Melody A Swartz

List of Publications by Year in Descending Order

104 papers	13,428 citations	59 h-index	110 g-index
110 ext. papers	15,199 ext. citations	12 avg, IF	6.57 L-index

#	Paper	IF	Citations
104	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**,	19	4
103	Overcoming transport barriers to immunotherapy. *Drug Delivery and Translational Research*, **2021**, 11, 2273-2275	6.2	0
102	Lymphangiogenesis-inducing vaccines elicit potent and long-lasting T cell immunity against melanomas. *Science Advances*, **2021**, 7,	14.3	6
101	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	16.8	5
100	Pro-lymphangiogenic VEGFR-3 signaling modulates memory T cell responses in allergic airway inflammation. *Mucosal Immunology*, **2021**, 14, 144-151	9.2	2
99	Prolonged residence of an albumin-IL-4 fusion protein in secondary lymphoid organs ameliorates experimental autoimmune encephalomyelitis. *Nature Biomedical Engineering*, **2021**, 5, 387-398	19	2
98	Lymph Node-Targeted Synthetically Glycosylated Antigen Leads to Antigen-Specific Immunological Tolerance. *Frontiers in Immunology*, **2021**, 12, 714842	8.4	2
97	Generation of potent cellular and humoral immunity against SARS-CoV-2 antigens via conjugation to a polymeric glyco-adjuvant. *Biomaterials*, **2021**, 278, 121159	15.6	5
96	Lymphoidal chemokine CCL19 promoted the heterogeneity of the breast tumor cell motility within a 3D microenvironment revealed by a L□y distribution analysis. *Integrative Biology (United Kingdom)*, **2020**, 12, 12-20	3.7	3
95	Adjuvant-free immunization with infective filarial larvae as lymphatic homing antigen carriers. *Scientific Reports*, **2020**, 10, 1055	4.9	0
94	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	19	57
93	Engineering Targeting Materials for Therapeutic Cancer Vaccines. *Frontiers in Bioengineering and Biotechnology*, **2020**, 8, 19	5.8	12
92	Lymphatic endothelial cells prime na□e CD8 T cells into memory cells under steady-state conditions. *Nature Communications*, **2020**, 11, 538	17.4	23
91	Growth factors with enhanced syndecan binding generate tonic signalling and promote tissue healing. *Nature Biomedical Engineering*, **2020**, 4, 463-475	19	30
90	Myeloid Cells Orchestrate Systemic Immunosuppression, Impairing the Efficacy of Immunotherapy against HPV Cancers. *Cancer Immunology Research*, **2020**, 8, 131-145	12.5	13
89	Trojan horses for immunotherapy. *Nature Nanotechnology*, **2019**, 14, 196-197	28.7	4
88	Targeted antibody and cytokine cancer immunotherapies through collagen affinity. *Science Translational Medicine*, **2019**, 11,	17.5	82

87	Tumor-associated factors are enriched in lymphatic exudate compared to plasma in metastatic melanoma patients. *Journal of Experimental Medicine*, **2019**, 216, 1091-1107	16.6	58
86	Experimental Drainage Device to Reduce Lymphoedema in a Rat Model. *European Journal of Vascular and Endovascular Surgery*, **2019**, 57, 859-867	2.3	6
85	Inherent biomechanical traits enable infective filariae to disseminate through collecting lymphatic vessels. *Nature Communications*, **2019**, 10, 2895	17.4	8
84	Combination of Synthetic Long Peptides and XCL1 Fusion Proteins Results in Superior Tumor Control. *Frontiers in Immunology*, **2019**, 10, 294	8.4	13
83	Recruitment of CD103 dendritic cells via tumor-targeted chemokine delivery enhances efficacy of checkpoint inhibitor immunotherapy. *Science Advances*, **2019**, 5, eaay1357	14.3	44
82	Antigens reversibly conjugated to a polymeric glyco-adjuvant induce protective humoral and cellular immunity. *Nature Materials*, **2019**, 18, 175-185	27	112
81	Lymphatic vessel density is associated with CD8 T cell infiltration and immunosuppressive factors in human melanoma. *OncoImmunology*, **2018**, 7, e1462878	7.2	33
80	Immune Checkpoint Ligand PD-L1 Is Upregulated in Pulmonary Lymphangioleiomyomatosis. *American Journal of Respiratory Cell and Molecular Biology*, **2018**, 59, 723-732	5.7	19
79	Improving Efficacy and Safety of Agonistic Anti-CD40 Antibody Through Extracellular Matrix Affinity. *Molecular Cancer Therapeutics*, **2018**, 17, 2399-2411	6.1	22
78	Dorsal Ear Skin Window for Intravital Imaging and Functional Analysis of Lymphangiogenesis. *Methods in Molecular Biology*, **2018**, 1846, 261-277	1.4	3
77	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	12.5	19
76	Transcellular Pathways in Lymphatic Endothelial Cells Regulate Changes in Solute Transport by Fluid Stress. *Circulation Research*, **2017**, 120, 1440-1452	15.7	57
75	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	15.6	67
74	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	11.5	75
73	Vaccine nanocarriers: Coupling intracellular pathways and cellular biodistribution to control CD4 vs CD8 T cell responses. *Biomaterials*, **2017**, 132, 48-58	15.6	38
72	Oxidation-sensitive polymersomes as vaccine nanocarriers enhance humoral responses against Lassa virus envelope glycoprotein. *Virology*, **2017**, 512, 161-171	3.6	15
71	Tumor lymphangiogenesis promotes T cell infiltration and potentiates immunotherapy in melanoma. *Science Translational Medicine*, **2017**, 9,	17.5	120
70	Matrix-binding checkpoint immunotherapies enhance antitumor efficacy and reduce adverse events. *Science Translational Medicine*, **2017**, 9,	17.5	99

69	Exploiting lymphatic vessels for immunomodulation: Rationale, opportunities, and challenges. *Advanced Drug Delivery Reviews*, **2017**, 114, 43-59	18.5	66
68	T Cells Redirected to a Minor Histocompatibility Antigen Instruct Intratumoral TNF Expression and Empower Adoptive Cell Therapy for Solid Tumors. *Cancer Research*, **2017**, 77, 658-671	10.1	22
67	Primary Human and Rat Cells Release the Intracellular Autoantigens GAD65, IA-2, and Proinsulin in Exosomes Together With Cytokine-Induced Enhancers of Immunity. *Diabetes*, **2017**, 66, 460-473	0.9	102
66	Perivascular Macrophages Limit Permeability. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2016**, 36, 2203-2212	9.4	62
65	Polypropylene Sulfide Nanoparticle p24 Vaccine Promotes Dendritic Cell-Mediated Specific Immune Responses against HIV-1. *Journal of Investigative Dermatology*, **2016**, 136, 1172-1181	4.3	17
64	Fibronectin EDA and CpG synergize to enhance antigen-specific Th1 and cytotoxic responses. *Vaccine*, **2016**, 34, 2453-2459	4.1	15
63	A Cationic Micelle Complex Improves CD8+ T Cell Responses in Vaccination Against Unmodified Protein Antigen. *ACS Biomaterials Science and Engineering*, **2016**, 2, 231-240	5.5	12
62	Connecting (T)issues: How Research in Fascia Biology Can Impact Integrative Oncology. *Cancer Research*, **2016**, 76, 6159-6162	10.1	25
61	Lymphatic vessels regulate immune microenvironments in human and murine melanoma. *Journal of Clinical Investigation*, **2016**, 126, 3389-402	15.9	120
60	Collecting lymphatic vessel permeability facilitates adipose tissue inflammation and distribution of antigen to lymph node-homing adipose tissue dendritic cells. *Journal of Immunology*, **2015**, 194, 5200-10	5.3	84
59	Tissue mechanics: Cell jam. *Nature Materials*, **2015**, 14, 970-1	27	2
58	Combined CSL and p53 downregulation promotes cancer-associated fibroblast activation. *Nature Cell Biology*, **2015**, 17, 1193-204	23.4	131
57	Engineering opportunities in cancer immunotherapy. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 14467-72	11.5	90
56	Nanoparticle conjugation enhances the immunomodulatory effects of intranasally delivered CpG in house dust mite-allergic mice. *Scientific Reports*, **2015**, 5, 14274	4.9	32
55	ADAM17 Promotes Motility, Invasion, and Sprouting of Lymphatic Endothelial Cells. *PLoS ONE*, **2015**, 10, e0132661	3.7	15
54	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, 1033-46	7.4	50
53	Enhancing efficacy of anticancer vaccines by targeted delivery to tumor-draining lymph nodes. *Cancer Immunology Research*, **2014**, 2, 436-47	12.5	147
52	Targeting the tumor-draining lymph node with adjuvanted nanoparticles reshapes the anti-tumor immune response. *Biomaterials*, **2014**, 35, 814-24	15.6	209

51	Lymph node stromal cells acquire peptide-MHCII complexes from dendritic cells and induce antigen-specific CD4+ T cell tolerance. *Journal of Experimental Medicine*, **2014**, 211, 1153-66	16.6	153
50	Emerging roles of lymphatic endothelium in regulating adaptive immunity. *Journal of Clinical Investigation*, **2014**, 124, 943-52	15.9	153
49	Inflammatory lymphangiogenesis in postpartum breast tissue remodeling. *Journal of Clinical Investigation*, **2014**, 124, 3704-7	15.9	4
48	Long-term intravital immunofluorescence imaging of tissue matrix components with epifluorescence and two-photon microscopy. *Journal of Visualized Experiments*, **2014**,	1.6	13
47	Immunomodulatory roles of lymphatic vessels in cancer progression. *Cancer Immunology Research*, **2014**, 2, 701-7	12.5	66
46	Steady-state antigen scavenging, cross-presentation, and CD8+ T cell priming: a new role for lymphatic endothelial cells. *Journal of Immunology*, **2014**, 192, 5002-11	5.3	135
45	Optimization and regeneration kinetics of lymphatic-specific photodynamic therapy in the mouse dermis. *Angiogenesis*, **2014**, 17, 347-57	10.6	25
44	Growth factors engineered for super-affinity to the extracellular matrix enhance tissue healing. *Science*, **2014**, 343, 885-8	33.3	335
43	VEGFR-3 neutralization inhibits ovarian lymphangiogenesis, follicle maturation, and murine pregnancy. *American Journal of Pathology*, **2013**, 183, 1596-1607	5.8	21
42	Engineering synthetic vaccines using cues from natural immunity. *Nature Materials*, **2013**, 12, 978-90	27	403
41	Tunable T cell immunity towards a protein antigen using polymersomes vs. solid-core nanoparticles. *Biomaterials*, **2013**, 34, 4339-46	15.6	91
40	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, 19902-7	11.5	195
39	Normal dendritic cell mobilization to lymph nodes under conditions of severe lymphatic hypoplasia. *Journal of Immunology*, **2013**, 190, 4608-20	5.3	42
38	Intravital immunofluorescence for visualizing the microcirculatory and immune microenvironments in the mouse ear dermis. *PLoS ONE*, **2013**, 8, e57135	3.7	50
37	Peripherally administered nanoparticles target monocytic myeloid cells, secondary lymphoid organs and tumors in mice. *PLoS ONE*, **2013**, 8, e61646	3.7	108
36	Dendritic cell activation and T cell priming with adjuvant- and antigen-loaded oxidation-sensitive polymersomes. *Biomaterials*, **2012**, 33, 6211-9	15.6	152
35	Interstitial fluid and lymph formation and transport: physiological regulation and roles in inflammation and cancer. *Physiological Reviews*, **2012**, 92, 1005-60	47.9	399
34	Engineering approaches to immunotherapy. *Science Translational Medicine*, **2012**, 4, 148rv9	17.5	173

33	VEGF-C promotes immune tolerance in B16 melanomas and cross-presentation of tumor antigen by lymph node lymphatics. *Cell Reports*, **2012**, 1, 191-9	10.6	220
32	Lymphatic and interstitial flow in the tumour microenvironment: linking mechanobiology with immunity. *Nature Reviews Cancer*, **2012**, 12, 210-9	31.3	357
31	Impaired humoral immunity and tolerance in K14-VEGFR-3-Ig mice that lack dermal lymphatic drainage. *Journal of Immunology*, **2012**, 189, 2181-90	5.3	91
30	Nanoparticle conjugation and pulmonary delivery enhance the protective efficacy of Ag85B and CpG against tuberculosis. *Vaccine*, **2011**, 29, 6959-66	4.1	90
29	Regulation of tumor invasion by interstitial fluid flow. *Physical Biology*, **2011**, 8, 015012	3	83
28	Nano-sized drug-loaded micelles deliver payload to lymph node immune cells and prolong allograft survival. *Journal of Controlled Release*, **2011**, 156, 154-60	11.7	74
27	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	11.5	148
26	Transmural flow modulates cell and fluid transport functions of lymphatic endothelium. *Circulation Research*, **2010**, 106, 920-31	15.7	171
25	Antigen delivery to dendritic cells by poly(propylene sulfide) nanoparticles with disulfide conjugated peptides: Cross-presentation and T cell activation. *Vaccine*, **2010**, 28, 7897-906	4.1	173
24	Induction of lymphoidlike stroma and immune escape by tumors that express the chemokine CCL21. *Science*, **2010**, 328, 749-52	33.3	356
23	Vascular endothelial growth factor-C and C-C chemokine receptor 7 in tumor cell-lymphatic cross-talk promote invasive phenotype. *Cancer Research*, **2009**, 69, 349-57	10.1	151
22	A tissue-engineered model of the intestinal lacteal for evaluating lipid transport by lymphatics. *Biotechnology and Bioengineering*, **2009**, 103, 1224-35	4.9	64
21	ACTIVE REGULATION OF LIPID TRANSPORT AND METABOLISM BY LYMPHATICS: COMPLIMENTARY IN VIVO AND IN VITRO STUDIES. *FASEB Journal*, **2009**, 23, 813.2	0.9	
20	Lymphatic drainage function and its immunological implications: from dendritic cell homing to vaccine design. *Seminars in Immunology*, **2008**, 20, 147-56	10.7	108
19	Exploiting lymphatic transport and complement activation in nanoparticle vaccines. *Nature Biotechnology*, **2007**, 25, 1159-64	44.5	963
18	Autologous chemotaxis as a mechanism of tumor cell homing to lymphatics via interstitial flow and autocrine CCR7 signaling. *Cancer Cell*, **2007**, 11, 526-38	24.3	405
17	Cooperative and redundant roles of VEGFR-2 and VEGFR-3 signaling in adult lymphangiogenesis. *FASEB Journal*, **2007**, 21, 1003-12	0.9	118
16	Interstitial flow and its effects in soft tissues. *Annual Review of Biomedical Engineering*, **2007**, 9, 229-56	12	408

15	Active response of the lymphatic endothelium to acute inflammation vs. chronic lymphedema: in vivo and in vitro studies. *FASEB Journal*, **2007**, 21, A848	0.9	
14	In vivo targeting of dendritic cells in lymph nodes with poly(propylene sulfide) nanoparticles. *Journal of Controlled Release*, **2006**, 112, 26-34	11.7	509
13	Characterization of lymphangiogenesis in a model of adult skin regeneration. *American Journal of Physiology - Heart and Circulatory Physiology*, **2006**, 291, H1402-10	5.2	119
12	Secondary lymphedema in the mouse tail: Lymphatic hyperplasia, VEGF-C upregulation, and the protective role of MMP-9. *Microvascular Research*, **2006**, 72, 161-71	3.7	169
11	Dendritic-cell trafficking to lymph nodes through lymphatic vessels. *Nature Reviews Immunology*, **2005**, 5, 617-28	36.5	867
10	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	9.7	206
9	Interstitial fluid flow induces myofibroblast differentiation and collagen alignment in vitro. *Journal of Cell Science*, **2005**, 118, 4731-9	5.3	273
8	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, 15779-84	11.5	223
7	Overexpression of VEGF-C causes transient lymphatic hyperplasia but not increased lymphangiogenesis in regenerating skin. *Circulation Research*, **2005**, 96, 1193-9	15.7	95
6	Interstitial flow differentially stimulates blood and lymphatic endothelial cell morphogenesis in vitro. *Microvascular Research*, **2004**, 68, 258-64	3.7	174
5	Fibroblast alignment under interstitial fluid flow using a novel 3-D tissue culture model. *American Journal of Physiology - Heart and Circulatory Physiology*, **2003**, 284, H1771-7	5.2	119
4	Interstitial flow as a guide for lymphangiogenesis. *Circulation Research*, **2003**, 92, 801-8	15.7	233
3	Lymphatic function, lymphangiogenesis, and cancer metastasis. *Microscopy Research and Technique*, **2001**, 55, 92-9	2.8	134
2	Mechanics of interstitial-lymphatic fluid transport: theoretical foundation and experimental validation. *Journal of Biomechanics*, **1999**, 32, 1297-307	2.9	116
1	Hyperplasia of lymphatic vessels in VEGF-C transgenic mice. *Science*, **1997**, 276, 1423-5	33.3	1056