Sarah F Hamm-Alvarez

List of Publications by Year
in descending order

125 papers	4,469 citations	117625 34 h-index	128289 60 g-index
130 all docs	130 docs citations	130 times ranked	5530 citing authors

#	Article	IF	Citations
1	Targeting receptor-mediated endocytotic pathways with nanoparticles: Rationale and advances. Advanced Drug Delivery Reviews, 2013, 65, 121-138.	13.7	373
2	Intracellular trafficking of nonviral vectors. Gene Therapy, 2005, 12, 1734-1751.	4.5	309
3	Identification of the second chromophore of Escherichia coli and yeast DNA photolyases as 5,10-methenyltetrahydrofolate.. Proceedings of the National Academy of Sciences of the United States of America, 1988, 85, 2046-2050.	7.1	178
4	Site-Specific Labeling of Enveloped Viruses with Quantum Dots for Single Virus Tracking. ACS Nano, 2008, 2, 1553-1562.	14.6	124
5	Elastin-like polypeptides: Therapeutic applications for an emerging class of nanomedicines. Journal of Controlled Release, 2016, 240, 93-108.	9.9	115
6	Mechanisms of Alveolar Epithelial Translocation of a Defined Population of Nanoparticles. American Journal of Respiratory Cell and Molecular Biology, 2010, 42, 604-614.	2.9	111
7	Microtubule-Dependent Vesicle Transport: Modulation of Channel and Transporter Activity in Liver and Kidney. Physiological Reviews, 1998, 78, 1109-1129.	28.8	109
8	Structure, Function, and Molecular Modeling Approaches to the Study of the Intestinal Dipeptide Transporter PepT1. Journal of Pharmaceutical Sciences, 1998, 87, 1286-1291.	3.3	105
9	Cellular uptake of cyclotide MCoTI-I follows multiple endocytic pathways. Journal of Controlled Release, 2011, 155, 134-143.	9.9	99
10	A rapamycin-binding protein polymer nanoparticle shows potent therapeutic activity in suppressing autoimmune dacryoadenitis in a mouse model of SjÃ¶gren's syndrome. Journal of Controlled Release, 2013, 171, 269-279.	9.9	97
11	Tear Cathepsin S as a Candidate Biomarker for SjÃ¶gren's Syndrome. Arthritis and Rheumatology, 2014, 66, 1872-1881.	5.6	95
12	Polystyrene nanoparticle trafficking across alveolar epithelium. Nanomedicine: Nanotechnology, Biology, and Medicine, 2008, 4, 139-145.	3.3	94
13	Alveolar Epithelial Cell Injury Due to Zinc Oxide Nanoparticle Exposure. American Journal of Respiratory and Critical Care Medicine, 2010, 182, 1398-1409.	5.6	90
14	Actin and non-muscle myosin II facilitate apical exocytosis of tear proteins in rabbit lacrimal acinar epithelial cells. Journal of Cell Science, 2005, 118, 4797-4812.	2.0	82
15	Optimized Preservation of Extracellular Matrix in Cardiac Tissues: Implications for Long-Term Graft Durability. Annals of Thoracic Surgery, 2007, 83, 1641-1650.	1.3	71
16	Molecular Identification of a Role for Tyrosine 167 in the Function of the Human Intestinal Proton-Coupled Dipeptide Transporter (hPepT1). Biochemical and Biophysical Research Communications, 1998, 250, 103-107.	2.1	65
17	Quantitative second harmonic generation imaging of cartilage damage. Cell and Tissue Banking, 2008, 9, 299-307.	1.1	64
18	Increased degradation of extracellular matrix structures of lacrimal glands implicated in the pathogenesis of SjÃ¶gren's syndrome. Matrix Biology, 2008, 27, 53-66.	3.6	64

#	Article	IF	Citations
19	Increased Expression of Cathepsins and Obesity-Induced Proinflammatory Cytokines in Lacrimal Glands of Male NOD Mouse. , 2010, 51, 5019.		64
20	Intracellular Uptake and Trafficking of Difluoroboron Dibenzoylmethaneâ˘Polylactide Nanoparticles in HeLa Cells. ACS Nano, 2010, 4, 2735-2747.	14.6	59
21	Polystyrene nanoparticle trafficking across MDCK-II. Nanomedicine: Nanotechnology, Biology, and Medicine, 2011, 7, 588-594.	3.3	58
22	Cytoplasmic dynein participates in apically targeted stimulated secretory traffic in primary rabbit lacrimal acinar epithelial cells. Journal of Cell Science, 2003, 116, 2051-2065.	2.0	57
23	Design and cellular internalization of genetically engineered polypeptide nanoparticles displaying adenovirus knob domain. Journal of Controlled Release, 2011, 155, 218-226.	9.9	54
24	Rapamycin Eye Drops Suppress Lacrimal Gland Inflammation In a Murine Model of SjÃ¶gren's Syndrome. , 2017, 58, 372.		51
25	Increased Cathepsin S activity associated with decreased protease inhibitory capacity contributes to altered tear proteins in SjÃ¶grenâ€™s Syndrome patients. Scientific Reports, 2018, 8, 11044.	3.3	49
26	Cholinergic Stimulation of Lacrimal Acinar Cells Promotes Redistribution of Membrane-associated Kinesin and the Secretory Protein, Î²-hexosaminidase, and Increases Kinesin Motor Activity. Experimental Eye Research, 1997, 64, 141-156.	2.6	47
27	Molecular mechanisms of lacrimal acinar secretory vesicle exocytosis. Experimental Eye Research, 2006, 83, 84-96.	2.6	45
28	Application of advances in endocytosis and membrane trafficking to drug delivery. Advanced Drug Delivery Reviews, 2020, 157, 118-141.	13.7	44
29	Impairing Actin Filament or Syndapin Functions Promotes Accumulation of Clathrin-coated Vesicles at the Apical Plasma Membrane of Acinar Epithelial Cells. Molecular Biology of the Cell, 2003, 14, 4397-4413.	2.1	43
30	Lacritin-mediated regeneration of the corneal epithelia by protein polymer nanoparticles. Journal of Materials Chemistry B, 2014, 2, 8131-8141.	5.8	43
31	A thermo-responsive protein treatment for dry eyes. Journal of Controlled Release, 2015, 199, 156-167.	9.9	40
32	Oligomeric Î±-synuclein is increased in basal tears of Parkinsonâ€™s patients. Biomarkers in Medicine, 2019, 13, 941-952.	1.4	40
33	Delivery of Bone Marrow-Derived Mesenchymal Stem Cells Improves Tear Production in a Mouse Model of SjÃ¶grenâ€™s Syndrome. Stem Cells International, 2017, 2017, 1-10.	2.5	38
34	Coordinate depression of bradykinin receptor recycling and microtubule-dependent transport by taxol.. Proceedings of the National Academy of Sciences of the United States of America, 1994, 91, 7812-7816.	7.1	36
35	Actin microfilaments et al.â€"the many components, effectors and regulators of epithelial cell endocytosis. Advanced Drug Delivery Reviews, 2003, 55, 1359-1383.	13.7	36
36	Taxol inhibits endosomal-lysosomal membrane trafficking at two distinct steps in CV-1 cells. American Journal of Physiology - Cell Physiology, 1998, 275, C1630-C1639.	4.6	35

#	Article	IF	Citations
37	Male NOD mouse external lacrimal glands exhibit profound changes in the exocytotic pathway early in postnatal development. Experimental Eye Research, 2006, 82, 33-45.	2.6	35
38	Novel Fiber-Dependent Entry Mechanism for Adenovirus Serotype 5 in LacrimalAcini. Journal of Virology, 2006, 80, 11833-11851.	3.4	35
39	Biopharmaceutics of transmucosal peptide and protein drug administration: role of transport mechanisms with a focus on the involvement of PepT1. Journal of Controlled Release, 1999, 62, 129-140.	9.9	34
40	Direct interaction between Rab3D and the polymeric immunoglobulin receptor and trafficking through regulated secretory vesicles in lacrimal gland acinar cells. American Journal of Physiology - Cell Physiology, 2008, 294, C662-C674.	4.6	34
41	Molecular motors and their role in membrane traffic. Advanced Drug Delivery Reviews, 1998, 29, 229-242.	13.7	32
42	The class V myosin motor, myosin 5c, localizes to mature secretory vesicles and facilitates exocytosis in lacrimal acini. American Journal of Physiology - Cell Physiology, 2008, 295, C13-C28.	4.6	32
43	Myoepithelial cell-driven acini contraction in response to oxytocin receptor stimulation is impaired in lacrimal glands of SjÃ¶grenâ€™s syndrome animal models. Scientific Reports, 2018, 8, 9919.	3.3	32
44	Increased protein phosphorylation of cytoplasmic dynein results in impaired motor function. Biochemical Journal, 1999, 342, 1-6.	3.7	30
45	Paclitaxel and nocodazole differentially alter endocytosis in cultured cells. Pharmaceutical Research, 1996, 13, 1647-1656.	3.5	29
46	Biochemical Changes Contributing to Functional Quiescence in Lacrimal Gland Acinar Cells after Chronic Ex Vivo Exposure to a Muscarinic Agonist. Scandinavian Journal of Immunology, 2003, 58, 550-565.	2.7	29
47	Lymphocytic infiltration leads to degradation of lacrimal gland extracellular matrix structures in NOD mice exhibiting a SjÃ¶gren's syndrome-like exocrinopathy. Experimental Eye Research, 2010, 90, 223-237.	2.6	29
48	Imbalanced Rab3D versus Rab27 increases cathepsin S secretion from lacrimal acini in a mouse model of SjÃ¶gren's Syndrome. American Journal of Physiology - Cell Physiology, 2016, 310, C942-C954.	4.6	29
49	The Effects of Apolipoprotein F Deficiency on High Density Lipoprotein Cholesterol Metabolism in Mice. PLoS ONE, 2012, 7, e31616.	2.5	28
50	Analyzing Live Cellularity in the Human Trabecular Meshwork. , 2013, 54, 1039.		27
51	Accumulation of Catalytically Active Proteases in Lacrimal Gland Acinar Cell Endosomes During Chronic Ex Vivo Muscarinic Receptor Stimulation. Scandinavian Journal of Immunology, 2005, 61, 36-50.	2.7	26
52	Typical and atypical trafficking pathways of Ad5 penton base recombinant protein: implications for gene transfer. Gene Therapy, 2006, 13, 821-836.	4.5	26
53	Rab27b regulates exocytosis of secretory vesicles in acinar epithelial cells from the lacrimal gland. American Journal of Physiology - Cell Physiology, 2011, 301, C507-C521.	4.6	25
54	Inhibition of Cathepsin S Reduces Lacrimal Gland Inflammation and Increases Tear Flow in a Mouse Model of SjÃ¶grenâ€™s Syndrome. Scientific Reports, 2019, 9, 9559.	3.3	25

#	Article	IF	Citations
55	A Tunable and Reversible Platform for the Intracellular Formation of Genetically Engineered Protein Microdomains. Biomacromolecules, 2012, 13, 3439-3444.	5.4	24
56	Altered expression of genes functioning in lipid homeostasis is associated with lipid deposition in NOD mouse lacrimal gland. Experimental Eye Research, 2009, 89, 319-332.	2.6	23
57	Interferon-Î³ treatment in vitro elicits some of the changes in cathepsin S and antigen presentation characteristic of lacrimal glands and corneas from the NOD mouse model of SjÃ¶grenâ€™s Syndrome. PLoS ONE, 2017, 12, e0184781.	2.5	23
58	Dominant-negative PKC-Îµ impairs apical actin remodeling in parallel with inhibition of carbachol-stimulated secretion in rabbit lacrimal acini. American Journal of Physiology - Cell Physiology, 2005, 289, C1052-C1068.	4.6	22
59	Elevated prolactin redirects secretory vesicle traffic in rabbit lacrimal acinar cells. American Journal of Physiology - Endocrinology and Metabolism, 2007, 292, E1122-E1134.	3.5	22
60	Cathepsin S Alters the Expression of Pro-Inflammatory Cytokines and MMP-9, Partially through Proteaseâ€"Activated Receptor-2, in Human Corneal Epithelial Cells. International Journal of Molecular Sciences, 2018, 19, 3530.	4.1	22
61	In Situ Autofluorescence Visualization of Human Trabecular Meshwork Structure. , 2012, 53, 2080.		22
62	Mucosal Immunity and Self-Tolerance in the Ocular Surface System. Ocular Surface, 2005, 3, 182-193.	4.4	21
63	Unique Ultrastructure of Exorbital Lacrimal Glands in Male NOD and BALB/c Mice. Current Eye Research, 2006, 31, 13-22.	1.5	21
64	Current status of gene delivery and gene therapy in lacrimal gland using viral vectors. Advanced Drug Delivery Reviews, 2006, 58, 1243-1257.	13.7	21
65	A novel elastin-like polypeptide drug carrier for cyclosporine A improves tear flow in a mouse model of SjÃ¶gren's syndrome. Journal of Controlled Release, 2018, 292, 183-195.	9.9	21
66	NOD and NOR mice exhibit comparable development of lacrimal gland secretory dysfunction but NOD mice have more severe autoimmune dacryoadenitis. Experimental Eye Research, 2018, 176, 243-251.	2.6	21
67	The Ad5 fiber mediates nonviral gene transfer in the absence of the whole virus, utilizing a novel cell entry pathway. Gene Therapy, 2005, 12, 225-237.	4.5	20
68	A Rab11a-enriched subapical membrane compartment regulates a cytoskeleton-dependent transcytotic pathway in secretory epithelial cells of the lacrimal gland. Journal of Cell Science, 2011, 124, 3503-3514.	2.0	20
69	Nocodazole treatment of CV-1 cells enhances nuclear/perinuclear accumulation of lipid-DNA complexes and increases gene expression. Pharmaceutical Research, 2001, 18, 246-249.	3.5	19
70	Novel biphasic traffic of endocytosed EGF to recycling and degradative compartments in lacrimal gland acinar cells. Journal of Cellular Physiology, 2004, 199, 108-125.	4.1	18
71	Nanoparticle translocation across mouse alveolar epithelial cell monolayers: Species-specific mechanisms. Nanomedicine: Nanotechnology, Biology, and Medicine, 2013, 9, 786-794.	3.3	18
72	Flipping the Switch on Clathrinâ€Mediated Endocytosis using Thermally Responsive Protein Microdomains. Advanced Functional Materials, 2014, 24, 5340-5347.	14.9	18

#	Article	IF	Citations
73	Levels of oligomeric Î±-Synuclein in reflex tears distinguish Parkinson's disease patients from healthy controls. Biomarkers in Medicine, 2019, 13, 1447-1457.	1.4	18
74	Tear Proteases and Protease Inhibitors: Potential Biomarkers and Disease Drivers in Ocular Surface Disease. Eye and Contact Lens, 2020, 46, S70-S83.	1.6	18
75	Heterotrimeric GTP-binding Proteins in the Lacrimal Acinar Cell Endomembrane System. Experimental Eye Research, 2002, 74, 7-22.	2.6	17
76	Altered traffic to the lysosome in an ex vivo lacrimal acinar cell model for chronic muscarinic receptor stimulation. Experimental Eye Research, 2004, 79, 665-675.	2.6	17
77	Traffic of endogenous, transduced, and endocytosed prolactin in rabbit lacrimal acinar cells. Experimental Eye Research, 2007, 85, 749-761.	2.6	17
78	Tear-mediated delivery of nanoparticles through transcytosis of the lacrimal gland. Journal of Controlled Release, 2015, 208, 2-13.	9.9	17
79	Longitudinal analysis of tear cathepsin S activity levels in male non-obese diabetic mice suggests its potential as an early stage biomarker of SjÃ¶grenâ€™s Syndrome. Biomarkers, 2019, 24, 91-102.	1.9	17
80	Berunda Polypeptides: Biheaded Rapamycin Carriers for Subcutaneous Treatment of Autoimmune Dry Eye Disease. Molecular Pharmaceutics, 2019, 16, 3024-3039.	4.6	17
81	Polymeric immunoglobulin receptor traffics through two distinct apically targeted pathways in primary lacrimal gland acinar cells. Journal of Cell Science, 2013, 126, 2704-2717.	2.0	15
82	Tears â€“ more to them than meets the eye: why tears are a good source of biomarkers in Parkinson's disease. Biomarkers in Medicine, 2020, 14, 151-163.	1.4	13
83	Cathepsin S activation contributes to elevated CX3CL1 (fractalkine) levels in tears of a SjÃ¶grenâ€™s syndrome murine model. Scientific Reports, 2020, 10, 1455.	3.3	13
84	SjÃ¶gren's autoimmunity: how perturbation of recognition in endomembrane traffic may provoke pathological recognition at the cell surface. , 1998, 11, 40-48.		12
85	Increased protein phosphorylation of cytoplasmic dynein results in impaired motor function. Biochemical Journal, 1999, 342, 1.	3.7	12
86	Diverse Perturbations May Alter the Lacrimal Acinar Cell Autoantigenic Spectra. DNA and Cell Biology, 2002, 21, 435-442.	1.9	12
87	Focus on â€œEGF receptor downregulation depends on a trafficking motif in the distal tyrosine kinase domainâ€. American Journal of Physiology - Cell Physiology, 2002, 282, C417-C419.	4.6	12
88	Translocation of PEGylated quantum dots across rat alveolar epithelial cell monolayers. International Journal of Nanomedicine, 2011, 6, 2849.	6.7	12
89	A Multivalent ICAM-1 Binding Nanoparticle which Inhibits ICAM-1 and LFA-1 Interaction Represents a New Tool for the Investigation of Autoimmune-Mediated Dry Eye. International Journal of Molecular Sciences, 2020, 21, 2758.	4.1	12
90	Integrin adhesion in regulation of lacrimal gland acinar cell secretion. Experimental Eye Research, 2006, 83, 543-553.	2.6	11

#	Article	IF	Citations
91	Small RNA Deep Sequencing Identifies a Unique miRNA Signature Released in Serum Exosomes in a Mouse Model of SjÃ¶gren's Syndrome. Frontiers in Immunology, 2020, 11, 1475.	4.8	11
92	Adenoviral capsid modulates secretory compartment organization and function in acinar epithelial cells from rabbit lacrimal gland. Gene Therapy, 2004, 11, 970-981.	4.5	10
93	Role of the microtubule cytoskeleton in traffic of EGF through the lacrimal acinar cell endomembrane network. Experimental Eye Research, 2004, 78, 1093-1106.	2.6	10
94	Multidimensional Separation Using HILIC and SCX Pre-fractionation for RP LC-MS/MS Platform with Automated Exclusion List-based MS Data Acquisition with Increased Protein Quantification. Journal of Proteomics and Bioinformatics, 2015, 8, 260-265.	0.4	10
95	PP2A: A Novel Target to Prevent Cathepsin Sâ€"mediated Damage in Smoking-induced Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2019, 200, 6-8.	5.6	9
96	Direct Imaging of RAB27B-Enriched Secretory Vesicle Biogenesis in Lacrimal Acinar Cells Reveals Origins on a Nascent Vesicle Budding Site. PLoS ONE, 2012, 7, e31789.	2.5	9
97	Protein phosphatase inhibitors alter cellular microtubules and reduce carbachol-dependent protein secretion in lacrimal acini. Current Eye Research, 2000, 20, 373-383.	1.5	8
98	Modulation of secretory functions in epithelia by adenovirus capsid proteins. Journal of Controlled Release, 2003, 93, 129-140.	9.9	8
99	Cytoskeletal Participation in Stimulated Secretion and Compensatory Apical Plasma Membrane Retrieval in Lacrimal Gland Acinar Cells. Advances in Experimental Medicine and Biology, 2002, 506, 199-205.	1.6	8
100	Mitochondrial medicine and mitochondrion-based therapeutics. Advanced Drug Delivery Reviews, 2008, 60, 1437-1438.	13.7	7
101	Transduced viral IL-10 is exocytosed from lacrimal acinar secretory vesicles in a myosin-dependent manner in response to carbachol. Experimental Eye Research, 2009, 88, 467-478.	2.6	7
102	Molecular Targeting of Immunosuppressants Using a Bifunctional Elastin-Like Polypeptide. Bioconjugate Chemistry, 2019, 30, 2358-2372.	3.6	7
103	Tear miRNAs Identified in a Murine Model of SjÃ¶grenâ€™s Syndrome as Potential Diagnostic Biomarkers and Indicators of Disease Mechanism. Frontiers in Immunology, 2022, 13, 833254.	4.8	7
104	Supra-lacrimal protein-based carriers for cyclosporine A reduce Th17-mediated autoimmunity in murine model of SjÃ¶gren's syndrome. Biomaterials, 2022, 283, 121441.	11.4	7
105	Stable Transfection of MDCK Cells with Epitope-Tagged Human PepT1. Pharmaceutical Research, 2004, 21, 1970-1973.	3.5	6
106	Tyrphostin A8 stimulates a novel trafficking pathway of apically endocytosed transferrin through Rab11-enriched compartments in Caco-2 cells. American Journal of Physiology - Cell Physiology, 2008, 294, C7-C21.	4.6	6
107	Mitochondrial medicine and therapeutics, Part IIâ˜†. Advanced Drug Delivery Reviews, 2009, 61, 1233-1233.	13.7	6
108	Caveolin Elastin-Like Polypeptide Fusions Mediate Temperature-Dependent Assembly of Caveolar Microdomains. ACS Biomaterials Science and Engineering, 2020, 6, 198-204.	5.2	6

#	Article	IF	Citations
109	Biosynthesized Multivalent Lacritin Peptides Stimulate Exosome Production in Human Corneal Epithelium. International Journal of Molecular Sciences, 2020, 21, 6157.	4.1	6
110	Cathepsin S is a novel target for age-related dry eye. Experimental Eye Research, 2022, 214, 108895.	2.6	6
111	Microtubule-based motor proteins: new targets for enhancing drug delivery?. Pharmaceutical Research, 1996, 13, 489-496.	3.5	5
112	Targeting endocytosis and motor proteins to enhance DNA persistence. Pharmaceutical Science & Technology Today, 1999, 2, 190-196.	0.7	5
113	Changes in cytoskeletal organization in polyoma middle T antigen-transformed fibroblasts: Involvement of protein phosphatase 2A andsrc tyrosine kinases. Cytoskeleton, 2000, 47, 253-268.	4.4	5
114	Intralacrimal Sustained Delivery of Rapamycin Shows Therapeutic Effects without Systemic Toxicity in a Mouse Model of Autoimmune Dacryoadenitis Characteristic of SjÃ¶grenâ€™s Syndrome. Biomacromolecules, 2021, 22, 1102-1114.	5.4	5
115	Identification of a Novel Taxol-Sensitive Kinase Activity Associated with the Cytoskeleton. Biochemical and Biophysical Research Communications, 2000, 277, 525-530.	2.1	4
116	Lacrimal Gland Overview. , 2010, , 522-527.		4
117	Rab27a Contributes to Cathepsin S Secretion in Lacrimal Gland Acinar Cells. International Journal of Molecular Sciences, 2021, 22, 1630.	4.1	4
118	Phenylephrine increases tear cathepsin S secretion in healthy murine lacrimal gland acinar cells through an alternative secretory pathway. Experimental Eye Research, 2021, 211, 108760.	2.6	4
119	M3 Receptor Autoimmunity: Losing Tolerance to a Familiar Protein. Advances in Experimental Medicine and Biology, 2002, 506, 51-58.	1.6	4
120	Focused ultrasound stimulation on meibomian glands for the treatment of evaporative dry eye. Experimental Biology and Medicine, 2022, 247, 519-526.	2.4	4
121	Reduced Expression of VEGF-A in Human Retinal Pigment Epithelial Cells and Human Muller Cells Following CRISPR-Cas9 Ribonucleoprotein-Mediated Gene Disruption. Translational Vision Science and Technology, 2020, 9, 23.	2.2	3
122	Epidermal Growth Factor Traffic in Lacrimal Acinar Cells. Advances in Experimental Medicine and Biology, 2002, 506, 213-217.	1.6	3
123	Use of nucleofection to efficiently transfect primary rabbit lacrimal gland acinar cells. Cytotechnology, 2012, 64, 149-156.	1.6	2
124	Intracellular Dynamin Elastin-like Polypeptides Assemble into Rodlike, Spherical, and Reticular Dynasomes. Biomacromolecules, 2022, 23, 265-275.	5.4	1
125	EPIDERMAL GROWTH FACTOR TRAFFIC IN LACRIMALACINAR CELLS.. Cornea, 2000, 19, S137.	1.7	0