Leonard D Shultz

List of Publications by Year
in descending order

85 papers	12,766 citations	44069 48 h-index	53230 85 g-index
90 all docs	90 docs citations	90 times ranked	14917 citing authors

#	Article	IF	Citations
1	Human Lymphoid and Myeloid Cell Development in NOD/LtSz-*scid IL2R*γ*null* Mice Engrafted with Mobilized Human Hemopoietic Stem Cells. Journal of Immunology, 2005, 174, 6477-6489.	0.8	1,513
2	Humanized mice in translational biomedical research. Nature Reviews Immunology, 2007, 7, 118-130.	22.7	1,189
3	Chemotherapy-resistant human AML stem cells home to and engraft within the bone-marrow endosteal region. Nature Biotechnology, 2007, 25, 1315-1321.	17.5	866
4	Humanized mice for immune system investigation: progress, promise and challenges. Nature Reviews Immunology, 2012, 12, 786-798.	22.7	851
5	Development of functional human blood and immune systems in NOD/SCID/IL2 receptor γ chainnull mice. Blood, 2005, 106, 1565-1573.	1.4	849
6	T Cell-Specific siRNA Delivery Suppresses HIV-1 Infection in Humanized Mice. Cell, 2008, 134, 577-586.	28.9	542
7	Humanized Mouse Models of Clinical Disease. Annual Review of Pathology: Mechanisms of Disease, 2017, 12, 187-215.	22.4	437
8	Induction of cell cycle entry eliminates human leukemia stem cells in a mouse model of AML. Nature Biotechnology, 2010, 28, 275-280.	17.5	373
9	Identification of Therapeutic Targets for Quiescent, Chemotherapy-Resistant Human Leukemia Stem Cells. Science Translational Medicine, 2010, 2, 17ra9.	12.4	364
10	Generation of functional human T-cell subsets with HLA-restricted immune responses in HLA class I expressing NOD/SCID/IL2rγ*null* humanized mice. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 13022-13027.	7.1	348
11	SCID Mouse Models of Human Stem Cell Engraftment. Stem Cells, 1998, 16, 166-177.	3.2	289
12	Humanized mice in studying efficacy and mechanisms of PD‑1‑targeted cancer immunotherapy. FASEB Journal, 2018, 32, 1537-1549.	0.5	260
13	Effective Targeting of Quiescent Chronic Myelogenous Leukemia Stem Cells by Histone Deacetylase Inhibitors in Combination with Imatinib Mesylate. Cancer Cell, 2010, 17, 427-442.	16.8	245
14	Parameters for establishing humanized mouse models to study human immunity: Analysis of human hematopoietic stem cell engraftment in three immunodeficient strains of mice bearing the IL2rγnull mutation. Clinical Immunology, 2010, 135, 84-98.	3.2	225
15	Improved Murine Model of Malaria Using *Plasmodium falciparum* Competent Strains and Non-Myelodepleted NOD-*scid IL2R*γ*null* Mice Engrafted with Human Erythrocytes. Antimicrobial Agents and Chemotherapy, 2009, 53, 4533-4536.	3.2	171
16	A new Hu-PBL model for the study of human islet alloreactivity based on NOD-scid mice bearing a targeted mutation in the IL-2 receptor gamma chain gene. Clinical Immunology, 2008, 126, 303-314.	3.2	163
17	High Levels of Human Peripheral Blood Mononuclear Cell Engraftment and Enhanced Susceptibility to Human Immunodeficiency Virus Type 1 Infection in NOD/LtSz-scid/scid Mice. Journal of Infectious Diseases, 1995, 172, 974-982.	4.0	159
18	Human Cancer Growth and Therapy in Immunodeficient Mouse Models. Cold Spring Harbor Protocols, 2014, 2014, pdb.top073585.	0.3	156

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19	Human acute leukemia cells injected in NOD/LtSz-*scid/IL-2Rγ* null mice generate a faster and more efficient disease compared to other NOD/*scid*-related strains. International Journal of Cancer, 2008, 123, 2222-2227.	5.1	155
20	Retroviruses use CD169-mediated trans-infection of permissive lymphocytes to establish infection. Science, 2015, 350, 563-567.	12.6	155
21	α Cell Function and Gene Expression Are Compromised in Type 1 Diabetes. Cell Reports, 2018, 22, 2667-2676.	6.4	152
22	Overcoming Current Limitations in Humanized Mouse Research. Journal of Infectious Diseases, 2013, 208, S125-S130.	4.0	127
23	Development of Mature and Functional Human Myeloid Subsets in Hematopoietic Stem Cell-Engrafted NOD/SCID/IL2rγKO Mice. Journal of Immunology, 2012, 188, 6145-6155.	0.8	124
24	Generation of improved humanized mouse models for human infectious diseases. Journal of Immunological Methods, 2014, 410, 3-17.	1.4	124
25	Humanized nonobese diabetic-*scid IL2rγnull* mice are susceptible to lethal *Salmonella* Typhi infection. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 15589-15594.	7.1	122
26	Dengue Virus Infection and Virus-Specific HLA-A2 Restricted Immune Responses in Humanized NOD-scid IL2rγnull Mice. PLoS ONE, 2009, 4, e7251.	2.5	121
27	Age-dependent human β cell proliferation induced by glucagon-like peptide 1 and calcineurin signaling. Journal of Clinical Investigation, 2017, 127, 3835-3844.	8.2	118
28	Accelerated Wound Healing of Alkali-Burned Corneas in MRL Mice Is Associated with a Reduced Inflammatory Signature. , 2005, 46, 4097.		104
29	Lack of acute xenogeneic graft-*versus*-host disease, but retention of T-cell function following engraftment of human peripheral blood mononuclear cells in NSG mice deficient in MHC class I and II expression. FASEB Journal, 2019, 33, 3137-3151.	0.5	99
30	Improved B cell development in humanized NOD-*scid IL2Rγnull* mice transgenically expressing human stem cell factor, granulocyte-macrophage colony-stimulating factor and interleukin-3. Immunity, Inflammation and Disease, 2016, 4, 427-440.	2.7	97
31	Membrane-bound human SCF/KL promotes in vivo human hematopoietic engraftment and myeloid differentiation. Blood, 2012, 119, 2768-2777.	1.4	96
32	Sepsis-induced human lymphocyte apoptosis and cytokine production in "humanized" mice. Journal of Leukocyte Biology, 2009, 86, 219-227.	3.3	91
33	Enhanced humoral and HLA-A2-restricted dengue virus-specific T-cell responses in humanized BLT NSG mice. Immunology, 2012, 136, 334-343.	4.4	88
34	Stress-impaired transcription factor expression and insulin secretion in transplanted human islets. Journal of Clinical Investigation, 2016, 126, 1857-1870.	8.2	86
35	Innovations, challenges, and minimal information for standardization of humanized mice. EMBO Molecular Medicine, 2020, 12, e8662.	6.9	82
36	Role of Natural Killer Cells on Engraftment of Human Lymphoid Cells and on Metastasis of Human T-Lymphoblastoid Leukemia Cells in C57BL/6J-scidMice and in C57BL/6J-scid bgMice. Cellular Immunology, 1996, 171, 186-199.	3.0	80

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37	Humanized mouse model of mast cell–mediated passive cutaneous anaphylaxis and passive systemic anaphylaxis. Journal of Allergy and Clinical Immunology, 2016, 138, 769-779.	2.9	80
38	Engraftment of human HSCs in nonirradiated newborn NOD-scid IL2rγnull mice is enhanced by transgenic expression of membrane-bound human SCF. Blood, 2012, 119, 2778-2788.	1.4	76
39	Humanized mouse models of immunological diseases and precision medicine. Mammalian Genome, 2019, 30, 123-142.	2.2	76
40	Islet-Specific CTL Cloned from a Type 1 Diabetes Patient Cause Beta-Cell Destruction after Engraftment into HLA-A2 Transgenic NOD/SCID/IL2RG Null Mice. PLoS ONE, 2012, 7, e49213.	2.5	75
41	Efficient and Targeted Transduction of Nonhuman Primate Liver With Systemically Delivered Optimized AAV3B Vectors. Molecular Therapy, 2015, 23, 1867-1876.	8.2	73
42	NOD-scid IL2rγnull Mouse Model of Human Skin Transplantation and Allograft Rejection. Transplantation, 2010, 89, 527-536.	1.0	69
43	Human Immune System Development and Rejection of Human Islet Allografts in Spontaneously Diabetic NOD-*Rag1null IL2r*γ*null*–*Ins2Akita* Mice. Diabetes, 2010, 59, 2265-2270.	0.6	68
44	Human Cord Blood-Derived Cells Generate Insulin-Producing Cells In Vivo. Stem Cells, 2005, 23, 1409-1416.	3.2	67
45	Humanized mice as a preclinical tool for infectious disease and biomedical research. Annals of the New York Academy of Sciences, 2011, 1245, 50-54.	3.8	59
46	Humanized mice for the study of infectious diseases. Current Opinion in Immunology, 2013, 25, 428-435.	5.5	59
47	Improvements and Limitations of Humanized Mouse Models for HIV Research: NIH/NIAID "Meet the Experts" 2015 Workshop Summary. AIDS Research and Human Retroviruses, 2016, 32, 109-119.	1.1	57
48	*Rhbdf2* mutations increase its protein stability and drive EGFR hyperactivation through enhanced secretion of amphiregulin. Proceedings of the National Academy of Sciences of the United States of America, 2014, 111, E2200-9.	7.1	56
49	Human BLyS Facilitates Engraftment of Human PBL Derived B Cells in Immunodeficient Mice. PLoS ONE, 2008, 3, e3192.	2.5	53
50	NOD-scidIl2rg tm1Wjl and NOD-Rag1 null Il2rg tm1Wjl : A Model for Stromal Cell–Tumor Cell Interaction for Human Colon Cancer. Digestive Diseases and Sciences, 2014, 59, 1169-1179.	2.3	52
51	Regulation of human short-term repopulating cell (STRC) engraftment in NOD/SCID mice by host CD122 + cells. Experimental Hematology, 2003, 31, 551-558.	0.4	48
52	Engrafted human cells generate adaptive immune responses to Mycobacterium bovis BCG infection in humanized mice. BMC Immunology, 2013, 14, 53.	2.2	41
53	Viral Infection of Engrafted Human Islets Leads to Diabetes. Diabetes, 2015, 64, 1358-1369.	0.6	41
54	Induction of WT1-specific human CD8+ T cells from human HSCs in HLA class I Tg NOD/SCID/IL2rgKO mice. Blood, 2016, 127, 722-734.	1.4	39

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55	Dengue virus infection induces broadly cross-reactive human IgM antibodies that recognize intact virions in humanized BLT-NSG mice. Experimental Biology and Medicine, 2015, 240, 67-78.	2.4	38
56	Human allograft rejection in humanized mice: a historical perspective. Cellular and Molecular Immunology, 2012, 9, 225-231.	10.5	33
57	Alloimmune Responses of Humanized Mice to Human Pluripotent Stem Cell Therapeutics. Cell Reports, 2017, 20, 1978-1990.	6.4	31
58	Curly bare (cub), a new mouse mutation on chromosome 11 causing skin and hair abnormalities, and a modifier gene (mcub) on chromosome 5. Genomics, 2003, 81, 6-14.	2.9	30
59	Human cord blood—and bone marrow—derived CD34 + cells regenerate gastrointestinal epithelial cells. FASEB Journal, 2004, 18, 1958-1960.	0.5	28
60	A rapid, sensitive, and reproducible in vivo PBMC humanized murine model for determining therapeutic—related cytokine release syndrome. FASEB Journal, 2020, 34, 12963-12975.	0.5	28
61	ADAM17 is essential for ectodomain shedding of the EGF—receptor ligand amphiregulin. FEBS Open Bio, 2018, 8, 702-710.	2.3	23
62	Understanding Normal and Malignant Human Hematopoiesis Using Next-Generation Humanized Mice. Trends in Immunology, 2020, 41, 706-720.	6.8	23
63	Phorbol ester responsiveness of murine Ly-1-lineage B cells from normal and viable motheaten mutant mice. European Journal of Immunology, 1991, 21, 721-729.	2.9	21
64	Development of Humanized Mice in the Age of Genome Editing. Journal of Cellular Biochemistry, 2017, 118, 3043-3048.	2.6	20
65	Ectopic high endothelial venules in pancreatic ductal adenocarcinoma: A unique site for targeted delivery. EBioMedicine, 2018, 38, 79-88.	6.1	20
66	Genes adapt to outsmart gene-targeting strategies in mutant mouse strains by skipping exons to reinitiate transcription and translation. Genome Biology, 2020, 21, 168.	8.8	19
67	A novel hemolytic complement-sufficient NSG mouse model supports studies of complement-mediated antitumor activity in vivo. Journal of Immunological Methods, 2017, 446, 47-53.	1.4	18
68	Role of MicroRNA in Inflammatory Bowel Disease: Clinical Evidence and the Development of Preclinical Animal Models. Cells, 2021, 10, 2204.	4.1	18
69	Beyond the brain: disrupted in schizophrenia 1 regulates pancreatic β—cell function *via* glycogen synthase kinase—3β. FASEB Journal, 2016, 30, 983-993.	0.5	16
70	Gene Therapy with an Adeno-Associated Viral Vector Expressing Human Interleukin-2 Alters Immune System Homeostasis in Humanized Mice. Human Gene Therapy, 2018, 29, 352-365.	2.7	15
71	The Presence and Preferential Activation of Regulatory T Cells Diminish Adoptive Transfer of Autoimmune Diabetes by Polyclonal Nonobese Diabetic (NOD) T Cell Effectors into NSG versus NOD-*scid* Mice. Journal of Immunology, 2015, 195, 3011-3019.	0.8	14
72	Early induction of NRF2 antioxidant pathway by RHBDF2 mediates rapid cutaneous wound healing. Experimental and Molecular Pathology, 2017, 102, 337-346.	2.1	14

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73	Genetic deletion of amphiregulin restores the normal skin phenotype in a mouse model of the human skin disease tylosis. Biology Open, 2017, 6, 1174-1179.	1.2	13
74	Genetic ablation of lymphocytes and cytokine signaling in nonobese diabetic mice prevents dietâ€induced obesity and insulin resistance. FASEB Journal, 2016, 30, 1328-1338.	0.5	12
75	RHBDF2-Regulated Growth Factor Signaling in a Rare Human Disease, Tylosis With Esophageal Cancer: What Can We Learn From Murine Models?. Frontiers in Genetics, 2018, 9, 233.	2.3	10
76	Genetically modified human CD4+ T cells can be evaluated inÂvivo without lethal graftâ€versusâ€host disease. Immunology, 2016, 148, 339-351.	4.4	9
77	TEG011 persistence averts extramedullary tumor growth without exerting offâ€target toxicity against healthy tissues in a humanized HLAâ€A*24:02 transgenic mice. Journal of Leukocyte Biology, 2020, 107, 1069-1079.	3.3	9
78	Retrotransposon Insertion in the T-cell Acute Lymphocytic Leukemia 1 (Tal1) Gene Is Associated with Severe Renal Disease and Patchy Alopecia in Hairpatches (Hpt) Mice. PLoS ONE, 2013, 8, e53426.	2.5	8
79	Tissue-specific role of RHBDF2 in cutaneous wound healing and hyperproliferative skin disease. BMC Research Notes, 2017, 10, 573.	1.4	6
80	Human Antiâ€"HIV-1 gp120 Monoclonal Antibodies with Neutralizing Activity Cloned from Humanized Mice Infected with HIV-1. Journal of Immunology, 2019, 202, 799-804.	0.8	5
81	Humanized Mouse Model Used to Monitor MUC Gene Expression in Nasal Polyps and to Preclinically Evaluate the Efficacy of Montelukast in Reducing Mucus Production. Annals of Otology, Rhinology and Laryngology, 2012, 121, 307-316.	1.1	4
82	Improved mouse models and advanced genetic and genomic technologies for the study of neutrophils. Drug Discovery Today, 2020, 25, 1013-1025.	6.4	4
83	A novel clinically relevant graft-versus-leukemia model in humanized mice. Journal of Leukocyte Biology, 2022, 111, 427-437.	3.3	4
84	Inactive rhomboid proteins RHBDF1 and RHBDF2 (iRhoms): a decade of research in murine models. Mammalian Genome, 2021, 32, 415-426.	2.2	4
85	Clathrin light chainâ€conjugated drug delivery for cancer. Bioengineering and Translational Medicine, 2023, 8, e10273.	7.1	2