Katey J Rayner

List of Publications by Year
in descending order

87 papers	13,821 citations	61977 43 h-index	58576 82 g-index
92 all docs	92 docs citations	92 times ranked	17643 citing authors

#	Article	IF	Citations
1	NLRP3 inflammasomes are required for atherogenesis and activated by cholesterol crystals. Nature, 2010, 464, 1357-1361.	27.8	3,130
2	CD36 ligands promote sterile inflammation through assembly of a Toll-like receptor 4 and 6 heterodimer. Nature Immunology, 2010, 11, 155-161.	14.5	1,255
3	MiR-33 Contributes to the Regulation of Cholesterol Homeostasis. Science, 2010, 328, 1570-1573.	12.6	1,095
4	CD36 coordinates NLRP3 inflammasome activation by facilitating intracellular nucleation of soluble ligands into particulate ligands in sterile inflammation. Nature Immunology, 2013, 14, 812-820.	14.5	746
5	Inhibition of miR-33a/b in non-human primates raises plasma HDL and lowers VLDL triglycerides. Nature, 2011, 478, 404-407.	27.8	647
6	miR-33a/b contribute to the regulation of fatty acid metabolism and insulin signaling. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 9232-9237.	7.1	615
7	Antagonism of miR-33 in mice promotes reverse cholesterol transport and regression of atherosclerosis. Journal of Clinical Investigation, 2011, 121, 2921-2931.	8.2	609
8	MicroRNA-33â€“dependent regulation of macrophage metabolism directs immune cell polarization in atherosclerosis. Journal of Clinical Investigation, 2015, 125, 4334-4348.	8.2	304
9	Mycobacterium tuberculosis induces the miR-33 locus to reprogram autophagy and host lipid metabolism. Nature Immunology, 2016, 17, 677-686.	14.5	295
10	Role of inflammation in the pathogenesis of atherosclerosis and therapeutic interventions. Atherosclerosis, 2018, 276, 98-108.	0.8	289
11	The neuroimmune guidance cue netrin-1 promotes atherosclerosis by inhibiting the emigration of macrophages from plaques. Nature Immunology, 2012, 13, 136-143.	14.5	280
12	HDL promotes rapid atherosclerosis regression in mice and alters inflammatory properties of plaque monocyte-derived cells. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 7166-7171.	7.1	276
13	MicroRNAs in lipid metabolism. Current Opinion in Lipidology, 2011, 22, 86-92.	2.7	262
14	Targeting macrophage necroptosis for therapeutic and diagnostic interventions in atherosclerosis. Science Advances, 2016, 2, e1600224.	10.3	214
15	Netrin-1 promotes adipose tissue macrophage retention and insulin resistance in obesity. Nature Medicine, 2014, 20, 377-384.	30.7	213
16	Extracellular Vesicles Secreted by Atherogenic Macrophages Transfer MicroRNA to Inhibit Cell Migration. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 49-63.	2.4	176
17	Macrophage Mitochondrial Energy Status Regulates Cholesterol Efflux and Is Enhanced by Anti-miR33 in Atherosclerosis. Circulation Research, 2015, 117, 266-278.	4.5	158
18	microRNA-33 Regulates Macrophage Autophagy in Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 1058-1067.	2.4	158

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19	Extracellular communication via microRNA: lipid particles have a new message. Journal of Lipid Research, 2013, 54, 1174-1181.	4.2	142
20	MicroRNAs in the Pathobiology and Therapy of Atherosclerosis. Canadian Journal of Cardiology, 2017, 33, 313-324.	1.7	134
21	The Role of MicroRNAs in Cholesterol Efflux and Hepatic Lipid Metabolism. Annual Review of Nutrition, 2011, 31, 49-63.	10.1	130
22	microRNAs and cholesterol metabolism. Trends in Endocrinology and Metabolism, 2010, 21, 699-706.	7.1	127
23	Neuroimmune Guidance Cue Semaphorin 3E Is Expressed in Atherosclerotic Plaques and Regulates Macrophage Retention. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, 886-893.	2.4	114
24	Extracellular Release of the Atheroprotective Heat Shock Protein 27 Is Mediated by Estrogen and Competitively Inhibits acLDL Binding to Scavenger Receptor-A. Circulation Research, 2008, 103, 133-141.	4.5	111
25	Injectable human recombinant collagen matrices limit adverse remodeling and improve cardiac function after myocardial infarction. Nature Communications, 2019, 10, 4866.	12.8	103
26	<i>RIPK1</i> Expression Associates With Inflammation in Early Atherosclerosis in Humans and Can Be Therapeutically Silenced to Reduce NF-ÎºB Activation and Atherogenesis in Mice. Circulation, 2021, 143, 163-177.	1.6	102
27	Delivery of MicroRNAs by Chitosan Nanoparticles to Functionally Alter Macrophage Cholesterol Efflux <i>in Vitro</i> and <i>in Vivo</i>. ACS Nano, 2019, 13, 6491-6505.	14.6	98
28	The walking dead: macrophage inflammation and death in atherosclerosis. Current Opinion in Lipidology, 2017, 28, 91-98.	2.7	97
29	Resolvin D1 promotes the targeting and clearance of necroptotic cells. Cell Death and Differentiation, 2020, 27, 525-539.	11.2	90
30	Hypoxia Induces Netrin-1 and Unc5b in Atherosclerotic Plaques. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, 1180-1188.	2.4	88
31	Timing underpins the benefits associated with injectable collagen biomaterial therapy for the treatment of myocardial infarction. Biomaterials, 2015, 39, 182-192.	11.4	85
32	MicroRNAs regulating lipid metabolism in atherogenesis. Thrombosis and Haemostasis, 2012, 107, 642-647.	3.4	81
33	Paradoxical Suppression of Atherosclerosis in the Absence of microRNA-146a. Circulation Research, 2017, 121, 354-367.	4.5	79
34	MicroRNAs regulate the immunometabolic response to viral infection in the liver. Nature Chemical Biology, 2015, 11, 988-993.	8.0	76
35	MicroRNA Control of High-Density Lipoprotein Metabolism and Function. Circulation Research, 2014, 114, 183-192.	4.5	73
36	Modulation of Estrogen Signaling by the Novel Interaction of Heat Shock Protein 27, a Biomarker for Atherosclerosis, and Estrogen Receptor Î². Arteriosclerosis, Thrombosis, and Vascular Biology, 2005, 25, e10-4.	2.4	69

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37	Heat Shock Protein 27 Protects Against Atherogenesis via an Estrogen-Dependent Mechanism. Arteriosclerosis, Thrombosis, and Vascular Biology, 2009, 29, 1751-1756.	2.4	66
38	IRF2BP2 Reduces Macrophage Inflammation and Susceptibility to Atherosclerosis. Circulation Research, 2015, 117, 671-683.	4.5	64
39	Therapeutic Inhibition of miR-33 Promotes Fatty Acid Oxidation but Does Not Ameliorate Metabolic Dysfunction in Diet-Induced Obesity. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 2536-2543.	2.4	63
40	miRNA Targeting of Oxysterol-Binding Protein-Like 6 Regulates Cholesterol Trafficking and Efflux. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 942-951.	2.4	62
41	Serum Heat Shock Protein 27 Levels Represent a Potential Therapeutic Target for Atherosclerosis. Journal of the American College of Cardiology, 2013, 62, 1446-1454.	2.8	58
42	Cell Death in the Vessel Wall. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, e75-e81.	2.4	52
43	Metformin Abrogates Age-Associated Ovarian Fibrosis. Clinical Cancer Research, 2020, 26, 632-642.	7.0	51
44	MicroRNA Regulation of Vascular Smooth Muscle Function and Phenotype. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 2-6.	2.4	46
45	PAR2 (Protease-Activated Receptor 2) Deficiency Attenuates Atherosclerosis in Mice. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 1271-1282.	2.4	42
46	Loss of MLKL (Mixed Lineage Kinase Domain-Like Protein) Decreases Necrotic Core but Increases Macrophage Lipid Accumulation in Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2020, 40, 1155-1167.	2.4	42
47	Inhibition of endothelial progenitor cell glycogen synthase kinase-3Î² results in attenuated neointima formation and enhanced re-endothelialization after arterial injury. Cardiovascular Research, 2009, 83, 16-23.	3.8	41
48	[18F]-Fluorodeoxyglucose PET/CT imaging as a marker of carotid plaque inflammation: Comparison to immunohistology and relationship to acuity of events. International Journal of Cardiology, 2018, 271, 378-386.	1.7	41
49	The interaction and cellular localization of HSP27 and ERÎ² are modulated by 17Î²-estradiol and HSP27 phosphorylation. Molecular and Cellular Endocrinology, 2007, 270, 33-42.	3.2	39
50	Through the layers: how macrophages drive atherosclerosis across the vessel wall. Journal of Clinical Investigation, 2022, 132, .	8.2	39
51	Chronic Over-Expression of Heat Shock Protein 27 Attenuates Atherogenesis and Enhances Plaque Remodeling: A Combined Histological and Mechanical Assessment of Aortic Lesions. PLoS ONE, 2013, 8, e55867.	2.5	37
52	RIPK1 gene variants associate with obesity in humans and can be therapeutically silenced to reduce obesity in mice. Nature Metabolism, 2020, 2, 1113-1125.	11.9	34
53	Discovery of NM23-H2 as an estrogen receptor Î²-associated protein: Role in estrogen-induced gene transcription and cell migration. Journal of Steroid Biochemistry and Molecular Biology, 2008, 108, 72-81.	2.5	33
54	Nanomedicine Meets microRNA. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, e73-9.	2.4	33

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55	Pre-Procedural Atorvastatin Mobilizes Endothelial Progenitor Cells: Clues to the Salutary Effects of Statins on Healing of Stented Human Arteries. PLoS ONE, 2011, 6, e16413.	2.5	33
56	Heat Shock Protein 27: Clue to Understanding Estrogen-Mediated Atheroprotection?. Trends in Cardiovascular Medicine, 2010, 20, 53-57.	4.9	31
57	Anti-GRP78 autoantibodies induce endothelial cell activation and accelerate the development of atherosclerotic lesions. JCI Insight, 2018, 3, .	5.0	31
58	Autophagy Is Differentially Regulated in Leukocyte and Nonleukocyte Foam Cells During Atherosclerosis. Circulation Research, 2022, 130, 831-847.	4.5	31
59	Heat shock protein-27 attenuates foam cell formation and atherogenesis by down-regulating scavenger receptor-A expression via NF-Î°B signaling. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2013, 1831, 1721-1728.	2.4	26
60	MicroRNAs in Cardiovascular Health: From Order to Disorder. Endocrinology, 2013, 154, 4000-4009.	2.8	22
61	Macrophage miRNAs in atherosclerosis. Biochimica Et Biophysica Acta - Molecular and Cell Biology of Lipids, 2016, 1861, 2087-2093.	2.4	22
62	Macrophage Responses to Environmental Stimuli During Homeostasis and Disease. Endocrine Reviews, 2021, 42, 407-435.	20.1	21
63	How Biomaterials Can Influence Various Cell Types in the Repair and Regeneration of the Heart after Myocardial Infarction. Frontiers in Bioengineering and Biotechnology, 2016, 4, 62.	4.1	20
64	NM23-H2, an estrogen receptor Î²-associated protein, shows diminished expression with progression of atherosclerosis. American Journal of Physiology - Regulatory Integrative and Comparative Physiology, 2007, 292, R743-R750.	1.8	18
65	MicroRNA-155 in the Heart. Circulation, 2015, 131, 1533-1535.	1.6	18
66	Collagen biomaterial stimulates the production of extracellular vesicles containing microRNAâ€21 and enhances the proangiogenic function of CD34 ⁺ cells. FASEB Journal, 2019, 33, 4166-4177.	0.5	18
67	Attenuation of Atherogenesis via the Anti-inflammatory Effects of the Selective Estrogen Receptor Beta Modulator 8Î²-VE2. Journal of Cardiovascular Pharmacology, 2011, 58, 399-405.	1.9	17
68	miR-223 Exerts Translational Control of Proatherogenic Genes in Macrophages. Circulation Research, 2022, 131, 42-58.	4.5	17
69	Virally programmed extracellular vesicles sensitize cancer cells to oncolytic virus and small molecule therapy. Nature Communications, 2022, 13, 1898.	12.8	16
70	The Plaque â€œMicroâ€•Environment: microRNAs Control the Risk and the Development of Atherosclerosis. Current Atherosclerosis Reports, 2012, 14, 413-421.	4.8	13
71	Cathepsin G deficiency decreases complexity of atherosclerotic lesions in apolipoprotein E-deficient mice. American Journal of Physiology - Heart and Circulatory Physiology, 2013, 305, H1141-H1148.	3.2	13
72	LDL Receptor Pathway Regulation by miR-224 and miR-520d. Frontiers in Cardiovascular Medicine, 2020, 7, 81.	2.4	13

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73	Unlocking the Door to New Therapies in Cardiovascular Disease: MicroRNAs Hold the Key. Current Cardiology Reports, 2014, 16, 539.	2.9	12
74	Long Noncoding RNAs in the Heart. Circulation: Cardiovascular Genetics, 2016, 9, 101-103.	5.1	11
75	Loss of TIMP4 (Tissue Inhibitor of Metalloproteinase 4) Promotes Atherosclerotic Plaque Deposition in the Abdominal Aorta Despite Suppressed Plasma Cholesterol Levels. Arteriosclerosis, Thrombosis, and Vascular Biology, 2021, 41, 1874-1889.	2.4	10
76	Local Anti-miR Delivery. Arteriosclerosis, Thrombosis, and Vascular Biology, 2015, 35, 1905-1906.	2.4	6
77	microRNA-128. Circulation Research, 2020, 126, 1721-1722.	4.5	1
78	Macrophage Foam Cell Formation: The Pathways to Cholesterol Engorgement. , 0, , 229-254.		1
79	Metabolic dysfunction branches out. Science Translational Medicine, 2016, 8, .	12.4	1
80	LDL cholesterol hitches a ride. Science Translational Medicine, 2016, 8, 368ec196.	12.4	1
81	Observational Cross-Sectional Study of Inflammatory Markers After Transient Ischemic Attacks, Acute Coronary Syndromes, and Vascular Stroke Events. CJC Open, 2021, 3, 675-679.	1.5	0
82	The splice of life: Understanding human macrophage polarization. Science Translational Medicine, 2016, 8, .	12.4	0
83	The trash piles up in vascular disease. Science Translational Medicine, 2016, 8, .	12.4	0
84	PITing host against bacteria in the fight for infection control. Science Translational Medicine, 2016, 8, .	12.4	0
85	Resolvinâ€™ inflammation. Science Translational Medicine, 2016, 8, .	12.4	0
86	A big shot of small RNAs repairs a broken heart. Science Translational Medicine, 2017, 9, .	12.4	0
87	The scent of atherosclerosis. Science, 2022, 375, 145-146.	12.6	0