Aravind Asokan

List of Publications by Year
in descending order

62 papers	5,060 citations	168829 31 h-index	145109 60 g-index
63 all docs	63 docs citations	63 times ranked	7204 citing authors

#	Article	IF	Citations
1	Structurally Mapping Antigenic Epitopes of Adeno-associated Virus 9: Development of Antibody Escape Variants. Journal of Virology, 2022, 96, JVI0125121.	1.5	11
2	Targeted Delivery for Cardiac Regeneration: Comparison of Intra-coronary Infusion and Intra-myocardial Injection in Porcine Hearts. Frontiers in Cardiovascular Medicine, 2022, 9, 833335.	1.1	7
3	Epigenetic Silencing of Recombinant Adeno-associated Virus Genomes by NP220 and the HUSH Complex. Journal of Virology, 2022, 96, JVI0203921.	1.5	20
4	Engineering highly efficient backsplicing and translation of synthetic circRNAs. Molecular Therapy - Nucleic Acids, 2021, 23, 821-834.	2.3	36
5	Adeno-Associated Virus-Mediated Gene Therapy in the Mashlool, Atp1a3^{Mashl/+}, Mouse Model of Alternating Hemiplegia of Childhood. Human Gene Therapy, 2021, 32, 405-419.	1.4	9
6	The NIH Somatic Cell Genome Editing program. Nature, 2021, 592, 195-204.	13.7	84
7	AAV-CNS matters turn from gray to white. Molecular Therapy, 2021, 29, 1659-1660.	3.7	1
8	Characterization of liver GSD IX Î³2 pathophysiology in a novel Phkg2/ mouse model. Molecular Genetics and Metabolism, 2021, 133, 269-276.	0.5	4
9	Transgenic mice for in vivo epigenome editing with CRISPR-based systems. Nature Methods, 2021, 18, 965-974.	9.0	56
10	Full-length dystrophin restoration via targeted exon integration by AAV-CRISPR in a humanized mouse model of Duchenne muscular dystrophy. Molecular Therapy, 2021, 29, 3243-3257.	3.7	27
11	Receptor Switching in Newly Evolved Adeno-associated Viruses. Journal of Virology, 2021, 95, e0058721.	1.5	12
12	Safe and EffectiveIn VivoTargeting and Gene Editing in Hematopoietic Stem Cells: Strategies for Accelerating Development. Human Gene Therapy, 2021, 32, 31-42.	1.4	15
13	The membrane associated accessory protein is an adeno-associated viral egress factor. Nature Communications, 2021, 12, 6239.	5.8	30
14	Abstract 12181: Targeted Intra-Coronary Delivery versus Intra-Myocardial Injection of Therapeutics for Myocardial Recovery: A Nanoparticle Image Guided Porcine Study. Circulation, 2021, 144, .	1.6	0
15	Optimizing delivery for efficient cardiac reprogramming. Biochemical and Biophysical Research Communications, 2020, 533, 9-16.	1.0	15
16	Coevolution of Adeno-associated Virus Capsid Antigenicity and Tropism through a Structure-Guided Approach. Journal of Virology, 2020, 94, .	1.5	38
17	The Golgi Calcium ATPase Pump Plays an Essential Role in Adeno-associated Virus Trafficking and Transduction. Journal of Virology, 2020, 94, .	1.5	17
18	Intravital imaging of mouse embryos. Science, 2020, 368, 181-186.	6.0	70

#	Article	IF	Citations
19	Gangliosides are essential endosomal receptors for quasi-enveloped and naked hepatitis A virus. Nature Microbiology, 2020, 5, 1069-1078.	5.9	45
20	Rescuing AAV gene transfer from neutralizing antibodies with an IgG-degrading enzyme. JCI Insight, 2020, 5, .	2.3	77
21	Ring finger protein 121 is a potent regulator of adeno-associated viral genome transcription. PLoS Pathogens, 2019, 15, e1007988.	2.1	22
22	A CRISPR Screen Identifies the Cell Polarity Determinant Crumbs 3 as an Adeno-associated Virus Restriction Factor in Hepatocytes. Journal of Virology, 2019, 93, .	1.5	14
23	Vaccine-Mediated Inhibition of the Transporter Associated with Antigen Processing Is Insufficient To Induce Major Histocompatibility Complex E-Restricted CD8⁺T Cells in Nonhuman Primates. Journal of Virology, 2019, 93, .	1.5	5
24	Modulation of Sialic Acid Dependence Influences the Central Nervous System Transduction Profile of Adeno-associated Viruses. Journal of Virology, 2019, 93, .	1.5	55
25	Long-term evaluation of AAV-CRISPR genome editing for Duchenne muscular dystrophy. Nature Medicine, 2019, 25, 427-432.	15.2	303
26	CRISPR genome editing in stem cells turns to gold. Nature Materials, 2019, 18, 1038-1039.	13.3	4
27	Mapping and Engineering Functional Domains of the Assembly-Activating Protein of Adeno-associated Viruses. Journal of Virology, 2018, 92, .	1.5	15
28	Mapping the Structural Determinants Required for AAVrh.10 Transport across the Blood-Brain Barrier. Molecular Therapy, 2018, 26, 510-523.	3.7	60
29	Physical positioning markedly enhances brain transduction after intrathecal AAV9 infusion. Science Advances, 2018, 4, eaau9859.	4.7	28
30	Tissue-Dependent Expression and Translation of Circular RNAs with Recombinant AAV Vectors InÂVivo. Molecular Therapy - Nucleic Acids, 2018, 13, 89-98.	2.3	89
31	Systemic and Persistent Muscle Gene Expression in Rhesus Monkeys with a Liver De-Targeted Adeno-Associated Virus Vector. Human Gene Therapy, 2017, 28, 385-391.	1.4	21
32	Inducing circular RNA formation using the CRISPR endoribonuclease Csy4. Rna, 2017, 23, 619-627.	1.6	19
33	Structure-guided evolution of antigenically distinct adeno-associated virus variants for immune evasion. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E4812-E4821.	3.3	152
34	Primary Cilia Signaling Shapes the Development of Interneuronal Connectivity. Developmental Cell, 2017, 42, 286-300.e4.	3.1	90
35	Hepatocytic expression of human sodium-taurocholate cotransporting polypeptide enables hepatitis B virus infection of macaques. Nature Communications, 2017, 8, 2146.	5.8	59
36	Glymphatic fluid transport controls paravascular clearance of AAV vectors from the brain. JCI Insight, 2016, 1, e88034.	2.3	52

#	Article	IF	Citations
37	AAV Gene Therapy for MPS1-associated Corneal Blindness. Scientific Reports, 2016, 6, 22131.	1.6	40
38	Characterization of the Adeno-Associated Virus 1 and 6 Sialic Acid Binding Site. Journal of Virology, 2016, 90, 5219-5230.	1.5	63
39	CNS-restricted Transduction and CRISPR/Cas9-mediated Gene Deletion with an Engineered AAV Vector. Molecular Therapy - Nucleic Acids, 2016, 5, e338.	2.3	56
40	Generation and characterization of anti-Adeno-associated virus serotype 8 (AAV8) and anti-AAV9 monoclonal antibodies. Journal of Virological Methods, 2016, 236, 105-110.	1.0	22
41	Cellular transduction mechanisms of adeno-associated viral vectors. Current Opinion in Virology, 2016, 21, 54-60.	2.6	42
42	Engineering AAV receptor footprints for gene therapy. Current Opinion in Virology, 2016, 18, 89-96.	2.6	32
43	In vivo genome editing improves muscle function in a mouse model of Duchenne muscular dystrophy. Science, 2016, 351, 403-407.	6.0	957
44	Development of Patient-specific AAV Vectors After Neutralizing Antibody Selection for Enhanced Muscle Gene Transfer. Molecular Therapy, 2016, 24, 53-65.	3.7	45
45	An siRNA Screen Identifies the U2 snRNP Spliceosome as a Host Restriction Factor for Recombinant Adeno-associated Viruses. PLoS Pathogens, 2015, 11, e1005082.	2.1	35
46	Strategies to circumvent humoral immunity to adeno-associated viral vectors. Expert Opinion on Biological Therapy, 2015, 15, 845-855.	1.4	49
47	Functional Analysis of the Putative Integrin Recognition Motif on Adeno-associated Virus 9. Journal of Biological Chemistry, 2015, 290, 1496-1504.	1.6	18
48	Unique Glycan Signatures Regulate Adeno-Associated Virus Tropism in the Developing Brain. Journal of Virology, 2015, 89, 3976-3987.	1.5	13
49	Controlling mRNA stability and translation with the CRISPR endoribonuclease Csy4. Rna, 2015, 21, 1921-1930.	1.6	23
50	Biology of adeno-associated viral vectors in the central nervous system. Frontiers in Molecular Neuroscience, 2014, 7, 76.	1.4	137
51	Engraftment of a Galactose Receptor Footprint onto Adeno-associated Viral Capsids Improves Transduction Efficiency. Journal of Biological Chemistry, 2013, 288, 28814-28823.	1.6	77
52	Multiple Roles for Sialylated Glycans in Determining the Cardiopulmonary Tropism of Adeno-Associated Virus 4. Journal of Virology, 2013, 87, 13206-13213.	1.5	32
53	An Emerging Adeno-Associated Viral Vector Pipeline for Cardiac Gene Therapy. Human Gene Therapy, 2013, 24, 906-913.	1.4	31
54	The AAV Vector Toolkit: Poised at the Clinical Crossroads. Molecular Therapy, 2012, 20, 699-708.	3.7	388

#	Article	IF	Citations
55	Human Galectin 3 Binding Protein Interacts with Recombinant Adeno-Associated Virus Type 6. Journal of Virology, 2012, 86, 6620-6631.	1.5	52
56	Tyrosine Cross-Linking Reveals Interfacial Dynamics in Adeno-Associated Viral Capsids during Infection. ACS Chemical Biology, 2012, 7, 1059-1066.	1.6	22
57	Terminal N-Linked Galactose Is the Primary Receptor for Adeno-associated Virus 9. Journal of Biological Chemistry, 2011, 286, 13532-13540.	1.6	213
58	Reengineering a receptor footprint of adeno-associated virus enables selective and systemic gene transfer to muscle. Nature Biotechnology, 2010, 28, 79-82.	9.4	220
59	Reengineered AAV vectors: old dog, new tricks. Discovery Medicine, 2010, 9, 399-403.	0.5	15
60	Adeno-associated Virus Serotypes: Vector Toolkit for Human Gene Therapy. Molecular Therapy, 2006, 14, 316-327.	3.7	744
61	Adeno-Associated Virus Type 2 Contains an Integrin Î±5Î²1 Binding Domain Essential for Viral Cell Entry. Journal of Virology, 2006, 80, 8961-8969.	1.5	164
62	Strategies for the Cytosolic Delivery of Macromolecules: An Overview. , 0, , 279-296.		1