

Mavis Agbandje-McKenna

List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/7451579/publications.pdf>

Version: 2024-02-01

126
papers

9,359
citations

36203

51
h-index

43802

91
g-index

131
all docs

131
docs citations

131
times ranked

5592
citing authors

#	ARTICLE	IF	CITATIONS
1	The family Parvoviridae. Archives of Virology, 2014, 159, 1239-1247.	0.9	555
2	Next generation of adeno-associated virus 2 vectors: Point mutations in tyrosines lead to high-efficiency transduction at lower doses. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 7827-7832.	3.3	505
3	Mutational Analysis of the Adeno-Associated Virus Type 2 (AAV2) Capsid Gene and Construction of AAV2 Vectors with Altered Tropism. Journal of Virology, 2000, 74, 8635-8647.	1.5	344
4	Phase 1 Gene Therapy for Duchenne Muscular Dystrophy Using a Translational Optimized AAV Vector. Molecular Therapy, 2012, 20, 443-455.	3.7	328
5	ICTV Virus Taxonomy Profile: Parvoviridae. Journal of General Virology, 2019, 100, 367-368.	1.3	312
6	Identification of Amino Acid Residues in the Capsid Proteins of Adeno-Associated Virus Type 2 That Contribute to Heparan Sulfate Proteoglycan Binding. Journal of Virology, 2003, 77, 6995-7006.	1.5	294
7	$\hat{\alpha}$ 2,3 and $\hat{\alpha}$ 2,6 N-Linked Sialic Acids Facilitate Efficient Binding and Transduction by Adeno-Associated Virus Types 1 and 6. Journal of Virology, 2006, 80, 9093-9103.	1.5	268
8	Engineering and Selection of Shuffled AAV Genomes: A New Strategy for Producing Targeted Biological Nanoparticles. Molecular Therapy, 2008, 16, 1252-1260.	3.7	224
9	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
10	Structure of Adeno-Associated Virus Serotype 8, a Gene Therapy Vector. Journal of Virology, 2007, 81, 12260-12271.	1.5	199
11	Tyrosine-phosphorylation of AAV2 vectors and its consequences on viral intracellular trafficking and transgene expression. Virology, 2008, 381, 194-202.	1.1	193
12	Engineering Liver-detargeted AAV9 Vectors for Cardiac and Musculoskeletal Gene Transfer. Molecular Therapy, 2011, 19, 1070-1078.	3.7	179
13	Structurally Mapping the Diverse Phenotype of Adeno-Associated Virus Serotype 4. Journal of Virology, 2006, 80, 11556-11570.	1.5	165
14	Adeno-Associated Virus Type 2 Contains an Integrin $\hat{\alpha}$ 5 $\hat{\beta}$ 1 Binding Domain Essential for Viral Cell Entry. Journal of Virology, 2006, 80, 8961-8969.	1.5	164
15	Structural Insight into the Unique Properties of Adeno-Associated Virus Serotype 9. Journal of Virology, 2012, 86, 6947-6958.	1.5	163
16	AAV Capsid Structure and Cell Interactions. Methods in Molecular Biology, 2012, 807, 47-92.	0.4	152
17	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
18	Structure and Dynamics of Adeno-Associated Virus Serotype 1 VP1-Unique N-Terminal Domain and Its Role in Capsid Trafficking. Journal of Virology, 2013, 87, 4974-4984.	1.5	151

#	ARTICLE	IF	CITATIONS
19	The AAV9 receptor and its modification to improve in vivo lung gene transfer in mice. <i>Journal of Clinical Investigation</i> , 2011, 121, 2427-2435.	3.9	150
20	Defining the Stoichiometry and Cargo Load of Viral and Bacterial Nanoparticles by Orbitrap Mass Spectrometry. <i>Journal of the American Chemical Society</i> , 2014, 136, 7295-7299.	6.6	134
21	Twenty-Five Years of Structural Parvovirology. <i>Viruses</i> , 2019, 11, 362.	1.5	122
22	Structural Characterization of the Dual Glycan Binding Adeno-Associated Virus Serotype 6. <i>Journal of Virology</i> , 2010, 84, 12945-12957.	1.5	120
23	OneBac: Platform for Scalable and High-Titer Production of Adeno-Associated Virus Serotype 12 Vectors for Gene Therapy. <i>Human Gene Therapy</i> , 2014, 25, 212-222.	1.4	117
24	Comparative Analysis of Adeno-Associated Virus Capsid Stability and Dynamics. <i>Journal of Virology</i> , 2013, 87, 13150-13160.	1.5	114
25	Structure of Adeno-Associated Virus Serotype 5. <i>Journal of Virology</i> , 2004, 78, 3361-3371.	1.5	104
26	Capsid Antibodies to Different Adeno-Associated Virus Serotypes Bind Common Regions. <i>Journal of Virology</i> , 2013, 87, 9111-9124.	1.5	102
27	Identification of the Galactose Binding Domain of the Adeno-Associated Virus Serotype 9 Capsid. <i>Journal of Virology</i> , 2012, 86, 7326-7333.	1.5	101
28	Parvovirus glycan interactions. <i>Current Opinion in Virology</i> , 2014, 7, 108-118.	2.6	101
29	Adeno-associated virus capsid assembly is divergent and stochastic. <i>Nature Communications</i> , 2021, 12, 1642.	5.8	99
30	Heparin binding induces conformational changes in Adeno-associated virus serotype 2. <i>Journal of Structural Biology</i> , 2009, 165, 146-156.	1.3	98
31	Structure of Adeno-Associated Virus Type 4. <i>Journal of Virology</i> , 2005, 79, 5047-5058.	1.5	95
32	Thermal Stability as a Determinant of AAV Serotype Identity. <i>Molecular Therapy - Methods and Clinical Development</i> , 2017, 6, 171-182.	1.8	95
33	Mapping the AAV Capsid Host Antibody Response toward the Development of Second Generation Gene Delivery Vectors. <i>Frontiers in Immunology</i> , 2014, 5, 9.	2.2	93
34	Mapping a Neutralizing Epitope onto the Capsid of Adeno-Associated Virus Serotype 8. <i>Journal of Virology</i> , 2012, 86, 7739-7751.	1.5	86
35	Human Hepatocyte Growth Factor Receptor Is a Cellular Coreceptor for Adeno-Associated Virus Serotype 3. <i>Human Gene Therapy</i> , 2010, 21, 1741-1747.	1.4	82
36	A novel adeno-associated virus capsid with enhanced neurotropism corrects a lysosomal transmembrane enzyme deficiency. <i>Brain</i> , 2018, 141, 2014-2031.	3.7	80

#	ARTICLE	IF	CITATIONS
37	Human Bocavirus Capsid Structure: Insights into the Structural Repertoire of the <i>Parvoviridae</i>. <i>Journal of Virology</i> , 2010, 84, 5880-5889.	1.5	79
38	Structural Studies of Adeno-Associated Virus Serotype 8 Capsid Transitions Associated with Endosomal Trafficking. <i>Journal of Virology</i> , 2011, 85, 11791-11799.	1.5	78
39	Engraftment of a Galactose Receptor Footprint onto Adeno-associated Viral Capsids Improves Transduction Efficiency. <i>Journal of Biological Chemistry</i> , 2013, 288, 28814-28823.	1.6	77
40	Sub-2Å... Ewald curvature corrected structure of an AAV2 capsid variant. <i>Nature Communications</i> , 2018, 9, 3628.	5.8	73
41	Host-Selected Amino Acid Changes at the Sialic Acid Binding Pocket of the Parvovirus Capsid Modulate Cell Binding Affinity and Determine Virulence. <i>Journal of Virology</i> , 2006, 80, 1563-1573.	1.5	72
42	Diversity of environmental single-stranded DNA phages revealed by PCR amplification of the partial major capsid protein. <i>ISME Journal</i> , 2014, 8, 2093-2103.	4.4	71
43	Structural Insights into Adeno-Associated Virus Serotype 5. <i>Journal of Virology</i> , 2013, 87, 11187-11199.	1.5	69
44	Adeno-associated virus structural biology as a tool in vector development. <i>Future Virology</i> , 2013, 8, 1183-1199.	0.9	68
45	Adeno-Associated Virus Serotype 1 (AAV1)- and AAV5-Antibody Complex Structures Reveal Evolutionary Commonalities in Parvovirus Antigenic Reactivity. <i>Journal of Virology</i> , 2015, 89, 1794-1808.	1.5	64
46	An Ancient Lineage of Highly Divergent Parvoviruses Infects both Vertebrate and Invertebrate Hosts. <i>Viruses</i> , 2019, 11, 525.	1.5	64
47	Characterization of the Adeno-Associated Virus 1 and 6 Sialic Acid Binding Site. <i>Journal of Virology</i> , 2016, 90, 5219-5230.	1.5	63
48	Impact of Heparan Sulfate Binding on Transduction of Retina by Recombinant Adeno-Associated Virus Vectors. <i>Journal of Virology</i> , 2016, 90, 4215-4231.	1.5	61
49	Vector Design Tour de Force: Integrating Combinatorial and Rational Approaches to Derive Novel Adeno-associated Virus Variants. <i>Molecular Therapy</i> , 2014, 22, 1900-1909.	3.7	59
50	Direct Head-to-Head Evaluation of Recombinant Adeno-associated Viral Vectors Manufactured in Human versus Insect Cells. <i>Molecular Therapy</i> , 2017, 25, 2661-2675.	3.7	59
51	A simplified purification protocol for recombinant adeno-associated virus vectors. <i>Molecular Therapy - Methods and Clinical Development</i> , 2014, 1, 14034.	1.8	56
52	Molecular Characterization of the Heparin-Dependent Transduction Domain on the Capsid of a Novel Adeno-Associated Virus Isolate, AAV(VR-942). <i>Journal of Virology</i> , 2008, 82, 8911-8916.	1.5	54
53	Evidence for pH-Dependent Protease Activity in the Adeno-Associated Virus Capsid. <i>Journal of Virology</i> , 2012, 86, 11877-11885.	1.5	53
54	Adeno-Associated Virus Capsid Proteins May Play a Role in Transcription and Second-Strand Synthesis of Recombinant Genomes. <i>Journal of Virology</i> , 2014, 88, 1071-1079.	1.5	53

#	ARTICLE	IF	CITATIONS
55	Parvovirus Family Conundrum: What Makes a Killer?. Annual Review of Virology, 2015, 2, 425-450.	3.0	53
56	The Structure of Carbonic Anhydrase IX Is Adapted for Low-pH Catalysis. Biochemistry, 2016, 55, 4642-4653.	1.2	51
57	Parvoviruses: structure and infection. Future Virology, 2012, 7, 253-278.	0.9	49
58	Gene Transfer Properties and Structural Modeling of Human Stem Cell-derived AAV. Molecular Therapy, 2014, 22, 1625-1634.	3.7	48
59	Rationally Engineered AAV Capsids Improve Transduction and Volumetric Spread in the CNS. Molecular Therapy - Nucleic Acids, 2017, 8, 184-197.	2.3	48
60	Structure of neurotropic adeno-associated virus AAVrh.8. Journal of Structural Biology, 2015, 192, 21-36.	1.3	47
61	Pre-arrayed Pan-AAV Peptide Display Libraries for Rapid Single-Round Screening. Molecular Therapy, 2020, 28, 1016-1032.	3.7	46
62	Completion of the AAV Structural Atlas: Serotype Capsid Structures Reveals Clade-Specific Features. Viruses, 2021, 13, 101.	1.5	46
63	Development of Patient-specific AAV Vectors After Neutralizing Antibody Selection for Enhanced Muscle Gene Transfer. Molecular Therapy, 2016, 24, 53-65.	3.7	45
64	Random Insertion of mCherry Into VP3 Domain of Adeno-associated Virus Yields Fluorescent Capsids With no Loss of Infectivity. Molecular Therapy - Nucleic Acids, 2012, 1, e54.	2.3	43
65	Examining the cross-reactivity and neutralization mechanisms of a panel of mAbs against adeno-associated virus serotypes 1 and 5. Journal of General Virology, 2012, 93, 347-355.	1.3	43
66	A Rationally Engineered Capsid Variant of AAV9 for Systemic CNS-Directed and Peripheral Tissue-Detargeted Gene Delivery in Neonates. Molecular Therapy - Methods and Clinical Development, 2018, 9, 234-246.	1.8	42
67	Identification and Mutagenesis of the Adeno-Associated Virus 5 Sialic Acid Binding Region. Journal of Virology, 2015, 89, 1660-1672.	1.5	41
68	Restoring the natural tropism of AAV2 vectors for human liver. Science Translational Medicine, 2020, 12, .	5.8	41
69	The Threefold Protrusions of Adeno-Associated Virus Type 8 Are Involved in Cell Surface Targeting as Well as Postattachment Processing. Journal of Virology, 2012, 86, 9396-9408.	1.5	40
70	Structure of an Enteric Pathogen, Bovine Parvovirus. Journal of Virology, 2015, 89, 2603-2614.	1.5	39
71	Cryo-electron Microscopy Reconstruction and Stability Studies of the Wild Type and the R432A Variant of Adeno-associated Virus Type 2 Reveal that Capsid Structural Stability Is a Major Factor in Genome Packaging. Journal of Virology, 2016, 90, 8542-8551.	1.5	39
72	Comparative Analysis of the Capsid Structures of AAVrh.10, AAVrh.39, and AAV8. Journal of Virology, 2020, 94, .	1.5	38

#	ARTICLE	IF	CITATIONS
73	Coevolution of Adeno-associated Virus Capsid Antigenicity and Tropism through a Structure-Guided Approach. <i>Journal of Virology</i> , 2020, 94, .	1.5	38
74	Structural Insights into Human Bocaparvoviruses. <i>Journal of Virology</i> , 2017, 91, .	1.5	37
75	High-Resolution Structural Characterization of a New Adeno-associated Virus Serotype 5 Antibody Epitope toward Engineering Antibody-Resistant Recombinant Gene Delivery Vectors. <i>Journal of Virology</i> , 2019, 93, .	1.5	37
76	Protease-Activatable Adeno-Associated Virus Vector for Gene Delivery to Damaged Heart Tissue. <i>Molecular Therapy</i> , 2019, 27, 611-622.	3.7	33
77	Adeno-Associated Virus (AAV) Capsid Stability and Liposome Remodeling During Endo/Lysosomal pH Trafficking. <i>Viruses</i> , 2020, 12, 668.	1.5	32
78	The structure of AAVrh32.33, a novel gene delivery vector. <i>Journal of Structural Biology</i> , 2014, 186, 308-317.	1.3	31
79	Characterization of AAV-Specific Affinity Ligands: Consequences for Vector Purification and Development Strategies. <i>Molecular Therapy - Methods and Clinical Development</i> , 2020, 19, 362-373.	1.8	29
80	Attenuation of Heparan Sulfate Proteoglycan Binding Enhances In Vivo Transduction of Human Primary Hepatocytes with AAV2. <i>Molecular Therapy - Methods and Clinical Development</i> , 2020, 17, 1139-1154.	1.8	29
81	Mapping Antigenic Epitopes on the Human Bocavirus Capsid. <i>Journal of Virology</i> , 2016, 90, 4670-4680.	1.5	28
82	Site-Directed Mutagenesis of Surface-Exposed Lysine Residues Leads to Improved Transduction by AAV2, But Not AAV8, Vectors in Murine Hepatocytes <i>In Vivo</i> . <i>Human Gene Therapy Methods</i> , 2015, 26, 211-220.	2.1	27
83	Mutants at the 2-Fold Interface of Adeno-associated Virus Type 2 (AAV2) Structural Proteins Suggest a Role in Viral Transcription for AAV Capsids. <i>Journal of Virology</i> , 2016, 90, 7196-7204.	1.5	27
84	Understanding capsid assembly and genome packaging for adeno-associated viruses. <i>Future Virology</i> , 2017, 12, 283-297.	0.9	25
85	OneBac 2.0: <i>Sf9</i> Cell Lines for Production of AAV1, AAV2, and AAV8 Vectors with Minimal Encapsulation of Foreign DNA. <i>Human Gene Therapy Methods</i> , 2017, 28, 15-22.	2.1	24
86	Atomic structure of a rationally engineered gene delivery vector, AAV2.5. <i>Journal of Structural Biology</i> , 2018, 203, 236-241.	1.3	24
87	Parvovirus Capsid Structures Required for Infection: Mutations Controlling Receptor Recognition and Protease Cleavages. <i>Journal of Virology</i> , 2017, 91, .	1.5	23
88	Adeno-associated Virus 9 Structural Rearrangements Induced by Endosomal Trafficking pH and Glycan Attachment. <i>Journal of Virology</i> , 2021, 95, e0084321.	1.5	23
89	Generation and characterization of anti-Adeno-associated virus serotype 8 (AAV8) and anti-AAV9 monoclonal antibodies. <i>Journal of Virological Methods</i> , 2016, 236, 105-110.	1.0	22
90	Creating an arsenal of Adeno-associated virus (AAV) gene delivery stealth vehicles. <i>PLoS Pathogens</i> , 2018, 14, e1006929.	2.1	22

#	ARTICLE	IF	CITATIONS
91	Site-Directed Mutagenesis Improves the Transduction Efficiency of Capsid Library-Derived Recombinant AAV Vectors. <i>Molecular Therapy - Methods and Clinical Development</i> , 2020, 17, 545-555.	1.8	21
92	AAV6 K531 serves a dual function in selective receptor and antibody ADK6 recognition. <i>Virology</i> , 2018, 518, 369-376.	1.1	20
93	Atomic Resolution Structures of Human Bufaviruses Determined by Cryo-Electron Microscopy. <i>Viruses</i> , 2018, 10, 22.	1.5	20
94	Structure comparison of the chimeric AAV2.7m8 vector with parental AAV2. <i>Journal of Structural Biology</i> , 2020, 209, 107433.	1.3	20
95	Endogenous amdoparvovirus-related elements reveal insights into the biology and evolution of vertebrate parvoviruses. <i>Virus Evolution</i> , 2018, 4, vey026.	2.2	19
96	Parvovirus Capsid-Antibody Complex Structures Reveal Conservation of Antigenic Epitopes Across the Family. <i>Viral Immunology</i> , 2021, 34, 3-17.	0.6	19
97	The Good That Viruses Do. <i>Annual Review of Virology</i> , 2017, 4, iii-v.	3.0	17
98	Enhanced Transduction of Human Hematopoietic Stem Cells by AAV6 Vectors: Implications in Gene Therapy and Genome Editing. <i>Molecular Therapy - Nucleic Acids</i> , 2020, 20, 451-458.	2.3	17
99	Structural and biophysical characterization of the Γ -carbonic anhydrase from the gammaproteobacterium <i>Thiomicrospira crunogena</i> XCL-2: insights into engineering thermostable enzymes for CO ₂ sequestration. <i>Acta Crystallographica Section D: Biological Crystallography</i> , 2015, 71, 1745-1756.	2.5	16
100	Characterization of Naturally-Occurring Humoral Immunity to AAV in Sheep. <i>PLoS ONE</i> , 2013, 8, e75142.	1.1	14
101	Profiling of Glycan Receptors for Minute Virus of Mice in Permissive Cell Lines Towards Understanding the Mechanism of Cell Recognition. <i>PLoS ONE</i> , 2014, 9, e86909.	1.1	14
102	Molecular biology and structure of a novel penaeid shrimp densovirus elucidate convergent parvoviral host capsid evolution. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2020, 117, 20211-20222.	3.3	13
103	Atomic structure of viral particles. , 2005, , 107-123.		13
104	Adeno-Associated Virus VP1u Exhibits Protease Activity. <i>Viruses</i> , 2019, 11, 399.	1.5	12
105	Receptor Switching in Newly Evolved Adeno-associated Viruses. <i>Journal of Virology</i> , 2021, 95, e0058721.	1.5	12
106	Improved Genome Packaging Efficiency of Adeno-associated Virus Vectors Using Rep Hybrids. <i>Journal of Virology</i> , 2021, 95, e0077321.	1.5	11
107	Structurally Mapping Antigenic Epitopes of Adeno-associated Virus 9: Development of Antibody Escape Variants. <i>Journal of Virology</i> , 2022, 96, JV0125121.	1.5	11
108	Geminivirus structure and assembly. <i>Advances in Virus Research</i> , 2020, 108, 1-32.	0.9	10

#	ARTICLE	IF	CITATIONS
109	Evolution of dependoparvoviruses across geological timescalesâ€™ implications for design of AAV-based gene therapy vectors. <i>Virus Evolution</i> , 2020, 6, veaa043.	2.2	10
110	Impact of Natural or Synthetic Singletons in the Capsid of Human Bocavirus 1 on Particle Infectivity and Immunoreactivity. <i>Journal of Virology</i> , 2020, 94, .	1.5	10
111	Structural characterization of a bat Adeno-associated virus capsid. <i>Journal of Structural Biology</i> , 2020, 211, 107547.	1.3	10
112	Assembly and disassembly intermediates of maize streak geminivirus. <i>Virology</i> , 2018, 525, 224-236.	1.1	9
113	Structural Characterization of Cuta- and Tusavirus: Insight into Protoparvoviruses Capsid Morphology. <i>Viruses</i> , 2020, 12, 653.	1.5	9
114	Adeno-associated Virus (AAV) Capsid Chimeras with Enhanced Infectivity Reveal a Core Element in the AAV Genome Critical for both Cell Transduction and Capsid Assembly. <i>Journal of Virology</i> , 2021, 95, .	1.5	9
115	Characterization of an intermolecular quaternary interaction between discrete segments of the <i>Streptococcus</i> mutans adhesin P1 by NMR spectroscopy. <i>FEBS Journal</i> , 2020, 287, 2597-2611.	2.2	8
116	Structural Study of Aavrh.10 Receptor and Antibody Interactions. <i>Journal of Virology</i> , 2021, 95, e0124921.	1.5	8
117	Atomic Resolution Structure of the Oncolytic Parvovirus LuIII by Electron Microscopy and 3D Image Reconstruction. <i>Viruses</i> , 2017, 9, 321.	1.5	6
118	Characterization of the GBoV1 Capsid and Its Antibody Interactions. <i>Viruses</i> , 2021, 13, 330.	1.5	6
119	Cryoannealing-induced space-group transition of crystals of the carbonic anhydrase psCA3. <i>Acta Crystallographica Section F, Structural Biology Communications</i> , 2016, 72, 573-577.	0.4	5
120	Characterization of the Serpentine Adeno-Associated Virus (SAAV) Capsid Structure: Receptor Interactions and Antigenicity. <i>Journal of Virology</i> , 2022, 96, e0033522.	1.5	5
121	pH-Induced Conformational Changes of Human Bocavirus Capsids. <i>Journal of Virology</i> , 2021, 95, .	1.5	4
122	I Am Here: It Took a Global Village. <i>Annual Review of Virology</i> , 2021, 8, 1-21.	3.0	3
123	Comparative structural, biophysical, and receptor binding study of true type and wild type AAV2. <i>Journal of Structural Biology</i> , 2021, 213, 107795.	1.3	3
124	Structural Characterization of Emerging Pathogenic Human Parvoviruses. <i>Microscopy and Microanalysis</i> , 2018, 24, 1214-1215.	0.2	2
125	Optimizing the Targeting of Mouse Parvovirus 1 to Murine Melanoma Selects for Recombinant Genomes and Novel Mutations in the Viral Capsid Gene. <i>Viruses</i> , 2018, 10, 54.	1.5	2
126	Effects of Altering Heparan Sulfate Proteoglycan Binding and Capsid Hydrophilicity on Retinal Transduction by Adeno-associated Virus. <i>Journal of Virology</i> , 2021, 95, .	1.5	2