanoparticles with disulfide conjugated peptides: Cross-presentation and T cell activation. Vaccine, 2010, 28, 7897-7906.	1.7	199
84	Vascular Endothelial Growth Factor-C and C-C Chemokine Receptor 7 in Tumor Cellâ€“Lymphatic Cross-talk Promote Invasive Phenotype. Cancer Research, 2009, 69, 349-357.	0.4	169
85	A tissueâ€engineered model of the intestinal lacteal for evaluating lipid transport by lymphatics. Biotechnology and Bioengineering, 2009, 103, 1224-1235.	1.7	73
86	ACTIVE REGULATION OF LIPID TRANSPORT AND METABOLISM BY LYMPHATICS: COMPLIMENTARY IN VIVO AND IN VITRO STUDIES. FASEB Journal, 2009, 23, 813.2.	0.2	0
87	Lymphatic drainage function and its immunological implications: From dendritic cell homing to vaccine design. Seminars in Immunology, 2008, 20, 147-156.	2.7	126
88	Cooperative and redundant roles of VEGFRâ€2 and VEGFRâ€3 signaling in adult lymphangiogenesis. FASEB Journal, 2007, 21, 1003-1012.	0.2	126
89	Interstitial Flow and Its Effects in Soft Tissues. Annual Review of Biomedical Engineering, 2007, 9, 229-256.	5.7	491
90	Exploiting lymphatic transport and complement activation in nanoparticle vaccines. Nature Biotechnology, 2007, 25, 1159-1164.	9.4	1,142

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91	Autologous Chemotaxis as a Mechanism of Tumor Cell Homing to Lymphatics via Interstitial Flow and Autocrine CCR7 Signaling. Cancer Cell, 2007, 11, 526-538.	7.7	483
92	Active response of the lymphatic endothelium to acute inflammation vs. chronic lymphedema: in vivo and in vitro studies. FASEB Journal, 2007, 21, A848.	0.2	0
93	Secondary lymphedema in the mouse tail: Lymphatic hyperplasia, VEGF-C upregulation, and the protective role of MMP-9. Microvascular Research, 2006, 72, 161-171.	1.1	207
94	In vivo targeting of dendritic cells in lymph nodes with poly(propylene sulfide) nanoparticles. Journal of Controlled Release, 2006, 112, 26-34.	4.8	605
95	Characterization of lymphangiogenesis in a model of adult skin regeneration. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 291, H1402-H1410.	1.5	135
96	Dendritic-cell trafficking to lymph nodes through lymphatic vessels. Nature Reviews Immunology, 2005, 5, 617-628.	10.6	989
97	Complete and Specific Inhibition of Adult Lymphatic Regeneration by a Novel VEGFR-3 Neutralizing Antibody. Journal of the National Cancer Institute, 2005, 97, 14-21.	3.0	226
98	Interstitial fluid flow induces myofibroblast differentiation and collagen alignment in vitro. Journal of Cell Science, 2005, 118, 4731-4739.	1.2	322
99	Synergy between interstitial flow and VEGF directs capillary morphogenesis in vitro through a gradient amplification mechanism. Proceedings of the National Academy of Sciences of the United States of America, 2005, 102, 15779-15784.	3.3	254
100	Overexpression of VEGF-C Causes Transient Lymphatic Hyperplasia but Not Increased Lymphangiogenesis in Regenerating Skin. Circulation Research, 2005, 96, 1193-1199.	2.0	108
101	Interstitial flow differentially stimulates blood and lymphatic endothelial cell morphogenesis in vitro. Microvascular Research, 2004, 68, 258-264.	1.1	189
102	Fibroblast alignment under interstitial fluid flow using a novel 3-D tissue culture model. American Journal of Physiology - Heart and Circulatory Physiology, 2003, 284, H1771-H1777.	1.5	148
103	Interstitial Flow as a Guide for Lymphangiogenesis. Circulation Research, 2003, 92, 801-808.	2.0	263
104	Lymphatic function, lymphangiogenesis, and cancer metastasis. Microscopy Research and Technique, 2001, 55, 92-99.	1.2	157
105	Mechanics of interstitial-lymphatic fluid transport: theoretical foundation and experimental validation. Journal of Biomechanics, 1999, 32, 1297-1307.	0.9	140
106	Hyperplasia of Lymphatic Vessels in VEGF-C Transgenic Mice. Science, 1997, 276, 1423-1425.	6.0	1,160