Frank J Rybicki

List of Publications by Year
in descending order

113 papers	5,090 citations	172443 29 h-index	91872 69 g-index
120 all docs	120 docs citations	120 times ranked	5915 citing authors

#	Article	IF	Citations
1	Initial evaluation of coronary images from 320-detector row computed tomography. International Journal of Cardiovascular Imaging, 2008, 24, 535-546.	1.5	515
2	CAD-RADSTM Coronary Artery Disease â€" Reporting and Data System. An expert consensus document of the Society of Cardiovascular Computed Tomography (SCCT), the American College of Radiology (ACR) and the North American Society for Cardiovascular Imaging (NASCI). Endorsed by the American College of Cardiology. Journal of Cardiovascular Computed Tomography, 2016, 10, 269-281.	1.3	480
3	Medical 3D Printing for the Radiologist. Radiographics, 2015, 35, 1965-1988.	3.3	479
4	Applications of 3D printing in cardiovascular diseases. Nature Reviews Cardiology, 2016, 13, 701-718.	13.7	318
5	CAD-RADSâ„¢: Coronary DiseaseÂâ€"ÂReporting and Data System. Journal of the American College of Radiology, 2016, 13, 1458-1466.e9.	1.8	251
6	Three Patients with Full Facial Transplantation. New England Journal of Medicine, 2012, 366, 715-722.	27.0	230
7	Measuring and Establishing the Accuracy and Reproducibility of 3D Printed Medical Models. Radiographics, 2017, 37, 1424-1450.	3.3	196
8	Radiological Society of North America (RSNA) 3D printing Special Interest Group (SIG): guidelines for medical 3D printing and appropriateness for clinical scenarios. 3D Printing in Medicine, 2018, 4, 11.	3.1	187
9	3D printing based on cardiac CT assists anatomic visualization prior to transcatheter aortic valve replacement. Journal of Cardiovascular Computed Tomography, 2016, 10, 28-36.	1.3	172
10	COVID-19 and the role of 3D printing in medicine. 3D Printing in Medicine, 2020, 6, 11.	3.1	169
11	Applying Modern Virtual and Augmented Reality Technologies to Medical Images and Models. Journal of Digital Imaging, 2019, 32, 38-53.	2.9	168
12	Natural Language Processing Technologies in Radiology Research and Clinical Applications. Radiographics, 2016, 36, 176-191.	3.3	161
13	Medical 3D Printing Cost-Savings in Orthopedic and Maxillofacial Surgery: Cost Analysis of Operating Room Time Saved with 3D Printed Anatomic Models and Surgical Guides. Academic Radiology, 2020, 27, 1103-1113.	2.5	155
14	Diagnosis of obstructive coronary artery disease using computed tomography angiography in patients with stable chest pain depending on clinical probability and in clinically important subgroups: meta-analysis of individual patient data. BMJ: British Medical Journal, 2019, 365, l1945.	2.3	99
15	Anomalous origin of the coronary artery arising from the opposite sinus: prevalence and outcomes in patients undergoing coronary CTA. European Heart Journal Cardiovascular Imaging, 2017, 18, 224-235.	1.2	87
16	Skin and Thyroid Dosimetry in Cervical Spine Screening: Two Methods for Evaluation and a Comparison Between a Helical CT and Radiographic Trauma Series. American Journal of Roentgenology, 2002, 179, 933-937.	2.2	79
17	<i>RadioGraphics</i> Update: Medical 3D Printing for the Radiologist. Radiographics, 2020, 40, E21-E23.	3.3	58
18	Incremental prognostic value of coronary artery calcium score versus CT angiography among symptomatic patients without known coronary artery disease. Atherosclerosis, 2014, 233, 190-195.	0.8	57

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19	Accurate and reproducible reconstruction of coronary arteries and endothelial shear stress calculation using 3D OCT: Comparative study to 3D IVUS and 3D QCA. Atherosclerosis, 2015, 240, 510-519.	0.8	55
20	Prediction of coronary artery plaque progression and potential rupture from 320-detector row prospectively ECG-gated single heart beat CT angiography: Lattice Boltzmann evaluation of endothelial shear stress. International Journal of Cardiovascular Imaging, 2009, 25, 289-299.	1.5	54
21	3D printed ventricular septal defect patch: a primer for the 2015 Radiological Society of North America (RSNA) hands-on course in 3D printing. 3D Printing in Medicine, 2015, 1, 3.	3.1	48
22	ACR Appropriateness Criteria Imaging in the Diagnosis of Thoracic Outlet Syndrome. Journal of the American College of Radiology, 2015, 12, 438-443.	1.8	41
23	Gender Disparity Among Leaders of Canadian Academic Radiology Departments. American Journal of Roentgenology, 2020, 214, 3-9.	2.2	36
24	Diagnostic performance of on-site computed CT-fractional flow reserve based on fluid structure interactions: comparison with invasive fractional flow reserve and instantaneous wave-free ratio. European Heart Journal Cardiovascular Imaging, 2019, 20, 343-352.	1.2	35
25	Medical 3D printing: methods to standardize terminology and report trends. 3D Printing in Medicine, 2017, 3, 4.	3.1	33
26	Prenatal diagnosis of pyruvate dehydrogenase deficiency using magnetic resonance imaging. Prenatal Diagnosis, 2001, 21, 1053-1056.	2.3	32
27	Incremental diagnostic accuracy of computed tomography myocardial perfusion imaging over coronary angiography stratified by pre-test probability of coronary artery disease and severity of coronary artery calcification: The CORE320 study. International Journal of Cardiology, 2015, 201, 570-577.	1.7	31
28	ACR Appropriateness Criteria Â® NonvaricealÂUpperÂGastrointestinal Bleeding. Journal of the American College of Radiology, 2017, 14, S177-S188.	1.8	31
29	Fractional Flow Reserve Estimated at Coronary CT Angiography in Intermediate Lesions: Comparison of Diagnostic Accuracy of Different Methods to Determine Coronary Flow Distribution. Radiology, 2018, 287, 76-84.	7.3	31
30	CT pulmonary angiography-based scoring system to predict the prognosis of acute pulmonary embolism. Journal of Cardiovascular Computed Tomography, 2016, 10, 473-479.	1.3	30
31	Rescheduling Nonurgent Care in Radiology: Implementation During the Coronavirus Disease 2019 (COVID-19) Pandemic. Journal of the American College of Radiology, 2020, 17, 882-889.	1.8	29
32	Modern imaging techniques: applications in the management of acute aortic pathologies. Postgraduate Medical Journal, 2015, 91, 449-462.	1.8	26
33	Can CT and MR Shape and Textural Features Differentiate Benign Versus Malignant Pleural Lesions?. Academic Radiology, 2017, 24, 1277-1287.	2.5	26
34	Association of global and local low endothelial shear stress with high-risk plaque using intracoronary 3D optical coherence tomography: Introduction of â€˜shear stress scoreâ€™. European Heart Journal Cardiovascular Imaging, 2017, 18, 888-897.	1.2	25
35	Medical 3D printing and the physician-artist. Lancet, The, 2018, 391, 651-652.	13.7	25
36	Evaluation of scatter compensation methods by their effects on parameter estimation from SPECT projections. Medical Physics, 2001, 28, 278-287.	3.0	24

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37	3D Printing in Medicine: an introductory message from the Editor-in-Chief. 3D Printing in Medicine, 2015, 1, 1.	3.1	24
38	Quantifying the effect of side branches in endothelial shear stress estimates. Atherosclerosis, 2016, 251, 213-218.	0.8	23
39	Radiological Society of North America (RSNA) 3D Printing Special Interest Group (SIG) clinical situations for which 3D printing is considered an appropriate representation or extension of data contained in a medical imaging examination: abdominal, hepatobiliary, and gastrointestinal conditions. 3D Printing in Medicine, 2020, 6, 13.	3.1	22
40	Performance Measures in Radiology. Journal of the American College of Radiology, 2014, 11, 456-463.	1.8	20
41	Evaluation of a deep learning method for the automated detection of supraspinatus tears on MRI. Skeletal Radiology, 2022, 51, 1765-1775.	2.0	20
42	Mid-diastolic left ventricular volume and mass: Normal values for coronary computed tomography angiography. Journal of Cardiovascular Computed Tomography, 2017, 11, 135-140.	1.3	19
43	A systematic evaluation of medical 3D printing accuracy of multi€pathological anatomical models for surgical planning manufactured in elastic and rigid material using desktop inverted vat photopolymerization. Medical Physics, 2021, 48, 3223-3233.	3.0	19
44	The Health Care Value Transparency Movement and Its Implications for Radiology. Journal of the American College of Radiology, 2015, 12, 51-58.	1.8	18
45	Lack of Gender Disparity Among Administrative Leaders of Canadian Health Authorities. Journal of Women's Health, 2020, 29, 1469-1474.	3.3	18
46	MRI of the Knee and Shoulder Performed Before Radiography. Journal of the American College of Radiology, 2014, 11, 1053-1058.	1.8	17
47	Combined non-invasive assessment of endothelial shear stress and molecular imaging of inflammation for the prediction of inflamed plaque in hyperlipidaemic rabbit aortas. European Heart Journal Cardiovascular Imaging, 2017, 18, 19-30.	1.2	17
48	3D printed cardiovascular patient specific phantoms used for clinical validation of a CT-derived FFR diagnostic software. , 2018, 10578, .		16
49	Cardiac myocardial perfusion imaging using dual source computed tomography. International Journal of Cardiovascular Imaging, 2009, 25, 209-216.	1.5	15
50	ACR Appropriateness Criteria® Imaging for Transcatheter Aortic Valve Replacement. Journal of the American College of Radiology, 2017, 14, S449-S455.	1.8	15
51	Relationship of left ventricular mass to coronary atherosclerosis and myocardial ischaemia: the CORE320 multicenter study. European Heart Journal Cardiovascular Imaging, 2015, 16, 166-176.	1.2	14
52	ACR Appropriateness Criteria ® Sudden OnsetÂofÂCold, Painful Leg. Journal of the American College of Radiology, 2017, 14, S307-S313.	1.8	14
53	EXTraction of EMR numerical data: an efficient and generalizable tool to EXTEND clinical research. BMC Medical Informatics and Decision Making, 2019, 19, 226.	3.0	14
54	Normal ventricular diameter ratio on CT provides adequate assessment for critical right ventricular strain among patients with acute pulmonary embolism. International Journal of Cardiovascular Imaging, 2016, 32, 1153-1161.	1.5	13

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55	Evaluation of Bend Relief Disconnection in Patients Supported by a HeartMate II Left Ventricular Assist Device. Circulation: Cardiovascular Imaging, 2014, 7, 844-848.	2.6	12
56	ACR Appropriateness Criteria Â® Pulsatile Abdominal Mass Suspected Abdominal AorticÂAneurysm. Journal of the American College of Radiology, 2017, 14, S258-S265.	1.8	12
57	Preoperative planning and tracheal stent design in thoracic surgery: a primer for the 2017 Radiological Society of North America (RSNA) hands-on course in 3D printing. 3D Printing in Medicine, 2017, 3, 14.	3.1	12
58	Common First-Pass CT Angiography Findings Associated With Rapid Growth Rate in Abdominal Aorta Aneurysms Between 3 and 5 cm in Largest Diameter. American Journal of Roentgenology, 2018, 210, 431-437.	2.2	12
59	Contrast Administration in CT: A Patient-Centric Approach. Journal of the American College of Radiology, 2019, 16, 295-301.	1.8	12
60	Initial simulated FFR investigation using flow measurements in patient-specific 3D printed coronary phantoms. , 2017, 10138, .		11
61	Medical 3D Printing Dimensional Accuracy for Multi-pathological Anatomical Models 3D Printed Using Material Extrusion. Journal of Digital Imaging, 2022, 35, 613-622.	2.9	11
62	Analysis of Gender Disparity in US and Canadian Radiology Residency Programs. Current Problems in Diagnostic Radiology, 2022, 51, 21-24.	1.4	10
63	ACR Appropriateness CriteriaÂ® on Recurrent Symptoms Following Lower-Extremity Angioplasty. Journal of the American College of Radiology, 2008, 5, 1176-1180.	1.8	9
64	State-of-the-art Magnetic Resonance Imaging in Vascular Thoracic Outlet Syndrome. Magnetic Resonance Imaging Clinics of North America, 2015, 23, 309-320.	1.1	9
65	Clinical situations for which 3D printing is considered an appropriate representation or extension of data contained in a medical imaging examination: adult cardiac conditions. 3D Printing in Medicine, 2020, 6, 24.	3.1	9
66	3D Printing in Medicine: Coronavirus Disease 2019 Testing With 3D Printed Nasopharyngeal Swabs. Clinical Infectious Diseases, 2021, 73, e3033-e3035.	5.8	9
67	Prognostic value of noninvasive combined anatomic/functional assessment by cardiac CT in patients with suspected coronary artery disease â€" Comparison with invasive coronary angiography and nuclear myocardial perfusion imaging for the five-year-follow up of the CORE320 multicenter study. Journal of Cardiovascular Computed Tomography, 2021, 15, 485-491.	1.3	9
68	Implications of the 2021 AHA/ACC/ASE/CHEST/SAEM/SCCT/SCMR Chest Pain Guideline for Cardiovascular Imaging. JACC: Cardiovascular Imaging, 2022, 15, 912-926.	5.3	9
69	Quantification of aortic calcification â€" How and why should we do it?. Atherosclerosis, 2015, 240, 469-471.	0.8	8
70	Inter- and Intraoperator Variability in Measurement of On-Site CT-derived Fractional Flow Reserve Based on Structural and Fluid Analysis: A Comprehensive Analysis. Radiology: Cardiothoracic Imaging, 2019, 1, e180012.	2.5	8
71	Left Ventricular Mid-Diastolic Wall Thickness: Normal Values for Coronary CT Angiography. Radiology: Cardiothoracic Imaging, 2019, 1, e190034.	2.5	8
72	Initial evaluation of three-dimensionally printed patient-specific coronary phantoms for CT-FFR software validation. Journal of Medical Imaging, 2019, 6, 1.	1.5	8

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73	The impact of regulation, reimbursement, and research on the value of 3D printing and other 3D procedures in medicine. 3D Printing in Medicine, 2022, 8, 6.	3.1	8
74	Multi-contrast high spatial resolution black blood inner volume three-dimensional fast spin echo MR imaging in peripheral vein bypass grafts. International Journal of Cardiovascular Imaging, 2010, 26, 683-691.	1.5	7
75	ACR Appropriateness CriteriaÂ® Vascular Claudicationâ€"Assessment for Revascularization. Journal of the American College of Radiology, 2017, 14, S372-S379.	1.8	7
76	The transluminal attenuation gradient in coronary CT angiography for the detection of hemodynamically significant disease: can all arteries be treated equally?. British Journal of Radiology, 2018, 91, 20180043.	2.2	7
77	Initial evaluation of a convolutional neural network used for noninvasive assessment of coronary artery disease severity from coronary computed tomography angiography data. Medical Physics, 2020, 47, 3996-4004.	3.0	7
78	Contrast inhomogeneity in CT angiography of the abdominal aortic aneurysm. Journal of Cardiovascular Computed Tomography, 2016, 10, 179-183.	1.3	6
79	ACR Appropriateness Criteria Â® Lower Extremity Arterial Revascularizationâ€"Post-Therapy Imaging. Journal of the American College of Radiology, 2018, 15, S104-S115.	1.8	6
80	Improved Appropriateness of Advanced Diagnostic Imaging After Implementation of Clinical Decision Support Mechanism. Journal of Digital Imaging, 2021, 34, 397-403.	2.9	6
81	ACR Appropriateness Criteria Clinically Suspected Pulmonary Arteriovenous Malformation. Journal of the American College of Radiology, 2016, 13, 796-800.	1.8	5
82	Relative atherosclerotic plaque volume by CT coronary angiography trumps conventional stenosis assessment for identifying flow-limiting lesions. International Journal of Cardiovascular Imaging, 2017, 33, 1847-1855.	1.5	5
83	ACR Appropriateness CriteriaÂ® Suspected Thoracic Aortic Aneurysm. Journal of the American College of Radiology, 2018, 15, S208-S214.	1.8	5
84	Pulmonary Arteriovenous Malformation PAVM Multidetector Computed Tomography Findings. Eurasian Journal of Medicine, 2011, 42, 203-204.	0.6	4
85	Automatic ventricle detection in Computed Tomography Pulmonary Angiography. , 2015, , .		4
86	Association Between Confidence Level of Acute Pulmonary Embolism Diagnosis on CTPA images andÂClinical Outcomes. Academic Radiology, 2015, 22, 1555-1561.	2.5	4
87	Development and Management of a Noninvasive Cardiovascular Imaging Service. American Journal of Roentgenology, 2006, 187, 1401-1402.	2.2	3
88	Message From Frank J. Rybicki, MD, Incoming Chair of ACR Appropriateness Criteria. Journal of the American College of Radiology, 2017, 14, 723-724.	1.8	3
89	Comparative effectiveness of coronary artery stenosis and atherosclerotic plaque burden assessment for predicting 30-day revascularization and 2-year major adverse cardiac events. International Journal of Cardiovascular Imaging, 2020, 36, 2365-2375.	1.5	3
90	3D Printing of Open-Source Respirators (Including N95 Respirators), Surgical Masks, and Community Mask Designs to Address COVID-19 Shortages. , 2021, , 91-106.		3

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91	Literature and Media-Based Review of Personal Protective Equipment 3D Printing Efforts During COVID-19. , 2021, , 3-16.		3
92	Iodinated contrast injection data from a new technology. Radiologic Technology, 2012, 84, 120-5.	0.1	3
93	Technical note: Electrocardiogram electrode repositioning for 320-row coronary CT angiography in patients with regular and recurrent premature ventricular contractions. Journal of Cardiovascular Computed Tomography, 2014, 8, 13-18.	1.3	2
94	MRI Before Radiography for Patients With New Shoulder Conditions. Journal of the American College of Radiology, 2017, 14, 778-782.	1.8	2
95	ACR Appropriateness CriteriaÂ® Imaging of Deep Inferior Epigastric Arteries for Surgical Planning (Breast Reconstruction Surgery). Journal of the American College of Radiology, 2017, 14, S456-S461.	1.8	2
96	Early LV remodelling patterns in overweight and obesity: Feasibility of cardiac CT to detect early geometric left ventricular changes. Obesity Research and Clinical Practice, 2019, 13, 478-485.	1.8	2
97	Reference values for mid-diastolic right ventricular volume in population referred for cardiac computed tomography: An additional diagnostic value to cardiac computed tomography. Journal of Cardiovascular Computed Tomography, 2020, 14, 226-232.	1.3	2
98	A Metrics-Based Research Salary Award System and Its 9-Year Impact on Publication Productivity. Academic Radiology, 2022, 29, 728-735.	2.5	2
99	Sterilization of 3D Printed Parts Used as Medical Devices in the COVID-19 Pandemic. , 2021, , 107-113.		2
100	Comparing MRI pulse sequences for a specific clinical task. Emergency Radiology, 2002, 9, 178-180.	1.8	1
101	Determining Early Remodeling Patterns in Diabetes and Hypertension Using Cardiac Computed Tomography: The Feasibility of Assessing Early LV Geometric Changes. American Journal of Hypertension, 2020, 33, 496-504.	2.0	1
102	Patient-Friendly Summary of the ACR Appropriateness Criteria: Thoracic Aorta Interventional Planning and Follow-Up. Journal of the American College of Radiology, 2020, 17, e3.	1.8	1
103	3D Printing of Non-medical Devices During the COVID-19 Pandemic. , 2021, , 115-119.		1
104	Static CT myocardial perfusion imaging: image quality, artifacts including distribution and diagnostic performance compared to 82Rb PET. European Journal of Hybrid Imaging, 2022, 6, 1.	1.5	1
105	Immobilized contrast-enhanced MRI: Gadolinium-based long-term MR contrast enhancement of the vein graft vessel wall. Magnetic Resonance in Medicine, 2011, 65, spcone-spcone.	3.0	0
106	Early animal model evaluation of an implantable contrast agent to enhance magnetic resonance imaging of arterial bypass vein grafts. Acta Radiologica, 2018, 59, 1074-1081.	1.1	0
107	Patient-Friendly Summary of the ACR Appropriateness Criteria: Post-treatment Follow-up of Prostate Cancer. Journal of the American College of Radiology, 2019, 16, e13.	1.8	0
108	Patient-Friendly Summary of the ACR Appropriateness Criteria: Abdominal Aortic Aneurysm Follow-up (Without Repair). Journal of the American College of Radiology, 2020, 17, e13.	1.8	0

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109	3D Printing and Other Manufacturing During COVID-19: Success Stories and Lessons Learned by Makers atÂthe University of Cincinnati. , 2021, , 17-28.		0
110	3D Printing of Face Shields and Ear Tension Relief Devices During COVID-19 atÂthe Touro College of Osteopathic Medicine. , 2021, , 73-80.		0
111	Practical Frontline 3D Printing of Biomedical Equipment: From Design to Distributionâ€"A North American Experience. Lecture Notes in Bioengineering, 2022, , 1-13.	0.4	0
112	Patient-Friendly Summary of the ACR Appropriateness Criteria: Suspected Thoracic Aortic Aneurysm. Journal of the American College of Radiology, 2021, 18, e1.	1.8	0
113	Clinical Decision Support in Computerized Providers' Order Entry for Imaging Tests in Canada. Canadian Association of Radiologists Journal, 2017, 68, 357-358.	2.0	0