Elena Aikawa

List of Publications by Year
in descending order

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Version: 2024-02-01

246 papers	31,736 citations	6592 79 h-index	4535 171 g-index
253 all docs	253 docs citations	253 times ranked	36922 citing authors

#	Article	IF	Citations
1	Minimal information for studies of extracellular vesicles 2018 (MISEV2018): a position statement of the International Society for Extracellular Vesicles and update of the MISEV2014 guidelines. Journal of Extracellular Vesicles, 2018, 7, 1535750.	5.5	6,961
2	The healing myocardium sequentially mobilizes two monocyte subsets with divergent and complementary functions. Journal of Experimental Medicine, 2007, 204, 3037-3047.	4.2	1,926
3	Identification of Splenic Reservoir Monocytes and Their Deployment to Inflammatory Sites. Science, 2009, 325, 612-616.	6.0	1,806
4	Ly-6Chi monocytes dominate hypercholesterolemia-associated monocytosis and give rise to macrophages in atheromata. Journal of Clinical Investigation, 2007, 117, 195-205.	3.9	1,064
5	Vesiclepedia: A Compendium for Extracellular Vesicles with Continuous Community Annotation. PLoS Biology, 2012, 10, e1001450.	2.6	1,064
6	Calcific Aortic Valve Disease: Not Simply a Degenerative Process. Circulation, 2011, 124, 1783-1791.	1.6	699
7	Osteogenesis Associates With Inflammation in Early-Stage Atherosclerosis Evaluated by Molecular Imaging In Vivo. Circulation, 2007, 116, 2841-2850.	1.6	606
8	Noninvasive Vascular Cell Adhesion Molecule-1 Imaging Identifies Inflammatory Activation of Cells in Atherosclerosis. Circulation, 2006, 114, 1504-1511.	1.6	579
9	Nanoparticle PET-CT Imaging of Macrophages in Inflammatory Atherosclerosis. Circulation, 2008, 117, 379-387.	1.6	524
10	Macrophage-Derived Matrix Vesicles. Circulation Research, 2013, 113, 72-77.	2.0	471
11	Inflammation in Atherosclerosis. Circulation, 2006, 114, 55-62.	1.6	398
12	Multimodality Molecular Imaging Identifies Proteolytic and Osteogenic Activities in Early Aortic Valve Disease. Circulation, 2007, 115, 377-386.	1.6	375
13	Human Semilunar Cardiac Valve Remodeling by Activated Cells From Fetus to Adult. Circulation, 2006, 113, 1344-1352.	1.6	359
14	Endothelial to Mesenchymal Transition inÂCardiovascular Disease. Journal of the American College of Cardiology, 2019, 73, 190-209.	1.2	357
15	EVpedia: a community web portal for extracellular vesicles research. Bioinformatics, 2015, 31, 933-939.	1.8	317
16	Monocyte accumulation in mouse atherogenesis is progressive and proportional to extent of disease. Proceedings of the National Academy of Sciences of the United States of America, 2006, 103, 10340-10345.	3.3	316
17	Genesis and growth of extracellular-vesicle-derived microcalcification inÂatherosclerotic plaques. Nature Materials, 2016, 15, 335-343.	13.3	298
18	Revised microcalcification hypothesis for fibrous cap rupture in human coronary arteries. Proceedings of the National Academy of Sciences of the United States of America, 2013, 110, 10741-10746.	3.3	289

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19	Impaired Infarct Healing in Atherosclerotic Mice With Ly-6ChiMonocytosis. Journal of the American College of Cardiology, 2010, 55, 1629-1638.	1.2	281
20	Mitral valve diseaseâ€”morphology and mechanisms. Nature Reviews Cardiology, 2015, 12, 689-710.	6.1	281
21	Molecular Imaging Insights Into Early Inflammatory Stages of Arterial and Aortic Valve Calcification. Circulation Research, 2011, 108, 1381-1391.	2.0	276
22	Tracking the inflammatory response in stroke in vivo by sensing the enzyme myeloperoxidase. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 18584-18589.	3.3	275
23	Active Adaptation of the Tethered Mitral Valve. Circulation, 2009, 120, 334-342.	1.6	273
24	Arterial and Aortic Valve Calcification Abolished by Elastolytic Cathepsin S Deficiency in Chronic Renal Disease. Circulation, 2009, 119, 1785-1794.	1.6	272
25	Calcific Aortic Valve Disease. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 2387-2393.	1.1	261
26	Adventitial MSC-like Cells Are Progenitors of Vascular Smooth Muscle Cells and Drive Vascular Calcification in Chronic Kidney Disease. Cell Stem Cell, 2016, 19, 628-642.	5.2	254
27	Optical Visualization of Cathepsin K Activity in Atherosclerosis With a Novel, Protease-Activatable Fluorescence Sensor. Circulation, 2007, 115, 2292-2298.	1.6	241
28	Chemokine CXCL10 Promotes Atherogenesis by Modulating the Local Balance of Effector and Regulatory T Cells. Circulation, 2006, 113, 2301-2312.	1.6	237
29	PARP9 and PARP14 cross-regulate macrophage activation via STAT1 ADP-ribosylation. Nature Communications, 2016, 7, 12849.	5.8	214
30	Matrix Metalloproteinase-13/Collagenase-3 Deletion Promotes Collagen Accumulation and Organization in Mouse Atherosclerotic Plaques. Circulation, 2005, 112, 2708-2715.	1.6	199
31	18F-4V for PETâ€“CT Imaging of VCAM-1 Expression in Atherosclerosis. JACC: Cardiovascular Imaging, 2009, 2, 1213-1222.	2.3	197
32	Sortilin mediates vascular calcification via its recruitment into extracellular vesicles. Journal of Clinical Investigation, 2016, 126, 1323-1336.	3.9	196
33	Real-Time Catheter Molecular Sensing of Inflammation in Proteolytically Active Atherosclerosis. Circulation, 2008, 118, 1802-1809.	1.6	188
34	Inhibition of Bone Morphogenetic Protein Signaling Reduces Vascular Calcification and Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2012, 32, 613-622.	1.1	188
35	Lipoprotein(a) and Oxidized Phospholipids Promote Valve Calcification in Patients With AorticÂStenosis. Journal of the American College of Cardiology, 2019, 73, 2150-2162.	1.2	187
36	Fluorescence Tomography and Magnetic Resonance Imaging of Myocardial Macrophage Infiltration in Infarcted Myocardium In Vivo. Circulation, 2007, 115, 1384-1391.	1.6	185

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37	Arterial and aortic valve calcification inversely correlates with osteoporotic bone remodelling: a role for inflammation. European Heart Journal, 2010, 31, 1975-1984.	1.0	180
38	Spatiotemporal Multi-Omics Mapping Generates a Molecular Atlas of the Aortic Valve and Reveals Networks Driving Disease. Circulation, 2018, 138, 377-393.	1.6	180
39	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, 1153-1160.	1.6	178
40	Indocyanine Green Enables Near-Infrared Fluorescence Imaging of Lipid-Rich, Inflamed Atherosclerotic Plaques. Science Translational Medicine, 2011, 3, 84ra45.	5.8	174
41	Oxazine Conjugated Nanoparticle Detects in Vivo Hypochlorous Acid and Peroxynitrite Generation. Journal of the American Chemical Society, 2009, 131, 15739-15744.	6.6	165
42	Hybrid In Vivo FMT-CT Imaging of Protease Activity in Atherosclerosis With Customized Nanosensors. Arteriosclerosis, Thrombosis, and Vascular Biology, 2009, 29, 1444-1451.	1.1	161
43	Dual Channel Optical Tomographic Imaging of Leukocyte Recruitment and Protease Activity in the Healing Myocardial Infarct. Circulation Research, 2007, 100, 1218-1225.	2.0	151
44	Early photon tomography allows fluorescence detection of lung carcinomas and disease progression in mice in vivo. Proceedings of the National Academy of Sciences of the United States of America, 2008, 105, 19126-19131.	3.3	150
45	Cyclic strain induces dual-mode endothelial-mesenchymal transformation of the cardiac valve. Proceedings of the National Academy of Sciences of the United States of America, 2011, 108, 19943-19948.	3.3	145
46	In vivo detection of Staphylococcus aureus endocarditis by targeting pathogen-specific prothrombin activation. Nature Medicine, 2011, 17, 1142-1146.	15.2	144
47	Notch ligand Delta-like 4 blockade attenuates atherosclerosis and metabolic disorders. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, E1868-77.	3.3	144
48	Flow Perturbation Mediates Neutrophil Recruitment and Potentiates Endothelial Injury via TLR2 in Mice. Circulation Research, 2017, 121, 31-42.	2.0	141
49	Detection of Aggregation-Competent Tau in Neuron-Derived Extracellular Vesicles. International Journal of Molecular Sciences, 2018, 19, 663.	1.8	140
50	Valvular interstitial cells suppress calcification of valvular endothelial cells. Atherosclerosis, 2015, 242, 251-260.	0.4	135
51	Human Pulmonary Valve Progenitor Cells Exhibit Endothelial/Mesenchymal Plasticity in Response to Vascular Endothelial Growth Factor-A and Transforming Growth Factor-Î² 2. Circulation Research, 2006, 99, 861-869.	2.0	134
52	Inhibition of Atherogenesis in BLT1-Deficient Mice Reveals a Role for LTB4 and BLT1 in Smooth Muscle Cell Recruitment. Circulation, 2005, 112, 578-586.	1.6	130
53	Calcific aortic valve stenosis: hard disease in the heart. European Heart Journal, 2018, 39, 2618-2624.	1.0	127
54	In vivo monitoring of function of autologous engineered pulmonary valve. Journal of Thoracic and Cardiovascular Surgery, 2010, 139, 723-731.	0.4	126

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55	Uremic Toxin Indoxyl Sulfate Promotes Proinflammatory Macrophage Activation Via the Interplay of OATP2B1 and Dll4-Notch Signaling. Circulation, 2019, 139, 78-96.	1.6	126
56	Characterization of Human Atherosclerotic Plaques by Intravascular Magnetic Resonance Imaging. Circulation, 2005, 112, 2324-2331.	1.6	125
57	Role of Extracellular Vesicles in De Novo Mineralization. Arteriosclerosis, Thrombosis, and Vascular Biology, 2013, 33, 1753-1758.	1.1	125
58	Cellular Imaging of Inflammation in Atherosclerosis Using Magnetofluorescent Nanomaterials. Molecular Imaging, 2006, 5, 7290.2006.00009.	0.7	124
59	Potential drug targets for calcific aortic valve disease. Nature Reviews Cardiology, 2014, 11, 218-231.	6.1	123
60	Cardiovascular calcification: artificial intelligence and big data accelerate mechanistic discovery. Nature Reviews Cardiology, 2019, 16, 261-274.	6.1	121
61	Cardiovascular Calcification - An Inflammatory Disease -. Circulation Journal, 2011, 75, 1305-1313.	0.7	120
62	Mitral Valve Endothelial Cells With Osteogenic Differentiation Potential. Arteriosclerosis, Thrombosis, and Vascular Biology, 2011, 31, 598-607.	1.1	117
63	Small entities with large impact. Current Opinion in Lipidology, 2014, 25, 327-332.	1.2	117
64	Noninvasive Molecular Imaging of Disease Activity in Atherosclerosis. Circulation Research, 2016, 119, 330-340.	2.0	114
65	Fibroblast activation protein is induced by inflammation and degrades type I collagen in thin-cap fibroatheromata. European Heart Journal, 2011, 32, 2713-2722.	1.0	112
66	Selective Inhibition of Matrix Metalloproteinase-13 Increases Collagen Content of Established Mouse Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2011, 31, 2464-2472.	1.1	111
67	Myeloperoxidase-targeted imaging of active inflammatory lesions in murine experimental autoimmune encephalomyelitis. Brain, 2008, 131, 1123-1133.	3.7	106
68	Diffusion Spectrum MRI Tractography Reveals the Presence of a Complex Network of Residual Myofibers in Infarcted Myocardium. Circulation: Cardiovascular Imaging, 2009, 2, 206-212.	1.3	103
69	Extracellular Vesicles As Mediators of Cardiovascular Calcification. Frontiers in Cardiovascular Medicine, 2017, 4, 78.	1.1	103
70	Mitral Valve Adaptation to IsolatedÂAnnular Dilation. JACC: Cardiovascular Imaging, 2019, 12, 665-677.	2.3	102
71	Effect of Losartan on Mitral Valve Changes After Myocardial Infarction. Journal of the American College of Cardiology, 2017, 70, 1232-1244.	1.2	97
72	Myocardial Infarction Alters Adaptation ofÂthe Tethered Mitral Valve. Journal of the American College of Cardiology, 2016, 67, 275-287.	1.2	93

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73	Molecular MRI of Cardiomyocyte Apoptosis With Simultaneous Delayed-Enhancement MRI Distinguishes Apoptotic and Necrotic Myocytes In Vivo. Circulation: Cardiovascular Imaging, 2009, 2, 460-467.	1.3	92
74	A single injection of gain-of-function mutant PCSK9 adeno-associated virus vector induces cardiovascular calcification in mice with no genetic modification. Atherosclerosis, 2016, 251, 109-118.	0.4	92
75	¹⁸ F-Fluoride Signal Amplification Identifies Microcalcifications Associated With Atherosclerotic Plaque Instability in Positron Emission Tomography/Computed Tomography Images. Circulation: Cardiovascular Imaging, 2019, 12, e007835.	1.3	92
76	Extracellular vesicles in cardiovascular calcification: expanding current paradigms. Journal of Physiology, 2016, 594, 2895-2903.	1.3	88
77	Dynamin-Related Protein 1 Inhibition Attenuates Cardiovascular Calcification in the Presence of Oxidative Stress. Circulation Research, 2017, 121, 220-233.	2.0	88
78	MicroRNA in Cardiovascular Calcification. Circulation Research, 2013, 112, 1073-1084.	2.0	86
79	The role of organ level conditioning on the promotion of engineered heart valve tissue development in-vitro using mesenchymal stem cells. Biomaterials, 2010, 31, 1114-1125.	5.7	84
80	Molecular Imaging of Innate Immune Cell Function in Transplant Rejection. Circulation, 2009, 119, 1925-1932.	1.6	81
81	Engineering a 3D-Bioprinted Model of Human Heart Valve Disease Using Nanoindentation-Based Biomechanics. Nanomaterials, 2018, 8, 296.	1.9	81
82	Roles and Regulation of Extracellular Vesicles in Cardiovascular Mineral Metabolism. Frontiers in Cardiovascular Medicine, 2018, 5, 187.	1.1	78
83	Sortilin and Its Multiple Roles in Cardiovascular and Metabolic Diseases. Arteriosclerosis, Thrombosis, and Vascular Biology, 2018, 38, 19-25.	1.1	76
84	Calcific aortic valve disease: from molecular and cellular mechanisms to medical therapy. European Heart Journal, 2022, 43, 683-697.	1.0	76
85	Statins suppress apolipoprotein CIII-induced vascular endothelial cell activation and monocyte adhesion. European Heart Journal, 2013, 34, 615-624.	1.0	74
86	Endothelial Progenitor Cells as a Sole Source for Ex Vivo Seeding of Tissue-Engineered Heart Valves. Tissue Engineering - Part A, 2010, 16, 257-267.	1.6	72
87	Combined magnetic resonance and fluorescence imaging of the living mouse brain reveals glioma response to chemotherapy. NeuroImage, 2009, 45, 360-369.	2.1	71
88	Simulation of early calcific aortic valve disease in a 3D platform: A role for myofibroblast differentiation. Journal of Molecular and Cellular Cardiology, 2016, 94, 13-20.	0.9	70
89	Cellular imaging of inflammation in atherosclerosis using magnetofluorescent nanomaterials. Molecular Imaging, 2006, 5, 85-92.	0.7	70
90	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, 445-454.	1.0	69

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91	Cardiovascular calcification: current controversies and novel concepts. Cardiovascular Pathology, 2015, 24, 207-212.	0.7	69
92	CD45 Expression in Mitral Valve Endothelial Cells After Myocardial Infarction. Circulation Research, 2016, 119, 1215-1225.	2.0	69
93	Progenitor Cells Confer Plasticity to Cardiac Valve Endothelium. Journal of Cardiovascular Translational Research, 2011, 4, 710-719.	1.1	67
94	Directing Valvular Interstitial Cell Myofibroblastâ€Like Differentiation in a Hybrid Hydrogel Platform. Advanced Healthcare Materials, 2015, 4, 121-130.	3.9	66
95	Annexin A1â€“dependent tethering promotes extracellular vesicle aggregation revealed with singleâ€“extracellular vesicle analysis. Science Advances, 2020, 6, .	4.7	65
96	Selective Cathepsin S Inhibition Attenuates Atherosclerosis in Apolipoprotein Eâ€“Deficient Mice with Chronic Renal Disease. American Journal of Pathology, 2015, 185, 1156-1166.	1.9	63
97	Discoidin Domain Receptor-1 Regulates Calcific Extracellular Vesicle Release in Vascular Smooth Muscle Cell Fibrocalcific Response via Transforming Growth Factor-Î² Signaling. Arteriosclerosis, Thrombosis, and Vascular Biology, 2016, 36, 525-533.	1.1	58
98	Notch Signaling in Cardiovascular Disease and Calcification. Current Cardiology Reviews, 2008, 4, 148-156.	0.6	57
99	Genetically engineered resistance for MMP collagenases promotes abdominal aortic aneurysm formation in mice infused with angiotensin II. Laboratory Investigation, 2009, 89, 315-326.	1.7	55
100	S100A9-RAGE Axis Accelerates Formation of Macrophage-Mediated Extracellular Vesicle Microcalcification in Diabetes Mellitus. Arteriosclerosis, Thrombosis, and Vascular Biology, 2020, 40, 1838-1853.	1.1	52
101	Giving Calcification Its Due: Recognition of a Diverse Disease. Circulation Research, 2017, 120, 270-273.	2.0	52
102	Pioglitazone Suppresses Inflammation In Vivo in Murine Carotid Atherosclerosis. Arteriosclerosis, Thrombosis, and Vascular Biology, 2010, 30, 1933-1939.	1.1	51
103	Elastogenesis at the onset of human cardiac valve development. Development (Cambridge), 2013, 140, 2345-2353.	1.2	51
104	Molecular MRI Detects Low Levels of Cardiomyocyte Apoptosis in a Transgenic Model of Chronic Heart Failure. Circulation: Cardiovascular Imaging, 2009, 2, 468-475.	1.3	50
105	A Rock and a Hard Place. Circulation, 2017, 135, 1951-1955.	1.6	50
106	Mitral Leaflet Changes Following Myocardial Infarction. Circulation: Cardiovascular Imaging, 2017, 10, .	1.3	50
107	Standardization of Human Calcific Aortic Valve Disease in vitro Modeling Reveals Passage-Dependent Calcification. Frontiers in Cardiovascular Medicine, 2019, 6, 49.	1.1	49
108	Expression of the familial cardiac valvular dystrophy gene, filaminâ€A, during heart morphogenesis. Developmental Dynamics, 2010, 239, 2118-2127.	0.8	46

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109	Look More Closely at the Valve. Circulation, 2012, 125, 9-11.	1.6	44
110	Serum Sortilin Associates With Aortic Calcification and Cardiovascular Risk in Men. Arteriosclerosis, Thrombosis, and Vascular Biology, 2017, 37, 1005-1011.	1.1	44
111	Interferon-Î³ Released by Activated CD8+ T Lymphocytes Impairs the Calcium Resorption Potential of Osteoclasts in Calcified Human Aortic Valves. American Journal of Pathology, 2017, 187, 1413-1425.	1.9	44
112	New insights into mitral valve dystrophy: a Filamin-A genotypeâ€“phenotype and outcome study. European Heart Journal, 2018, 39, 1269-1277.	1.0	44
113	Methods for the identification and characterization of extracellular vesicles in cardiovascular studies: from exosomes to microvesicles. Cardiovascular Research, 2023, 119, 45-63.	1.8	44
114	Nitric oxide prevents aortic valve calcification by S-nitrosylation of USP9X to activate NOTCH signaling. Science Advances, 2021, 7, .	4.7	43
115	Detection of macrophage activity in atherosclerosis in vivo using multichannel, high-resolution laser scanning fluorescence microscopy. Journal of Biomedical Optics, 2006, 11, 021009.	1.4	41
116	Dimerization of sortilin regulates its trafficking to extracellular vesicles. Journal of Biological Chemistry, 2018, 293, 4532-4544.	1.6	41
117	Innate and adaptive immunity in cardiovascular calcification. Atherosclerosis, 2020, 306, 59-67.	0.4	41
118	Chronic Hypoxia Activates the Akt and Î²-Catenin Pathways in Human Macrophages. Arteriosclerosis, Thrombosis, and Vascular Biology, 2009, 29, 1664-1670.	1.1	39
119	Enrichment of calcifying extracellular vesicles using densityâ€based ultracentrifugation protocol. Journal of Extracellular Vesicles, 2014, 3, 25129.	5.5	39
120	Extracellular vesicles in cardiovascular homeostasis and disease. Current Opinion in Cardiology, 2018, 33, 290-297.	0.8	39
121	Multi-Omics Approaches to Define Calcific Aortic Valve Disease Pathogenesis. Circulation Research, 2021, 128, 1371-1397.	2.0	39
122	Simplified syntheses of complex multifunctional nanomaterials. Chemical Communications, 2008, , 4792.	2.2	38
123	InÂSitu Remodeling Overrules Bioinspired Scaffold Architecture of Supramolecular Elastomeric Tissue-Engineered Heart Valves. JACC Basic To Translational Science, 2020, 5, 1187-1206.	1.9	38
124	Healing and remodeling of bioengineered pulmonary artery patches implanted in sheep. Cardiovascular Pathology, 2007, 16, 277-282.	0.7	37
125	Visualizing novel concepts of cardiovascular calcification. Trends in Cardiovascular Medicine, 2013, 23, 71-79.	2.3	37
126	Cystathionine Î³-lyase Accelerates Osteoclast Differentiation. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 626-634.	1.1	37

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127	Revisiting cardiovascular calcification: A multifaceted disease requiring a multidisciplinary approach. Seminars in Cell and Developmental Biology, 2015, 46, 68-77.	2.3	37
128	The Osteoclast-Associated Receptor (OSCAR) Is a Novel Receptor Regulated by Oxidized Low-Density Lipoprotein in Human Endothelial Cells. Endocrinology, 2011, 152, 4915-4926.	1.4	36
129	Zooming in on the genesis of atherosclerotic plaque microcalcifications. Journal of Physiology, 2016, 594, 2915-2927.	1.3	36
130	Intravital Molecular Imaging of Small-Diameter Tissue-Engineered Vascular Grafts in Mice: A Feasibility Study. Tissue Engineering - Part C: Methods, 2010, 16, 597-607.	1.1	35
131	Attenuated Mitral Leaflet Enlargement Contributes to Functional Mitral Regurgitation After Myocardial Infarction. Journal of the American College of Cardiology, 2020, 75, 395-405.	1.2	33
132	Parathyroid Hormone. Arteriosclerosis, Thrombosis, and Vascular Biology, 2014, 34, 1333-1335.	1.1	32
133	Extracellular vesicles in cardiovascular disease: focus on vascular calcification. Journal of Physiology, 2016, 594, 2877-2880.	1.3	31
134	Cathepsin S As an Inhibitor of Cardiovascular Inflammation and Calcification in Chronic Kidney Disease. Frontiers in Cardiovascular Medicine, 2017, 4, 88.	1.1	30
135	Rheumatic Heart Valve Disease Pathophysiology and Underlying Mechanisms. Frontiers in Cardiovascular Medicine, 2020, 7, 612716.	1.1	30
136	Circulating Extracellular Vesicles As Biomarkers and Drug Delivery Vehicles in Cardiovascular Diseases. Biomolecules, 2021, 11, 388.	1.8	30
137	Innate and adaptive immunity: the understudied driving force of heart valve disease. Cardiovascular Research, 2021, 117, 2506-2524.	1.8	30
138	ApoC-III is a novel inducer of calcification in human aortic valves. Journal of Biological Chemistry, 2021, 296, 100193.	1.6	28
139	Histopathological assessment of calcification and inflammation of calcific aortic valves from patients with and without diabetes mellitus. Histology and Histopathology, 2017, 32, 293-306.	0.5	27
140	Role of Extracellular Vesicles in the Pathogenesis of Vascular Damage. Hypertension, 2022, 79, 863-873.	1.3	27
141	Medial and Intimal Calcification in Chronic Kidney Disease: Stressing the Contributions. Journal of the American Heart Association, 2013, 2, e000481.	1.6	26
142	Harnessing Single-Cell RNA Sequencing to Better Understand How Diseased Cells Behave the Way They Do in Cardiovascular Disease. Arteriosclerosis, Thrombosis, and Vascular Biology, 2021, 41, 585-600.	1.1	26
143	Comparative Histopathological Analysis of Mitral Valves in Barlow Disease and Fibroelastic Deficiency. Seminars in Thoracic and Cardiovascular Surgery, 2016, 28, 757-767.	0.4	25
144	Elastomeric Fibrous Hybrid Scaffold Supports In Vitro and In Vivo Tissue Formation. Advanced Functional Materials, 2017, 27, 1606614.	7.8	25

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145	In vitro 3D model and miRNA drug delivery to target calcific aortic valve disease. Clinical Science, 2017, 131, 181-195.	1.8	24
146	Vasculitis: Molecular Imaging by Targeting the Inflammatory Enzyme Myeloperoxidase. Radiology, 2012, 262, 181-190.	3.6	23
147	Macrophage Heterogeneity Complicates Reversal of Calcification in Cardiovascular Tissues. Circulation Research, 2017, 121, 5-7.	2.0	22
148	Systems Approach to Discovery of Therapeutic Targets for Vein Graft Disease: PPARÎ± Pivotally Regulates Metabolism, Activation, and Heterogeneity of Macrophages and Lesion Development. Circulation, 2021, 143, 2454-2470.	1.6	21
149	Unbiased discovery of in vivo imaging probes through in vitro profiling of nanoparticle libraries. Integrative Biology (United Kingdom), 2009, 1, 311.	0.6	20
150	Sheep-Specific Immunohistochemical Panel for the Evaluation of Regenerative and Inflammatory Processes in Tissue-Engineered Heart Valves. Frontiers in Cardiovascular Medicine, 2018, 5, 105.	1.1	20
151	The antiproliferative cytostatic effects of a self-activating viridin prodrug. Molecular Cancer Therapeutics, 2009, 8, 1666-1675.	1.9	19
152	Calcification of Vascular Smooth Muscle Cells and Imaging of Aortic Calcification and Inflammation. Journal of Visualized Experiments, 2016, , .	0.2	19
153	Aortic valve calcification predicts all-cause mortality independent of coronary calcification and severe stenosis. Atherosclerosis, 2020, 307, 16-20.	0.4	18
154	A Not-So-Little Role for Lipoprotein(a) in the Development of Calcific Aortic Valve Disease. Circulation, 2015, 132, 621-623.	1.6	17
155	Transcriptional control of intestinal cholesterol absorption, adipose energy expenditure and lipid handling by Sortilin. Scientific Reports, 2018, 8, 9006.	1.6	17
156	Retinoids Repress Human Cardiovascular Cell Calcification With Evidence for Distinct Selective Retinoid Modulator Effects. Arteriosclerosis, Thrombosis, and Vascular Biology, 2020, 40, 656-669.	1.1	17
157	CROT (Carnitine O-Octanoyltransferase) Is a Novel Contributing Factor in Vascular Calcification via Promoting Fatty Acid Metabolism and Mitochondrial Dysfunction. Arteriosclerosis, Thrombosis, and Vascular Biology, 2021, 41, 755-768.	1.1	17
158	Dynamin-related protein 1 inhibition reduces hepatic PCSK9 secretion. Cardiovascular Research, 2021, 117, 2340-2353.	1.8	16
159	A disease-driver population within interstitial cells of human calcific aortic valves identified via single-cell and proteomic profiling. Cell Reports, 2022, 39, 110685.	2.9	16
160	A Novel Quantitative Approach for Eliminating Sample-To-Sample Variation Using a Hue Saturation Value Analysis Program. PLoS ONE, 2014, 9, e89627.	1.1	15
161	Controlled delivery of gold nanoparticle-coupled miRNA therapeuticsviaan injectable self-healing hydrogel. Nanoscale, 2021, 13, 20451-20461.	2.8	15
162	Differential miRNA Loading Underpins Dual Harmful and Protective Roles for Extracellular Vesicles in Atherogenesis. Circulation Research, 2019, 124, 467-469.	2.0	14

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163	Modifying Vascular Calcification in Diabetes Mellitus. Circulation Research, 2014, 114, 1074-1076.	2.0	13
164	Pitavastatin Reduces Inflammation in Atherosclerotic Plaques in Apolipoprotein E-Deficient Mice with Late Stage Renal Disease. PLoS ONE, 2015, 10, e0138047.	1.1	13
165	Leukocyte-Derived Microparticles as Proinflammatory Mediators in Atherosclerosis. Journal of the American College of Cardiology, 2013, 62, 1442-1445.	1.2	12
166	Calcific and Degenerative Heart Valve Disease. , 2014, , 161-180.		12
167	Lipoprotein(a) Induces Vesicular Cardiovascular Calcification Revealed With Single-Extracellular Vesicle Analysis. Frontiers in Cardiovascular Medicine, 2022, 9, 778919.	1.1	12
168	Prothymosin Alpha: A Novel Contributor to Estradiol Receptor Alphaâ€“Mediated CD8 ⁺ T-Cell Pathogenic Responses and Recognition of Type 1 Collagen in Rheumatic Heart Valve Disease. Circulation, 2022, 145, 531-548.	1.6	12
169	Quantification of Calcified Particles in Human Valve Tissue Reveals Asymmetry of Calcific Aortic Valve Disease Development. Frontiers in Cardiovascular Medicine, 2016, 3, 44.	1.1	11
170	Current Trends and Future Perspectives of State-of-the-Art Proteomics Technologies Applied to Cardiovascular Disease Research. Circulation Journal, 2016, 80, 1674-1683.	0.7	11
171	Residual Bioprosthetic Valve Immunogenicity: Forgotten, Not Lost. Frontiers in Cardiovascular Medicine, 2021, 8, 760635.	1.1	10
172	Mitral Regurgitation After Percutaneous Mitral Valvuloplasty. JACC: Cardiovascular Imaging, 2020, 13, 2513-2526.	2.3	9
173	2020 Jeffrey M. Hoeg Award Lecture. Arteriosclerosis, Thrombosis, and Vascular Biology, 2021, 41, 117-127.	1.1	9
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