Roland W Herzog

List of Publications by Year
in descending order

135	7,622	57758	54911
papers	citations	44 h-index	84 g-index

135	135	135	4866
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Evidence for gene transfer and expression of factor IX in haemophilia B patients treated with an AAV vector. Nature Genetics, 2000, 24, 257-261.	21.4	971
2	AAV-mediated factor IX gene transfer to skeletal muscle in patients with severe hemophilia B. Blood, 2003, 101, 2963-2972.	1.4	707
3	Immune Responses to Viral Gene Therapy Vectors. Molecular Therapy, 2020, 28, 709-722.	8.2	382
4	Induction of immune tolerance to coagulation factor IX antigen by in vivo hepatic gene transfer. Journal of Clinical Investigation, 2003, 111, 1347-1356.	8.2	363
5	Long-term correction of inhibitor-prone hemophilia B dogs treated with liver-directed AAV2-mediated factor IX gene therapy. Blood, 2009, 113, 797-806.	1.4	247
6	Induction of immune tolerance to coagulation factor IX antigen by in vivo hepatic gene transfer. Journal of Clinical Investigation, 2003, 111, 1347-1356.	8.2	242
7	Induction and role of regulatory CD4+CD25+ T cells in tolerance to the transgene product following hepatic in vivo gene transfer. Blood, 2007, 110, 1132-1140.	1.4	216
8	The genome of self-complementary adeno-associated viral vectors increases Toll-like receptor 9â€“dependent innate immune responses in the liver. Blood, 2011, 117, 6459-6468.	1.4	187
9	Clinical development of gene therapy: results and lessons from recent successes. Molecular Therapy - Methods and Clinical Development, 2016, 3, 16034.	4.1	183
10	Engineered AAV vector minimizes in vivo targeting of transduced hepatocytes by capsid-specific CD8+ T cells. Blood, 2013, 121, 2224-2233.	1.4	149
11	Oral delivery of bioencapsulated coagulation factor IX prevents inhibitor formation and fatal anaphylaxis in hemophilia B mice. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 7101-7106.	7.1	140
12	Update on clinical gene therapy for hemophilia. Blood, 2019, 133, 407-414.	1.4	140
13	Role of Vector in Activation of T Cell Subsets in Immune Responses against the Secreted Transgene Product Factor IX. Molecular Therapy, 2000, 1, 225-235.	8.2	135
14	Induction of antigen-specific CD4+ T-cell anergy and deletion by in vivo viral gene transfer. Blood, 2004, 104, 969-977.	1.4	131
15	Low cost industrial production of coagulation factor IX bioencapsulated in lettuce cells for oral tolerance induction in hemophilia B. Biomaterials, 2015, 70, 84-93.	11.4	124
16	Prevention of cytotoxic T lymphocyte responses to factor IX-expressing hepatocytes by gene transfer-induced regulatory T cells. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 4592-4597.	7.1	114
17	Effective gene therapy for haemophilic mice with pathogenic factor <scp>IX</scp> antibodies. EMBO Molecular Medicine, 2013, 5, 1698-1709.	6.9	108
18	Hepatic Gene Transfer as a Means of Tolerance Induction to Transgene Products. Current Gene Therapy, 2009, 9, 104-114.	2.0	108

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19	Suppression of inhibitor formation against FVIII in a murine model of hemophilia A by oral delivery of antigens bioencapsulated in plant cells. Blood, 2014, 124, 1659-1668.	1.4	94
20	Superior In vivo Transduction of Human Hepatocytes Using Engineered AAV3 Capsid. Molecular Therapy, 2016, 24, 1042-1049.	8.2	91
21	Plasmacytoid and conventional dendritic cells cooperate in crosspriming AAV capsid-specific CD8+ T cells. Blood, 2017, 129, 3184-3195.	1.4	83
22	Safety of Intradiaphragmatic Delivery of Adeno-Associated Virus-Mediated Alpha-Glucosidase (rAAV1-CMV-hGAA) Gene Therapy in Children Affected by Pompe Disease. Human Gene Therapy Clinical Development, 2017, 28, 208-218.	3.1	83
23	Mechanism of oral tolerance induction to therapeutic proteins. Advanced Drug Delivery Reviews, 2013, 65, 759-773.	13.7	74
24	Synergy between rapamycin and FLT3 ligand enhances plasmacytoid dendritic cellâ€“dependent induction of CD4+CD25+FoxP3+ Treg. Blood, 2015, 125, 2937-2947.	1.4	74
25	Evaluation of Readministration of a Recombinant Adeno-Associated Virus Vector Expressing Acid Alpha-Glucosidase in Pompe Disease: Preclinical to Clinical Planning. Human Gene Therapy Clinical Development, 2015, 26, 185-193.	3.1	74
26	Transient B Cell Depletion or Improved Transgene Expression by Codon Optimization Promote Tolerance to Factor VIII in Gene Therapy. PLoS ONE, 2012, 7, e37671.	2.5	73
27	Cas9-specific immune responses compromise local and systemic AAV CRISPR therapy in multiple dystrophic canine models. Nature Communications, 2021, 12, 6769.	12.8	73
28	Adeno-Associated Virus Type 2 and Hepatocellular Carcinoma?. Human Gene Therapy, 2015, 26, 779-781.	2.7	71
29	Development of gene transfer for induction of antigen-specific tolerance. Molecular Therapy - Methods and Clinical Development, 2014, 1, 14013.	4.1	68
30	A Molecular Revolution in the Treatment of Hemophilia. Molecular Therapy, 2020, 28, 997-1015.	8.2	66
31	Animal Models of Hemophilia. Progress in Molecular Biology and Translational Science, 2012, 105, 151-209.	1.7	62
32	Unique Roles of TLR9- and MyD88-Dependent and -Independent Pathways in Adaptive Immune Responses to AAV-Mediated Gene Transfer. Journal of Innate Immunity, 2015, 7, 302-314.	3.8	62
33	Nonredundant Roles of IL-10 and TGF-Î² in Suppression of Immune Responses to Hepatic AAV-Factor IX Gene Transfer. Molecular Therapy, 2011, 19, 1263-1272.	8.2	61
34	Ex vivo expanded autologous polyclonal regulatory T cells suppress inhibitor formation in hemophilia. Molecular Therapy - Methods and Clinical Development, 2014, 1, 14030.	4.1	59
35	Vector Design Tour de Force: Integrating Combinatorial and Rational Approaches to Derive Novel Adeno-associated Virus Variants. Molecular Therapy, 2014, 22, 1900-1909.	8.2	59
36	Two decades of clinical gene therapy--success is finally mounting. Discovery Medicine, 2010, 9, 105-11.	0.5	58

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37	Plant-based oral tolerance to hemophilia therapy employs a complex immune regulatory response including LAP+CD4+ T cells. Blood, 2015, 125, 2418-2427.	1.4	57
38	Potential for cellular stress response to hepatic factor VIII expression from AAV vector. Molecular Therapy - Methods and Clinical Development, 2016, 3, 16063.	4.1	54
39	Oral Tolerance Induction in Hemophilia B Dogs Fed with Transplastomic Lettuce. Molecular Therapy, 2017, 25, 512-522.	8.2	54
40	Immune Responses to AAV Capsid: Are Mice Not Humans After All?. Molecular Therapy, 2007, 15, 649-650.	8.2	51
41	Oral delivery of Acid Alpha Glucosidase epitopes expressed in plant chloroplasts suppresses antibody formation in treatment of Pompe mice. Plant Biotechnology Journal, 2015, 13, 1023-1032.	8.3	51
42	Gene therapy for hemophilia. Frontiers in Bioscience - Landmark, 2015, 20, 556-603.	3.0	51
43	Low cost delivery of proteins bioencapsulated in plant cells to human non-immune or immune modulatory cells. Biomaterials, 2016, 80, 68-79.	11.4	50
44	The Balance between CD8+ T Cell-Mediated Clearance of AAV-Encoded Antigen in the Liver and Tolerance Is Dependent on the Vector Dose. Molecular Therapy, 2017, 25, 880-891.	8.2	50
45	Role of orally induced regulatory T cells in immunotherapy and tolerance. Cellular Immunology, 2021, 359, 104251.	3.0	48
46	Expression and assembly of largest foreign protein in chloroplasts: oral delivery of human FVIII made in lettuce chloroplasts robustly suppresses inhibitor formation in haemophilia A mice. Plant Biotechnology Journal, 2018, 16, 1148-1160.	8.3	46
47	Type I IFN Sensing by cDCs and CD4+ T Cell Help Are Both Requisite for Cross-Priming of AAV Capsid-Specific CD8+ T Cells. Molecular Therapy, 2020, 28, 758-770.	8.2	45
48	Targeted approaches to induce immune tolerance for Pompe disease therapy. Molecular Therapy - Methods and Clinical Development, 2016, 3, 15053.	4.1	44
49	Copackaged AAV9 Vectors Promote Simultaneous Immune Tolerance and Phenotypic Correction of Pompe Disease. Human Gene Therapy, 2016, 27, 43-59.	2.7	44
50	Plant cell-made protein antigens for induction of Oral tolerance. Biotechnology Advances, 2019, 37, 107413.	11.7	44
51	Expansion, in vivoâ€“ex vivo cycling, and genetic manipulation of primary human hepatocytes. Proceedings of the National Academy of Sciences of the United States of America, 2020, 117, 1678-1688.	7.1	41
52	Differential Type I Interferon-dependent Transgene Silencing of Helper-dependent Adenoviral vs. Adeno-associated Viral Vectors In Vivo. Molecular Therapy, 2013, 21, 796-805.	8.2	40
53	Complexity of immune responses to AAV transgene products â€“ Example of factor IX. Cellular Immunology, 2019, 342, 103658.	3.0	37
54	Prevention and Reversal of Antibody Responses Against Factor IX in Gene Therapy for Hemophilia B. Frontiers in Microbiology, 2011, 2, 244.	3.5	36

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55	Dynamics of antigen presentation to transgene product-specific CD4+ T cells and of Treg induction upon hepatic AAV gene transfer. Molecular Therapy - Methods and Clinical Development, 2016, 3, 16083.	4.1	36
56	Role of the vector genome and underlying factor IX mutation in immune responses to AAV gene therapy for hemophilia B. Journal of Translational Medicine, 2014, 12, 25.	4.4	35
57	Effect of CpG Depletion of Vector Genome on CD8+ T Cell Responses in AAV Gene Therapy. Frontiers in Immunology, 2021, 12, 672449.	4.8	35
58	In vivo induction of regulatory T cells for immune tolerance in hemophilia. Cellular Immunology, 2016, 301, 18-29.	3.0	34
59	SLAMF6 as a Regulator of Exhausted CD8+ T Cells in Cancer. Cancer Immunology Research, 2019, 7, 1485-1496.	3.4	34
60	Hemophilia Gene Therapy: Caught Between a Cure and an Immune Response. Molecular Therapy, 2015, 23, 1411-1412.	8.2	31
61	Immune Tolerance Induction to Factor IX through B Cell Gene Transfer: TLR9 Signaling Delineates between Tolerogenic and Immunogenic B Cells. Molecular Therapy, 2014, 22, 1139-1150.	8.2	30
62	Combination therapy for inhibitor reversal in haemophilia A using monoclonal anti-CD20 and rapamycin. Thrombosis and Haemostasis, 2017, 117, 33-43.	3.4	30
63	Gene Therapy With Regulatory T Cells: A Beneficial Alliance. Frontiers in Immunology, 2018, 9, 554.	4.8	30
64	Regulatory T cells and TLR9 activation shape antibody formation to a secreted transgene product in AAV muscle gene transfer. Cellular Immunology, 2019, 342, 103682.	3.0	29
65	Innovative Approaches for Immune Tolerance to Factor VIII in the Treatment of Hemophilia A. Frontiers in Immunology, 2017, 8, 1604.	4.8	28
66	Glucocorticoid-Induced TNF Receptor Family-Related Protein Ligand is Requisite for Optimal Functioning of Regulatory CD4+ T Cells. Frontiers in Immunology, 2014, 5, 35.	4.8	25
67	Immune Responses and Hypercoagulation in ERT for Pompe Disease Are Mutation and rhGAA Dose Dependent. PLoS ONE, 2014, 9, e98336.	2.5	25
68	TLR9-Activating CpG-B ODN but Not TLR7 Agonists Triggers Antibody Formation to Factor IX in Muscle Gene Transfer. Human Gene Therapy Methods, 2019, 30, 81-92.	2.1	22
69	AAV-Mediated Gene Delivery to the Liver: Overview of Current Technologies and Methods. Methods in Molecular Biology, 2019, 1950, 333-360.	0.9	22
70	Liver Gene Therapy: Reliable and Durable?. Molecular Therapy, 2019, 27, 1863-1864.	8.2	20
71	Reprogrammed CD4+ T Cells That Express FoxP3+ Control Inhibitory Antibody Formation in Hemophilia A Mice. Frontiers in Immunology, 2019, 10, 274.	4.8	20
72	Engineering and InÂVitro Selection of a Novel AAV3B Variant with High Hepatocyte Tropism and Reduced Seroreactivity. Molecular Therapy - Methods and Clinical Development, 2020, 19, 347-361.	4.1	19

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73	Development of a Clinical Candidate AAV3 Vector for Gene Therapy of Hemophilia B. Human Gene Therapy, 2020, 31, 1114-1123.	2.7	19
74	Experimental Variables that Affect Human Hepatocyte AAV Transduction in Liver Chimeric Mice. Molecular Therapy - Methods and Clinical Development, 2020, 18, 189-198.	4.1	19
75	Role of Small Intestine and Gut Microbiome in Plant-Based Oral Tolerance for Hemophilia. Frontiers in Immunology, 2020, 11, 844.	4.8	19
76	Liver gene therapy and hepatocellular carcinoma: A complex web. Molecular Therapy, 2021, 29, 1353-1354.	8.2	17
77	Preclinical development of plantâ€based oral immune modulatory therapy for haemophilia B. Plant Biotechnology Journal, 2021, 19, 1952-1966.	8.3	17
78	Update on gene therapy for hereditary hematological disorders. Expert Review of Cardiovascular Therapy, 2003, 1, 215-232.	1.5	16
79	Evaluation of engineered AAV capsids for hepatic factor IX gene transfer in murine and canine models. Journal of Translational Medicine, 2017, 15, 94.	4.4	16
80	Hepatic AAV Gene Transfer and the Immune System: Friends or Foes?. Molecular Therapy, 2010, 18, 1063-1066.	8.2	14
81	Tolerance induction in hemophilia. Current Opinion in Hematology, 2018, 25, 365-372.	2.5	14
82	Gene therapy for treatment of inherited haematological disorders. Expert Opinion on Biological Therapy, 2006, 6, 509-522.	3.1	13
83	BAFF blockade prevents anti-drug antibody formation in a mouse model of Pompe disease. Clinical Immunology, 2015, 158, 140-147.	3.2	13
84	Immune Modulatory Cell Therapy for Hemophilia B Based on CD20-Targeted Lentiviral Gene Transfer to Primary B Cells. Molecular Therapy - Methods and Clinical Development, 2017, 5, 76-82.	4.1	13
85	An Immune-Competent Murine Model to Study Elimination of AAV-Transduced Hepatocytes by Capsid-Specific CD8+ T Cells. Molecular Therapy - Methods and Clinical Development, 2017, 5, 142-152.	4.1	13
86	Encouraging and Unsettling Findings in Long-Term Follow-up of AAV Gene Transfer. Molecular Therapy, 2020, 28, 341-342.	8.2	12
87	Keeping Them Honest: Fighting Fraud in Academic Publishing. Molecular Therapy, 2021, 29, 889-890.	8.2	11
88	SLAMF6 in health and disease: Implications for therapeutic targeting. Clinical Immunology, 2019, 204, 3-13.	3.2	9
89	Did Dendritic Cell Activation, Induced by Adenovirus-Antibody Complexes, Play a Role in the Death of Jesse Gelsinger?. Molecular Therapy, 2020, 28, 704-706.	8.2	9
90	Impact of neutralizing antibodies against AAV is a key consideration in gene transfer to nonhuman primates. Nature Medicine, 2018, 24, 699-699.	30.7	8

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91	RNA-based vaccines and innate immune activation: Not too hot and not too cold. Molecular Therapy, 2021, 29, 1365-1366.	8.2	8
92	Recent advances in hepatic gene transfer: more efficacy and less immunogenicity. Current Opinion in Drug Discovery & Development, 2005, 8, 199-206.	1.9	8
93	The national blueprint for future basic and translational research to understand factor VIII immunogenicity: NHLBI State of the Science Workshop on factor VIII inhibitors. Haemophilia, 2019, 25, 595-602.	2.1	7
94	Neutralizing the Neutralizers in AAV Gene Therapy. Molecular Therapy, 2020, 28, 1741-1742.	8.2	7
95	Coagulation factor IX gene transfer to non-human primates using engineered AAV3 capsid and hepatic optimized expression cassette. Molecular Therapy - Methods and Clinical Development, 2021, 23, 98-107.	4.1	7
96	Treatment-induced hemophilic thrombosis?. Molecular Therapy, 2022, 30, 505-506.	8.2	7
97	One MicroRNA Controls Both Angiogenesis and TLR-mediated Innate Immunity to Nucleic Acids. Molecular Therapy, 2014, 22, 249-250.	8.2	6
98	An Annis Mirabilis for the Molecular Therapy Journal Family. Molecular Therapy, 2021, 29, 1.	8.2	5
99	The Checkpoint Regulator SLAMF3 Preferentially Prevents Expansion of Auto-Reactive B Cells Generated by Graft-vs.-Host Disease. Frontiers in Immunology, 2019, 10, 831.	4.8	4
100	AAV Immunogenicity: New Answers Create New Questions. Molecular Therapy, 2018, 26, 2538-2539.	8.2	3
101	Molecular Therapy: Flagship of a Strong Fleet of Journals. Molecular Therapy, 2020, 28, 1.	8.2	3
102	Anti-CD20 to Control Antibody Formation Against FVIII In Gene and Protein Replacement Therapy. Blood, 2010, 116, 711-711.	1.4	3
103	AAV Vector Dose Determines TLR9 Dependence of CD8+ T Cell Response to Transgene Product. Blood, 2020, 136, 3-3.	1.4	3
104	Substantial immune suppression required in gene therapy for muscular dystrophy?. Neuromuscular Disorders, 2008, 18, 83-84.	0.6	2
105	Special Issue Features State-of-the-Art in Clinical Gene Therapy. Molecular Therapy, 2020, 28, 1933.	8.2	2
106	When Immune Suppression Goes Wrong. Molecular Therapy, 2020, 28, 1381-1382.	8.2	2
107	Hepatic Gene Transfer of Factor IX Reverses Inhibitors and Protects From Anaphylaxis in a Murine Hemophilia B Model. Blood, 2011, 118, 669-669.	1.4	2
108	Suppression of Inhibitor Formation Against Factor VIII in Hemophilia A Mice by Oral Delivery of Bioencapsulated Antigen. Blood, 2012, 120, 14-14.	1.4	2

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109	ASGCT Meeting Showcases Fast-Paced Development of Gene and Cell Therapy Technologies. Molecular Therapy, 2020, 28, 1547.	8.2	1
110	Self-Complementary AAV Vectors Cause a Substantially Heightened TLR9-Dependent Innate Immune Response In the Liver. Blood, 2010, 116, 252-252.	1.4	1
111	Immune Tolerance Induction to Factor IX Through B Cell Gene Transfer â€“ Delineating Between Tolerogenic and Immunogenic B Cells.. Blood, 2012, 120, 3156-3156.	1.4	1
112	Mechanism Of Oral Tolerance Induced By Bioencapsulated Coagulation Factor IX In Hemophilia B Mice. Blood, 2013, 122, 30-30.	1.4	1
113	Treg: tolerance vs immunity. Oncotarget, 2015, 6, 19956-19957.	1.8	1
114	Suppression of Inhibitor Formation in Protein and Gene Therapy for Hemophilia Using Ex Vivo Expanded Treg. Blood, 2012, 120, 13-13.	1.4	1
115	Cross Priming of Transgene Product-Specific CD8+ T Cells in Hepatic AAV Gene Transfer Depends on IL-1 Receptor and XCR1+ Dendritic Cells but Not TLR9. Blood, 2020, 136, 2-3.	1.4	1
116	Revisiting the "Danger Theory": Toll-like Receptor 9 Stimulation Triggers Activation of Conventional CD8Î±+ and Plasmacytoid Dendritic Cells En Route to Enhancing FVIII Inhibitor Formation. Blood, 2020, 136, 1-1.	1.4	1
117	Call for papers: Exploiting extracellular vesicles as therapeutic agents. Molecular Therapy, 2022, 30, 979.	8.2	1
118	Lentiviral vector for hemophilia gene therapy. Blood, 2004, 103, 3609-3610.	1.4	0
119	Call for Papers: Expanding the Scale and Scope of Therapeutic Gene Editing. Molecular Therapy, 2020, 28, 1743.	8.2	0
120	Old versus new gene therapy for globin disorders. Molecular Therapy, 2021, 29, 1933-1934.	8.2	0
121	ASGCT 2021: Time to celebrate and expand. Molecular Therapy, 2021, 29, 2183.	8.2	0
122	Call for papers: A special issue on tackling emerging infectious diseases. Molecular Therapy, 2021, 29, 2387.	8.2	0
123	Six-Year Follow-Up of Inhibitor Prone Hemophilia B Dogs Treated with Muscle and Liver-Directed AAV2 Mediated Factor IX Gene Therapy.. Blood, 2006, 108, 3282-3282.	1.4	0
124	A Prophylactic Protocol for the Prevention of Inhibitor Formation in Gene Therapy for Hemophilia B by Shifting the Balance from An Effector to a Regulatory T Cell Response. Blood, 2008, 112, 3531-3531.	1.4	0
125	Strategies to Prevent or Reverse Immune Responses Against Factor In Gene Replacement for Hemophilia B.. Blood, 2010, 116, 3761-3761.	1.4	0
126	Humoral and Anaphylactic Responses to Factor IX In Murine Hemophilia B Are Genotype Dependent and Can Be Reversed by Hepatic Gene Transfer. Blood, 2010, 116, 2202-2202.	1.4	0

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127	Synergistic Effect of Flt3L and Rapamycin On Immune Tolerance Induction Via Plasmacytoid Dendritic Cells and Treg.. Blood, 2012, 120, 2209-2209.	1.4	0
128	In Vivo Model to Evaluate Loss of Liver-Derived Factor IX Expression Caused by AAV Capsid-Specific CD8+ T Cells. Blood, 2012, 120, 2046-2046.	1.4	0
129	The Need for Gene Therapy for the Effective Treatment of Hemophilia. Journal of Genetic Syndromes & Gene Therapy, 2013, S1, .	0.2	0
130	Self-Complementary AAV Vectors Delivered Intramuscularly Do Not Break Tolerance In a Partial Knockout Model Of Hemophilia B. Blood, 2013, 122, 4209-4209.	1.4	0
131	Toll-like Receptor 9 Activation Accelerates Inhibitor Formation in Response to Factor VIII. Blood, 2019, 134, 1113-1113.	1.4	0
132	Helper T Cell Response to Factor VIII In Vivo Requires Several Anatomically Distinct Types of Antigen Presenting Cells. Blood, 2021, 138, 440-440.	1.4	0
133	Factor IX Delivery to the Skin Primes Inhibitor Formation and Sensitizes Hemophilia B Mice to Systemic Factor IX Administration. Blood, 2021, 138, 3194-3194.	1.4	0
134	Alternative Approaches to Oral Tolerance Induction to Factor FVIII. Blood, 2020, 136, 8-9.	1.4	0
135	ASGCT 2022 â€“ Bigger than Ever. Molecular Therapy, 2022, , .	8.2	0