

Eric A Hoffman

List of Publications by Year in descending order

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604
papers

33,693
citations

3149

92
h-index

6282

158
g-index

615
all docs

615
docs citations

615
times ranked

22101
citing authors

#	ARTICLE	IF	CITATIONS
1	The Lung Image Database Consortium (LIDC) and Image Database Resource Initiative (IDRI): A Completed Reference Database of Lung Nodules on CT Scans. <i>Medical Physics</i> , 2011, 38, 915-931.	1.6	1,659
2	The National Lung Screening Trial: Overview and Study Design. <i>Radiology</i> , 2011, 258, 243-253.	3.6	992
3	Automatic lung segmentation for accurate quantitation of volumetric X-ray CT images. <i>IEEE Transactions on Medical Imaging</i> , 2001, 20, 490-498.	5.4	830
4	Upper airway and soft tissue anatomy in normal subjects and patients with sleep-disordered breathing. Significance of the lateral pharyngeal walls. <i>American Journal of Respiratory and Critical Care Medicine</i> , 1995, 152, 1673-1689.	2.5	704
5	Clinical Significance of Symptoms in Smokers with Preserved Pulmonary Function. <i>New England Journal of Medicine</i> , 2016, 374, 1811-1821.	13.9	526
6	Percent Emphysema, Airflow Obstruction, and Impaired Left Ventricular Filling. <i>New England Journal of Medicine</i> , 2010, 362, 217-227.	13.9	473
7	Dynamic Upper Airway Imaging during Awake Respiration in Normal Subjects and Patients with Sleep Disordered Breathing. <i>The American Review of Respiratory Disease</i> , 1993, 148, 1385-1400.	2.9	451
8	CT-Definable Subtypes of Chronic Obstructive Pulmonary Disease: A Statement of the Fleischner Society. <i>Radiology</i> , 2015, 277, 192-205.	3.6	423
9	Predictors of Mortality in Patients with Emphysema and Severe Airflow Obstruction. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2006, 173, 1326-1334.	2.5	392
10	Vocal tract area functions from magnetic resonance imaging. <i>Journal of the Acoustical Society of America</i> , 1996, 100, 537-554.	0.5	363
11	Lung Image Database Consortium: Developing a Resource for the Medical Imaging Research Community. <i>Radiology</i> , 2004, 232, 739-748.	3.6	345
12	Mucus plugs in patients with asthma linked to eosinophilia and airflow obstruction. <i>Journal of Clinical Investigation</i> , 2018, 128, 997-1009.	3.9	337
13	Impaired mucus detachment disrupts mucociliary transport in a piglet model of cystic fibrosis. <i>Science</i> , 2014, 345, 818-822.	6.0	332
14	Sex Differences in Severe Pulmonary Emphysema. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2007, 176, 243-252.	2.5	301
15	Practical reconstruction method for bioluminescence tomography. <i>Optics Express</i> , 2005, 13, 6756.	1.7	299
16	Association between Functional Small Airway Disease and FEV ₁ Decline in Chronic Obstructive Pulmonary Disease. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2016, 194, 178-184.	2.5	292
17	CT Super-Resolution GAN Constrained by the Identical, Residual, and Cycle Learning Ensemble (GAN-CIRCLE). <i>IEEE Transactions on Medical Imaging</i> , 2020, 39, 188-203.	5.4	289
18	CT-based geometry analysis and finite element models of the human and ovine bronchial tree. <i>Journal of Applied Physiology</i> , 2004, 97, 2310-2321.	1.2	286

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19	Airway Mucin Concentration as a Marker of Chronic Bronchitis. <i>New England Journal of Medicine</i> , 2017, 377, 911-922.	13.9	279
20	Design of the Subpopulations and Intermediate Outcomes in COPD Study (SPIROMICS): Table 1. <i>Thorax</i> , 2014, 69, 492-495.	2.7	277
21	Registration-based estimates of local lung tissue expansion compared to xenon CT measures of specific ventilation. <i>Medical Image Analysis</i> , 2008, 12, 752-763.	7.0	273
22	Characteristics of the turbulent laryngeal jet and its effect on airflow in the human intra-thoracic airways. <i>Respiratory Physiology and Neurobiology</i> , 2007, 157, 295-309.	0.7	268
23	Airway Remodeling Measured by Multidetector CT Is Increased in Severe Asthma and Correlates With Pathology. <i>Chest</i> , 2008, 134, 1183-1191.	0.4	260
24	A Multivariate Analysis of Risk Factors for the Air-Trapping Asthmatic Phenotype as Measured by Quantitative CT Analysis. <i>Chest</i> , 2009, 135, 48-56.	0.4	260
25	Quantification of Pulmonary Emphysema from Lung Computed Tomography Images. <i>American Journal of Respiratory and Critical Care Medicine</i> , 1997, 156, 248-254.	2.5	257
26	Severe Asthma. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2012, 185, 356-362.	2.5	242
27	Intrathoracic airway trees: segmentation and airway morphology analysis from low-dose CT scans. <i>IEEE Transactions on Medical Imaging</i> , 2005, 24, 1529-1539.	5.4	236
28	Association Between Long-term Exposure to Ambient Air Pollution and Change in Quantitatively Assessed Emphysema and Lung Function. <i>JAMA - Journal of the American Medical Association</i> , 2019, 322, 546.	3.8	236
29	Cigarette Smoking Is Associated with Subclinical Parenchymal Lung Disease. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2009, 180, 407-414.	2.5	227
30	Interstitial Lung Disease. <i>American Journal of Respiratory and Critical Care Medicine</i> , 1999, 159, 519-525.	2.5	220
31	Frequency of exacerbations in patients with chronic obstructive pulmonary disease: an analysis of the SPIROMICS cohort. <i>Lancet Respiratory Medicine</i> , 2017, 5, 619-626.	5.2	219
32	Association of sputum and blood eosinophil concentrations with clinical measures of COPD severity: an analysis of the SPIROMICS cohort. <i>Lancet Respiratory Medicine</i> , 2017, 5, 956-967.	5.2	211
33	Computer Recognition of Regional Lung Disease Patterns. <i>American Journal of Respiratory and Critical Care Medicine</i> , 1999, 160, 648-654.	2.5	209
34	Intramural myocardial shortening in hypertensive left ventricular hypertrophy with normal pump function. <i>Circulation</i> , 1994, 89, 122-131.	1.6	203
35	Segmentation and analysis of the human airway tree from three-dimensional X-ray CT images. <i>IEEE Transactions on Medical Imaging</i> , 2003, 22, 940-950.	5.4	202
36	Upper airway and soft tissue structural changes induced by CPAP in normal subjects. <i>American Journal of Respiratory and Critical Care Medicine</i> , 1996, 154, 1106-1116.	2.5	200

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37	MDCT-based 3-D texture classification of emphysema and early smoking related lung pathologies. IEEE Transactions on Medical Imaging, 2006, 25, 464-475.	5.4	198
38	Predictors of operative mortality and cardiopulmonary morbidity in the National Emphysema Treatment Trial. Journal of Thoracic and Cardiovascular Surgery, 2006, 131, 43-53.	0.4	190
39	Mass preserving nonrigid registration of CT lung images using cubic B-spline. Medical Physics, 2009, 36, 4213-4222.	1.6	185
40	At the Root: Defining and Halting Progression of Early Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2018, 197, 1540-1551.	2.5	185
41	Circumferential myocardial shortening in the normal human left ventricle. Assessment by magnetic resonance imaging using spatial modulation of magnetization.. Circulation, 1991, 84, 67-74.	1.6	181
42	Evaluation of the Upper Airway in Patients with Obstructive Sleep Apnea. Sleep, 1991, 14, 361-371.	0.6	181
43	SPIROMICS Protocol for Multicenter Quantitative Computed Tomography to Phenotype the Lungs. American Journal of Respiratory and Critical Care Medicine, 2016, 194, 794-806.	2.5	180
44	Characterization of the interstitial lung diseases via density-based and texture-based analysis of computed tomography images of lung structure and function1. Academic Radiology, 2003, 10, 1104-1118.	1.3	179
45	Extraction of Airways From CT (EXACT'09). IEEE Transactions on Medical Imaging, 2012, 31, 2093-2107.	5.4	173
46	Atlas-driven lung lobe segmentation in volumetric X-ray CT images. IEEE Transactions on Medical Imaging, 2006, 25, 1-16.	5.4	170
47	In vivo mouse studies with bioluminescence tomography. Optics Express, 2006, 14, 7801.	1.7	167
48	Accurate measurement of intrathoracic airways. IEEE Transactions on Medical Imaging, 1997, 16, 820-827.	5.4	163
49	Pulmonary Hypertension and Computed Tomography Measurement of Small Pulmonary Vessels in Severe Emphysema. American Journal of Respiratory and Critical Care Medicine, 2010, 181, 218-225.	2.5	157
50	Measurement of three-dimensional lung tree structures by using computed tomography. Journal of Applied Physiology, 1995, 79, 1687-1697.	1.2	153
51	State of the Art. A Structural and Functional Assessment of the Lung via Multidetector-Row Computed Tomography: Phenotyping Chronic Obstructive Pulmonary Disease. Proceedings of the American Thoracic Society, 2006, 3, 519-532.	3.5	143
52	A Study in Ventricular-Ventricular Interaction. Circulation, 1995, 92, 219-230.	1.6	143
53	Virtual bronchoscopy for three-dimensional pulmonary image assessment: state of the art and future needs.. Radiographics, 1998, 18, 761-778.	1.4	142
54	Three-Dimensional Human Airway Segmentation Methods for Clinical Virtual Bronchoscopy. Academic Radiology, 2002, 9, 1153-1168.	1.3	141

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55	Regional Deposition of Particles in an Image-Based Airway Model: Large-Eddy Simulation and Left-Right Lung Ventilation Asymmetry. <i>Aerosol Science and Technology</i> , 2011, 45, 11-25.	1.5	141
56	Pulmonary fibrosis 4 months after COVID-19 is associated with severity of illness and blood leucocyte telomere length. <i>Thorax</i> , 2021, 76, 1242-1245.	2.7	139
57	Matching and anatomical labeling of human airway tree. <i>IEEE Transactions on Medical Imaging</i> , 2005, 24, 1540-1547.	5.4	138
58	Computer-aided Classification of Interstitial Lung Diseases Via MDCT: 3D Adaptive Multiple Feature Method (3D AMFM). <i>Academic Radiology</i> , 2006, 13, 969-978.	1.3	138
59	Blood eosinophil count thresholds and exacerbations in patients with chronic obstructive pulmonary disease. <i>Journal of Allergy and Clinical Immunology</i> , 2018, 141, 2037-2047.e10.	1.5	138
60	Pulmonary Emphysema Subtypes on Computed Tomography: The MESA COPD Study. <i>American Journal of Medicine</i> , 2014, 127, 94.e7-94.e23.	0.6	137
61	Genetic Determinants of Emphysema Distribution in the National Emphysema Treatment Trial. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2007, 176, 42-48.	2.5	136
62	Late ventricular geometry and performance changes of functional single ventricle throughout staged fontan reconstruction assessed by magnetic resonance imaging. <i>Journal of the American College of Cardiology</i> , 1996, 28, 212-221.	1.2	135
63	The effects of serotonin antagonists in an animal model of sleep-disordered breathing.. <i>American Journal of Respiratory and Critical Care Medicine</i> , 1996, 153, 776-786.	2.5	135
64	Quantitative analysis of pulmonary airway tree structures. <i>Computers in Biology and Medicine</i> , 2006, 36, 974-996.	3.9	134
65	Longitudinal Phenotypes and Mortality in Preserved Ratio Impaired Spirometry in the COPD Gene Study. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2018, 198, 1397-1405.	2.5	132
66	Simulation of pulmonary air flow with a subject-specific boundary condition. <i>Journal of Biomechanics</i> , 2010, 43, 2159-2163.	0.9	131
67	Supine and prone differences in regional lung density and pleural pressure gradients in the human lung with constant shape. <i>Journal of Applied Physiology</i> , 2009, 107, 912-920.	1.2	130
68	On intra- and intersubject variabilities of airflow in the human lungs. <i>Physics of Fluids</i> , 2009, 21, 101901.	1.6	128
69	Pulmonary Microvascular Blood Flow in Mild Chronic Obstructive Pulmonary Disease and Emphysema. The MESA COPD Study. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2015, 192, 570-580.	2.5	127
70	A mouse optical simulation environment (MOSE) to investigate bioluminescent phenomena in the living mouse with the monte carlo method1. <i>Academic Radiology</i> , 2004, 11, 1029-1038.	1.3	126
71	Establishing a Normative Atlas of the Human Lung. <i>Academic Radiology</i> , 2003, 10, 255-265.	1.3	124
72	Subclinical atherosclerosis, airflow obstruction and emphysema: the MESA Lung Study. <i>European Respiratory Journal</i> , 2012, 39, 846-854.	3.1	123

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73	Endothelial Microparticles in Mild Chronic Obstructive Pulmonary Disease and Emphysema. The Multi-Ethnic Study of Atherosclerosis Chronic Obstructive Pulmonary Disease Study. American Journal of Respiratory and Critical Care Medicine, 2013, 188, 60-68.	2.5	122
74	Quantitative Computed Tomography of the Lungs and Airways in Healthy Nonsmoking Adults. Investigative Radiology, 2012, 47, 596-602.	3.5	121
75	Pulmonary Perfused Blood Volume with Dual-Energy CT as Surrogate for Pulmonary Perfusion Assessed with Dynamic Multidetector CT. Radiology, 2013, 267, 747-756.	3.6	116
76	Comparison of spatially matched airways reveals thinner airway walls in COPD. The Multi-Ethnic Study of Atherosclerosis (MESA) COPD Study and the Subpopulations and Intermediate Outcomes in COPD Study (SPIROMICS). Thorax, 2014, 69, 987-996.	2.7	114
77	COPDGene [®] 2019: Redefining the Diagnosis of Chronic Obstructive Pulmonary Disease. Chronic Obstructive Pulmonary Diseases (Miami, Fla), 2019, 6, 384-399.	0.5	112
78	High attenuation areas on chest computed tomography in community-dwelling adults: the MESA study. European Respiratory Journal, 2016, 48, 1442-1452.	3.1	110
79	Maximizing quantitative accuracy of lung airway lumen and wall measures obtained from X-ray CT imaging. Journal of Applied Physiology, 2003, 95, 1063-1075.	1.2	109
80	Intestinal CFTR expression alleviates meconium ileus in cystic fibrosis pigs. Journal of Clinical Investigation, 2013, 123, 2685-2693.	3.9	109
81	Infection Is Not Required for Mucoinflammatory Lung Disease in CFTR-Knockout Ferrets. American Journal of Respiratory and Critical Care Medicine, 2018, 197, 1308-1318.	2.5	108
82	Assessment of the pulmonary structure-function relationship and clinical outcomes measures: Quantitative volumetric CT of the lung. Academic Radiology, 1997, 4, 758-776.	1.3	104
83	Association of Dysanapsis With Chronic Obstructive Pulmonary Disease Among Older Adults. JAMA - Journal of the American Medical Association, 2020, 323, 2268.	3.8	104
84	Rule-based detection of intrathoracic airway trees. IEEE Transactions on Medical Imaging, 1996, 15, 314-326.	5.4	103
85	Genome-wide Association Study Identifies <i>BICD1</i> as a Susceptibility Gene for Emphysema. American Journal of Respiratory and Critical Care Medicine, 2011, 183, 43-49.	2.5	103
86	Assessment of morphometry of pulmonary acini in mouse lungs by nondestructive imaging using multiscale microcomputed tomography. Proceedings of the National Academy of Sciences of the United States of America, 2012, 109, 17105-17110.	3.3	103
87	Variation in the Percent of Emphysema-like Lung in a Healthy, Nonsmoking Multiethnic Sample. The MESA Lung Study. Annals of the American Thoracic Society, 2014, 11, 898-907.	1.5	102
88	Idiopathic Pulmonary Fibrosis: The Association between the Adaptive Multiple Features Method and Fibrosis Outcomes. American Journal of Respiratory and Critical Care Medicine, 2017, 195, 921-929.	2.5	102
89	Computed Tomographic Biomarkers in Idiopathic Pulmonary Fibrosis. The Future of Quantitative Analysis. American Journal of Respiratory and Critical Care Medicine, 2019, 199, 12-21.	2.5	102
90	Validation of in vivo myocardial strain measurement by magnetic resonance tagging with sonomicrometry. Journal of the American College of Cardiology, 2001, 38, 555-561.	1.2	101

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91	Imaging Advances in Chronic Obstructive Pulmonary Disease. Insights from the Genetic Epidemiology of Chronic Obstructive Pulmonary Disease (COPDGene) Study. American Journal of Respiratory and Critical Care Medicine, 2019, 199, 286-301.	2.5	100
92	Long-Residence-Time Nano-Scale Liposomal Iohexol for X-ray-Based Blood Pool Imaging. Academic Radiology, 2003, 10, 475-483.	1.3	98
93	CT-measured regional specific volume change reflects regional ventilation in supine sheep. Journal of Applied Physiology, 2008, 104, 1177-1184.	1.2	97
94	The Role of Chest Computed Tomography in the Evaluation and Management of the Patient with Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2017, 196, 1372-1379.	2.5	97
95	Subsecond Multisection CT of Regional Pulmonary Ventilation. Academic Radiology, 2002, 9, 130-146.	1.3	95
96	Heterogeneity of pulmonary perfusion as a mechanistic image-based phenotype in emphysema susceptible smokers. Proceedings of the National Academy of Sciences of the United States of America, 2010, 107, 7485-7490.	3.3	95
97	Mechanics of the Single Left Ventricle. Circulation, 1998, 98, 330-338.	1.6	94
98	The effects of geometry on airflow in the acinar region of the human lung. Journal of Biomechanics, 2009, 42, 1635-1642.	0.9	94
99	Lung imaging in asthmatic patients: The picture is clearer. Journal of Allergy and Clinical Immunology, 2011, 128, 467-478.	1.5	94
100	Segmentation of intrathoracic airway trees: a fuzzy logic approach. IEEE Transactions on Medical Imaging, 1998, 17, 489-497.	5.4	92
101	Reproducibility and Validity of Lung Density Measures from Cardiac CT Scans—The Multi-Ethnic Study of Atherosclerosis (MESA) Lung Study1. Academic Radiology, 2009, 16, 689-699.	1.3	92
102	The Lung Image Database Consortium (LIDC): An Evaluation of Radiologist Variability in the Identification of Lung Nodules on CT Scans. Academic Radiology, 2007, 14, 1409-1421.	1.3	91
103	Very Low-Dose (0.15 mGy) Chest CT Protocols Using the COPDGene 2 Test Object and a Third-Generation Dual-Source CT Scanner With Corresponding Third-Generation Iterative Reconstruction Software. Investigative Radiology, 2015, 50, 40-45.	3.5	91
104	Three-Dimensional Path Planning for Virtual Bronchoscopy. IEEE Transactions on Medical Imaging, 2004, 23, 1365-1379.	5.4	88
105	Common Genetic Polymorphisms Influence Blood Biomarker Measurements in COPD. PLoS Genetics, 2016, 12, e1006011.	1.5	88
106	CT Metrics of Airway Disease and Emphysema in Severe COPD. Chest, 2009, 136, 396-404.	0.4	87
107	Genome-Wide Study of Percent Emphysema on Computed Tomography in the General Population. The Multi-Ethnic Study of Atherosclerosis Lung/SNP Health Association Resource Study. American Journal of Respiratory and Critical Care Medicine, 2014, 189, 408-418.	2.5	87
108	Impaired Left Ventricular Filling in COPD and Emphysema: Is It the Heart or the Lungs?. Chest, 2013, 144, 1143-1151.	0.4	86

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109	Parametric Response Mapping Monitors Temporal Changes on Lung CT Scans in the Subpopulations and Intermediate Outcome Measures in COPD Study (SPIROMICS). <i>Academic Radiology</i> , 2015, 22, 186-194.	1.3	86
110	Air pollution and subclinical interstitial lung disease: the Multi-Ethnic Study of Atherosclerosis (MESA) airâ€“lung study. <i>European Respiratory Journal</i> , 2017, 50, 1700559.	3.1	86
111	A multiscale MDCT image-based breathing lung model with time-varying regional ventilation. <i>Journal of Computational Physics</i> , 2013, 244, 168-192.	1.9	85
112	Vocal tract area functions for an adult female speaker based on volumetric imaging. <i>Journal of the Acoustical Society of America</i> , 1998, 104, 471-487.	0.5	84
113	Using imaging as a biomarker for asthma. <i>Journal of Allergy and Clinical Immunology</i> , 2017, 139, 1-10.	1.5	83
114	Computational fluid dynamics. <i>IEEE Engineering in Medicine and Biology Magazine</i> , 2009, 28, 25-33.	1.1	81
115	Human airway branch variation and chronic obstructive pulmonary disease. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2018, 115, E974-E981.	3.3	80
116	Airway mucin MUC5AC and MUC5B concentrations and the initiation and progression of chronic obstructive pulmonary disease: an analysis of the SPIROMICS cohort. <i>Lancet Respiratory Medicine</i> , 2021, 9, 1241-1254.	5.2	80
117	Can Retinoic Acid Ameliorate the Physiologic and Morphologic Effects of Elastase Instillation in the Rat?. <i>Chest</i> , 2000, 117, 242S-244S.	0.4	79
118	The relationship of vocal tract shape to three voice qualities. <i>Journal of the Acoustical Society of America</i> , 2001, 109, 1651-1667.	0.5	79
119	Quantitative computed tomographic imagingâ€“based clustering differentiates asthmatic subgroups with distinctive clinical phenotypes. <i>Journal of Allergy and Clinical Immunology</i> , 2017, 140, 690-700.e8.	1.5	79
120	Statistical Interior Tomography. <i>IEEE Transactions on Medical Imaging</i> , 2011, 30, 1116-1128.	5.4	77
121	Registration-based assessment of regional lung function via volumetric CT images of normal subjects vs. severe asthmatics. <i>Journal of Applied Physiology</i> , 2013, 115, 730-742.	1.2	77
122	Quantitative Dual-Energy Computed Tomography Supports a Vascular Etiology of Smoking-induced Inflammatory Lung Disease. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2016, 193, 652-661.	2.5	77
123	Evaluation of Lung MDCT Nodule Annotation Across Radiologists and Methods. <i>Academic Radiology</i> , 2006, 13, 1254-1265.	1.3	76
124	Pulmonary Hyperinflation and Left Ventricular Mass. <i>Circulation</i> , 2013, 127, 1503-1511.	1.6	76
125	Cor Pulmonale Parvus in Chronic Obstructive Pulmonary Disease and Emphysema. <i>Journal of the American College of Cardiology</i> , 2014, 64, 2000-2009.	1.2	76
126	Percent Emphysema and Right Ventricular Structure and Function. <i>Chest</i> , 2013, 144, 136-144.	0.4	75

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127	Lung structure phenotype variation in inbred mouse strains revealed through in vivo micro-CT imaging. <i>Journal of Applied Physiology</i> , 2010, 109, 1960-1968.	1.2	74
128	Segmentation and Quantitative Analysis of Intrathoracic Airway Trees from Computed Tomography Images. <i>Proceedings of the American Thoracic Society</i> , 2005, 2, 484-487.	3.5	73
129	Functional Imaging: CT and MRI. <i>Clinics in Chest Medicine</i> , 2008, 29, 195-216.	0.8	73
130	Airway Wall Stiffening Increases Peak Wall Shear Stress: A Fluid-Structure Interaction Study in Rigid and Compliant Airways. <i>Annals of Biomedical Engineering</i> , 2010, 38, 1836-1853.	1.3	73
131	Cluster analysis in severe emphysema subjects using phenotype and genotype data: an exploratory investigation. <i>Respiratory Research</i> , 2010, 11, 30.	1.4	72
132	Association Between Emphysema-like Lung on Cardiac Computed Tomography and Mortality in Persons Without Airflow Obstruction. <i>Annals of Internal Medicine</i> , 2014, 161, 863.	2.0	72
133	Mucus Plugs and Emphysema in the Pathophysiology of Airflow Obstruction and Hypoxemia in Smokers. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2021, 203, 957-968.	2.5	71
134	Differences in regional wash-in and wash-out time constants for xenon-CT ventilation studies. <i>Respiratory Physiology and Neurobiology</i> , 2005, 148, 65-83.	0.7	68
135	Computed Tomographic-Based Quantification of Emphysema and Correlation to Pulmonary Function and Mechanics. <i>COPD: Journal of Chronic Obstructive Pulmonary Disease</i> , 2008, 5, 177-186.	0.7	68
136	Ultra-low Dose Lung CT Perfusion Regularized by a Previous Scan. <i>Academic Radiology</i> , 2009, 16, 363-373.	1.3	68
137	The comprehensive imaging-based analysis of the lung. <i>Academic Radiology</i> , 2004, 11, 1370-1380.	1.3	67
138	Quantitative assessment of multiscale structural and functional alterations in asthmatic populations. <i>Journal of Applied Physiology</i> , 2015, 118, 1286-1298.	1.2	67
139	Association Between Expiratory Central Airway Collapse and Respiratory Outcomes Among Smokers. <i>JAMA - Journal of the American Medical Association</i> , 2016, 315, 498.	3.8	67
140	Multiscale image-based modeling and simulation of gas flow and particle transport in the human lungs. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2013, 5, 643-655.	6.6	66
141	Segmentation of Pulmonary Vascular Trees from Thoracic 3D CT Images. <i>International Journal of Biomedical Imaging</i> , 2009, 2009, 1-11.	3.0	65
142	Assessing mucociliary transport of single particles in vivo shows variable speed and preference for the ventral trachea in newborn pigs. <i>Proceedings of the National Academy of Sciences of the United States of America</i> , 2014, 111, 2355-2360.	3.3	65
143	Numerical Study of High-Frequency Oscillatory Air Flow and Convective Mixing in a CT-Based Human Airway Model. <i>Annals of Biomedical Engineering</i> , 2010, 38, 3550-3571.	1.3	64
144	Development of Quantitative Computed Tomography Lung Protocols. <i>Journal of Thoracic Imaging</i> , 2013, 28, 266-271.	0.8	64

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145	Computed Tomography Studies of Lung Ventilation and Perfusion. Proceedings of the American Thoracic Society, 2005, 2, 492-498.	3.5	63
146	The interdependent contributions of gravitational and structural features to perfusion distribution in a multiscale model of the pulmonary circulation. Journal of Applied Physiology, 2011, 110, 943-955.	1.2	63
147	Reconsidering the Utility of Race-Specific Lung Function Prediction Equations. American Journal of Respiratory and Critical Care Medicine, 2022, 205, 819-829.	2.5	63
148	Matching pulmonary structure and perfusion via combined dynamic multislice CT and thin-slice high-resolution CT. Computerized Medical Imaging and Graphics, 1995, 19, 101-112.	3.5	61
149	Per cent emphysema is associated with respiratory and lung cancer mortality in the general population: a cohort study. Thorax, 2016, 71, 624-632.	2.7	61
150	Air Trapping and Airflow Obstruction in Newborn Cystic Fibrosis Piglets. American Journal of Respiratory and Critical Care Medicine, 2013, 188, 1434-1441.	2.5	60
151	Obstructive Sleep Apnea and Subclinical Interstitial Lung Disease in the Multi-Ethnic Study of Atherosclerosis (MESA). Annals of the American Thoracic Society, 2017, 14, 1786-1795.	1.5	60
152	Pulmonary CT and MRI phenotypes that help explain chronic pulmonary obstruction disease pathophysiology and outcomes. Journal of Magnetic Resonance Imaging, 2016, 43, 544-557.	1.9	59
153	Rheumatoid arthritis-associated autoantibodies and subclinical interstitial lung disease: the Multi-Ethnic Study of Atherosclerosis. Thorax, 2016, 71, 1082-1090.	2.7	59
154	Computed Tomography Measure of Lung at Risk and Lung Function Decline in Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2017, 196, 569-576.	2.5	59
155	Age and Small Airway Imaging Abnormalities in Subjects with and without Airflow Obstruction in SPIROMICS. American Journal of Respiratory and Critical Care Medicine, 2017, 195, 464-472.	2.5	59
156	Machine learning approach for distinguishing malignant and benign lung nodules utilizing standardized perinodular parenchymal features from CT. Medical Physics, 2019, 46, 3207-3216.	1.6	59
157	Automated segmentation of pulmonary vascular tree from 3D CT images. , 2004, , .		58
158	High-Attenuation Areas on Chest Computed Tomography and Clinical Respiratory Outcomes in Community-Dwelling Adults. American Journal of Respiratory and Critical Care Medicine, 2017, 196, 1434-1442.	2.5	58
159	CT-based assessment of regional pulmonary microvascular blood flow parameters. Journal of Applied Physiology, 2003, 94, 2483-2493.	1.2	57
160	Registration-Based Lung Mechanical Analysis of Chronic Obstructive Pulmonary Disease (COPD) Using a Supervised Machine Learning Framework. Academic Radiology, 2013, 20, 527-536.	1.3	57
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