Matthias Nahrendorf

List of Publications by Citations

216 papers	26,782 citations	89 h-index	162 g-index
255 ext. papers	32,093 ext. citations	15.3 avg, IF	7.2 L-index

#	Paper	IF	Citations
216	The healing myocardium sequentially mobilizes two monocyte subsets with divergent and complementary functions. *Journal of Experimental Medicine*, **2007**, 204, 3037-47	16.6	1568
215	Identification of splenic reservoir monocytes and their deployment to inflammatory sites. *Science*, **2009**, 325, 612-6	33.3	1481
214	Molecularly self-assembled nucleic acid nanoparticles for targeted in vivo siRNA delivery. *Nature Nanotechnology*, **2012**, 7, 389-93	28.7	836
213	Myocardial infarction accelerates atherosclerosis. *Nature*, **2012**, 487, 325-9	50.4	674
212	Local proliferation dominates lesional macrophage accumulation in atherosclerosis. *Nature Medicine*, **2013**, 19, 1166-72	50.5	669
211	Leukocyte behavior in atherosclerosis, myocardial infarction, and heart failure. *Science*, **2013**, 339, 161-6	33.3	665
210	Therapeutic siRNA silencing in inflammatory monocytes in mice. *Nature Biotechnology*, **2011**, 29, 1005-10	44.5	594
209	Imaging macrophages with nanoparticles. *Nature Materials*, **2014**, 13, 125-38	27	586
208	Monocytes: protagonists of infarct inflammation and repair after myocardial infarction. *Circulation*, **2010**, 121, 2437-45	16.7	546
207	Noninvasive vascular cell adhesion molecule-1 imaging identifies inflammatory activation of cells in atherosclerosis. *Circulation*, **2006**, 114, 1504-11	16.7	508
206	Nanoparticle PET-CT imaging of macrophages in inflammatory atherosclerosis. *Circulation*, **2008**, 117, 379-87	16.7	460
205	Origins of tumor-associated macrophages and neutrophils. *Proceedings of the National Academy of Sciences of the United States of America*, **2012**, 109, 2491-6	11.5	445
204	Macrophages Facilitate Electrical Conduction in the Heart. *Cell*, **2017**, 169, 510-522.e20	56.2	438
203	Modified mRNA directs the fate of heart progenitor cells and induces vascular regeneration after myocardial infarction. *Nature Biotechnology*, **2013**, 31, 898-907	44.5	418
202	Chronic variable stress activates hematopoietic stem cells. *Nature Medicine*, **2014**, 20, 754-758	50.5	408
201	In vivo endothelial siRNA delivery using polymeric nanoparticles with low molecular weight. *Nature Nanotechnology*, **2014**, 9, 648-655	28.7	385
200	Rapid monocyte kinetics in acute myocardial infarction are sustained by extramedullary monocytopoiesis. *Journal of Experimental Medicine*, **2012**, 209, 123-37	16.6	342

199	Ly-6Chigh monocytes depend on Nr4a1 to balance both inflammatory and reparative phases in the infarcted myocardium. *Circulation Research*, **2014**, 114, 1611-22	15.7	333
198	Multimodality molecular imaging identifies proteolytic and osteogenic activities in early aortic valve disease. *Circulation*, **2007**, 115, 377-86	16.7	325
197	Extramedullary hematopoiesis generates Ly-6C(high) monocytes that infiltrate atherosclerotic lesions. *Circulation*, **2012**, 125, 364-74	16.7	321
196	Differential contribution of monocytes to heart macrophages in steady-state and after myocardial infarction. *Circulation Research*, **2014**, 115, 284-95	15.7	305
195	Innate response activator B cells protect against microbial sepsis. *Science*, **2012**, 335, 597-601	33.3	291
194	Relation between resting amygdalar activity and cardiovascular events: a longitudinal and cohort study. *Lancet, The*, **2017**, 389, 834-845	40	269
193	A statin-loaded reconstituted high-density lipoprotein nanoparticle inhibits atherosclerotic plaque inflammation. *Nature Communications*, **2014**, 5, 3065	17.4	269
192	PET/MRI of inflammation in myocardial infarction. *Journal of the American College of Cardiology*, **2012**, 59, 153-63	15.1	245
191	Cardioimmunology: the immune system in cardiac homeostasis and disease. *Nature Reviews Immunology*, **2018**, 18, 733-744	36.5	240
190	Impaired infarct healing in atherosclerotic mice with Ly-6C(hi) monocytosis. *Journal of the American College of Cardiology*, **2010**, 55, 1629-38	15.1	238
189	The human heart contains distinct macrophage subsets with divergent origins and functions. *Nature Medicine*, **2018**, 24, 1234-1245	50.5	229
188	Monocyte and macrophage heterogeneity in the heart. *Circulation Research*, **2013**, 112, 1624-33	15.7	226
187	On-demand erythrocyte disposal and iron recycling requires transient macrophages in the liver. *Nature Medicine*, **2016**, 22, 945-51	50.5	224
186	An acute immune response underlies the benefit of cardiac stem cell therapy. *Nature*, **2020**, 577, 405-409	50.4	222
185	Magnetic resonance imaging of cardiomyocyte apoptosis with a novel magneto-optical nanoparticle. *Magnetic Resonance in Medicine*, **2005**, 54, 718-24	4.4	213
184	Proliferation and Recruitment Contribute to Myocardial Macrophage Expansion in Chronic Heart Failure. *Circulation Research*, **2016**, 119, 853-64	15.7	210
183	IRF3 and type I interferons fuel a fatal response to myocardial infarction. *Nature Medicine*, **2017**, 23, 1481-1487	50.5	208
182	18F labeled nanoparticles for in vivo PET-CT imaging. *Bioconjugate Chemistry*, **2009**, 20, 397-401	6.3	208

181	Monocyte-directed RNAi targeting CCR2 improves infarct healing in atherosclerosis-prone mice. *Circulation*, **2013**, 127, 2038-46	16.7	200
180	Abandoning M1/M2 for a Network Model of Macrophage Function. *Circulation Research*, **2016**, 119, 414-7	15.7	191
179	Leukocytes Link Local and Systemic Inflammation in Ischemic Cardiovascular Disease: An Expanded "Cardiovascular Continuum". *Journal of the American College of Cardiology*, **2016**, 67, 1091-1103	15.1	191
178	Cardiac macrophages and their role in ischaemic heart disease. *Cardiovascular Research*, **2014**, 102, 240-8	9.9	191
177	Hybrid PET-optical imaging using targeted probes. *Proceedings of the National Academy of Sciences of the United States of America*, **2010**, 107, 7910-5	11.5	191
176	In vivo silencing of the transcription factor IRF5 reprograms the macrophage phenotype and improves infarct healing. *Journal of the American College of Cardiology*, **2014**, 63, 1556-66	15.1	187
175	Magnetic nanoparticles for MR imaging: agents, techniques and cardiovascular applications. *Basic Research in Cardiology*, **2008**, 103, 122-30	11.8	186
174	Interleukin-3 amplifies acute inflammation and is a potential therapeutic target in sepsis. *Science*, **2015**, 347, 1260-5	33.3	183
173	Cardiac macrophages promote diastolic dysfunction. *Journal of Experimental Medicine*, **2018**, 215, 423-440	16.6	182
172	Osteoblasts remotely supply lung tumors with cancer-promoting SiglecF neutrophils. *Science*, **2017**, 358,	33.3	172
171	18F-4V for PET-CT imaging of VCAM-1 expression in atherosclerosis. *JACC: Cardiovascular Imaging*, **2009**, 2, 1213-22	8.4	166
170	Angiotensin-converting enzyme inhibition prevents the release of monocytes from their splenic reservoir in mice with myocardial infarction. *Circulation Research*, **2010**, 107, 1364-73	15.7	164
169	Fluorescence tomography and magnetic resonance imaging of myocardial macrophage infiltration in infarcted myocardium in vivo. *Circulation*, **2007**, 115, 1384-91	16.7	163
168	Monocyte and macrophage contributions to cardiac remodeling. *Journal of Molecular and Cellular Cardiology*, **2016**, 93, 149-55	5.8	161
167	Activatable magnetic resonance imaging agent reports myeloperoxidase activity in healing infarcts and noninvasively detects the antiinflammatory effects of atorvastatin on ischemia-reperfusion injury. *Circulation*, **2008**, 117, 1153-60	16.7	158
166	Targeting Interleukin-1 Reduces Leukocyte Production After Acute Myocardial Infarction. *Circulation*, **2015**, 132, 1880-90	16.7	154
165	Monocyte subset accumulation in the human heart following acute myocardial infarction and the role of the spleen as monocyte reservoir. *European Heart Journal*, **2014**, 35, 376-85	9.5	152
164	Oxazine conjugated nanoparticle detects in vivo hypochlorous acid and peroxynitrite generation. *Journal of the American Chemical Society*, **2009**, 131, 15739-44	16.4	151

163	Hybrid in vivo FMT-CT imaging of protease activity in atherosclerosis with customized nanosensors. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2009**, 29, 1444-51	9.4	150
162	Sleep modulates haematopoiesis and protects against atherosclerosis. *Nature*, **2019**, 566, 383-387	50.4	149
161	Splenic metabolic activity predicts risk of future cardiovascular events: demonstration of a cardiosplenic axis in humans. *JACC: Cardiovascular Imaging*, **2015**, 8, 121-30	8.4	146
160	Direct vascular channels connect skull bone marrow and the brain surface enabling myeloid cell migration. *Nature Neuroscience*, **2018**, 21, 1209-1217	25.5	139
159	Inhibiting macrophage proliferation suppresses atherosclerotic plaque inflammation. *Science Advances*, **2015**, 1,	14.3	137
158	Dual channel optical tomographic imaging of leukocyte recruitment and protease activity in the healing myocardial infarct. *Circulation Research*, **2007**, 100, 1218-25	15.7	132
157	Imaging and nanomedicine in inflammatory atherosclerosis. *Science Translational Medicine*, **2014**, 6, 239sr1	17.5	131
156	Myocardial Infarction Activates CCR2(+) Hematopoietic Stem and Progenitor Cells. *Cell Stem Cell*, **2015**, 16, 477-87	18	129
155	Angiotensin II drives the production of tumor-promoting macrophages. *Immunity*, **2013**, 38, 296-308	32.3	129
154	Ischemic stroke activates hematopoietic bone marrow stem cells. *Circulation Research*, **2015**, 116, 407-17	15.7	126
153	In vivo detection of Staphylococcus aureus endocarditis by targeting pathogen-specific prothrombin activation. *Nature Medicine*, **2011**, 17, 1142-6	50.5	125
152	Monocytes in myocardial infarction. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2015**, 35, 1066-70	9.4	124
151	RNAi targeting multiple cell adhesion molecules reduces immune cell recruitment and vascular inflammation after myocardial infarction. *Science Translational Medicine*, **2016**, 8, 342ra80	17.5	123
150	Myeloid cell contributions to cardiovascular health and disease. *Nature Medicine*, **2018**, 24, 711-720	50.5	122
149	Polymeric nanoparticle PET/MR imaging allows macrophage detection in atherosclerotic plaques. *Circulation Research*, **2013**, 112, 755-61	15.7	122
148	Endoscopic time-lapse imaging of immune cells in infarcted mouse hearts. *Circulation Research*, **2013**, 112, 891-9	15.7	122
147	Molecular magnetic resonance imaging in cardiovascular medicine. *Circulation*, **2007**, 115, 2076-86	16.7	122
146	Monocytes/macrophages prevent healing defects and left ventricular thrombus formation after myocardial infarction. *FASEB Journal*, **2013**, 27, 871-81	0.9	121

145	Resident and Monocyte-Derived Macrophages in Cardiovascular Disease. *Circulation Research*, **2018**, 122, 113-127	15.7	120
144	Detection of macrophages in aortic aneurysms by nanoparticle positron emission tomography-computed tomography. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2011**, 31, 750-7	9.4	120
143	Multimodality cardiovascular molecular imaging, Part II. *Circulation: Cardiovascular Imaging*, **2009**, 2, 56-70	7.9	119
142	Factor XIII deficiency causes cardiac rupture, impairs wound healing, and aggravates cardiac remodeling in mice with myocardial infarction. *Circulation*, **2006**, 113, 1196-202	16.7	118
141	The infarcted myocardium solicits GM-CSF for the detrimental oversupply of inflammatory leukocytes. *Journal of Experimental Medicine*, **2017**, 214, 3293-3310	16.6	114
140	Cellular Imaging of Inflammation in Atherosclerosis Using Magnetofluorescent Nanomaterials. *Molecular Imaging*, **2006**, 5, 7290.2006.00009	3.7	112
139	Macrophages retain hematopoietic stem cells in the spleen via VCAM-1. *Journal of Experimental Medicine*, **2015**, 212, 497-512	16.6	104
138	Real-time in vivo imaging of the beating mouse heart at microscopic resolution. *Nature Communications*, **2012**, 3, 1054	17.4	104
137	Pleural innate response activator B cells protect against pneumonia via a GM-CSF-IgM axis. *Journal of Experimental Medicine*, **2014**, 211, 1243-56	16.6	101
136	89Zr-labeled dextran nanoparticles allow in vivo macrophage imaging. *Bioconjugate Chemistry*, **2011**, 22, 2383-9	6.3	100
135	Systemic RNAi-mediated Gene Silencing in Nonhuman Primate and Rodent Myeloid Cells. *Molecular Therapy - Nucleic Acids*, **2012**, 1, e4	10.7	100
134	Polyglucose nanoparticles with renal elimination and macrophage avidity facilitate PET imaging in ischaemic heart disease. *Nature Communications*, **2017**, 8, 14064	17.4	95
133	Inhibiting Inflammation with Myeloid Cell-Specific Nanobiologics Promotes Organ Transplant Acceptance. *Immunity*, **2018**, 49, 819-828.e6	32.3	95
132	Flow Perturbation Mediates Neutrophil Recruitment and Potentiates Endothelial Injury via TLR2 in Mice: Implications for Superficial Erosion. *Circulation Research*, **2017**, 121, 31-42	15.7	94
131	Advancing biomedical imaging. *Proceedings of the National Academy of Sciences of the United States of America*, **2015**, 112, 14424-8	11.5	90
130	Exercise reduces inflammatory cell production and cardiovascular inflammation via instruction of hematopoietic progenitor cells. *Nature Medicine*, **2019**, 25, 1761-1771	50.5	90
129	Behavior of endogenous tumor-associated macrophages assessed in vivo using a functionalized nanoparticle. *Neoplasia*, **2009**, 11, 459-68, 2 p following 468	6.4	90
128	Molecular imaging of coronary atherosclerosis and myocardial infarction: considerations for the bench and perspectives for the clinic. *Circulation Research*, **2011**, 108, 593-606	15.7	89

127	IGF2BP2/IMP2-Deficient mice resist obesity through enhanced translation of Ucp1 mRNA and Other mRNAs encoding mitochondrial proteins. *Cell Metabolism*, **2015**, 21, 609-21	24.6	87
126	Multimodality cardiovascular molecular imaging, part I. *Circulation: Cardiovascular Imaging*, **2008**, 1, 244-56	5.9	87
125	Direct Imaging of Cerebral Thromboemboli Using Computed Tomography and Fibrin-targeted Gold Nanoparticles. *Theranostics*, **2015**, 5, 1098-114	12.1	84
124	Prospective Evaluation of 18F-Fluorodeoxyglucose Uptake in Postischemic Myocardium by Simultaneous Positron Emission Tomography/Magnetic Resonance Imaging as a Prognostic Marker of Functional Outcome. *Circulation: Cardiovascular Imaging*, **2016**, 9, e004316	3.9	84
123	Quantitative Imaging of Tumor-Associated Macrophages and Their Response to Therapy Using Cu-Labeled Macrin. *ACS Nano*, **2018**, 12, 12015-12029	16.7	83
122	Molecular MRI of cardiomyocyte apoptosis with simultaneous delayed-enhancement MRI distinguishes apoptotic and necrotic myocytes in vivo: potential for midmyocardial salvage in acute ischemia. *Circulation: Cardiovascular Imaging*, **2009**, 2, 460-7	3.9	82
121	Myeloperoxidase-rich Ly-6C+ myeloid cells infiltrate allografts and contribute to an imaging signature of organ rejection in mice. *Journal of Clinical Investigation*, **2010**, 120, 2627-34	15.9	77
120	Immune cell screening of a nanoparticle library improves atherosclerosis therapy. *Proceedings of the National Academy of Sciences of the United States of America*, **2016**, 113, E6731-E6740	11.5	75
119	Imaging of the unstable plaque: how far have we got?. *European Heart Journal*, **2009**, 30, 2566-74	9.5	73
118	Monocytes and macrophages as nanomedicinal targets for improved diagnosis and treatment of disease. *Expert Review of Molecular Diagnostics*, **2013**, 13, 567-80	3.8	72
117	Lifestyle effects on hematopoiesis and atherosclerosis. *Circulation Research*, **2015**, 116, 884-94	15.7	71
116	Silencing of CCR2 in myocarditis. *European Heart Journal*, **2015**, 36, 1478-88	9.5	70
115	Molecular imaging of innate immune cell function in transplant rejection. *Circulation*, **2009**, 119, 1925-32	16.7	70
114	Immunology. Neutrophil-macrophage communication in inflammation and atherosclerosis. *Science*, **2015**, 349, 237-8	33.3	66
113	Serial cine-magnetic resonance imaging of left ventricular remodeling after myocardial infarction in rats. *Journal of Magnetic Resonance Imaging*, **2001**, 14, 547-55	5.6	66
112	Pro-Angiogenic Macrophage Phenotype to Promote Myocardial Repair. *Journal of the American College of Cardiology*, **2019**, 73, 2990-3002	15.1	63
111	Stress-Induced Changes in Bone Marrow Stromal Cell Populations Revealed through Single-Cell Protein Expression Mapping. *Cell Stem Cell*, **2019**, 25, 570-583.e7	18	63
110	Cellular imaging of inflammation in atherosclerosis using magnetofluorescent nanomaterials. *Molecular Imaging*, **2006**, 5, 85-92	3.7	63

109	Stage-dependent differential effects of interleukin-1 isoforms on experimental atherosclerosis. *European Heart Journal*, **2019**, 40, 2482-2491	9.5	62
108	Transglutaminase activity in acute infarcts predicts healing outcome and left ventricular remodelling: implications for FXIII therapy and antithrombin use in myocardial infarction. *European Heart Journal*, **2008**, 29, 445-54	9.5	62
107	Efficacy and safety assessment of a TRAF6-targeted nanoimmunotherapy in atherosclerotic mice and non-human primates. *Nature Biomedical Engineering*, **2018**, 2, 279-292	19	60
106	Tissue-Specific Macrophage Responses to Remote Injury Impact the Outcome of Subsequent Local Immune Challenge. *Immunity*, **2019**, 51, 899-914.e7	32.3	60
105	Stress-Associated Neurobiological Pathway Linking Socioeconomic Disparities to Cardiovascular Disease. *Journal of the American College of Cardiology*, **2019**, 73, 3243-3255	15.1	55
104	Increased microvascularization and vessel permeability associate with active inflammation in human atheromata. *Circulation: Cardiovascular Imaging*, **2014**, 7, 920-9	3.9	55
103	High-resolution imaging of murine myocardial infarction with delayed-enhancement cine micro-CT. *American Journal of Physiology - Heart and Circulatory Physiology*, **2007**, 292, H3172-8	5.2	53
102	Increased haematopoietic activity in patients with atherosclerosis. *European Heart Journal*, **2017**, 38, 425-432	9.5	53
101	Imaging Macrophage and Hematopoietic Progenitor Proliferation in Atherosclerosis. *Circulation Research*, **2015**, 117, 835-45	15.7	52
100	Healing and adverse remodelling after acute myocardial infarction: role of the cellular immune response. *Heart*, **2012**, 98, 1384-90	5.1	52
99	Myeloperoxidase Inhibition Improves Ventricular Function and Remodeling After Experimental Myocardial Infarction. *JACC Basic To Translational Science*, **2016**, 1, 633-643	8.7	50
98	Innate immune cells in ischaemic heart disease: does myocardial infarction beget myocardial infarction?. *European Heart Journal*, **2016**, 37, 868-72	9.5	49
97	Imaging systemic inflammatory networks in ischemic heart disease. *Journal of the American College of Cardiology*, **2015**, 65, 1583-91	15.1	49
96	Increased stem cell proliferation in atherosclerosis accelerates clonal hematopoiesis. *Cell*, **2021**, 184, 1348-1361.e22	56.2	49
95	The journey from stem cell to macrophage. *Annals of the New York Academy of Sciences*, **2014**, 1319, 1-18	6.5	48
94	Molecular MRI detects low levels of cardiomyocyte apoptosis in a transgenic model of chronic heart failure. *Circulation: Cardiovascular Imaging*, **2009**, 2, 468-75	3.9	48
93	Cardiovascular molecular imaging: the road ahead. *Journal of Nuclear Medicine*, **2012**, 53, 673-6	8.9	47
92	Monocyte subset dynamics in human atherosclerosis can be profiled with magnetic nano-sensors. *PLoS ONE*, **2009**, 4, e5663	3.7	45

91	Development and Function of Arterial and Cardiac Macrophages. *Trends in Immunology*, **2016**, 37, 32-40	14.4	43
90	Ibrutinib-Mediated Atrial Fibrillation Attributable to Inhibition of C-Terminal Src Kinase. *Circulation*, **2020**, 142, 2443-2455	16.7	43
89	Assessment of Cardiovascular Apoptosis in the Isolated Rat Heart by Magnetic Resonance Molecular Imaging. *Molecular Imaging*, **2006**, 5, 7290.2006.00012	3.7	42
88	Astrocytic interleukin-3 programs microglia and limits Alzheimer's disease. *Nature*, **2021**, 595, 701-706	50.4	41
87	Regulation and consequences of monocytosis. *Immunological Reviews*, **2014**, 262, 167-78	11.3	39
86	The innate immune system after ischemic injury: lessons to be learned from the heart and brain. *JAMA Neurology*, **2014**, 71, 233-6	17.2	39
85	Macrophages and Cardiovascular Health. *Physiological Reviews*, **2018**, 98, 2523-2569	47.9	39
84	Heart Failure With Preserved Ejection Fraction Induces Beiging in Adipose Tissue. *Circulation: Heart Failure*, **2016**, 9, e002724	7.6	38
83	Late Na(+) current and protracted electrical recovery are critical determinants of the aging myopathy. *Nature Communications*, **2015**, 6, 8803	17.4	37
82	Hematopoiesis and Cardiovascular Disease. *Circulation Research*, **2020**, 126, 1061-1085	15.7	37
81	The cardiac microenvironment uses non-canonical WNT signaling to activate monocytes after myocardial infarction. *EMBO Molecular Medicine*, **2017**, 9, 1279-1293	12	36
80	Report of the National Heart, Lung, and Blood Institute working group on the translation of cardiovascular molecular imaging. *Circulation*, **2011**, 123, 2157-63	16.7	36
79	Monocyte and haematopoietic progenitor reprogramming as common mechanism underlying chronic inflammatory and cardiovascular diseases. *European Heart Journal*, **2018**, 39, 3521-3527	9.5	34
78	Direct Thrombus Imaging in Stroke. *Journal of Stroke*, **2016**, 18, 286-296	5.6	34
77	Modifiable Cardiovascular Risk, Hematopoiesis, and Innate Immunity. *Circulation Research*, **2020**, 126, 1242-1259	15.7	34
76	Imaging the Vascular Bone Marrow Niche During Inflammatory Stress. *Circulation Research*, **2018**, 123, 415-427	15.7	31
75	Imaging-assisted nanoimmunotherapy for atherosclerosis in multiple species. *Science Translational Medicine*, **2019**, 11,	17.5	31
74	Applying nanomedicine in maladaptive inflammation and angiogenesis. *Advanced Drug Delivery Reviews*, **2017**, 119, 143-158	18.5	29

73	Nanoparticle-encapsulated siRNAs for gene silencing in the haematopoietic stem-cell niche. *Nature Biomedical Engineering*, **2020**, 4, 1076-1089	19	29
72	Selective factor XIIa inhibition attenuates silent brain ischemia: application of molecular imaging targeting coagulation pathway. *JACC: Cardiovascular Imaging*, **2012**, 5, 1127-38	8.4	26
71	Nanoparticle PET-CT detects rejection and immunomodulation in cardiac allografts. *Circulation: Cardiovascular Imaging*, **2013**, 6, 568-73	3.9	26
70	Mechanisms of Myeloid Cell Modulation of Atherosclerosis. *Microbiology Spectrum*, **2016**, 4,	8.9	26
69	Glucocorticoids Regulate Bone Marrow B Lymphopoiesis After Stroke. *Circulation Research*, **2019**, 124, 1372-1385	15.7	26
68	Nanoimmunotherapy to treat ischaemic heart disease. *Nature Reviews Cardiology*, **2019**, 16, 21-32	14.8	26
67	CCR2 expression on circulating monocytes is associated with arterial wall inflammation assessed by 18F-FDG PET/CT in patients at risk for cardiovascular disease. *Cardiovascular Research*, **2018**, 114, 468-475	8.9	25
66	Multimodal iron oxide nanoparticles for hybrid biomedical imaging. *NMR in Biomedicine*, **2013**, 26, 756-65	4.4	25
65	Extra-Axial Inflammatory Signal in Parameninges in Migraine with Visual Aura. *Annals of Neurology*, **2020**, 87, 939-949	9.4	24
64	Vasculitis: molecular imaging by targeting the inflammatory enzyme myeloperoxidase. *Radiology*, **2012**, 262, 181-90	20.5	22
63	MR-optical imaging of cardiovascular molecular targets. *Basic Research in Cardiology*, **2008**, 103, 87-94	11.8	22
62	E-Selectin Inhibition Mitigates Splenic HSC Activation and Myelopoiesis in Hypercholesterolemic Mice With Myocardial Infarction. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2016**, 36, 1802-8	9.4	21
61	Unbiased discovery of in vivo imaging probes through in vitro profiling of nanoparticle libraries. *Integrative Biology (United Kingdom)*, **2009**, 1, 311-7	3.7	20
60	Probing myeloid cell dynamics in ischaemic heart disease by nanotracer hot-spot imaging. *Nature Nanotechnology*, **2020**, 15, 398-405	28.7	20
59	Lack of microsomal prostaglandin E(2) synthase-1 in bone marrow-derived myeloid cells impairs left ventricular function and increases mortality after acute myocardial infarction. *Circulation*, **2012**, 125, 2904-13	16.7	19
58	Assessment of cardiovascular apoptosis in the isolated rat heart by magnetic resonance molecular imaging. *Molecular Imaging*, **2006**, 5, 115-21	3.7	19
57	Diminished Reactive Hematopoiesis and Cardiac Inflammation in a Mouse Model of Recurrent Myocardial Infarction. *Journal of the American College of Cardiology*, **2020**, 75, 901-915	15.1	18
56	Self-reactive CD4 IL-3 T cells amplify autoimmune inflammation in myocarditis by inciting monocyte chemotaxis. *Journal of Experimental Medicine*, **2019**, 216, 369-383	16.6	17

55	Bone Marrow Endothelial Cells Regulate Myelopoiesis in Diabetes Mellitus. *Circulation*, **2020**, 142, 244-256	38.7	17
54	Imaging macrophage development and fate in atherosclerosis and myocardial infarction. *Immunology and Cell Biology*, **2013**, 91, 297-303	5	17
53	Acute mental stress drives vascular inflammation and promotes plaque destabilization in mouse atherosclerosis. *European Heart Journal*, **2021**, 42, 4077-4088	9.5	16
52	Novel functions of macrophages in the heart: insights into electrical conduction, stress, and diastolic dysfunction. *European Heart Journal*, **2020**, 41, 989-994	9.5	16
51	Does FXIII deficiency impair wound healing after myocardial infarction?. *PLoS ONE*, **2006**, 1, e48	3.7	14
50	Corticosterone inhibits GAS6 to govern hair follicle stem-cell quiescence. *Nature*, **2021**, 592, 428-432	50.4	14
49	A Supramolecular Nanocarrier for Delivery of Amiodarone Anti-Arrhythmic Therapy to the Heart. *Bioconjugate Chemistry*, **2019**, 30, 733-740	6.3	14
48	Neutrophil contributions to ischaemic heart disease. *European Heart Journal*, **2017**, 38, 465-472	9.5	13
47	Na-H exchanger 1 determines atherosclerotic lesion acidification and promotes atherogenesis. *Nature Communications*, **2019**, 10, 3978	17.4	11
46	Chronic stress primes innate immune responses in mice and humans. *Cell Reports*, **2021**, 36, 109595	10.6	11
45	Systems Biology and Noninvasive Imaging of Atherosclerosis. *Arteriosclerosis, Thrombosis, and Vascular Biology*, **2016**, 36, e1-8	9.4	10
44	Liver X receptors are required for thymic resilience and T cell output. *Journal of Experimental Medicine*, **2020**, 217,	16.6	10
43	Endocarditis and molecular imaging. *Journal of Nuclear Cardiology*, **2014**, 21, 486-95	2.1	9
42	Myeloid cells in cardiovascular organs. *Journal of Internal Medicine*, **2019**, 285, 491-502	10.8	9
41	Lp-PLA2 Antagonizes Left Ventricular Healing After Myocardial Infarction by Impairing the Appearance of Reparative Macrophages. *Circulation: Heart Failure*, **2015**, 8, 980-7	7.6	8
40	A Miniaturized, Programmable Pacemaker for Long-Term Studies in the Mouse. *Circulation Research* , **2018**, 123, 1208-1219	15.7	8
39	Impact of cholesterol on proinflammatory monocyte production by the bone marrow. *European Heart Journal*, **2021**, 42, 4309-4320	9.5	8
38	Looking back and thinking forwards - 15 years of cardiology and cardiovascular research. *Nature Reviews Cardiology*, **2019**, 16, 651-660	14.8	7

37	Immune cells in cardiac homeostasis and disease: emerging insights from novel technologies.. *European Heart Journal*, **2021**,	9.5	7
36	Imaging Cardiovascular and Lung Macrophages With the Positron Emission Tomography Sensor Cu-Macrin in Mice, Rabbits, and Pigs. *Circulation: Cardiovascular Imaging*, **2020**, 13, e010586	3.9	7
35	Prosaposin mediates inflammation in atherosclerosis. *Science Translational Medicine*, **2021**, 13,	17.5	7
34	Motion characterization scheme to minimize motion artifacts in intravital microscopy. *Journal of Biomedical Optics*, **2017**, 22, 36005	3.5	6
33	The maturation of a Rneural-hematopoieticRinflammatory axis in cardiovascular disease. *Current Opinion in Lipidology*, **2017**, 28, 507-512	4.4	6
32	An acute immune response underlies the benefit of cardiac adult stem cell therapy		6
31	B lymphocyte-derived acetylcholine limits steady-state and emergency hematopoiesis.. *Nature Immunology*, **2022**, 23, 605-618	19.1	6
30	Single-nucleus profiling of human dilated and hypertrophic cardiomyopathy. *Nature*,	50.4	6
29	Multiparametric Imaging of Organ System Interfaces. *Circulation: Cardiovascular Imaging*, **2017**, 10,	3.9	5
28	Interferon-regulates cardiac myeloid cells in myocardial infarction. *Cardiovascular Research*, **2019**, 115, 1815-1816	9.9	5
27	Mapping molecular agents distributions in whole mice hearts using born-normalized optical projection tomography. *PLoS ONE*, **2012**, 7, e34427	3.7	5
26	Republished: healing and adverse remodelling after acute myocardial infarction: role of the cellular immune response. *Postgraduate Medical Journal*, **2013**, 89, 52-8	2	5
25	Electroimmunology and cardiac arrhythmia. *Nature Reviews Cardiology*, **2021**, 18, 547-564	14.8	5
24	Fluorescence microscopy tensor imaging representations for large-scale dataset analysis. *Scientific Reports*, **2020**, 10, 5632	4.9	4
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1	Response by Nahrendorf to Letter Regarding Article, "Bone Marrow Endothelial Cells Regulate Myelopoiesis in Diabetes Mellitus". *Circulation*, **2021**, 143, e7-e8	16.7