

# Ronak Rajani

## List of Publications by Year in descending order

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Version: 2024-02-01

120  
papers

2,942  
citations

186265  
28  
h-index

197818  
49  
g-index

122  
all docs

122  
docs citations

122  
times ranked

3706  
citing authors

#	ARTICLE	IF	CITATIONS
1	Unidentified floating object within the right ventricle: Multimodality imaging lights the way. Hellenic Journal of Cardiology, 2022, 64, 106-108.	1.0	0
2	The association of pre-existing comorbid conditions with COVID-19 severity and post-COVID complications; insights from South Asia. Pakistan Journal of Medical Sciences, 2022, 38, 439-441.	0.6	2
3	Sex Differences in Right Ventricular Systolic Function and All-Cause Mortality in Tricuspid Regurgitation. Cardiology, 2022, 147, 453-460.	1.4	1
4	Characteristics and outcomes of patients screened for transcatheter mitral valve implantation: <sc>1-year</sc> results from the <sc>CHOICEâ€MI</sc> registry. European Journal of Heart Failure, 2022, 24, 887-898.	7.1	32
5	The AKI care bundle: all bundle components are created equalâ€are they?. Intensive Care Medicine, 2022, 48, 242-245.	8.2	15
6	Anatomy of a Transcatheter Mitral Valve Service. Frontiers in Cardiovascular Medicine, 2022, 9, 862471.	2.4	1
7	Chimney kissing stenting after transcatheter aortic valve implantation. EuroIntervention, 2022, 18, e351-e352.	3.2	0
8	Clinical significance and prognostic value of ST segment depression on ECG during exercise treadmill test in asymptomatic patients with moderate or severe aortic stenosis. Scandinavian Cardiovascular Journal, 2022, 56, 231-235.	1.2	1
9	Assessment of Right Ventricular Function With CT and Echocardiography in Patients With Severe Acute Respiratory Distress Syndrome on Extracorporeal Membrane Oxygenation. , 2021, 3, e0345.		9
10	Feasibility of intraprocedural integration of cardiac CT to guide left ventricular lead implantation for CRT upgrades. Journal of Cardiovascular Electrophysiology, 2021, 32, 802-812.	1.7	14
11	The cardiovascular complications in COVID-19:ÂFocus on acute cardiac injury. Pakistan Journal of Medical Sciences, 2021, 37, 908-912.	0.6	5
12	The advantages, pitfalls and limitations of guidelineâ€directed medical therapy in patients with valvular heart disease. European Journal of Heart Failure, 2021, 23, 1325-1333.	7.1	9
13	Standardised computed tomographic assessment of left atrial morphology and tissue thickness in humans. IJC Heart and Vasculature, 2021, 32, 100694.	1.1	3
14	Hyperparameter optimisation and validation of registration algorithms for measuring regional ventricular deformation using retrospective gated computed tomography images. Scientific Reports, 2021, 11, 5718.	3.3	3
15	Prevention of Cardiac Surgeryâ€Associated Acute Kidney Injury by Implementing the KDIGO Guidelines in High-Risk Patients Identified by Biomarkers: The PrevAKI-Multicenter Randomized Controlled Trial. Anesthesia and Analgesia, 2021, 133, 292-302.	2.2	115
16	Clinical comparison of sub-mm high-resolution non-contrast coronary CMR angiography against coronary CT angiography in patients with low-intermediate risk of coronary artery disease: a single center trial. Journal of Cardiovascular Magnetic Resonance, 2021, 23, 57.	3.3	28
17	Automated Left Ventricle Ischemic Scar Detection in CT Using Deep Neural Networks. Frontiers in Cardiovascular Medicine, 2021, 8, 655252.	2.4	12
18	Automated Localization of Focal Ventricular Tachycardia From Simulated Implanted Device Electrograms: A Combined Physicsâ€AI Approach. Frontiers in Physiology, 2021, 12, 682446.	2.8	9

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19	Fractional flow reserve derived from computed tomography coronary angiography in the assessment and management of stable chest pain: the FORECAST randomized trial. <i>European Heart Journal</i> , 2021, 42, 3844-3852.	2.2	74
20	Two-year outcomes from the Mitral Valve Repair Clinical (MAVERIC) trial: a novel percutaneous treatment of functional mitral regurgitation. <i>European Journal of Heart Failure</i> , 2021, 23, 1775-1783.	7.1	7
21	Computed Tomography-Derived 3D Modeling to Guide Sizing and Planning of Transcatheter Mitral Valve Interventions. <i>JACC: Cardiovascular Imaging</i> , 2021, 14, 1644-1658.	5.3	16
22	A Machine-Learning Framework to Identify Distinct Phenotypes of Aortic Stenosis Severity. <i>JACC: Cardiovascular Imaging</i> , 2021, 14, 1707-1720.	5.3	39
23	Left atrial volume index predicts adverse events in asymptomatic moderate or severe aortic stenosis. <i>Echocardiography</i> , 2021, 38, 1893-1899.	0.9	5
24	Assessment of Thrombotic Risk following Transcatheter Mitral Valve Replacement. , 2021, , .		1
25	Evaluation of aortic stenosis: From Bernoulli and Doppler to Navier-Stokes. <i>Trends in Cardiovascular Medicine</i> , 2021, , .	4.9	7
26	Combined computed tomographic perfusion and mechanics with predicted activation pattern can successfully guide implantation of a wireless endocardial pacing system. <i>Europace</i> , 2020, 22, 298.	1.7	13
27	Antihypertensive treatment with calcium channel blockers in patients with moderate or severe aortic stenosis: Relationship with all-cause mortality. <i>International Journal of Cardiology</i> , 2020, 298, 122-125.	1.7	14
28	Between a rock and the mitral valve space: Transcatheter mitral valve-in-valve implantation for paravalvular leak and refractory hemolysis complicated by circumflex coronary occlusion. <i>Catheterization and Cardiovascular Interventions</i> , 2020, 96, 215-218.	1.7	2
29	Fractional Flow Reserve Derived from Computed Tomography Coronary Angiography in the Assessment and Management of Stable Chest Pain: Rationale and Design of the FORECAST Trial. <i>Cardiovascular Revascularization Medicine</i> , 2020, 21, 890-896.	0.8	13
30	The impact of wall thickness and curvature on wall stress in patient-specific electromechanical models of the left atrium. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 1015-1034.	2.8	23
31	Sex-differences in aortic stenosis: Effect on functional capacity and prognosis. <i>International Journal of Cardiology</i> , 2020, 304, 130-134.	1.7	5
32	Thunderball: Oscillating ball thrombus within a giant sinus of Valsalva aneurysm. <i>Hellenic Journal of Cardiology</i> , 2020, 62, 241-243.	1.0	0
33	Development and Testing of an Ultrasound-Compatible Cardiac Phantom for Interventional Procedure Simulation Using Direct Three-Dimensional Printing. <i>3D Printing and Additive Manufacturing</i> , 2020, 7, 269-278.	2.9	7
34	Simultaneous Transcatheter Double Valve Treatment of Mediastinal Radiation-Induced Severe Calcific Aortic and Mitral Stenosis. <i>JACC: Case Reports</i> , 2020, 2, 1443-1447.	0.6	6
35	In-silico pace-mapping using a detailed whole torso model and implanted electronic device electrograms for more efficient ablation planning. <i>Computers in Biology and Medicine</i> , 2020, 125, 104005.	7.0	10
36	Specialist valve clinic in a cardiac centre: 10-year experience. <i>Open Heart</i> , 2020, 7, e001262.	2.3	4

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37	Nowhere to Hide. <i>Circulation: Cardiovascular Imaging</i> , 2020, 13, e009643.	2.6	0
38	The tricuspid annular plane systolic excursion to systolic pulmonary artery pressure index: Association with all-cause mortality in patients with moderate or severe tricuspid regurgitation. <i>International Journal of Cardiology</i> , 2020, 317, 176-180.	1.7	18
39	A computational investigation into rate-dependant vectorcardiogram changes due to specific fibrosis patterns in non-ischemic dilated cardiomyopathy. <i>Computers in Biology and Medicine</i> , 2020, 123, 103895.	7.0	10
40	Tracking the motion of intracardiac structures aids the development of future leadless pacing systems. <i>Journal of Cardiovascular Electrophysiology</i> , 2020, 31, 2431-2439.	1.7	6
41	Determinants and clinical significance of aortic stiffness in patients with moderate or severe aortic stenosis. <i>International Journal of Cardiology</i> , 2020, 315, 99-104.	1.7	16
42	3D whole-heart isotropic sub-millimeter resolution coronary magnetic resonance angiography with non-rigid motion-compensated PROST. <i>Journal of Cardiovascular Magnetic Resonance</i> , 2020, 22, 24.	3.3	37
43	Coronavirus Disease 2019 and Heart Failure: A Multiparametric Approach. <i>Cardiac Failure Review</i> , 2020, 6, e22.	3.0	3
44	Giant left atrium: Adaptive or maladaptive?. <i>Hellenic Journal of Cardiology</i> , 2019, 60, 400-401.	1.0	0
45	Emerging role of cardiac computed tomography in heart failure. <i>ESC Heart Failure</i> , 2019, 6, 909-920.	3.1	23
46	Generation of a cohort of whole-torso cardiac models for assessing the utility of a novel computed shock vector efficiency metric for ICD optimisation. <i>Computers in Biology and Medicine</i> , 2019, 112, 103368.	7.0	13
47	Patient-Specific Computer Simulation of Transcatheter Aortic Valve Replacement in Bicuspid Aortic Valve Morphology. <i>Circulation: Cardiovascular Imaging</i> , 2019, 12, e009178.	2.6	42
48	Indirect Annuloplasty to Treat Functional Mitral Regurgitation: Current Results and Future Perspectives. <i>Frontiers in Cardiovascular Medicine</i> , 2019, 6, 60.	2.4	14
49	Chronic ventricular lead perforation: Expect the unexpected. <i>Clinical Case Reports (discontinued)</i> , 2019, 7, 465-468.	0.5	1
50	Rapid early rise in heart rate on treadmill exercise in patients with asymptomatic moderate or severe aortic stenosis: a new prognostic marker?. <i>Open Heart</i> , 2019, 6, e000950.	2.3	9
51	Predicting the Physiological Effect of Revascularization in Serially Diseased Coronary Arteries. <i>Circulation: Cardiovascular Interventions</i> , 2019, 12, e007577.	3.9	52
52	Patient-specific computer simulation for transcatheter cardiac interventions: what a clinician needs to know. <i>Heart</i> , 2019, 105, s21-s27.	2.9	27
53	Impact of pulmonary hypertension on outcome in patients with moderate or severe tricuspid regurgitation. <i>Open Heart</i> , 2019, 6, e001104.	2.3	5
54	Hypertension in aortic stenosis. <i>Journal of Hypertension</i> , 2019, 37, 2209-2215.	0.5	9

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55	Real-time image integration for transcatheter mitral valve replacement in mitral annular calcification. <i>Journal of Thoracic and Cardiovascular Surgery</i> , 2019, 157, e135-e139.	0.8	6
56	Personalized computational modeling of left atrial geometry and transmural myofiber architecture. <i>Medical Image Analysis</i> , 2018, 47, 180-190.	11.6	46
57	Exercise testing in patients with asymptomatic moderate or severe aortic stenosis. <i>Heart</i> , 2018, 104, 1836-1842.	2.9	46
58	Lesion Indexâ€“Guided Ablation Facilitates Continuous, Transmural, and Durable Lesions in a Porcine Recovery Model. <i>Circulation: Arrhythmia and Electrophysiology</i> , 2018, 11, e005892.	4.8	37
59	Transcatheter mitral valve replacement in mitral annulus calcification â€“ â€œThe art of computer simulationâ€• <i>Journal of Cardiovascular Computed Tomography</i> , 2018, 12, 153-157.	1.3	33
60	Early Experience With New Transcatheterâ€“Mitral Valve Replacement. <i>Journal of the American College of Cardiology</i> , 2018, 71, 12-21.	2.8	229
61	Computed Tomography Aortic Valve Calcium Scoring in Patients With Aortic Stenosis. <i>Circulation: Cardiovascular Imaging</i> , 2018, 11, e007146.	2.6	251
62	Physiology-Guided Management of Serial Coronary Artery Disease. <i>JAMA Cardiology</i> , 2018, 3, 432.	6.1	24
63	A cost effectiveness study establishing the impact and accuracy of implementing the NICE guidelines lowering plasma NTproBNP threshold in patients with clinically suspected heart failure at our institution. <i>International Journal of Cardiology</i> , 2018, 257, 131-136.	1.7	1
64	Improving outcomes in chronic aortic regurgitation: timely diagnosis, access to specialist assessment and earlier surgery. <i>Heart</i> , 2018, 104, 794-795.	2.9	4
65	Exercise Treadmill Testing in Moderate or Severe Aortic Stenosis: The Left Ventricular Correlates of an Exaggerated Blood Pressure Rise. <i>Journal of the American Heart Association</i> , 2018, 7, e010735.	3.7	19
66	Left ventricular outflow obstruction predicts increase in systolic pressure gradients and blood residence time after transcatheter mitral valve replacement. <i>Scientific Reports</i> , 2018, 8, 15540.	3.3	24
67	Automated quantification of mitral valve geometry on multi-slice computed tomography in patients with dilated cardiomyopathy â€“ Implications for transcatheter mitral valve replacement. <i>Journal of Cardiovascular Computed Tomography</i> , 2018, 12, 329-337.	1.3	12
68	Algorithms for left atrial wall segmentation and thickness â€“ Evaluation on an open-source CT and MRI image database. <i>Medical Image Analysis</i> , 2018, 50, 36-53.	11.6	40
69	Patient-Specific Computer Modeling for the Planning of Transcatheter Mitral Valve Replacement. <i>Journal of the American College of Cardiology</i> , 2018, 72, 956-958.	2.8	15
70	Diagnosis and management of iatrogenic cardiac perforation caused by pacemaker and defibrillator leads. <i>Europace</i> , 2017, 19, euw074.	1.7	37
71	Effects of renal denervation on vascular remodelling in patients with heart failure and preserved ejection fraction: A randomised control trial. <i>JRSM Cardiovascular Disease</i> , 2017, 6, 204800401769098.	0.7	7
72	Comprehensive use of cardiac computed tomography to guide left ventricular lead placement in cardiac resynchronization therapy. <i>Heart Rhythm</i> , 2017, 14, 1364-1372.	0.7	48

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73	Non-invasive fractional flow reserve using computed tomographic angiography: where are we now and where are we going?. Heart, 2017, 103, 1216-1222.	2.9	9
74	A hybrid energy model for region based curve evolution “ Application to CTA coronary segmentation. Computer Methods and Programs in Biomedicine, 2017, 144, 189-202.	4.7	7
75	Guided left ventricular lead placement for cardiac resynchronization therapy: an opportunity for image integration. European Journal of Heart Failure, 2017, 19, 435-435.	7.1	3
76	Framework for detection and localization of coronary non-calcified plaques in cardiac CTA using mean radial profiles. Computers in Biology and Medicine, 2017, 89, 84-95.	7.0	20
77	Computational fluid dynamic modelling to determine the hemodynamic effects of implanting a transcatheter mitral valve within the left ventricle. International Journal of Cardiovascular Imaging, 2017, 34, 803-805.	1.5	2
78	The role of multi modality imaging in selecting patients and guiding lead placement for the delivery of cardiac resynchronization therapy. Expert Review of Cardiovascular Therapy, 2017, 15, 93-107.	1.5	13
79	Percutaneous Ventricular Restoration Using the Parachute Device: The Parachute III Pressure-Volume Loop Sub-study. Structural Heart, 2017, 1, 65-74.	0.6	2
80	Segmentation Challenge on the Quantification of Left Atrial Wall Thickness. Lecture Notes in Computer Science, 2017, , 193-200.	1.3	1
81	Coronary artery anomalies overview: The normal and the abnormal. World Journal of Radiology, 2016, 8, 537.	1.1	242
82	State-of-the-Art CT Imaging of the Left Atrium. Current Radiology Reports, 2016, 4, 1.	1.4	1
83	Renal denervation in heart failure with preserved ejection fraction (<sc>RDT&PEF</sc>): a randomized controlled trial. European Journal of Heart Failure, 2016, 18, 703-712.	7.1	62
84	The influence of vessel segmentation threshold on the accuracy of patient-specific coronary blood flow simulations. , 2016, , .		0
85	Does the Routine Availability of CT&Derived FFR Influence Management of&Patients With&Stable Chest&Pain Compared to CT&Angiography&Alone?. JACC: Cardiovascular Imaging, 2016, 9, 1188-1194.	5.3	90
86	Iterative Learning of Transcatheter Mitral Valve Replacement in Mitral Valve Annulus Calcification: Management and Prevention of Transcatheter Mitral Valve Replacement Dislocation. Annals of Thoracic Surgery, 2016, 102, e287-e290.	1.3	7
87	The role of myocardial wall thickness in atrial arrhythmogenesis. Europace, 2016, 18, euw014.	1.7	65
88	Deployed but not irretrievable: A novel surgical off-pump technique for parachute device extraction. International Journal of Cardiology, 2016, 204, 66-69.	1.7	2
89	Three-dimensional atrial wall thickness maps to inform catheter ablation procedures for atrial fibrillation. Europace, 2016, 18, 376-383.	1.7	59
90	A rare case of a giant saphenous vein graft aneurysm with right atrial fistula formation. BMJ Case Reports, 2016, 2016, bcr2015213955.	0.5	1

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91	Increased pericardial fat accumulation is associated with increased intramyocardial lipid content and duration of highly active antiretroviral therapy exposure in patients infected with human immunodeficiency virus: a 3T cardiovascular magnetic resonance feasibility study. Journal of Cardiovascular Magnetic Resonance, 2015, 17, 91.	3.3	22
92	Factors influencing left ventricular outflow tract obstruction following a mitral valveâ€”valveâ€”ring procedure, part 1. Catheterization and Cardiovascular Interventions, 2015, 86, 747-760.	1.7	83
93	Multimodality Imaging of Extensive Caseating Intramyocardial Calcification Secondary to Lymphoma. Circulation: Cardiovascular Imaging, 2015, 8, .	2.6	1
94	Comparative efficacy testing â€” Fractional flow reserve by coronary computed tomography for the evaluation of patients with stable chest pain. International Journal of Cardiology, 2015, 183, 173-177.	1.7	16
95	Lord of the imaging rings â€” Takayasu's aortitis. International Journal of Cardiology, 2015, 182, 219-221.	1.7	0
96	First Reported Case of Transcatheter Mitral Valve Implantation in Mitral Annular Calcification With a Fully Repositionable and Self-Expanding Valve. Circulation: Cardiovascular Interventions, 2015, 8, e003031.	3.9	32
97	Adult Left Ventricular Noncompaction. JACC: Cardiovascular Imaging, 2014, 7, 1266-1275.	5.3	85
98	Optimizing Image Contrast Display Improves Quantitative Stenosis Measurement in Heavily Calcified Coronary Arterial Segments on Coronary CT Angiography. Academic Radiology, 2014, 21, 797-804.	2.5	8
99	Incremental Value of Diagonal Earlobe Crease to the Diamond-Forrester Classification in Estimating the Probability of Significant Coronary Artery Disease Determined by Computed Tomographic Angiography. American Journal of Cardiology, 2014, 114, 1670-1675.	1.6	8
100	Multimodality Imaging of Heart Valve Disease. Arquivos Brasileiros De Cardiologia, 2014, 103, 251-63.	0.8	5
101	Relationship of epicardial fat volume to coronary plaque, severe coronary stenosis, and high-risk coronary plaque features assessed by coronary CT angiography. Journal of Cardiovascular Computed Tomography, 2013, 7, 125-132.	1.3	56
102	An insight into transcatheter aortic valve implantationâ€”a perspective from multidetectorâ€”computed tomography. Catheterization and Cardiovascular Interventions, 2013, 82, E952-8.	1.7	0
103	Virtual fractional flow reserve by coronary computed tomography - hope or hype?. EuroIntervention, 2013, 9, 277-284.	3.2	16
104	An unusual cause of intractable cough. European Heart Journal Cardiovascular Imaging, 2012, 13, 848-848.	1.2	0
105	If at first you do not succeed; try another phase! Rescue reconstruction of an anomalous coronary artery in a patient with atrial fibrillation. European Heart Journal Cardiovascular Imaging, 2012, 13, 196-196.	1.2	0
106	The art of assessing aortic stenosis. Heart, 2012, 98, iv14-iv22.	2.9	17
107	Asymptomatic Aortic Stenosis: The Influence of the Systemic Vasculature on Exercise Time. Journal of the American Society of Echocardiography, 2012, 25, 613-619.	2.8	10
108	Relation of Diagonal Ear Lobe Crease to the Presence, Extent, and Severity of Coronary Artery Disease Determined by Coronary Computed Tomography Angiography. American Journal of Cardiology, 2012, 109, 1283-1287.	1.6	67

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109	In people with severe aortic stenosis unsuitable for surgery transcatheter aortic valve implantation reduces 1-year mortality compared with standard care. Evidence-Based Medicine, 2011, 16, 74-75.	0.6	0
110	Pancreatitis and the broken heart. European Journal of Emergency Medicine, 2010, 17, 27-29.	1.1	17
111	Paravalvular regurgitation one year after transcatheter aortic valve implantation. Catheterization and Cardiovascular Interventions, 2010, 75, 868-872.	1.7	69
112	Treadmill exercise in apparently asymptomatic patients with moderate or severe aortic stenosis: relationship between cardiac index and revealed symptoms. Heart, 2010, 96, 689-695.	2.9	48
113	Entrapment: thrombus within a patent foramen ovale. Journal of Cardiovascular Medicine, 2009, 10, 576-577.	1.5	0
114	B-type natriuretic peptide and tissue doppler for predicting symptoms on treadmill exercise in apparently asymptomatic aortic stenosis. Journal of Heart Valve Disease, 2009, 18, 565-71.	0.5	10
115	The noninvasive estimation of central aortic blood pressure in patients with aortic stenosis. Journal of Hypertension, 2008, 26, 2381-2388.	0.5	25
116	A randomized comparison of the Cryolife Oâ€™Brien and Toronto stentless replacement aortic valves. Journal of Thoracic and Cardiovascular Surgery, 2007, 133, 1045-1050.	0.8	9
117	Doppler echocardiography in normally functioning replacement aortic valves: a review of 129 studies. Journal of Heart Valve Disease, 2007, 16, 519-35.	0.5	22
118	The subcoronary Toronto stentless versus supra-annular Perimount stented replacement aortic valve: Early clinical and hemodynamic results of a randomized comparison in 160 patients. Journal of Thoracic and Cardiovascular Surgery, 2006, 131, 878-882.e4.	0.8	41
119	Right ventricular rupture. Clinical Cardiology, 2005, 28, 201-201.	1.8	0
120	The Peak to Mean Pressure Decrease Ratio: A New Method of Assessing Aortic Stenosis. Journal of the American Society of Echocardiography, 2005, 18, 674-678.	2.8	20