Ruth R Montgomery

List of Publications by Year in descending order

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126 papers 11,474 citations

28190 55 h-index 30848 102 g-index

133 all docs

133 docs citations

times ranked

133

16042 citing authors

#	Article	IF	CITATIONS
1	Single-cell multi-omics reveals dyssynchrony of the innate and adaptive immune system in progressive COVID-19. Nature Communications, 2022, 13, 440.	5.8	100
2	A genome-scale gain-of-function CRISPR screen in CD8 TÂcells identifies proline metabolism as a means to enhance CAR-T therapy. Cell Metabolism, 2022, 34, 595-614.e14.	7.2	70
3	Single-cell longitudinal analysis of SARS-CoV-2 infection in human airway epithelium identifies target cells, alterations in gene expression, and cell state changes. PLoS Biology, 2021, 19, e3001143.	2.6	180
4	Design and implementation of a prospective cohort study of persons living with and without HIV infection who are initiating medication treatment for opioid use disorder. Contemporary Clinical Trials Communications, 2021, 21, 100704.	0.5	4
5	Single-cell immunophenotyping of the skin lesion erythema migrans identifies IgM memory B cells. JCI Insight, 2021, 6, .	2.3	10
6	Using †big data' to disentangle aging and COVID-19. Nature Aging, 2021, 1, 496-497.	5.3	2
7	Multiâ€site reproducibility of a human immunophenotyping assay in whole blood and peripheral blood mononuclear cells preparations using CyTOF technology coupled with Maxpar Pathsetter, an automated data analysis system. Cytometry Part B - Clinical Cytometry, 2020, 98, 146-160.	0.7	41
8	Profiling cellular heterogeneity in asthma with single cell multiparameter CyTOF. Journal of Leukocyte Biology, 2020, 108, 1555-1564.	1.5	11
9	In-Depth Analysis of Genetic Variation Associated with Severe West Nile Viral Disease. Vaccines, 2020, 8, 744.	2.1	3
10	Single cell immune profiling of dengue virus patients reveals intact immune responses to Zika virus with enrichment of innate immune signatures. PLoS Neglected Tropical Diseases, 2020, 14, e0008112.	1.3	20
11	Single-Cell Transcriptional Archetypes of Airway Inflammation in Cystic Fibrosis. American Journal of Respiratory and Critical Care Medicine, 2020, 202, 1419-1429.	2.5	56
12	Molecular MRI of the Immuno-Metabolic Interplay in a Rabbit Liver Tumor Model: A Biomarker for Resistance Mechanisms in Tumor-targeted Therapy?. Radiology, 2020, 296, 575-583.	3.6	19
13	DNA aptamer-based non-faradaic impedance biosensor for detecting E.Âcoli. Analytica Chimica Acta, 2020, 1107, 135-144.	2.6	50
14	Smooth Muscle Cell Reprogramming in Aortic Aneurysms. Cell Stem Cell, 2020, 26, 542-557.e11.	5.2	114
15	How Inflammation Blunts Innate Immunity in Aging. Interdisciplinary Topics in Gerontology and Geriatrics, 2020, 43, 1-17.	2.6	20
16	A Modified Injector and Sample Acquisition Protocol Can Improve Data Quality and Reduce Interâ€Instrument Variability of the Helios Mass Cytometer. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2019, 95, 1019-1030.	1.1	15
17	Dissecting alterations in human CD8+ T cells with aging by high-dimensional single cell mass cytometry. Clinical Immunology, 2019, 200, 24-30.	1.4	18
18	ImmuneRegulation: a web-based tool for identifying human immune regulatory elements. Nucleic Acids Research, 2019, 47, W142-W150.	6.5	4

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19	Transcriptomic analysis of human ILâ€7 receptor alpha ^{low} and ^{high} effector memory CD8 ⁺ T cells reveals an ageâ€associated signature linked to influenza vaccine response in older adults. Aging Cell, 2019, 18, e12960.	3.0	20
20	HIPK2 is necessary for type I interferon–mediated antiviral immunity. Science Signaling, 2019, 12, .	1.6	16
21	Aedes aegypti AgBR1 antibodies modulate early Zika virus infection of mice. Nature Microbiology, 2019, 4, 948-955.	5.9	43
22	Multiplexed (18-Plex) Measurement of Signaling Targets and Cytotoxic T Cells in Trastuzumab-Treated Patients using Imaging Mass Cytometry. Clinical Cancer Research, 2019, 25, 3054-3062.	3.2	42
23	Development of a 2-dimensional atlas of the human kidney with imaging mass cytometry. JCI Insight, 2019, 4, .	2.3	43
24	Impaired ATM activation in B cells is associated with bone resorption in rheumatoid arthritis. Science Translational Medicine, 2019, 11 , .	5.8	15
25	Exploring single-cell data with deep multitasking neural networks. Nature Methods, 2019, 16, 1139-1145.	9.0	222
26	Elevated Activation of Neutrophil Toll-Like Receptors in Patients with Acute Severe Leptospirosis: An Observational Study. American Journal of Tropical Medicine and Hygiene, 2019, 101, 585-589.	0.6	5
27	Age-Related Changes in Immune Regulation by Noncoding RNAs. , 2019, , 1241-1258.		0
28	Reduced dynamic range of antiviral innate immune responses in aging. Experimental Gerontology, 2018, 107, 130-135.	1.2	42
29	Non-invasive Point-of-Care Device To Diagnose Acute Mesenteric Ischemia. ACS Sensors, 2018, 3, 2296-2302.	4.0	12
30	Identification of genetic variants associated with dengue or West Nile virus disease: a systematic review and meta-analysis. BMC Infectious Diseases, 2018, 18, 282.	1.3	30
31	SIRT6 Acts as a Negative Regulator in Dengue Virus-Induced Inflammatory Response by Targeting the DNA Binding Domain of NF-I°B p65. Frontiers in Cellular and Infection Microbiology, 2018, 8, 113.	1.8	29
32	Age-related changes in expression and signaling of TAM receptor inflammatory regulators in monocytes. Oncotarget, 2018, 9, 9572-9580.	0.8	7
33	Age-Related Changes in Immune Regulation by Noncoding RNAs. , 2018, , 1-18.		0
34	Removal of batch effects using distribution-matching residual networks. Bioinformatics, 2017, 33, 2539-2546.	1.8	120
35	Multiparameter Single Cell Profiling of Airway Inflammatory Cells. Cytometry Part B - Clinical Cytometry, 2017, 92, 12-20.	0.7	19
36	Humanized mouse model supports development, function, and tissue residency of human natural killer cells. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E9626-E9634.	3.3	138

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37	Multicohort analysis reveals baseline transcriptional predictors of influenza vaccination responses. Science Immunology, 2017, 2, .	5.6	122
38	Aging impairs both primary and secondary RIC-I signaling for interferon induction in human monocytes. Science Signaling, 2017, 10, .	1.6	113
39	Gating mass cytometry data by deep learning. Bioinformatics, 2017, 33, 3423-3430.	1.8	84
40	The natural killer cell response to West Nile virus in young and old individuals with or without a prior history of infection. PLoS ONE, 2017, 12, e0172625.	1.1	26
41	West Nile Virus Seroprevalence, Connecticut, USA, 2000–2014. Emerging Infectious Diseases, 2017, 23, 708-710.	2.0	5
42	Role of Immune Aging in Susceptibility to West Nile Virus. Methods in Molecular Biology, 2016, 1435, 235-247.	0.4	14
43	Mx1 reveals innate pathways to antiviral resistance and lethal influenza disease. Science, 2016, 352, 463-466.	6.0	210
44	First Responders: Laboratory Methods to Assess Human Neutrophils. , 2016, , 89-101.		0
45	High standards for high dimensional investigations. Cytometry Part A: the Journal of the International Society for Analytical Cytology, 2016, 89, 886-888.	1.1	3
46	Association between high expression macrophage migration inhibitory factor (MIF) alleles and West Nile virus encephalitis. Cytokine, 2016, 78, 51-54.	1.4	14
47	Age-related alterations in immune responses to West Nile virus infection. Clinical and Experimental Immunology, 2016, 187, 26-34.	1.1	44
48	Cathelicidin Insufficiency in Patients with Fatal Leptospirosis. PLoS Pathogens, 2016, 12, e1005943.	2.1	22
49	Coordinated expression of Tryo3, Axl, and Mer receptors in macrophage ontogeny. Macrophage, 2016, 3, .	1.0	8
50	Systems Immunology Reveals Markers of Susceptibility to West Nile Virus Infection. Vaccine Journal, 2015, 22, 6-16.	3.2	35
51	Human NK cell repertoire diversity reflects immune experience and correlates with viral susceptibility. Science Translational Medicine, 2015, 7, 297ra115.	5.8	177
52	Risk factors for West Nile virus infection and disease in populations and individuals. Expert Review of Anti-Infective Therapy, 2015, 13, 317-325.	2.0	46
53	Imaging Immunosenescence. Methods in Molecular Biology, 2015, 1343, 97-106.	0.4	4
54	Neutralizing antibodies against West Nile virus identified directly from human B cells by single-cell analysis and next generation sequencing. Integrative Biology (United Kingdom), 2015, 7, 1587-1597.	0.6	80

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55	Paradoxical changes in innate immunity in aging: recent progress and new directions. Journal of Leukocyte Biology, 2015, 98, 937-943.	1.5	127
56	DNA Methylation Regulates the Differential Expression of CX3CR1 on Human IL-7R \hat{I} ±low and IL-7R \hat{I} ±high Effector Memory CD8+ T Cells with Distinct Migratory Capacities to the Fractalkine. Journal of Immunology, 2015, 195, 2861-2869.	0.4	32
57	Leukocyte-specific protein 1 regulates T-cell migration in rheumatoid arthritis. Proceedings of the National Academy of Sciences of the United States of America, 2015, 112, E6535-43.	3.3	28
58	IL-6 Receptor α Defines Effector Memory CD8+T Cells Producing Th2 Cytokines and Expanding in Asthma. American Journal of Respiratory and Critical Care Medicine, 2014, 190, 1383-1394.	2.5	38
59	Chitinase 3–Like 1 Suppresses Injury and Promotes Fibroproliferative Responses in Mammalian Lung Fibrosis. Science Translational Medicine, 2014, 6, 240ra76.	5.8	162
60	CyTOF supports efficient detection of immune cell subsets from small samples. Journal of Immunological Methods, 2014, 415, 1-5.	0.6	106
61	Functional Polymorphisms in the Gene Encoding Macrophage Migration Inhibitory Factor Are Associated With Gram-Negative Bacteremia in Older Adults. Journal of Infectious Diseases, 2014, 209, 764-768.	1.9	22
62	Effect of aging on microRNAs and regulation of pathogen recognition receptors. Current Opinion in Immunology, 2014, 29, 29-37.	2.4	34
63	Immune Markers Associated with Host Susceptibility to Infection with West Nile Virus. Viral Immunology, 2014, 27, 39-47.	0.6	31
64	Human monocytes have increased IFN- \hat{I}^3 -mediated IL-15 production with age alongside altered IFN- \hat{I}^3 receptor signaling. Clinical Immunology, 2014, 152, 101-110.	1.4	15
65	Editorial overview: Immune senescence: Known knowns and unknown unknowns. Current Opinion in Immunology, 2014, 29, vii-ix.	2.4	8
66	Reduced bioenergetics and toll-like receptor 1 function in human polymorphonuclear leukocytes in aging. Aging, 2014 , 6 , $131-139$.	1.4	48
67	Innate Immune Responses in the Neutrophils of Community Dwelling and Nursing Home Elders. Journal of Aging Science, 2014, 02, .	0.5	5
68	Differential expression analysis for paired RNA-seq data. BMC Bioinformatics, 2013, 14, 110.	1.2	22
69	An altered relationship of influenza vaccine-specific IgG responses with T cell immunity occurs with aging in humans. Clinical Immunology, 2013, 147, 79-88.	1.4	9
70	ELF4 is critical for induction of type I interferon and the host antiviral response. Nature Immunology, 2013, 14, 1237-1246.	7.0	89
71	Age-dependent dysregulation of innate immunity. Nature Reviews Immunology, 2013, 13, 875-887.	10.6	847
72	Semaphorin 7a ⁺ Regulatory T Cells Are Associated with Progressive Idiopathic Pulmonary Fibrosis and Are Implicated in Transforming Growth Factor-β1–induced Pulmonary Fibrosis. American Journal of Respiratory and Critical Care Medicine, 2013, 187, 180-188.	2.5	106

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73	Identification of Genes Critical for Resistance to Infection by West Nile Virus Using RNA-Seq Analysis. Viruses, 2013, 5, 1664-1681.	1.5	25
74	Cytokine Response Signatures in Disease Progression and Development of Severe Clinical Outcomes for Leptospirosis. PLoS Neglected Tropical Diseases, 2013, 7, e2457.	1.3	67
75	Impaired Toll-Like Receptor 3-Mediated Immune Responses from Macrophages of Patients Chronically Infected with Hepatitis C Virus. Vaccine Journal, 2013, 20, 146-155.	3.2	22
76	Semaphorin 7A Contributes to West Nile Virus Pathogenesis through TGF- \hat{l}^21/S mad6 Signaling. Journal of Immunology, 2012, 189, 3150-3158.	0.4	52
77	West Nile Virus: Biology, Transmission, and Human Infection. Clinical Microbiology Reviews, 2012, 25, 635-648.	5.7	275
78	Innate Immune Function by Toll-like Receptors: Distinct Responses in Newborns and the Elderly. Immunity, 2012, 37, 771-783.	6.6	478
79	Quantitative Imaging of Lineage-specific Toll-like Receptor-mediated Signaling in Monocytes and Dendritic Cells from Small Samples of Human Blood. Journal of Visualized Experiments, 2012, , .	0.2	11
80	Ageâ€essociated elevation in TLR5 leads to increased inflammatory responses in the elderly. Aging Cell, 2012, 11, 104-110.	3.0	125
81	IL-22 Signaling Contributes to West Nile Encephalitis Pathogenesis. PLoS ONE, 2012, 7, e44153.	1.1	65
82	Dysregulation of human Toll-like receptor function in aging. Ageing Research Reviews, 2011, 10, 346-353.	5.0	183
83	Innate immune control of West Nile virus infection. Cellular Microbiology, 2011, 13, 1648-1658.	1.1	42
84	Dual effect of the macrophage migration inhibitory factor gene on the development and severity of human systemic lupus erythematosus. Arthritis and Rheumatism, 2011, 63, 3942-3951.	6.7	106
85	Impaired Interferon Signaling in Dendritic Cells From Older Donors Infected In Vitro With West Nile Virus. Journal of Infectious Diseases, 2011, 203, 1415-1424.	1.9	143
86	<i>Anaplasma phagocytophilum</i> induces actin phosphorylation to selectively regulate gene transcription in <i>Ixodes scapularis</i> ticks. Journal of Experimental Medicine, 2011, 208, 1737-1737.	4.2	1
87	Circulating monocytes from systemic sclerosis patients with interstitial lung disease show an enhanced profibrotic phenotype. Laboratory Investigation, 2010, 90, 812-823.	1.7	212
88	<i>Anaplasma phagocytophilum</i> induces actin phosphorylation to selectively regulate gene transcription in <i>Ixodes scapularis</i> ticks. Journal of Experimental Medicine, 2010, 207, 1727-1743.	4.2	99
89	Age-Associated Decrease in TLR Function in Primary Human Dendritic Cells Predicts Influenza Vaccine Response. Journal of Immunology, 2010, 184, 2518-2527.	0.4	472
90	A Paradoxical Role for Neutrophils in the Pathogenesis of West Nile Virus. Journal of Infectious Diseases, 2010, 202, 1804-1812.	1.9	156

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91	Increased TLR4 Expression and Downstream Cytokine Production in Immunosuppressed Adults Compared to Non-Immunosuppressed Adults. PLoS ONE, 2010, 5, e11343.	1.1	8
92	<i>Anaplasma phagocytophilum</i> induces actin phosphorylation to selectively regulate gene transcription in <i>lxodes scapularis</i> i>ticks. Journal of Cell Biology, 2010, 190, i8-i8.	2.3	0
93	Inhibition of Neutrophil Function by Two Tick Salivary Proteins. Infection and Immunity, 2009, 77, 2320-2329.	1.0	99
94	IL-10 Signaling Blockade Controls Murine West Nile Virus Infection. PLoS Pathogens, 2009, 5, e1000610.	2.1	79
95	Fusion Loop Peptide of the West Nile Virus Envelope Protein Is Essential for Pathogenesis and Is Recognized by a Therapeutic Cross-Reactive Human Monoclonal Antibody. Journal of Immunology, 2009, 183, 650-660.	0.4	60
96	Toll-like Receptor 7 Mitigates Lethal West Nile Encephalitis via Interleukin 23-Dependent Immune Cell Infiltration and Homing. Immunity, 2009, 30, 242-253.	6.6	180
97	Human innate immunosenescence: causes and consequences for immunity in old age. Trends in Immunology, 2009, 30, 325-333.	2.9	413
98	RNA interference screen for human genes associated with West Nile virus infection. Nature, 2008, 455, 242-245.	13.7	471
99	Matrix Metalloproteinase 9 Facilitates West Nile Virus Entry into the Brain. Journal of Virology, 2008, 82, 8978-8985.	1.5	151
100	Dysregulation of TLR3 Impairs the Innate Immune Response to West Nile Virus in the Elderly. Journal of Virology, 2008, 82, 7613-7623.	1.5	161
101	West Nile Virus Attenuates Activation of Primary Human Macrophages. Viral Immunology, 2008, 21, 78-82.	0.6	25
102	Age-Associated Defect in Human TLR-1/2 Function. Journal of Immunology, 2007, 178, 970-975.	0.4	313
103	ASC/PYCARD and Caspase-1 Regulate the IL-18/IFN-γ Axis during <i>Anaplasma phagocytophilum</i> Infection. Journal of Immunology, 2007, 179, 4783-4791.	0.4	7 5
104	Recruitment of Macrophages and Polymorphonuclear Leukocytes in Lyme Carditis. Infection and Immunity, 2007, 75, 613-620.	1.0	59
105	Abrogation of macrophage migration inhibitory factor decreases West Nile virus lethality by limiting viral neuroinvasion. Journal of Clinical Investigation, 2007, 117, 3059-3066.	3.9	135
106	Human Neutrophil Calprotectin Reduces the Susceptibility of Borrelia burgdorferi to Penicillin. Infection and Immunity, 2006, 74, 2468-2472.	1.0	12
107	Myeloid Differentiation Antigen 88 Deficiency Impairs Pathogen Clearance but Does Not Alter Inflammation in Borrelia burgdorferi -Infected Mice. Infection and Immunity, 2004, 72, 3195-3203.	1.0	138
108	Disruption of Ixodes scapularis anticoagulation by using RNA interference. Proceedings of the National Academy of Sciences of the United States of America, 2004, 101, 1141-1146.	3.3	119

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109	Tick Saliva Reduces Adherence and Area of Human Neutrophils. Infection and Immunity, 2004, 72, 2989-2994.	1.0	72
110	TROSPA, an Ixodes scapularis Receptor for Borrelia burgdorferi. Cell, 2004, 119, 457-468.	13.5	348
111	Calprotectin, an Abundant Cytosolic Protein from Human Polymorphonuclear Leukocytes, Inhibits the Growth of Borrelia burgdorferi. Infection and Immunity, 2003, 71, 4711-4716.	1.0	83
112	Borrelia burgdorferiAre Susceptible to Killing by a Variety of Human Polymorphonuclear Leukocyte Components. Journal of Infectious Diseases, 2002, 185, 797-804.	1.9	55
113	Human Phagocytic Cells in the Early Innate Immune Response toBorrelia burgdorferi. Journal of Infectious Diseases, 2002, 185, 1773-1779.	1.9	57
114	Murine Lyme Disease: No Evidence for Active Immune Downâ€Regulation in Resolving or Subclinical Infection. Journal of Infectious Diseases, 2001, 183, 1631-1637.	1.9	12
115	Inhibition ofBorrelia burgdorferi-Tick Interactions In Vivo by Outer Surface Protein A Antibody. Journal of Immunology, 2001, 166, 7398-7403.	0.4	74
116	Functional Competence of Peritoneal Macrophages in Murine Lyme Borreliosis. Inflammation, 2000, 24, 277-288.	1.7	5
117	Attachment of Borrelia burgdorferi within Ixodes scapularis mediated by outer surface protein A. Journal of Clinical Investigation, 2000, 106, 561-569.	3.9	215
118	Temporal pattern of Borrelia burgdorferi p21 expression in ticks and the mammalian host Journal of Clinical Investigation, 1997, 99, 987-995.	3.9	102
119	Direct demonstration of antigenic substitution of Borrelia burgdorferi ex vivo: exploration of the paradox of the early immune response to outer surface proteins A and C in Lyme disease Journal of Experimental Medicine, 1996, 183, 261-269.	4.2	205
120	Microbial killing by human neutrophil cytokineplasts: similar suppressive effects of reversible and irreversible inhibitors of nitric oxide synthase. Journal of Leukocyte Biology, 1996, 60, 753-757.	1.5	11
121	Fc- And Non-Fc-Mediated Phagocytosis Of Borrelia Burgdorferi By Maerophages. Journal of Infectious Diseases, 1994, 170, 890-893.	1.9	45
122	Evidence for reactive nitrogen intermediates in killing of staphylococci by human neutrophil cytoplasts. A new microbicidal pathway for polymorphonuclear leukocytes Journal of Clinical Investigation, 1992, 90, 631-636.	3.9	183
123	Endocytic and Secretory Repertoire of the Lipid-Loaded Macrophage. Journal of Leukocyte Biology, 1989, 45, 129-138.	1.5	26
124	Effects of reagent and cell-generated hydrogen peroxide on the properties of low density lipoprotein Proceedings of the National Academy of Sciences of the United States of America, 1986, 83, 6631-6635.	3.3	32
125	Regulation of oocyte maturation in the mouse: Possible roles of intercellular communication, cAMP, and testosterone. Developmental Biology, 1983, 95, 294-304.	0.9	167
126	Regulation of mouse oocyte meiotic maturation: Implication of a decrease in oocyte cAMP and protein dephosphorylation in commitment to resume meiosis. Developmental Biology, 1983, 97, 264-273.	0.9	398