Frank Em Rademakers

List of Publications by Year
in descending order

108 papers	10,576 citations	66343 42 h-index	39675 94 g-index
112 all docs	112 docs citations	112 times ranked	10060 citing authors

#	Article	IF	Citations
1	How to diagnose diastolic heart failure: a consensus statement on the diagnosis of heart failure with normal left ventricular ejection fraction by the Heart Failure and Echocardiography Associations of the European Society of Cardiology. European Heart Journal, 2007, 28, 2539-2550.	2.2	2,302
2	Autologous bone marrow-derived stem-cell transfer in patients with ST-segment elevation myocardial infarction: double-blind, randomised controlled trial. Lancet, The, 2006, 367, 113-121.	13.7	1,225
3	Clinical indications for cardiovascular magnetic resonance (CMR): Consensus Panel report?. European Heart Journal, 2004, 25, 1940-1965.	2.2	649
4	Myocardial function defined by strain rate and strain during alterations in inotropic states and heart rate. American Journal of Physiology - Heart and Circulatory Physiology, 2002, 283, H792-H799.	3.2	353
5	Regional nonuniformity of normal adult human left ventricle. American Journal of Physiology - Heart and Circulatory Physiology, 2001, 280, H610-H620.	3.2	333
6	Visualization of Ventricular Thrombi With Contrast-Enhanced Magnetic Resonance Imaging in Patients With Ischemic Heart Disease. Circulation, 2002, 106, 2873-2876.	1.6	287
7	Impact of myocardial haemorrhage on left ventricular function and remodelling in patients with reperfused acute myocardial infarction. European Heart Journal, 2009, 30, 1440-1449.	2.2	259
8	Can natural strain and strain rate quantify regional myocardial deformation? A study in healthy subjects. Ultrasound in Medicine and Biology, 2001, 27, 1087-1097.	1.5	247
9	Left ventricular flow patterns in healthy subjects and patients with prosthetic mitral valves: An in vivo study using echocardiographic particle image velocimetry. Journal of Thoracic and Cardiovascular Surgery, 2010, 139, 1501-1510.	0.8	229
10	Morphological and Functional Adaptation of the Maternal Heart During Pregnancy. Circulation: Cardiovascular Imaging, 2012, 5, 289-297.	2.6	219
11	Remodeling of T-Tubules and Reduced Synchrony of Ca ²⁺ Release in Myocytes From Chronically Ischemic Myocardium. Circulation Research, 2008, 102, 338-346.	4.5	208
12	Quantification of regional left and right ventricular radial and longitudinal function in healthy children using ultrasound-based Strain Rate and Strain Imaging. Journal of the American Society of Echocardiography, 2002, 15, 20-28.	2.8	202
13	Clinical Indications for Cardiovascular Magnetic Resonance (CMR): Consensus Panel Report #. Journal of Cardiovascular Magnetic Resonance, 2004, 6, 727-765.	3.3	200
14	Imaging in population science: cardiovascular magnetic resonance in 100,000 participants of UK Biobank - rationale, challenges and approaches. Journal of Cardiovascular Magnetic Resonance, 2013, 15, 46.	3.3	188
15	Analysis of relaxation in the evaluation of ventricular function of the heart. Progress in Cardiovascular Diseases, 1985, 28, 143-163.	3.1	182
16	Noninvasive Measurement of Shortening in the Fiber and Cross-Fiber Directions in the Normal Human Left Ventricle and in Idiopathic Dilated Cardiomyopathy. Circulation, 1997, 96, 535-541.	1.6	179
17	Assessment of ventricular coupling with real-time cine MRI and its value to differentiate constrictive pericarditis from restrictive cardiomyopathy. European Radiology, 2006, 16, 944-951.	4.5	171
18	Strain Rate Imaging Detects Early Cardiac Effects of Pegylated Liposomal Doxorubicin as Adjuvant Therapy in Elderly Patients with Breast Cancer. Journal of the American Society of Echocardiography, 2008, 21, 1283-1289.	2.8	165

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19	Remote myocardial dysfunction after acute anterior myocardial infarction: impact of left ventricular shape on regional function. Journal of the American College of Cardiology, 2000, 35, 1525-1534.	2.8	163
20	Scheduling operating rooms: achievements, challenges and pitfalls. Journal of Scheduling, 2016, 19, 493-525.	1.9	154
21	Rotational deformation of the canine left ventricle measured by magnetic resonance tagging: effects of catecholamines, ischaemia, and pacing. Cardiovascular Research, 1994, 28, 629-635.	3.8	145
22	Functional Recovery of Subepicardial Myocardial Tissue in Transmural Myocardial Infarction After Successful Reperfusion. Circulation, 1999, 99, 36-43.	1.6	135
23	Quantification of the spectrum of changes in regional myocardial function during acute ischemia in closed chest pigs: An ultrasonic strain rate and strain study. Journal of the American Society of Echocardiography, 2001, 14, 874-884.	2.8	129
24	Clinically Suspected Constrictive Pericarditis: MR Imaging Assessment of Ventricular Septal Motion and Configuration in Patients and Healthy Subjects. Radiology, 2003, 228, 417-424.	7.3	124
25	Regional Right Ventricular Dysfunction in Chronic Pulmonary Hypertension. Journal of the American Society of Echocardiography, 2007, 20, 1172-1180.	2.8	117
26	Determinants and impact of microvascular obstruction in successfully reperfused ST-segment elevation myocardial infarction. Assessment by magnetic resonance imaging. European Radiology, 2007, 17, 2572-2580.	4.5	117
27	Cardiovascular magnetic resonance in rheumatology: Current status and recommendations for use. International Journal of Cardiology, 2016, 217, 135-148.	1.7	114
28	Determination of interobserver variability for identifying inducible left ventricular wall motion abnormalities during dobutamine stress magnetic resonance imaging. European Heart Journal, 2006, 27, 1459-1464.	2.2	92
29	Improved regional function after autologous bone marrow-derived stem cell transfer in patients with acute myocardial infarction: a randomized, double-blind strain rate imaging study. European Heart Journal, 2008, 30, 662-670.	2.2	92
30	Coronary Artery Imaging with Real-time Navigator Three-dimensional Turbo-Field-Echo MR Coronary Angiography: Initial Experience. Radiology, 2003, 226, 707-716.	7.3	81
31	Left ventricular quantification with breath-hold MR imaging: comparison with echocardiography. Magnetic Resonance Materials in Physics, Biology, and Medicine, 1995, 3, 5-12.	2.0	77
32	Apical transverse motion as surrogate parameter to determine regional left ventricular function inhomogeneities: a new, integrative approach to left ventricular asynchrony assessment. European Heart Journal, 2008, 30, 959-968.	2.2	77
33	Experimental assessment of a new research tool for the estimation of two-dimensional myocardial strain. Ultrasound in Medicine and Biology, 2006, 32, 1509-1513.	1.5	75
34	Assessment of apical rocking: a new, integrative approach for selection of candidates for cardiac resynchronization therapy. European Journal of Echocardiography, 2010, 11, 863-869.	2.3	74
35	Longitudinal but not circumferential deformation reflects global contractile function in the right ventricle with open pericardium. American Journal of Physiology - Heart and Circulatory Physiology, 2006, 290, H2369-H2375.	3.2	73
36	Determinants of the effects of physical training and of the complications requiring resuscitation during exercise in patients with cardiovascular disease. European Journal of Cardiovascular Prevention and Rehabilitation, 2004, 11, 304-312.	2.8	66

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37	Transverse arch hypoplasia predisposes to aneurysm formation at the repair site after patch angioplasty for coarctation of the aorta. Journal of the American College of Cardiology, 1995, 26, 521-527.	2.8	61
38	Detection of Regional Myocardial Dysfunction in Patients with Acute Myocardial Infarction Using Velocity Vector Imaging. Journal of the American Society of Echocardiography, 2008, 21, 879-886.	2.8	58
39	Value of T2-Weighted Magnetic Resonance Imaging Early After Myocardial Infarction in Dogs. Investigative Radiology, 2002, 37, 77-85.	6.2	54
40	Can regional strain and strain rate measurement be performed during both dobutamine and exercise echocardiography, and do regional deformation responses differ with different forms of stress testing?. Journal of the American Society of Echocardiography, 2003, 16, 299-308.	2.8	51
41	Training and accreditation in cardiovascular magnetic resonance in Europe: a position statement of the working group on cardiovascular magnetic resonance of the European Society of Cardiology. European Heart Journal, 2011, 32, 793-798.	2.2	46
42	Comparison of real-time tri-plane and conventional 2D dobutamine stress echocardiography for the assessment of coronary artery disease. European Heart Journal, 2006, 27, 1719-1724.	2.2	45
43	Changes in systolic and postsystolic wall thickening during acute coronary occlusion and reperfusion in closed-chest pigs: Implications for the assessment of regional myocardial function. Journal of the American Society of Echocardiography, 2001, 14, 691-697.	2.8	43
44	The Evaluation of Pulmonary Hypertension Using Right Ventricular Myocardial Isovolumic Relaxation Time. Journal of the American Society of Echocardiography, 2005, 18, 1113-1120.	2.8	42
45	Evolution of regional performance after an acute anterior myocardial infarction in humans using magnetic resonance tagging. Journal of Physiology, 2003, 546, 777-787.	2.9	41
46	Clinical Validation of a Novel Speckle-Trackingâ€“Based Ejection Fraction Assessment Method. Journal of the American Society of Echocardiography, 2011, 24, 1092-1100.	2.8	38
47	The use of imaging for electrophysiological and devices procedures: a report from the first European Heart Rhythm Association Policy Conference, jointly organized with the European Association of Cardiovascular Imaging (EACVI), the Council of Cardiovascular Imaging and the European Society of Cardiac Radiology. Europace, 2013, 15, 927-936.	1.7	38
48	Pexelizumab and Infarct Size in Patients With Acute Myocardial Infarction Undergoing Primary Percutaneous Coronary Intervention. JACC: Cardiovascular Imaging, 2010, 3, 52-60.	5.3	37
49	Right ventricular function by MRI. Current Opinion in Cardiology, 2010, 25, 451-455.	1.8	31
50	Left-ventricular shape determines intramyocardial mechanical heterogeneity. American Journal of Physiology - Heart and Circulatory Physiology, 2011, 301, H2351-H2361.	3.2	29
51	Identifying needs and opportunities for advancing translational research in cardiovascular disease. Cardiovascular Research, 2009, 83, 425-435.	3.8	28
52	Determination of Regional Ejection Fraction in Patients with Myocardial Infarction by Using Merged Late Gadolinium Enhancement and Cine MR: Feasibility Study. Radiology, 2009, 250, 50-60.	7.3	27
53	Magnetic resonance imaging in cardiology. Lancet, The, 2003, 361, 359-360.	13.7	23
54	Definition of Left Ventricular Segments for Cardiac Magnetic Resonance Imaging. JACC: Cardiovascular Imaging, 2018, 11, 926-928.	5.3	23

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55	Determining optimal noninvasive parameters for the prediction of left ventricular remodeling in chronic ischemic patients. Scandinavian Cardiovascular Journal, 2013, 47, 329-334.	1.2	22
56	Cardiac Dysfunction in Heart Failure with Normal Ejection Fraction: MRI measurements. Progress in Cardiovascular Diseases, 2006, 49, 215-227.	3.1	18
57	Left ventricular myocardial tagging. , 1997, 13, 233-245.		17
58	A pilot study to investigate the feasibility and cardiac effects of pegylated liposomal doxorubicin (PL-DOX) as adjuvant therapy in medically fit elderly breast cancer patients. Critical Reviews in Oncology/Hematology, 2008, 67, 133-138.	4.4	17
59	Exercise physiology with a left ventricular assist device: Analysis of heart-pump interaction with a computational simulator. PLoS ONE, 2017, 12, e0181879.	2.5	17
60	Post-Systolic Thickening in Ischaemic Myocardium: A Simple Mathematical Model for Simulating Regional Deformation. Lecture Notes in Computer Science, 2001, , 134-139.	1.3	17
61	Non-invasive characterization of the area-at-risk using magnetic resonance imaging in chronic ischaemia. Cardiovascular Research, 2011, 89, 166-174.	3.8	16
62	Absent right and persistent left superior vena cava. Acta Cardiologica, 2003, 58, 421-423.	0.9	15
63	Due time driven surgery scheduling. Health Care Management Science, 2017, 20, 326-352.	2.6	15
64	Cardiac Troponin T Concentrations, Reversible Myocardial Ischemia, and Indices of Left Ventricular Remodeling in Patients with Suspected Stable Angina Pectoris: a DOPPLER-CIP Substudy. Clinical Chemistry, 2018, 64, 1370-1379.	3.2	15
65	Reallocation of Operating Room Capacity Using the Due-time Model. Medical Care, 2012, 50, 779-784.	2.4	14
66	The Slope of the Segmental Stretch-Strain Relationship as a Noninvasive Index of LV Inotropy. JACC: Cardiovascular Imaging, 2013, 6, 419-428.	5.3	14
67	Single Coronary Artery as Cause of Acute Myocardial Infarction in a 12-Year-Old Girl: A Comprehensive Approach with MR Imaging. American Journal of Roentgenology, 2002, 179, 1535-1537.	2.2	13
68	Comparative study of rest technetium-99m sestamibi SPET and low-dose dobutamine stress echocardiography for the early assessment of myocardial viability after acute myocardial infarction: importance of the severity of the infarct-related stenosis. European Journal of Nuclear Medicine and Molecular Imaging, 1996, 23, 748-755.	2.1	11
69	Diastolic Indexes During Dobutamine Stress Echocardiography in Patients Early After Myocardial Infarction. Journal of the American Society of Echocardiography, 1998, 11, 26-35.	2.8	11
70	The quantification of dipyridamole induced changes in regional deformation in normal, stunned or infarcted myocardium as measured by strain and strain rate: an experimental study. International Journal of Cardiovascular Imaging, 2008, 24, 365-376.	1.5	11
71	Closed-chest animal model of chronic coronary artery stenosis. Assessment with magnetic resonance imaging. International Journal of Cardiovascular Imaging, 2010, 26, 299-308.	1.5	10
72	Operating room planning and scheduling for outpatients and inpatients: A review and future research. Operations Research for Health Care, 2021, 31, 100323.	1.2	9

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73	Right atrial tumor arising on an atrial septal aneurysm assessment by MR imaging. Clinical Imaging, 1995, 19, 172-175.	1.5	8
74	Left ventricular radial tagging acquisition using gradient-recalled-echo techniques: sequence optimization. Magnetic Resonance Materials in Physics, Biology, and Medicine, 1996, 4, 123-133.	2.0	8
75	On the calculation of principle curvatures of the left-ventricular surfaces. , 2008, 2008, 961-4.		8
76	A new electric method for non-invasive continuous monitoring of stroke volume and ventricular volume-time curves. BioMedical Engineering OnLine, 2012, 11, 51.	2.7	8
77	Is Global Longitudinal Strain a Superior Parameter for Predicting Outcome After Myocardial Infarction?. JACC: Cardiovascular Imaging, 2018, 11, 1458-1460.	5.3	7
78	Standardised mortality ratios as a user-friendly performance metric and trigger for quality improvement in a Flemish hospital network: multicentre retrospective study. BMJ Open, 2019, 9, e029857.	1.9	7
79	Full or pressure limited reperfusion of an acute myocardial infarct results in a different wall thickness and deformation of the distal myocardium â€“ Implications for clinical reperfusion strategies. European Journal of Echocardiography, 2007, 9, 458-65.	2.3	5
80	Consistent Regional Heterogeneity of Passive Diastolic Stretch and Systolic Deformation in the Healthy Heart: Age-Related Changes in Left Ventricle Contractility. Ultrasound in Medicine and Biology, 2014, 40, 37-44.	1.5	5
81	Serial assessment of left ventricular morphology and function in a rodent model of ischemic cardiomyopathy. International Journal of Cardiovascular Imaging, 2018, 34, 385-397.	1.5	5
82	3D Echocardiography: Is CMR better?. European Journal of Echocardiography, 2006, 7, 339-340.	2.3	4
83	In-vivo validation of a new non-invasive continuous ventricular stroke volume monitoring system in an animal model. Critical Care, 2011, 15, R165.	5.8	4
84	Translating Data From an Electronic Prescribing and Medicines Administration System Into Knowledge. Medical Care, 2020, 58, 83-89.	2.4	4
85	Due Time Driven Surgery Scheduling. SSRN Electronic Journal, 2015, , .	0.4	3
86	Non-invasive measurement of volumeâ€“time curves in patients with mitral regurgitation and in healthy volunteers, using a new operator-independent screening tool. Physiological Measurement, 2017, 38, 241-258.	2.1	3
87	Adenosine technetium-99m sestamibi single-photon emission tomography for the assessment of jeopardized myocardium early after acute myocardial infarction. European Journal of Nuclear Medicine and Molecular Imaging, 1997, 24, 1121-1127.	2.1	2
88	3D motion and strain estimation of the heart: initial clinical findings. Proceedings of SPIE, 2010, , .	0.8	2
89	Clinical Need for Evaluation of Ischemia. Revista Espanola De Cardiologia (English Ed), 2013, 66, 161-162.	0.6	2
90	A massive left-to-right shunt due to a ruptured giant aneurysm of the sinus of Valsalva. Acta Cardiologica, 2002, 57, 449-451.	0.9	2

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91	On the use of partitioning for scheduling of surgeries in the inpatient surgical department. Health Care Management Science, 2022, 25, 526-550.	2.6	2
92	Fetal Caudal Dysgenesis after Maternal Cardiopulmonary Bypass in Pregnancy. Ultrasound, 2007, 15, 71-72.	0.7	1
93	Distribution of active fiber stress at the beginning of ejection depends on left-ventricular shape. , 2010, 2010, 2638-41.		1
94	Imaging Hemodynamics. JACC: Cardiovascular Imaging, 2014, 7, 927-929.	5.3	1
95	Scheduling Operating Rooms: Achievements, Challenges and Pitfalls. SSRN Electronic Journal, 2016, , .	0.4	1
96	Different Approaches to the Choice of Coordinate System for Left-Ventricular FE-Mesh Generation. , 2008, , .		1
97	Cardiac troponin T and NT-proBNP for detecting myocardial ischemia in suspected chronic coronary syndrome. International Journal of Cardiology, 2022, , .	1.7	1
98	Myocarditis and Pericardial Disease. , 0, , 261-272.		0
99	Left-Ventricular Function Quantitative Parameters and Their Relationship to Acute Loading Variation: From Physiology to Clinical Practice. Current Cardiovascular Imaging Reports, 2012, 5, 83-91.	0.6	0
100	A Remedy for the Achillesâ€™ Heel ofÂEchocardiography?. JACC: Cardiovascular Imaging, 2016, 9, 1031-1033.	5.3	0
101	Regional Myocardial Contractility. Circulation: Cardiovascular Imaging, 2017, 10, .	2.6	0
102	Experimental validation of the prestretch-strain relationship as a non-invasive index of left ventricular myocardial contractility. PLoS ONE, 2020, 15, e0228027.	2.5	0
103	Left ventricular myocardial tagging. , 2004, , 85-97.		0
104	Cardiac Magnetic Resonance. , 2006, , 37-55.		0
105	Constrictive Pericarditis and Restrictive Cardiomyopathy. , 2010, , 501-519.		0
106	Left-Ventricular Shape Determines Intramyocardial Stroke Work Distribution. Lecture Notes in Computer Science, 2011, , 401-408.	1.3	0
107	Seeing, even quantified, is not always believing. European Heart Journal Cardiovascular Imaging, 0, , .	1.2	0
108	The Left Ventricular Pressure-Volume Area and Stroke Work in Porcine Model of Ascending Compared to Descending Thoracic Aorta Stenosis Creating a Chronic Early Vs. Late Left Ventricular Afterload Increase. Prilozi - Makedonska Akademija Na Naukite I Umetnostite Oddelenie Za Medicinski Nauki, 2022, 43, 111-121.	0.5	0