Zhou Xing

List of Publications by Year
in descending order

119 papers	7,394 citations	53660 45 h-index	62479 80 g-index
124 all docs	124 docs citations	124 times ranked	9188 citing authors

#	Article	IF	Citations
1	Immunological considerations for COVID-19 vaccine strategies. Nature Reviews Immunology, 2020, 20, 615-632.	10.6	806
2	Induction of Autonomous Memory Alveolar Macrophages Requires T Cell Help and Is Critical to Trained Immunity. Cell, 2018, 175, 1634-1650.e17.	13.5	339
3	Single Mucosal, but Not Parenteral, Immunization with Recombinant Adenoviral-Based Vaccine Provides Potent Protection from Pulmonary Tuberculosis. Journal of Immunology, 2004, 173, 6357-6365.	0.4	328
4	Viral Booster Vaccines Improve <i>Mycobacterium bovis</i> BCG-Induced Protection against Bovine Tuberculosis. Infection and Immunity, 2009, 77, 3364-3373.	1.0	237
5	Respiratory mucosal delivery of next-generation COVID-19 vaccine provides robust protection against both ancestral and variant strains of SARS-CoV-2. Cell, 2022, 185, 896-915.e19.	13.5	189
6	Influenza Infection Leads to Increased Susceptibility to Subsequent Bacterial Superinfection by Impairing NK Cell Responses in the Lung. Journal of Immunology, 2010, 184, 2048-2056.	0.4	185
7	A Human Type 5 Adenovirusâ€“Based Tuberculosis Vaccine Induces Robust T Cell Responses in Humans Despite Preexisting Anti-Adenovirus Immunity. Science Translational Medicine, 2013, 5, 205ra134.	5.8	184
8	Intranasal Boosting with an Adenovirus-Vectored Vaccine Markedly Enhances Protection by Parenteral Mycobacterium bovis BCG Immunization against Pulmonary Tuberculosis. Infection and Immunity, 2006, 74, 4634-4643.	1.0	176
9	Transient Transgene Expression of Decorin in the Lung Reduces the Fibrotic Response to Bleomycin. American Journal of Respiratory and Critical Care Medicine, 2001, 163, 770-777.	2.5	172
10	Targeted Prostaglandin E2 Inhibition Enhances Antiviral Immunity through Induction of Type I Interferon and Apoptosis in Macrophages. Immunity, 2014, 40, 554-568.	6.6	171
11	TNF-Î± is a critical negative regulator of type 1 immune activation during intracellular bacterial infection. Journal of Clinical Investigation, 2004, 113, 401-413.	3.9	166
12	Macrophages are a significant source of type 1 cytokines during mycobacterial infection. Journal of Clinical Investigation, 1999, 103, 1023-1029.	3.9	159
13	Mechanisms of Mucosal and Parenteral Tuberculosis Vaccinations: Adenoviral-Based Mucosal Immunization Preferentially Elicits Sustained Accumulation of Immune Protective CD4 and CD8 T Cells within the Airway Lumen. Journal of Immunology, 2005, 174, 7986-7994.	0.4	151
14	Single Intranasal Mucosal Mycobacterium bovis BCG Vaccination Confers Improved Protection Compared to Subcutaneous Vaccination against Pulmonary Tuberculosis. Infection and Immunity, 2004, 72, 238-246.	1.0	150
15	TNF Drives Monocyte Dysfunction with Age and Results in Impaired Anti-pneumococcal Immunity. PLoS Pathogens, 2016, 12, e1005368.	2.1	130
16	NK Cells Play a Critical Protective Role in Host Defense against Acute Extracellular<i>Staphylococcus aureus</i>Bacterial Infection in the Lung. Journal of Immunology, 2008, 180, 5558-5568.	0.4	113
17	Immunopathology in influenza virus infection: Uncoupling the friend from foe. Clinical Immunology, 2012, 144, 57-69.	1.4	108
18	Intranasal Mucosal Boosting with an Adenovirus-Vectored Vaccine Markedly Enhances the Protection of BCG-Primed Guinea Pigs against Pulmonary Tuberculosis. PLoS ONE, 2009, 4, e5856.	1.1	104

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19	Negative Regulation of Lung Inflammation and Immunopathology by TNF-Î± during Acute Influenza Infection. American Journal of Pathology, 2011, 179, 2963-2976.	1.9	101
20	COVID-19 vaccines and kidney disease. Nature Reviews Nephrology, 2021, 17, 291-293.	4.1	91
21	A role for CD4+ T cells in the pathogenesis of skin fibrosis in tight skin mice. European Journal of Immunology, 1994, 24, 1463-1466.	1.6	82
22	Gene transfer for cytokine functional studies in the lung: the multifunctional role of GM-CSF in pulmonary inflammation. Journal of Leukocyte Biology, 1996, 59, 481-488.	1.5	82
23	Mucosal Luminal Manipulation of T Cell Geography Switches on Protective Efficacy by Otherwise Ineffective Parenteral Genetic Immunization. Journal of Immunology, 2007, 178, 2387-2395.	0.4	81
24	Lipopolysaccharide Induces Expression of Granulocyte/Macrophage Colony-stimulating Factor, Interleukin-8, and Interleukin-6 in Human Nasal, but Not Lung, Fibroblasts: Evidence for Heterogeneity within the Respiratory Tract. American Journal of Respiratory Cell and Molecular Biology, 1993, 9, 255-263.	1.4	78
25	Activation of CD8 T Cells by Mycobacterial Vaccination Protects against Pulmonary Tuberculosis in the Absence of CD4 T Cells. Journal of Immunology, 2004, 173, 4590-4597.	0.4	75
26	Methods and clinical development of adenovirus-vectored vaccines against mucosal pathogens. Molecular Therapy - Methods and Clinical Development, 2016, 3, 16030.	1.8	75
27	Transgenic expression of granulocyte-macrophage colony-stimulating factor induces the differentiation and activation of a novel dendritic cell population in the lung. Blood, 2000, 95, 2337-2345.	0.6	74
28	Pseudomonas aeruginosa LasB protease impairs innate immunity in mice and humans by targeting a lung epithelial cystic fibrosis transmembrane regulatorâ€“IL-6â€“antimicrobialâ€“repair pathway. Thorax, 2018, 73, 49-61.	2.7	74
29	COVIDâ€19: Current knowledge in clinical features, immunological responses, and vaccine development. FASEB Journal, 2021, 35, e21409.	0.2	71
30	Genetically Determined Disparate Innate and Adaptive Cell-Mediated Immune Responses to Pulmonary Mycobacterium bovis BCG Infection in C57BL/6 and BALB/c Mice. Infection and Immunity, 2000, 68, 6946-6953.	1.0	69
31	Intramuscular immunization with a monogenic plasmid DNA tuberculosis vaccine: Enhanced immunogenicity by electroporation and co-expression of GM-CSF transgene. Vaccine, 2007, 25, 1342-1352.	1.7	69
32	New Tuberculosis Vaccine Strategies: Taking Aim at Un-Natural Immunity. Trends in Immunology, 2018, 39, 419-433.	2.9	67
33	Airway luminal T cells: A newcomer on the stage of TB vaccination strategies. Trends in Immunology, 2010, 31, 247-252.	2.9	64
34	Adenoviral Vectors for Mucosal Vaccination Against Infectious Diseases. Viral Immunology, 2005, 18, 283-291.	0.6	63
35	Murine Airway Luminal Antituberculosis Memory CD8 T Cells by Mucosal Immunization Are Maintained Via Antigen-Driven <i>In Situ</i> Proliferation, Independent of Peripheral T Cell Recruitment. American Journal of Respiratory and Critical Care Medicine, 2010, 181, 862-872.	2.5	63
36	IL-12-Independent Th1<i>-</i>Type Immune Responses to Respiratory Viral Infection: Requirement of IL-18 for IFN-Î³ Release in the Lung But Not for the Differentiation of Viral-Reactive Th1<i>-</i>Type Lymphocytes. Journal of Immunology, 2000, 164, 2575-2584.	0.4	62

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37	Innate immune memory of tissue-resident macrophages and trained innate immunity: Re-vamping vaccine concept and strategies. Journal of Leukocyte Biology, 2020, 108, 825-834.	1.5	62
38	Use of recombinant virus-vectored tuberculosis vaccines for respiratory mucosal immunization. Tuberculosis, 2006, 86, 211-217.	0.8	61
39	AdHu5Ag85A Respiratory Mucosal Boost Immunization Enhances Protection against Pulmonary Tuberculosis in BCG-Primed Non-Human Primates. PLoS ONE, 2015, 10, e0135009.	1.1	55
40	Estradiol Enhances CD4+ T-Cell Anti-Viral Immunity by Priming Vaginal DCs to Induce Th17 Responses via an IL-1-Dependent Pathway. PLoS Pathogens, 2016, 12, e1005589.	2.1	55
41	Immune Responses Induced in Cattle by Vaccination with a Recombinant Adenovirus Expressing Mycobacterial Antigen 85A and Mycobacterium bovis BCG. Infection and Immunity, 2006, 74, 1416-1418.	1.0	54
42	CXCR3 Signaling Is Required for Restricted Homing of Parenteral Tuberculosis Vaccineâ€“Induced T Cells to Both the Lung Parenchyma and Airway. Journal of Immunology, 2017, 199, 2555-2569.	0.4	54
43	Marked Improvement of Severe Lung Immunopathology by Influenza-Associated Pneumococcal Superinfection Requires the Control of Both Bacterial Replication and Host Immune Responses. American Journal of Pathology, 2013, 183, 868-880.	1.9	51
44	Goats Primed with Mycobacterium bovis BCG and Boosted with a Recombinant Adenovirus Expressing Ag85A Show Enhanced Protection against Tuberculosis. Vaccine Journal, 2012, 19, 1339-1347.	3.2	50
45	Differential Regulation of DAP12 and Molecules Associated with DAP12 during Host Responses to Mycobacterial Infection. Infection and Immunity, 2004, 72, 2477-2483.	1.0	49
46	Understanding Delayed T-Cell Priming, Lung Recruitment, and Airway Luminal T-Cell Responses in Host Defense against Pulmonary Tuberculosis. Clinical and Developmental Immunology, 2012, 2012, 1-13.	3.3	49
47	Gamma Interferon Responses of CD4 and CD8 T-Cell Subsets Are Quantitatively Different and Independent of Each Other during Pulmonary Mycobacterium bovis BCG Infection. Infection and Immunity, 2007, 75, 2244-2252.	1.0	47
48	Optimization of Spray Drying Conditions for Yield, Particle Size and Biological Activity of Thermally Stable Viral Vectors. Pharmaceutical Research, 2016, 33, 2763-2776.	1.7	47
49	Aerosol delivery, but not intramuscular injection, of adenovirus-vectored tuberculosis vaccine induces respiratory-mucosal immunity in humans. JCI Insight, 2022, 7, .	2.3	46
50	FimH, a TLR4 ligand, induces innate antiviral responses in the lung leading to protection against lethal influenza infection in mice. Antiviral Research, 2011, 92, 346-355.	1.9	45
51	CD8+ T-cell expansion and maintenance after recombinant adenovirus immunization rely upon cooperation between hematopoietic and nonhematopoietic antigen-presenting cells. Blood, 2011, 117, 1146-1155.	0.6	42
52	Continuous and Discontinuous Cigarette Smoke Exposure Differentially Affects Protective Th1 Immunity against Pulmonary Tuberculosis. PLoS ONE, 2013, 8, e59185.	1.1	41
53	Heterologous Boosting of Recombinant Adenoviral Prime Immunization With a Novel Vesicular Stomatitis Virusâ€“vectored Tuberculosis Vaccine. Molecular Therapy, 2008, 16, 1161-1169.	3.7	40
54	Within the Enemyâ€™s Camp: contribution of the granuloma to the dissemination, persistence and transmission of Mycobacterium tuberculosis. Frontiers in Immunology, 2013, 4, 30.	2.2	40

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55	Human Upper Airway Structural Cell-derived Cytokines Support Human Peripheral Blood Monocyte Survival: A Potential Mechanism for Monocyte/Macrophage Accumulation in the Tissue. American Journal of Respiratory Cell and Molecular Biology, 1992, 6, 212-218.	1.4	39
56	Recent Advances in the Development of Adenovirus- and Poxvirus- Vectored Tuberculosis Vaccines. Current Gene Therapy, 2005, 5, 485-492.	0.9	39
57	Enhanced immunogenicity of BCG vaccine by using a viral-based GM-CSF transgene adjuvant formulation. Vaccine, 2002, 20, 2887-2898.	1.7	36
58	Mucosal immunity and novel tuberculosis vaccine strategies: route of immunisation-determined T-cell homing to restricted lung mucosal compartments. European Respiratory Review, 2015, 24, 356-360.	3.0	36
59	Evaluation of excipients for enhanced thermal stabilization of a human type 5 adenoviral vector through spray drying. International Journal of Pharmaceutics, 2016, 506, 289-301.	2.6	36
60	Protection by CD4 or CD8 T Cells against Pulmonary<i>Mycobacterium bovis</i>Bacillus Calmette-Guérin Infection. Infection and Immunity, 1998, 66, 5537-5542.	1.0	36
61	Critical Negative Regulation of Type 1 T Cell Immunity and Immunopathology by Signaling Adaptor DAP12 during Intracellular Infection. Journal of Immunology, 2007, 179, 4015-4026.	0.4	35
62	Heterologous boost vaccines for bacillus Calmetteâ€“GuÃ©rin prime immunization against tuberculosis. Expert Review of Vaccines, 2007, 6, 539-546.	2.0	35
63	On the Role of CD4+ T Cells in the CD8+ T-Cell Response Elicited by Recombinant Adenovirus Vaccines. Molecular Therapy, 2007, 15, 997-1006.	3.7	34
64	Immunization With a Bivalent Adenovirus-vectored Tuberculosis Vaccine Provides Markedly Improved Protection Over Its Monovalent Counterpart Against Pulmonary Tuberculosis. Molecular Therapy, 2009, 17, 1093-1100.	3.7	34
65	Organ distribution of transgene expression following intranasal mucosal delivery of recombinant replication-defective adenovirus gene transfer vector. Genetic Vaccines and Therapy, 2008, 6, 5.	1.5	33
66	Airway Delivery of Soluble Mycobacterial Antigens Restores Protective Mucosal Immunity by Single Intramuscular Plasmid DNA Tuberculosis Vaccination: Role of Proinflammatory Signals in the Lung. Journal of Immunology, 2008, 181, 5618-5626.	0.4	32
67	Protection Induced by Simultaneous Subcutaneous and Endobronchial Vaccination with BCG/BCG and BCG/Adenovirus Expressing Antigen 85A against Mycobacterium bovis in Cattle. PLoS ONE, 2015, 10, e0142270.	1.1	32
68	Expression and role of VLA-1 in resident memory CD8 T cell responses to respiratory mucosal viral-vectored immunization against tuberculosis. Scientific Reports, 2017, 7, 9525.	1.6	32
69	Tuberculosis vaccines: the past, present and future. Expert Review of Vaccines, 2002, 1, 341-354.	2.0	30
70	Airway Macrophages Mediate Mucosal Vaccineâ€“Induced Trained Innate Immunity against <i>Mycobacterium tuberculosis</i> in Early Stages of Infection. Journal of Immunology, 2020, 205, 2750-2762.	0.4	30
71	CD11b+ Dendritic Cellâ€“Mediated Antiâ€“<i>Mycobacterium tuberculosis</i> Th1 Activation Is Counterregulated by CD103+ Dendritic Cells via IL-10. Journal of Immunology, 2018, 200, 1746-1760.	0.4	29
72	CD11c+ antigen presenting cells from the alveolar space, lung parenchyma and spleen differ in their phenotype and capabilities to activate naÃ¯ve and antigen-primed T cells. BMC Immunology, 2008, 9, 48.	0.9	28

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73	Mucosal-Pull Induction of Lung-Resident Memory CD8 T Cells in Parenteral TB Vaccine-Primed Hosts Requires Cognate Antigens and CD4 T Cells. Frontiers in Immunology, 2019, 10, 2075.	2.2	28
74	Human type 5 adenovirus-based tuberculosis vaccine: is the respiratory route of delivery the future?. Expert Review of Vaccines, 2014, 13, 927-930.	2.0	27
75	Development of Cell-Based Tuberculosis Vaccines: Genetically Modified Dendritic Cell Vaccine Is a Much More Potent Activator of CD4 and CD8 T Cells Than Peptide- or Protein-Loaded Counterparts. Molecular Therapy, 2006, 13, 766-775.	3.7	26
76	Comparison of immune responses and protective efficacy of intranasal prime-boost immunization regimens using adenovirus-based and CpG/HH2 adjuvanted-subunit vaccines against genital Chlamydia muridarum infection. Vaccine, 2012, 30, 350-360.	1.7	26
77	Type 1 interferon gene transfer enhances host defense against pulmonary Streptococcus pneumoniae infection via activating innate leukocytes. Molecular Therapy - Methods and Clinical Development, 2014, 1, 5.	1.8	26
78	Spray dried human and chimpanzee adenoviral-vectored vaccines are thermally stable and immunogenic in vivo. Vaccine, 2017, 35, 2916-2924.	1.7	26
79	Enhanced Protection Against Fatal Mycobacterial Infection in SCID Beige Mice by Reshaping Innate Immunity with IFN-Î³ Transgene. Journal of Immunology, 2001, 167, 375-383.	0.4	25
80	Induction of an Immune-Protective T-Cell Repertoire With Diverse Genetic Coverage by a Novel Viral-Vectored Tuberculosis Vaccine in Humans. Journal of Infectious Diseases, 2016, 214, 1996-2005.	1.9	25
81	Respiratory mucosal immunization with adenovirus gene transfer vector induces helper CD4 T cellâ€independent protective immunity. Journal of Gene Medicine, 2010, 12, 693-704.	1.4	24
82	The phase-contrast imaging instrument at the matter in extreme conditions endstation at LCLS. Review of Scientific Instruments, 2016, 87, 103701.	0.6	23
83	Consideration of Cytokines as Therapeutics Agents or Targets. Current Pharmaceutical Design, 2000, 6, 599-611.	0.9	22
84	The Hunt for New Tuberculosis Vaccines: Anti-TB Immunity and Rational Design of Vaccines. Current Pharmaceutical Design, 2001, 7, 1015-1037.	0.9	22
85	Excipient selection for thermally stable enveloped and non-enveloped viral vaccine platforms in dry powders. International Journal of Pharmaceutics, 2019, 561, 66-73.	2.6	22
86	Pulmonary Mycobacterial Granuloma. American Journal of Pathology, 2011, 178, 1622-1634.	1.9	21
87	Immunogenicity comparison of the intradermal or endobronchial boosting of BCG vaccinates with Ad5-85A. Vaccine, 2012, 30, 6294-6300.	1.7	21
88	Effect of Shear Stresses on Adenovirus Activity and Aggregation during Atomization To Produce Thermally Stable Vaccines by Spray Drying. ACS Biomaterials Science and Engineering, 2020, 6, 4304-4313.	2.6	21
89	Restoration of innate immune activation accelerates <scp>T</scp>h1â€cell priming and protection following pulmonary mycobacterial infection. European Journal of Immunology, 2014, 44, 1375-1386.	1.6	20
90	Mucosally Delivered Dendritic Cells Activate T Cells Independently of IL-12 and Endogenous APCs. Journal of Immunology, 2008, 181, 2356-2367.	0.4	17

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91	New Approaches to TB Vaccination. Chest, 2014, 146, 804-812.	0.4	17
92	Acoustic levitation as a screening method for excipient selection in the development of dry powder vaccines. International Journal of Pharmaceutics, 2019, 563, 71-78.	2.6	16
93	Enhancement of Antituberculosis Immunity in a Humanized Model System by a Novel Virus-Vectored Respiratory Mucosal Vaccine. Journal of Infectious Diseases, 2017, 216, 135-145.	1.9	15
94	Stabilization of HSV-2 viral vaccine candidate by spray drying. International Journal of Pharmaceutics, 2019, 569, 118615.	2.6	15
95	Role of B Cells in Mucosal Vaccineâ€"Induced Protective CD8+ T Cell Immunity against Pulmonary Tuberculosis. Journal of Immunology, 2015, 195, 2900-2907.	0.4	14
96	Immunotherapeutic effects of recombinant adenovirus encoding interleukin 12 in experimental pulmonary tuberculosis. Scandinavian Journal of Immunology, 2018, 89, e12743.	1.3	14
97	Fragile X mental retardation protein promotes astrocytoma proliferation via the MEK/ERK signaling pathway. Oncotarget, 2016, 7, 75394-75406.	0.8	14
98	Differential Biodistribution of Adenoviral-Vectored Vaccine Following Intranasal and Endotracheal Deliveries Leads to Different Immune Outcomes. Frontiers in Immunology, 0, 13, .	2.2	14
99	Efficacy of gene-therapy based on adenovirus encoding granulocyte-macrophage colony-stimulating factor in drug-sensitive and drug-resistant experimental pulmonary tuberculosis. Tuberculosis, 2016, 100, 5-14.	0.8	13
100	Adenovirus Vectors for Cytokine Gene Expression. Annals of the New York Academy of Sciences, 1995, 762, 282-293.	1.8	12
101	Immunization Strategies Against Pulmonary Tuberculosis: Considerations of T Cell Geography. Advances in Experimental Medicine and Biology, 2013, 783, 267-278.	0.8	12
102	Single-Dose Mucosal Immunotherapy With Chimpanzee Adenovirus-Based Vaccine Accelerates Tuberculosis Disease Control and Limits Its Rebound After Antibiotic Cessation. Journal of Infectious Diseases, 2019, 220, 1355-1366.	1.9	12
103	Pulmonary mucosal dendritic cells in T-cell activation: implications for TB therapy. Expert Review of Respiratory Medicine, 2011, 5, 75-85.	1.0	11
104	Spray dried VSV-vectored vaccine is thermally stable and immunologically active in vivo. Scientific Reports, 2020, 10, 13349.	1.6	11
105	Use of cytokines in infection. Expert Opinion on Emerging Drugs, 2004, 9, 223-236.	1.0	10
106	Importance of T-cell location rekindled: implication for tuberculosis vaccination strategies. Expert Review of Vaccines, 2009, 8, 1465-1468.	2.0	10
107	Advancing Immunotherapeutic Vaccine Strategies Against Pulmonary Tuberculosis. Frontiers in Immunology, 2020, 11, 557809.	2.2	10
108	Adenoviral-Mediated Gene Transfer of Interleukin-6 in Rat Lung Enhances Antiviral Immunoglobulin A and G Responses in Distinct Tissue Compartments. Biochemical and Biophysical Research Communications, 1999, 258, 332-335.	1.0	8

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109	Consecutive Spray Drying to Produce Coated Dry Powder Vaccines Suitable for Oral Administration. ACS Biomaterials Science and Engineering, 2018, 4, 1669-1678.	2.6	6
110	Respiratory macrophages regulate CD4 T memory responses to mucosal immunization with recombinant adenovirus-based vaccines. Cellular Immunology, 2016, 310, 53-62.	1.4	5
111	Regulation of TB Vaccine-Induced Airway Luminal T Cells by Respiratory Exposure to Endotoxin. PLoS ONE, 2012, 7, e41666.	1.1	4
112	Cryoprotective agents influence viral dosage and thermal stability of inhalable dry powder vaccines. International Journal of Pharmaceutics, 2022, 617, 121602.	2.6	4
113	A novel genetically engineered<i>Mycobacterium smegmatis</i>-based vaccine promotes anti-TB immunity. Expert Review of Vaccines, 2012, 11, 35-38.	2.0	3
114	Filling the Immunological Gap. , 2015, , 1291-1306.		3
115	Age at Mycobacterium bovis BCG Priming Has Limited Impact on Anti-Tuberculosis Immunity Boosted by Respiratory Mucosal AdHu5Ag85A Immunization in a Murine Model. PLoS ONE, 2015, 10, e0131175.	1.1	3
116	Evaluating the sensitivity of the bovine BCG challenge model using a prime boost Ad85A vaccine regimen. Vaccine, 2020, 38, 1241-1248.	1.7	3
117	Validation of a diffusion-based single droplet drying model for encapsulation of a viral-vectored vaccine using an acoustic levitator. International Journal of Pharmaceutics, 2021, 605, 120806.	2.6	3
118	BCG and New Tuberculosis Vaccines. , 2004, , 881-892.		0
119	Assessment of Immune Protective T Cell Repertoire in Humans Immunized with Novel Tuberculosis Vaccines. Methods in Molecular Biology, 2020, 2111, 175-192.	0.4	0