Sang-Moo Kang

List of Publications by Year
in descending order

162 papers	6,931 citations	47006 47 h-index	76900 74 g-index
163 all docs	163 docs citations	163 times ranked	5830 citing authors

#	Article	IF	Citations
1	Virus-Like Particle Vaccine Induces Protective Immunity against Homologous and Heterologous Strains of Influenza Virus. Journal of Virology, 2007, 81, 3514-3524.	3.4	279
2	Formulation and coating of microneedles with inactivated influenza virus to improve vaccine stability and immunogenicity. Journal of Controlled Release, 2010, 142, 187-195.	9.9	217
3	Vaccination inducing broad and improved cross protection against multiple subtypes of influenza A virus. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 757-761.	7.1	206
4	Induction of Heterosubtypic Immunity to Influenza Virus by Intranasal Immunization. Journal of Virology, 2008, 82, 1350-1359.	3.4	147
5	Double-layered protein nanoparticles induce broad protection against divergent influenza A viruses. Nature Communications, 2018, 9, 359.	12.8	147
6	Virus-like Particles Containing Multiple M2 Extracellular Domains Confer Improved Cross-protection Against Various Subtypes of Influenza Virus. Molecular Therapy, 2013, 21, 485-492.	8.2	138
7	Lactobacillus plantarum DK119 as a Probiotic Confers Protection against Influenza Virus by Modulating Innate Immunity. PLoS ONE, 2013, 8, e75368.	2.5	138
8	Influenza vaccines based on virus-like particles. Virus Research, 2009, 143, 140-146.	2.2	123
9	Incorporation of Membrane-Anchored Flagellin into Influenza Virus-Like Particles Enhances the Breadth of Immune Responses. Journal of Virology, 2008, 82, 11813-11823.	3.4	118
10	Intradermal Vaccination with Influenza Virus-Like Particles by Using Microneedles Induces Protection Superior to That with Intramuscular Immunization. Journal of Virology, 2010, 84, 7760-7769.	3.4	118
11	Viruslike Particle Vaccine Induces Protection Against Respiratory Syncytial Virus Infection in Mice. Journal of Infectious Diseases, 2011, 204, 987-995.	4.0	117
12	Improved influenza vaccination in the skin using vaccine coated microneedles. Vaccine, 2009, 27, 6932-6938.	3.8	110
13	Enhanced Memory Responses to Seasonal H1N1 Influenza Vaccination of the Skin with the Use of Vaccineâ€Coated Microneedles. Journal of Infectious Diseases, 2010, 201, 190-198.	4.0	107
14	Influenza Virus-Like Particles Containing M2 Induce Broadly Cross Protective Immunity. PLoS ONE, 2011, 6, e14538.	2.5	104
15	Immunology and efficacy of MF59-adjuvanted vaccines. Human Vaccines and Immunotherapeutics, 2018, 14, 3041-3045.	3.3	103
16	Metabolic pathways of lung inflammation revealed by high-resolution metabolomics (HRM) of H1N1 influenza virus infection in mice. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2016, 311, R906-R916.	1.8	101
17	Dose sparing enabled by skin immunization with influenza virus-like particle vaccine using microneedles. Journal of Controlled Release, 2010, 147, 326-332.	9.9	99
18	Induction of Long-Term Protective Immune Responses by Influenza H5N1 Virus-Like Particles. PLoS ONE, 2009, 4, e4667.	2.5	93

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19	Stabilization of Influenza Vaccine Enhances Protection by Microneedle Delivery in the Mouse Skin. PLoS ONE, 2009, 4, e7152.	2.5	92
20	Formulation of Microneedles Coated with Influenza Virus-like Particle Vaccine. AAPS PharmSciTech, 2010, 11, 1193-1201.	3.3	91
21	Virus-Like Particle Vaccine Protects against 2009 H1N1 Pandemic Influenza Virus in Mice. PLoS ONE, 2010, 5, e9161.	2.5	91
22	Stability Kinetics of Influenza Vaccine Coated onto Microneedles During Drying and Storage. Pharmaceutical Research, 2011, 28, 135-144.	3.5	91
23	Transcutaneous immunization with inactivated influenza virus induces protective immune responses. Vaccine, 2006, 24, 6110-6119.	3.8	87
24	Heat-killed Lactobacillus casei confers broad protection against influenza A virus primary infection and develops heterosubtypic immunity against future secondary infection. Scientific Reports, 2017, 7, 17360.	3.3	85
25	Protective immunity against H5N1 influenza virus by a single dose vaccination with virus-like particles. Virology, 2010, 405, 165-175.	2.4	84
26	New vaccines against influenza virus. Clinical and Experimental Vaccine Research, 2014, 3, 12.	2.2	82
27	Intranasal Immunization with Influenza VLPs Incorporating Membrane-Anchored Flagellin Induces Strong Heterosubtypic Protection. PLoS ONE, 2010, 5, e13972.	2.5	82
28	Incorporation of High Levels of Chimeric Human Immunodeficiency Virus Envelope Glycoproteins into Virus-Like Particles. Journal of Virology, 2007, 81, 10869-10878.	3.4	80
29	A bivalent influenza VLP vaccine confers complete inhibition of virus replication in lungs. Vaccine, 2008, 26, 3352-3361.	3.8	77
30	Incorporation of Glycosylphosphatidylinositol-Anchored Granulocyte-MacrophageColony-Stimulating Factor or CD40 Ligand Enhances Immunogenicity of Chimeric Simian Immunodeficiency Virus-Like Particles. Journal of Virology, 2007, 81, 1083-1094.	3.4	73
31	Virus-like particles as universal influenza vaccines. Expert Review of Vaccines, 2012, 11, 995-1007.	4.4	73
32	Protective Effect of Ginseng Polysaccharides on Influenza Viral Infection. PLoS ONE, 2012, 7, e33678.	2.5	73
33	Human immunodeficiency virus-like particles activate multiple types of immune cells. Virology, 2007, 362, 331-341.	2.4	68
34	Microneedle Delivery of H5N1 Influenza Virus-Like Particles to the Skin Induces Long-Lasting B- and T-Cell Responses in Mice. Vaccine Journal, 2010, 17, 1381-1389.	3.1	68
35	Improved protection against avian influenza H5N1 virus by a single vaccination with virus-like particles in skin using microneedles. Antiviral Research, 2010, 88, 244-247.	4.1	65
36	Protective CD8 T Cellâ€"Mediated Immunity against Influenza A Virus Infection following Influenza Virusâ€"like Particle Vaccination. Journal of Immunology, 2013, 191, 2486-2494.	0.8	65

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37	Influenza virus-like particles coated onto microneedles can elicit stimulatory effects on Langerhans cells in human skin. Vaccine, 2010, 28, 6104-6113.	3.8	63
38	Mucosal Immunization with Virus-Like Particles of Simian Immunodeficiency Virus Conjugated with Cholera Toxin Subunit B. Journal of Virology, 2003, 77, 9823-9830.	3.4	62
39	Influenza M1 VLPs containing neuraminidase induce heterosubtypic cross-protection. Virology, 2012, 430, 127-135.	2.4	61
40	Multiple heterologous M2 extracellular domains presented on virus-like particles confer broader and stronger M2 immunity than live influenza A virus infection. Antiviral Research, 2013, 99, 328-335.	4.1	61
41	Kinetics of Immune Responses to Influenza Virus-Like Particles and Dose-Dependence of Protection with a Single Vaccination. Journal of Virology, 2009, 83, 4489-4497.	3.4	59
42	H9N2 avian influenza virus-like particle vaccine provides protective immunity and a strategy for the differentiation of infected from vaccinated animals. Vaccine, 2011, 29, 4003-4007.	3.8	59
43	Long-Term Protective Immunity from an Influenza Virus-Like Particle Vaccine Administered with a Microneedle Patch. Vaccine Journal, 2013, 20, 1433-1439.	3.1	59
44	Intranasal vaccination with M2e5x virus-like particles induces humoral and cellular immune responses conferring cross-protection against heterosubtypic influenza viruses. PLoS ONE, 2018, 13, e0190868.	2.5	57
45	Modified HIV envelope proteins with enhanced binding to neutralizing monoclonal antibodies. Virology, 2005, 331, 20-32.	2.4	54
46	Immunomodulatory Activity of Red Ginseng against Influenza A Virus Infection. Nutrients, 2014, 6, 517-529.	4.1	54
47	Enhancement of mucosal immune responses by chimeric influenza HA/SHIV virus-like particles. Virology, 2003, 313, 502-513.	2.4	49
48	Microneedle patch delivery to the skin of virus-like particles containing heterologous M2e extracellular domains of influenza virus induces broad heterosubtypic cross-protection. Journal of Controlled Release, 2015, 210, 208-216.	9.9	49
49	Progress in developing virus-like particle influenza vaccines. Expert Review of Vaccines, 2016, 15, 1281-1293.	4.4	49
50	A Novel Vaccination Strategy Mediating the Induction of Lung-Resident Memory CD8 T Cells Confers Heterosubtypic Immunity against Future Pandemic Influenza Virus. Journal of Immunology, 2016, 196, 2637-2645.	0.8	49
51	Mechanisms of Cross-protection by Influenza Virus M2-based Vaccines. Immune Network, 2015, 15, 213.	3.6	48
52	Host Responses from Innate to Adaptive Immunity after Vaccination: Molecular and Cellular Events. Molecules and Cells, 2009, 27, 5-14.	2.6	47
53	Low-dose cadmium disrupts mitochondrial citric acid cycle and lipid metabolism in mouse lung. Free Radical Biology and Medicine, 2019, 131, 209-217.	2.9	47
54	Supplementation of Influenza Split Vaccines with Conserved M2 Ectodomains Overcomes Strain Specificity and Provides Long-term Cross Protection. Molecular Therapy, 2014, 22, 1364-1374.	8.2	46

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55	Enhancement of Mucosal Immunization with Virus-Like Particles of Simian Immunodeficiency Virus. Journal of Virology, 2003, 77, 3615-3623.	3.4	45
56	Enhanced Influenza Virus-Like Particle Vaccines Containing the Extracellular Domain of Matrix Protein 2 and a Toll-Like Receptor Ligand. Vaccine Journal, 2012, 19, 1119-1125.	3.1	45
57	Fc receptor is not required for inducing antibodies but plays a critical role in conferring protection after influenza <scp>M</scp>2 vaccination. Immunology, 2014, 143, 300-309.	4.4	45
58	Virus-Like Particle Vaccine Containing the F Protein of Respiratory Syncytial Virus Confers Protection without Pulmonary Disease by Modulating Specific Subsets of Dendritic Cells and Effector T Cells. Journal of Virology, 2015, 89, 11692-11705.	3.4	44
59	Commensal epitopes drive differentiation of colonic T _{regs}. Science Advances, 2020, 6, eaaz3186.	10.3	44
60	Neuraminidase expressing virus-like particle vaccine provides effective cross protection against influenza virus. Virology, 2019, 535, 179-188.	2.4	43
61	MyD88 Plays an Essential Role in Inducing B Cells Capable of Differentiating into Antibody-Secreting Cells after Vaccination. Journal of Virology, 2011, 85, 11391-11400.	3.4	42
62	Co-immunization with virus-like particle and DNA vaccines induces protection against respiratory syncytial virus infection and bronchiolitis. Antiviral Research, 2014, 110, 115-123.	4.1	41
63	Intranasal Immunization with Inactivated Influenza Virus Enhances Immune Responses to Coadministered Simian-Human Immunodeficiency Virus-Like Particle Antigens. Journal of Virology, 2004, 78, 9624-9632.	3.4	40
64	Influenza virusâ€like particles engineered by protein transfer with tumorâ€associated antigens induces protective antitumor immunity. Biotechnology and Bioengineering, 2015, 112, 1102-1110.	3.3	40
65	Effects of MF59 Adjuvant on Induction of Isotype-Switched IgG Antibodies and Protection after Immunization with T-Dependent Influenza Virus Vaccine in the Absence of CD4 ⁺ T Cells. Journal of Virology, 2016, 90, 6976-6988.	3.4	39
66	Universal influenza vaccines: from viruses to nanoparticles. Expert Review of Vaccines, 2018, 17, 967-976.	4.4	38
67	Roles of Aluminum Hydroxide and Monophosphoryl Lipid A Adjuvants in Overcoming CD4+ T Cell Deficiency To Induce Isotype-Switched IgG Antibody Responses and Protection by T-Dependent Influenza Vaccine. Journal of Immunology, 2017, 198, 279-291.	0.8	37
68	Ginseng Protects Against Respiratory Syncytial Virus by Modulating Multiple Immune Cells and Inhibiting Viral Replication. Nutrients, 2015, 7, 1021-1036.	4.1	36
69	Antiviral Activity of Fermented Ginseng Extracts against a Broad Range of Influenza Viruses. Viruses, 2018, 10, 471.	3.3	35
70	Impaired T- and B-cell development in Tcl1-deficient mice. Blood, 2005, 105, 1288-1294.	1.4	33
71	Microneedle and mucosal delivery of influenza vaccines. Expert Review of Vaccines, 2012, 11, 547-560.	4.4	33
72	Alum Adjuvant Enhances Protection against Respiratory Syncytial Virus but Exacerbates Pulmonary Inflammation by Modulating Multiple Innate and Adaptive Immune Cells. PLoS ONE, 2015, 10, e0139916.	2.5	33

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73	Lactic Acid Bacteria Isolated From Korean Kimchi Activate the Vitamin D Receptorâ€"autophagy Signaling Pathways. Inflammatory Bowel Diseases, 2020, 26, 1199-1211.	1.9	33
74	Influenza M2 virus-like particles confer a broader range of cross protection to the strain-specific pre-existing immunity. Vaccine, 2014, 32, 5824-5831.	3.8	32
75	Doubleâ€Layered M2eâ€NA Protein Nanoparticle Immunization Induces Broad Crossâ€Protection against Different Influenza Viruses in Mice. Advanced Healthcare Materials, 2020, 9, e1901176.	7.6	32
76	Host Responses in Human Skin After Conventional Intradermal Injection or Microneedle Administration of Virusâ€Likeâ€Particle Influenza Vaccine. Advanced Healthcare Materials, 2013, 2, 1401-1410.	7.6	31
77	Virus-Like Particle Vaccine Confers Protection against a Lethal Newcastle Disease Virus Challenge in Chickens and Allows a Strategy of Differentiating Infected from Vaccinated Animals. Vaccine Journal, 2014, 21, 360-365.	3.1	31
78	MPL and CpG combination adjuvants promote homologous and heterosubtypic cross protection of inactivated split influenza virus vaccine. Antiviral Research, 2018, 156, 107-115.	4.1	31
79	Changes in Human Langerhans Cells Following Intradermal Injection of Influenza Virus-Like Particle Vaccines. PLoS ONE, 2010, 5, e12410.	2.5	30
80	Additive protection induced by mixed virus-like particles presenting respiratory syncytial virus fusion or attachment glycoproteins. Antiviral Research, 2014, 111, 129-135.	4.1	30
81	AS04-adjuvanted virus-like particles containing multiple M2 extracellular domains of influenza virus confer improved protection. Vaccine, 2014, 32, 4578-4585.	3.8	30
82	Virus-Like Particle Vaccine Containing Hemagglutinin Confers Protection against 2009 H1N1 Pandemic Influenza. Vaccine Journal, 2011, 18, 2010-2017.	3.1	29
83	Virus-like nanoparticle and DNA vaccination confers protection against respiratory syncytial virus by modulating innate and adaptive immune cells. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 99-108.	3.3	29
84	Distinct Effects of Monophosphoryl Lipid A, Oligodeoxynucleotide CpG, and Combination Adjuvants on Modulating Innate and Adaptive Immune Responses to Influenza Vaccination. Immune Network, 2017, 17, 326.	3.6	29
85	Immunogenicity of low-pH treated whole viral influenza vaccine. Virology, 2011, 417, 196-202.	2.4	28
86	Effect of Osmotic Pressure on the Stability of Whole Inactivated Influenza Vaccine for Coating on Microneedles. PLoS ONE, 2015, 10, e0134431.	2.5	28
87	Combined virus-like particle and fusion protein-encoding DNA vaccination of cotton rats induces protection against respiratory syncytial virus without causing vaccine-enhanced disease. Virology, 2016, 494, 215-224.	2.4	27
88	Cross-Protective Efficacy of Influenza Virus M2e Containing Virus-Like Particles Is Superior to Hemagglutinin Vaccines and Variable Depending on the Genetic Backgrounds of Mice. Frontiers in Immunology, 2017, 8, 1730.	4.8	27
89	Influenza M2 virus-like particle vaccination enhances protection in combination with avian influenza HA VLPs. PLoS ONE, 2019, 14, e0216871.	2.5	27
90	Immunogenicity of virus-like particles containing modified human immunodeficiency virus envelope proteins. Vaccine, 2007, 25, 3841-3850.	3.8	25

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91	Mucosal Adjuvants for Influenza Virus-Like Particle Vaccine. Viral Immunology, 2013, 26, 385-395.	1.3	23
92	Roles of Major Histocompatibility Complex Class II in Inducing Protective Immune Responses to Influenza Vaccination. Journal of Virology, 2014, 88, 7764-7775.	3.4	23
93	CD47 Plays a Role as a Negative Regulator in Inducing Protective Immune Responses to Vaccination against Influenza Virus. Journal of Virology, 2016, 90, 6746-6758.	3.4	23
94	Environmental Cadmium Enhances Lung Injury by Respiratory Syncytial Virus Infection. American Journal of Pathology, 2019, 189, 1513-1525.	3.8	23
95	Proteomic Characterization of Influenza H5N1 Virus-like Particles and Their Protective Immunogenicity. Journal of Proteome Research, 2011, 10, 3450-3459.	3.7	22
96	Oral vaccination with inactivated influenza vaccine induces cross-protective immunity. Vaccine, 2012, 30, 180-188.	3.8	22
97	Maternal antibodies by passive immunization with formalin inactivated respiratory syncytial virus confer protection without vaccine-enhanced disease. Antiviral Research, 2014, 104, 1-6.	4.1	22
98	Protective efficacy of crude virus-like particle vaccine against HPAI H5N1 in chickens and its application on DIVA strategy. Influenza and Other Respiratory Viruses, 2013, 7, 340-348.	3.4	20
99	Virus-like particle vaccine protects against H3N2 canine influenza virus in dog. Vaccine, 2013, 31, 3268-3273.	3.8	20
100	Respiratory syncytial virus-like nanoparticle vaccination induces long-term protection without pulmonary disease by modulating cytokines and T-cells partially through alveolar macrophages. International Journal of Nanomedicine, 2015, 10, 4491.	6.7	20
101	Protein transfer-mediated surface engineering to adjuvantate virus-like nanoparticles for enhanced anti-viral immune responses. Nanomedicine: Nanotechnology, Biology, and Medicine, 2015, 11, 1097-1107.	3.3	20
102	Virus-Like Particles Are a Superior Platform for Presenting M2e Epitopes to Prime Humoral and Cellular Immunity against Influenza Virus. Vaccines, 2018, 6, 66.	4.4	20
103	Recombinant live attenuated influenza vaccine viruses carrying CD8 T-cell epitopes of respiratory syncytial virus protect mice against both pathogens without inflammatory disease. Antiviral Research, 2019, 168, 9-17.	4.1	20
104	Soluble F proteins exacerbate pulmonary histopathology after vaccination upon respiratory syncytial virus challenge but not when presented on virus-like particles. Human Vaccines and Immunotherapeutics, 2017, 13, 2594-2605.	3.3	20
105	Cellular Immune Correlates Preventing Disease Against Respiratory Syncytial Virus by Vaccination with Virus-Like Nanoparticles Carrying Fusion Proteins. Journal of Biomedical Nanotechnology, 2017, 13, 84-98.	1.1	19
106	Complement C3 Plays a Key Role in Inducing Humoral and Cellular Immune Responses to Influenza Virus Strain-Specific Hemagglutinin-Based or Cross-Protective M2 Extracellular Domain-Based Vaccination. Journal of Virology, 2018, 92, .	3.4	19
107	Low-dose cadmium potentiates lung inflammatory response to 2009 pandemic H1N1 influenza virus in mice. Environment International, 2019, 127, 720-729.	10.0	19
108	Ginseng Diminishes Lung Disease in Mice Immunized with Formalin-Inactivated Respiratory Syncytial Virus After Challenge by Modulating Host Immune Responses. Journal of Interferon and Cytokine Research, 2014, 34, 902-914.	1.2	18

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109	Innate and adaptive cellular phenotypes contributing to pulmonary disease in mice after respiratory syncytial virus immunization and infection. Virology, 2015, 485, 36-46.	2.4	18
110	Vaccination by microneedle patch with inactivated respiratory syncytial virus and monophosphoryl lipid A enhances the protective efficacy and diminishes inflammatory disease after challenge. PLoS ONE, 2018, 13, e0205071.	2.5	18
111	Virus-like particle vaccines containing F or F and G proteins confer protection against respiratory syncytial virus without pulmonary inflammation in cotton rats. Human Vaccines and Immunotherapeutics, 2017, 13, 1031-1039.	3.3	17
112	Recombinant influenza virus carrying the conserved domain of respiratory syncytial virus (RSV) G protein confers protection against RSV without inflammatory disease. Virology, 2015, 476, 217-225.	2.4	16
113	Recombinant influenza virus expressing a fusion protein neutralizing epitope of respiratory syncytial virus (RSV) confers protection without vaccine-enhanced RSV disease. Antiviral Research, 2015, 115, 1-8.	4.1	16
114	Supplementation of H1N1pdm09 split vaccine with heterologous tandem repeat M2e5x virus-like particles confers improved cross-protection in ferrets. Vaccine, 2016, 34, 466-473.	3.8	16
115	Broad cross protection by recombinant live attenuated influenza H3N2 seasonal virus expressing conserved M2 extracellular domain in a chimeric hemagglutinin. Scientific Reports, 2021, 11, 4151.	3.3	16
116	Roles of antibodies to influenza A virus hemagglutinin, neuraminidase, and M2e in conferring cross protection. Biochemical and Biophysical Research Communications, 2017, 493, 393-398.	2.1	15
117	Enhancing the cross protective efficacy of live attenuated influenza virus vaccine by supplemented vaccination with M2 ectodomain virus-like particles. Virology, 2019, 529, 111-121.	2.4	15
118	Cross Protection against Influenza A Virus by Yeast-Expressed Heterologous Tandem Repeat M2 Extracellular Proteins. PLoS ONE, 2015, 10, e0137822.	2.5	15
119	Baculovirus-expressed virus-like particle vaccine in combination with DNA encoding the fusion protein confers protection against respiratory syncytial virus. Vaccine, 2014, 32, 5866-5874.	3.8	14
120	Co-Delivery of M2e Virus-Like Particles with Influenza Split Vaccine to the Skin Using Microneedles Enhances the Efficacy of Cross Protection. Pharmaceutics, 2019, 11, 188.	4.5	14
121	An Update on mRNA-Based Viral Vaccines. Vaccines, 2021, 9, 965.	4.4	14
122	Progress in the development of virus-like particle vaccines against respiratory viruses. Expert Review of Vaccines, 2020, 19, 11-24.	4.4	13
123	Supplemented vaccination with tandem repeat M2e virus-like particles enhances protection against homologous and heterologous HPAI H5 viruses in chickens. Vaccine, 2016, 34, 678-686.	3.8	12
124	Virus-like particles presenting flagellin exhibit unique adjuvant effects on eliciting T helper type 1 humoral and cellular immune responses to poor immunogenic influenza virus M2e protein vaccine. Virology, 2018, 524, 172-181.	2.4	12
125	Virus-like particle vaccine primes immune responses preventing inactivated-virus vaccine-enhanced disease against respiratory syncytial virus. Virology, 2017, 511, 142-151.	2.4	11
126	Cross protection by inactivated recombinant influenza viruses containing chimeric hemagglutinin conjugates with a conserved neuraminidase or M2 ectodomain epitope. Virology, 2020, 550, 51-60.	2.4	11

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127	Immunogenicity and Neutralizing Activity Comparison of SARS-CoV-2 Spike Full-Length and Subunit Domain Proteins in Young Adult and Old-Aged Mice. Vaccines, 2021, 9, 316.	4.4	11
128	Mucosal immunization of CD4+ T cell-deficient mice with an inactivated virus induces IgG and IgA responses in serum and mucosal secretions. Virology, 2005, 331, 387-395.	2.4	9
129	A unique combination adjuvant modulates immune responses preventing vaccine-enhanced pulmonary histopathology after a single dose vaccination with fusion protein and challenge with respiratory syncytial virus. Virology, 2019, 534, 1-13.	2.4	9
130	Generation and Characterization of Universal Live-Attenuated Influenza Vaccine Candidates Containing Multiple M2e Epitopes. Vaccines, 2020, 8, 648.	4.4	9
131	Transdermal Vaccination with the Matrix-2 Protein Virus-like Particle (M2e VLP) Induces Immunity in Mice against Influenza A Virus. Vaccines, 2021, 9, 1324.	4.4	9
132	Nanoparticle formulation of the fusion protein virus like particles of respiratory syncytial virus stimulates enhanced in vitro antigen presentation and autophagy. International Journal of Pharmaceutics, 2022, 623, 121919.	5.2	9
133	Co-immunization with tandem repeat heterologous M2 extracellular proteins overcomes strain-specific protection of split vaccine against influenza A virus. Antiviral Research, 2015, 122, 82-90.	4.1	8
134	Immunogenicity and efficacy of replication-competent recombinant influenza virus carrying multimeric M2 extracellular domains in a chimeric hemagglutinin conjugate. Antiviral Research, 2017, 148, 43-52.	4.1	8
135	Flagellin-expressing virus-like particles exhibit adjuvant effects on promoting IgG isotype-switched long-lasting antibody induction and protection of influenza vaccines in CD4-deficient mice. Vaccine, 2019, 37, 3426-3434.	3.8	8
136	A Strategy to Elicit M2e-Specific Antibodies Using a Recombinant H7N9 Live Attenuated Influenza Vaccine Expressing Multiple M2e Tandem Repeats. Biomedicines, 2021, 9, 133.	3.2	8
137	Low-Dose Cadmium Potentiates Metabolic Reprogramming Following Early-Life Respiratory Syncytial Virus Infection. Toxicological Sciences, 2022, 188, 62-74.	3.1	8
138	Protection against respiratory syncytial virus by inactivated influenza virus carrying a fusion protein neutralizing epitope in a chimeric hemagglutinin. Nanomedicine: Nanotechnology, Biology, and Medicine, 2016, 12, 759-770.	3.3	7
139	Natural Killer and CD8 T Cells Contribute to Protection by Formalin Inactivated Respiratory Syncytial Virus Vaccination under a CD4-Deficient Condition. Immune Network, 2020, 20, e51.	3.6	7
140	A chimeric thermostable M2e and H3 stalk-based universal influenza A virus vaccine. Npj Vaccines, 2022, 7, .	6.0	7
141	Recombinant Live Attenuated Influenza Virus Expressing Conserved G-Protein Domain in a Chimeric Hemagglutinin Molecule Induces G-Specific Antibodies and Confers Protection against Respiratory Syncytial Virus. Vaccines, 2020, 8, 716.	4.4	6
142	Towards Goals to Refine Prophylactic and Therapeutic Strategies Against COVID-19 Linked to Aging and Metabolic Syndrome. Cells, 2021, 10, 1412.	4.1	6
143	Systems biology from virus to humans. Journal of Analytical Science and Technology, 2015, 6, 3.	2.1	5
144	Vaccination with Combination DNA and Virus-Like Particles Enhances Humoral and Cellular Immune Responses upon Boost with Recombinant Modified Vaccinia Virus Ankara Expressing Human Immunodeficiency Virus Envelope Proteins. Vaccines, 2017, 5, 52.	4.4	5

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145	BCG Cell Wall Skeleton As a Vaccine Adjuvant Protects Both Infant and Old-Aged Mice from Influenza Virus Infection. Biomedicines, 2021, 9, 516.	3.2	5
146	Functional NK Cell Activation by Ovalbumin Immunization with a Monophosphoryl Lipid A and Poly I:C Combination Adjuvant Promoted Dendritic Cell Maturation. Vaccines, 2021, 9, 1061.	4.4	5
147	Influenza Virus-like Particle-Based Hybrid Vaccine Containing RBD Induces Immunity against Influenza and SARS-CoV-2 Viruses. Vaccines, 2022, 10, 944.	4.4	5
148	Distinct Bâ€cell populations contribute to vaccine antigenâ€specific antibody production in a transgenic mouse model. Immunology, 2014, 142, 624-635.	4.4	4
149	Antigenicity and immunogenicity of unique prefusion-mimic F proteins presented on enveloped virus-like particles. Vaccine, 2019, 37, 6656-6664.	3.8	4
150	Respiratory Syncytial Virus Fusion Protein-encoding DNA Vaccine Is Less Effective in Conferring Protection against Inflammatory Disease than a Virus-like Particle Platform. Immune Network, 2019, 19, e18.	3.6	4
151	Comparison of the effects of different potent adjuvants on enhancing the immunogenicity and cross-protection by influenza virus vaccination in young and aged mice. Antiviral Research, 2022, 197, 105229.	4.1	4
152	Physical radiofrequency adjuvant enhances immune responses to influenza H5N1 vaccination. FASEB Journal, 2022, 36, e22182.	0.5	4
153	Dendritic cell activation by a micro particulate based system containing the influenza matrix-2 protein virus-like particle (M2e VLP). International Journal of Pharmaceutics, 2022, , 121667.	5.2	4
154	Adjuvant effects of killed Lactobacillus casei DK128 on enhancing T helper type 1 immune responses and the efficacy of influenza vaccination in normal and CD4-deficient mice. Vaccine, 2020, 38, 5783-5792.	3.8	3
155	The efficacy of inactivated split respiratory syncytial virus as a vaccine candidate and the effects of novel combination adjuvants. Antiviral Research, 2019, 168, 100-108.	4.1	2
156	Enhanced cross protection by hetero prime-boost vaccination with recombinant influenza viruses containing chimeric hemagglutinin-M2e epitopes. Virology, 2022, 566, 143-152.	2.4	2
157	Transdermal Immunization with Microparticulate RSV-F Virus-like Particles Elicits Robust Immunity. Vaccines, 2022, 10, 584.	4.4	2
158	Thermostable H1 hemagglutinin stem with M2e epitopes provides broad cross-protection against group1 and 2 influenza A viruses. Molecular Therapy - Methods and Clinical Development, 2022, 26, 38-51.	4.1	1
159	Do recombinant-engineered nanoparticle vaccines hold promise for the prevention of respiratory syncytial virus?. Nanomedicine, 2016, 11, 439-442.	3.3	0
160	Roles of the Fc Receptor Î³-Chain in Inducing Protective Immune Responses after Heterologous Vaccination against Respiratory Syncytial Virus Infection. Vaccines, 2021, 9, 232.	4.4	0
161	Natural killer cells contribute to enhanced respiratory disease after oil-in-water emulsion adjuvanted vaccination against respiratory syncytial virus and infection. Human Vaccines and Immunotherapeutics, 2021, 17, 3806-3817.	3.3	0
162	Impact of hemagglutination activity and M2e immunity on conferring protection against influenza viruses. Virology, 2022, 574, 37-46.	2.4	0