Brian J Bartholmai

List of Publications by Citations

112 papers	**3,450** citations	**35** h-index	**56** g-index
125 ext. papers	**4,419** ext. citations	**5.8** avg, IF	**5.19** L-index

#	Paper	IF	Citations
112	Incidence, prevalence, and clinical course of idiopathic pulmonary fibrosis: a population-based study. *Chest*, **2010**, 137, 129-37	5.3	332
111	The effects of changes in utilization and technological advancements of cross-sectional imaging on radiologist workload. *Academic Radiology*, **2015**, 22, 1191-8	4.3	132
110	Automated quantification of radiological patterns predicts survival in idiopathic pulmonary fibrosis. *European Respiratory Journal*, **2014**, 43, 204-12	13.6	129
109	Mortality associated with nephropathy after radiographic contrast exposure. *Mayo Clinic Proceedings*, **2008**, 83, 1095-100	6.4	126
108	Mortality prediction in idiopathic pulmonary fibrosis: evaluation of computer-based CT analysis with conventional severity measures. *European Respiratory Journal*, **2017**, 49,	13.6	119
107	Effect of Recombinant Human Pentraxin 2 vs Placebo on Change in Forced Vital Capacity in Patients With Idiopathic Pulmonary Fibrosis: A Randomized Clinical Trial. *JAMA - Journal of the American Medical Association*, **2018**, 319, 2299-2307	27.4	107
106	Automated Quantitative Computed Tomography Versus Visual Computed Tomography Scoring in Idiopathic Pulmonary Fibrosis: Validation Against Pulmonary Function. *Journal of Thoracic Imaging*, **2016**, 31, 304-11	5.6	99
105	Sodium bicarbonate is associated with an increased incidence of contrast nephropathy: a retrospective cohort study of 7977 patients at mayo clinic. *Clinical Journal of the American Society of Nephrology: CJASN*, **2008**, 3, 10-8	6.9	94
104	High resolution multidetector CT-aided tissue analysis and quantification of lung fibrosis. *Academic Radiology*, **2007**, 14, 772-87	4.3	93
103	Quantitative computed tomography imaging of interstitial lung diseases. *Journal of Thoracic Imaging*, **2013**, 28, 298-307	5.6	89
102	Predicting Outcomes in Idiopathic Pulmonary Fibrosis Using Automated Computed Tomographic Analysis. *American Journal of Respiratory and Critical Care Medicine*, **2018**, 198, 767-776	10.2	80
101	Are airflow obstruction and radiographic evidence of emphysema risk factors for lung cancer? A nested case-control study using quantitative emphysema analysis. *Chest*, **2010**, 138, 1295-302	5.3	75
100	Clinical significance of radiologic characterizations in COPD. *COPD: Journal of Chronic Obstructive Pulmonary Disease*, **2009**, 6, 459-67	2	75
99	Iodixanol versus low-osmolar contrast media for prevention of contrast induced nephropathy: meta-analysis of randomized, controlled trials. *Circulation: Cardiovascular Interventions*, **2010**, 3, 351-8	6	71
98	Collapsibility of lung volume by paired inspiratory and expiratory CT scans: correlations with lung function and mean lung density. *Academic Radiology*, **2010**, 17, 489-95	4.3	68
97	Predicting outcomes in rheumatoid arthritis related interstitial lung disease. *European Respiratory Journal*, **2019**, 53,	13.6	66
96	Airway count and emphysema assessed by chest CT imaging predicts clinical outcome in smokers. *Chest*, **2010**, 138, 880-7	5.3	60

95	Methods and challenges in quantitative imaging biomarker development. *Academic Radiology*, **2015**, 22, 25-32	4.3	58
94	Recombinant human pentraxin-2 therapy in patients with idiopathic pulmonary fibrosis: safety, pharmacokinetics and exploratory efficacy. *European Respiratory Journal*, **2016**, 47, 889-97	13.6	54
93	Clinical utility of quantitative imaging. *Academic Radiology*, **2015**, 22, 33-49	4.3	53
92	Noninvasive characterization of the histopathologic features of pulmonary nodules of the lung adenocarcinoma spectrum using computer-aided nodule assessment and risk yield (CANARY)--a pilot study. *Journal of Thoracic Oncology*, **2013**, 8, 452-60	8.9	53
91	Functional and prognostic effects when emphysema complicates idiopathic pulmonary fibrosis. *European Respiratory Journal*, **2017**, 50,	13.6	50
90	Computer-aided detection and diagnosis at the start of the third millennium. *Journal of Digital Imaging*, **2002**, 15, 59-68	5.3	49
89	Relationship of emphysema and airway disease assessed by CT to exercise capacity in COPD. *Respiratory Medicine*, **2010**, 104, 1145-51	4.6	46
88	Evaluation of computer-based computer tomography stratification against outcome models in connective tissue disease-related interstitial lung disease: a patient outcome study. *BMC Medicine*, **2016**, 14, 190	11.4	46
87	Understanding interpretive errors in radiologists learning computed tomography colonography. *Academic Radiology*, **2004**, 11, 750-6	4.3	43
86	Quantitative CT Analysis of Diffuse Lung Disease. *Radiographics*, **2020**, 40, 28-43	5.4	41
85	Noninvasive Computed Tomography-based Risk Stratification of Lung Adenocarcinomas in the National Lung Screening Trial. *American Journal of Respiratory and Critical Care Medicine*, **2015**, 192, 737-44	19.2	38
84	Predictors of idiopathic pulmonary fibrosis in absence of radiologic honeycombing: A cross sectional analysis in ILD patients undergoing lung tissue sampling. *Respiratory Medicine*, **2016**, 118, 88-95	4.6	38
83	The relationship between small pulmonary vascular alteration and aortic atherosclerosis in chronic obstructive pulmonary disease: quantitative CT analysis. *Academic Radiology*, **2011**, 18, 40-6	4.3	37
82	Pulmonary nodule characterization, including computer analysis and quantitative features. *Journal of Thoracic Imaging*, **2015**, 30, 139-56	5.6	36
81	An Ultrasound Surface Wave Technique for Assessing Skin and Lung Diseases. *Ultrasound in Medicine and Biology*, **2018**, 44, 321-331	3.5	36
80	Statin as a novel pharmacotherapy of pulmonary alveolar proteinosis. *Nature Communications*, **2018**, 9, 3127	17.4	35
79	Correlation of regional emphysema and lung cancer: a lung tissue research consortium-based study. *Journal of Thoracic Oncology*, **2014**, 9, 639-45	8.9	35
78	Iron deposition and increased alveolar septal capillary density in nonfibrotic lung tissue are associated with pulmonary hypertension in idiopathic pulmonary fibrosis. *Respiratory Research*, **2010**, 11, 37	7.3	35

77	Chronic hypersensitivity pneumonitis: identification of key prognostic determinants using automated CT analysis. *BMC Pulmonary Medicine*, **2017**, 17, 81	3.5	34
76	Serial automated quantitative CT analysis in idiopathic pulmonary fibrosis: functional correlations and comparison with changes in visual CT scores. *European Radiology*, **2018**, 28, 1318-1327	8	33
75	Development and validation of a radiological diagnosis model for hypersensitivity pneumonitis. *European Respiratory Journal*, **2018**, 52,	13.6	32
74	Gender influences Health-Related Quality of Life in IPF. *Respiratory Medicine*, **2010**, 104, 724-30	4.6	30
73	Unclassifiable-interstitial lung disease: Outcome prediction using CT and functional indices. *Respiratory Medicine*, **2017**, 130, 43-51	4.6	29
72	Experimental and quantitative imaging techniques in interstitial lung disease. *Thorax*, **2019**, 74, 611-619	7.3	28
71	Noninvasive risk stratification of lung adenocarcinoma using quantitative computed tomography. *Journal of Thoracic Oncology*, **2014**, 9, 1698-703	8.9	27
70	Assessment of Interstitial Lung Disease Using Lung Ultrasound Surface Wave Elastography: A Novel Technique With Clinicoradiologic Correlates. *Journal of Thoracic Imaging*, **2019**, 34, 313-319	5.6	25
69	Intrathoracic tracheal volume and collapsibility on inspiratory and end-expiratory ct scans correlations with lung volume and pulmonary function in 85 smokers. *Academic Radiology*, **2011**, 18, 299-305	4.3	24
68	Quantitative stratification of diffuse parenchymal lung diseases. *PLoS ONE*, **2014**, 9, e93229	3.7	22
67	Clinical correlations of immunophenotypic variations and the presence of trisomy 12 in B-cell chronic lymphocytic leukemia. *Cancer Genetics and Cytogenetics*, **1997**, 95, 173-7		21
66	Lung US Surface Wave Elastography in Interstitial Lung Disease Staging. *Radiology*, **2019**, 291, 479-484	20.5	20
65	ROC study of four LCD displays under typical medical center lighting conditions. *Journal of Digital Imaging*, **2006**, 19, 30-40	5.3	20
64	Combined pulmonary fibrosis and emphysema as a clinicoradiologic entity: Characterization of presenting lung fibrosis and implications for survival. *Respiratory Medicine*, **2019**, 146, 106-112	4.6	19
63	Likelihood of pulmonary hypertension in patients with idiopathic pulmonary fibrosis and emphysema. *Respirology*, **2018**, 23, 593-599	3.6	19
62	Syntactic and semantic errors in radiology reports associated with speech recognition software. *Health Informatics Journal*, **2017**, 23, 3-13	3	17
61	Spirometric assessment of emphysema presence and severity as measured by quantitative CT and CT-based radiomics in COPD. *Respiratory Research*, **2019**, 20, 101	7.3	17
60	Evaluation of visual and computer-based CT analysis for the identification of functional patterns of obstruction and restriction in hypersensitivity pneumonitis. *Respirology*, **2017**, 22, 1585-1591	3.6	17

59	Novel high-resolution computed tomography-based radiomic classifier for screen-identified pulmonary nodules in the National Lung Screening Trial. *PLoS ONE*, **2018**, 13, e0196910	3.7	17
58	Kurtosis and skewness of density histograms on inspiratory and expiratory CT scans in smokers. *COPD: Journal of Chronic Obstructive Pulmonary Disease*, **2011**, 8, 13-20	2	16
57	Immune signatures underlying post-acute COVID-19 lung sequelae. *Science Immunology*, **2021**, 6, eabk1741		16
56	Optimizing non-local means for denoising low dose CT **2009**,		14
55	Automated Computed Tomography analysis in the assessment of Idiopathic Pulmonary Fibrosis severity and progression. *European Journal of Radiology*, **2020**, 124, 108852	4.7	13
54	Implications of the updated Lung CT Screening Reporting and Data System (Lung-RADS version 1.1) for lung cancer screening. *Journal of Thoracic Disease*, **2020**, 12, 6966-6977	2.6	12
53	Mycophenolate mofetil for scleroderma-related interstitial lung disease: A real world experience. *PLoS ONE*, **2017**, 12, e0177107	3.7	12
52	Computed Tomography-Based Score Indicative of Lung Cancer Aggression (SILA) Predicts the Degree of Histologic Tissue Invasion and Patient Survival in Lung Adenocarcinoma Spectrum. *Journal of Thoracic Oncology*, **2019**, 14, 1419-1429	8.9	12
51	Reviews in radiology informatics: establishing a core informatics curriculum. *Journal of Digital Imaging*, **2004**, 17, 244-8	5.3	12
50	Stratification of long-term outcome in stable idiopathic pulmonary fibrosis by combining longitudinal computed tomography and forced vital capacity. *European Radiology*, **2020**, 30, 2669-2679	8	11
49	Longitudinal prediction of outcome in idiopathic pulmonary fibrosis using automated CT analysis. *European Respiratory Journal*, **2019**, 54,	13.6	11
48	SCAR R&D Symposium 2003: comparing the efficacy of 5-MP CRT versus 3-MP LCD in the evaluation of interstitial lung disease. *Journal of Digital Imaging*, **2004**, 17, 149-57	5.3	11
47	Correlation of pulmonary function and usual interstitial pneumonia computed tomography patterns in idiopathic pulmonary fibrosis. *Respiratory Medicine*, **2017**, 129, 152-157	4.6	10
46	Short-term Automated Quantification of Radiologic Changes in the Characterization of Idiopathic Pulmonary Fibrosis Versus Nonspecific Interstitial Pneumonia and Prediction of Long-term Survival. *Journal of Thoracic Imaging*, **2018**, 33, 124-131	5.6	10
45	Do we need to see to believe?-radiomics for lung nodule classification and lung cancer risk stratification. *Journal of Thoracic Disease*, **2020**, 12, 3303-3316	2.6	9
44	Laterality errors in radiology reports generated with and without voice recognition software: frequency and clinical significance. *Journal of the American College of Radiology*, **2013**, 10, 538-43	3.5	9
43	Novel Assessment of Interstitial Lung Disease Using the "Computer-Aided Lung Informatics for Pathology Evaluation and Rating" (CALIPER) Software System in Idiopathic Inflammatory Myopathies. *Lung*, **2017**, 195, 545-552	2.9	9
42	Selection of appropriate computed tomographic image reconstruction algorithms for a quantitative multicenter trial of diffuse lung disease. *Journal of Computer Assisted Tomography*, **2008**, 32, 233-7	2.2	9

41	Comparison of Total Lung Capacity Determined by Plethysmography With Computed Tomographic Segmentation Using CALIPER. *Journal of Thoracic Imaging*, **2017**, 32, 101-106	5.6	8
40	Artificial Intelligence in Radiology: A Call for Thoughtful Application. *Clinical and Translational Science*, **2020**, 13, 216-218	4.9	8
39	Computer-Aided Nodule Assessment and Risk Yield Risk Management of Adenocarcinoma: The Future of Imaging?. *Seminars in Thoracic and Cardiovascular Surgery*, **2016**, 28, 120-6	1.7	8
38	Computer-Aided Nodule Assessment and Risk Yield (CANARY) may facilitate non-invasive prediction of EGFR mutation status in lung adenocarcinomas. *Scientific Reports*, **2017**, 7, 17620	4.9	7
37	The electronic imaging technology specialist: the role of a new radiology subspecialty for the 21st century. *Journal of Digital Imaging*, **2002**, 15 Suppl 1, 184-8	5.3	7
36	Sensitivity of Thoracic Digital Tomosynthesis (DTS) for the Identification of Lung Nodules. *Journal of Digital Imaging*, **2016**, 29, 141-7	5.3	7
35	Syntactic and Semantic Errors in Radiology Reports Associated With Speech Recognition Software. *Studies in Health Technology and Informatics*, **2015**, 216, 922	0.5	7
34	Predicting lung mass density of patients with interstitial lung disease and healthy subjects using deep neural network and lung ultrasound surface wave elastography. *Journal of the Mechanical Behavior of Biomedical Materials*, **2020**, 104, 103682	4.1	6
33	Assessing the inter-observer variability of Computer-Aided Nodule Assessment and Risk Yield (CANARY) to characterize lung adenocarcinomas. *PLoS ONE*, **2018**, 13, e0198118	3.7	6
32	Processing of CT images for analysis of diffuse lung disease in the lung tissue research consortium **2008**,		6
31	Putting artificial intelligence (AI) on the spot: machine learning evaluation of pulmonary nodules. *Journal of Thoracic Disease*, **2020**, 12, 6954-6965	2.6	6
30	Quantitative analysis of lung sounds for monitoring idiopathic pulmonary fibrosis: a prospective pilot study. *European Respiratory Journal*, **2019**, 53,	13.6	6
29	Effect of automated image registration on radiologist interpretation. *Journal of Digital Imaging*, **2007**, 20, 105-13	5.3	5
28	Automated computed tomography quantification of fibrosis predicts prognosis in combined pulmonary fibrosis and emphysema in a real-world setting: a single-centre, retrospective study. *Respiratory Research*, **2020**, 21, 275	7.3	5
27	Automated Parenchymal Pattern Analysis of Treatment Responses in Pulmonary Alveolar Proteinosis. *American Journal of Respiratory and Critical Care Medicine*, **2019**, 199, 1151-1152	10.2	4
26	COVID-19: The Importance of Multidisciplinary Approach. *Academic Radiology*, **2020**, 27, 1327-1328	4.3	4
25	Assessment of interstitial lung disease using lung ultrasound surface wave elastography **2017**,		4
24	Nonlinear histogram binning for quantitative analysis of lung tissue fibrosis in high-resolution CT data **2007**,		4

23	Validation of the BRODERS classifier (Benign aggRessive nODule Evaluation using Radiomic Stratification), a novel HRCT-based radiomic classifier for indeterminate pulmonary nodules. *European Respiratory Journal*, **2021**, 57,	13.6	4
22	A quantitative method for measuring the changes of lung surface wave speed for assessing disease progression of interstitial lung disease. *Ultrasound in Medicine and Biology*, **2019**, 45, 741-748	3.5	4
21	Lung mass density prediction using machine learning based on ultrasound surface wave elastography and pulmonary function testing. *Journal of the Acoustical Society of America*, **2021**, 149, 1318	2.2	4
20	Referenceless stratification of parenchymal lung abnormalities. *Lecture Notes in Computer Science*, **2011**, 14, 223-30	0.9	3
19	Automated CT Analysis of Major Forms of Interstitial Lung Disease. *Journal of Clinical Medicine*, **2020**, 9,	5.1	3
18	Computer Aided Nodule Analysis and Risk Yield (CANARY) characterization of adenocarcinoma: radiologic biopsy, risk stratification and future directions. *Translational Lung Cancer Research*, **2018**, 7, 313-326	4.4	3
17	Imaging informatics: challenges in multi-site imaging trials. *Journal of Digital Imaging*, **2011**, 24, 151-9	5.3	2
16	3D MORPHOLOGICAL ANALYSIS OF LUNG PATHOLOGY **2007**,		2
15	Breathe New Life Into Your Chest CT Exams: Using Advanced Acquisition and Postprocessing Techniques. *Current Problems in Diagnostic Radiology*, **2019**, 48, 152-160	1.6	2
14	Cicatricial organizing pneumonia: a clinicopathologic and radiologic study on a cohort diagnosed by surgical lung biopsy at a single institution. *Human Pathology*, **2020**, 101, 58-63	3.7	1
13	Active relearning for robust supervised training of emphysema patterns. *Journal of Digital Imaging*, **2014**, 27, 548-55	5.3	1
12	Quantitative assessment of scleroderma using ultrasound surface wave elastography **2017**,		1
11	Automated segmentation of the lungs from high resolution CT images for quantitative study of chronic obstructive pulmonary diseases **2005**, 5744, 5		1
10	Pulmonary Low Attenuation Areas on CT in ANCA-associated Vasculitis: A quantitative and semi-quantitative analysis correlated with pulmonary function testing for obstructive airway disease. *Sarcoidosis Vasculitis and Diffuse Lung Diseases*, **2020**, 37, e2020016	1.1	1
9	Vessel-related structures predict UIP pathology in those with a non-IPF pattern on CT. *European Radiology*, **2021**, 31, 7295-7302	8	1
8	Appreciating the shades of gray: a case for Computer-Aided Nodule Assessment and Risk Yield (CANARY)-based risk stratification of lung adenocarcinomas. *Journal of Thoracic Disease*, **2016**, 8, E1438-E1440	2.6	1
7	Detail-on-demand visualization for lean understanding of lung abnormalities. *Studies in Health Technology and Informatics*, **2012**, 173, 362-8	0.5	1
6	Optimization of CT image reconstruction algorithms for the lung tissue research consortium (LTRC) **2006**, 6143, 942		0

5   High resolution multidetector CT aided tissue analysis and quantification of lung fibrosis **2006**, 6143, 931

4   Parametric modeling for quantitative analysis of pulmonary structure to function relationships **2005**, 5744, 184

3   Lung vessel volume evaluated with CALIPER software is an independent predictor of mortality in COVID-19 patients: a multicentric retrospective analysis.. *European Radiology*, **2022**, 1   8

2   Sex Differences in the Diameter of Extra-parenchymal Airways in a Large Cohort of Healthy Adult Non-smokers. *FASEB Journal*, **2019**, 33, 735.1   0.9

1   Evaluation of Computer-Aided Nodule Assessment and Risk Yield (CANARY) in Korean patients for prediction of invasiveness of ground-glass opacity nodule. *PLoS ONE*, **2021**, 16, e0253204   3.7