Mark Oliver WielpÃ¼tz

List of Publications by Year
in descending order

110 papers	3,138 citations	136885 32 h-index	189801 50 g-index
122 all docs	122 docs citations	122 times ranked	3064 citing authors

#	Article	IF	Citations
1	Magnetic Resonance Imaging Detects Changes in Structure and Perfusion, and Response to Therapy in Early Cystic Fibrosis Lung Disease. American Journal of Respiratory and Critical Care Medicine, 2014, 189, 956-965.	2.5	228
2	Comparison of Lung Clearance Index and Magnetic Resonance Imaging for Assessment of Lung Disease in Children with Cystic Fibrosis. American Journal of Respiratory and Critical Care Medicine, 2017, 195, 349-359.	2.5	169
3	Morphologic and functional scoring of cystic fibrosis lung disease using MRI. European Journal of Radiology, 2012, 81, 1321-1329.	1.2	163
4	Randomized Study on Early Detection of Lung Cancer with MSCT in Germany: Results of the First 3 Years of Follow-up After Randomization. Journal of Thoracic Oncology, 2015, 10, 890-896.	0.5	131
5	MRI of the lung â€“ state of the art. Diagnostic and Interventional Radiology, 2011, 18, 344-53.	0.7	119
6	Preventive Inhalation of Hypertonic Saline in Infants with Cystic Fibrosis (PRESIS). A Randomized, Double-Blind, Controlled Study. American Journal of Respiratory and Critical Care Medicine, 2019, 199, 1238-1248.	2.5	96
7	Imaging lung perfusion. Journal of Applied Physiology, 2012, 113, 328-339.	1.2	86
8	Prognostic Impact of CT-Quantified Muscle and Fat Distribution before and after First-Line-Chemotherapy in Lung Cancer Patients. PLoS ONE, 2017, 12, e0169136.	1.1	85
9	Imaging of Cystic Fibrosis Lung Disease and Clinical Interpretation. RoFo Fortschritte Auf Dem Gebiet Der Rontgenstrahlen Und Der Bildgebenden Verfahren, 2016, 188, 834-845.	0.7	77
10	Multicentre standardisation of chest MRI as radiation-free outcome measure of lung disease in young children with cystic fibrosis. Journal of Cystic Fibrosis, 2018, 17, 518-527.	0.3	68
11	Automatic Airway Analysis on Multidetector Computed Tomography in Cystic Fibrosis. Journal of Thoracic Imaging, 2013, 28, 104-113.	0.8	66
12	Effects of Lumacaftorâ€“Ivacaftor on Lung Clearance Index, Magnetic Resonance Imaging, and Airway Microbiome in Phe508del Homozygous Patients with Cystic Fibrosis. Annals of the American Thoracic Society, 2021, 18, 971-980.	1.5	65
13	Current state of the art MRI for the longitudinal assessment of cystic fibrosis. Journal of Magnetic Resonance Imaging, 2020, 52, 1306-1320.	1.9	53
14	Morphologic Characterization of Pulmonary Nodules With Ultrashort TE MRI at 3T. American Journal of Roentgenology, 2018, 210, 1216-1225.	1.0	52
15	Conditional deletion of Nedd4-2 in lung epithelial cells causes progressive pulmonary fibrosis in adult mice. Nature Communications, 2020, 11, 2012.	5.8	52
16	Computed Tomographic Imaging of the Airways in COPD and Asthma. Journal of Thoracic Imaging, 2011, 26, 290-300.	0.8	51
17	Morphomolecular motifs of pulmonary neoangiogenesis in interstitial lung diseases. European Respiratory Journal, 2020, 55, 1900933.	3.1	51
18	Functional Lung MRI in Chronic Obstructive Pulmonary Disease: Comparison of T1 Mapping, Oxygen-Enhanced T1 Mapping and Dynamic Contrast Enhanced Perfusion. PLoS ONE, 2015, 10, e0121520.	1.1	49

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19	Effects of Elexacaftor/Tezacaftor/Ivacaftor Therapy on Lung Clearance Index and Magnetic Resonance Imaging in Patients with Cystic Fibrosis and One or Two F508del Alleles. American Journal of Respiratory and Critical Care Medicine, 2022, 206, 311-320.	2.5	49
20	In vivo monitoring of cystic fibrosis-like lung disease in mice by volumetric computed tomography. European Respiratory Journal, 2011, 38, 1060-1070.	3.1	48
21	Radiological Diagnosis in Lung Disease. Deutsches Ärzteblatt International, 2014, 111, 181-7.	0.6	46
22	Early detection and sensitive monitoring of CF lung disease: Prospects of improved and safer imaging. Pediatric Pulmonology, 2016, 51, S49-S60.	1.0	44
23	Breathlessness and Restrictive Lung Disease: An Important Diabetes-Related Feature in Patients with Type 2 Diabetes. Respiration, 2018, 96, 29-40.	1.2	44
24	Magnetic Resonance Imaging of Cystic Fibrosis Lung Disease. Journal of Thoracic Imaging, 2013, 28, 151-159.	0.8	42
25	Magnetic Resonance Imaging Detects Progression of Lung Disease and Impact of Newborn Screening in Preschool Children with Cystic Fibrosis. American Journal of Respiratory and Critical Care Medicine, 2021, 204, 943-953.	2.5	41
26	Pulmonary Emphysema in Cystic Fibrosis Detected by Densitometry on Chest Multidetector Computed Tomography. PLoS ONE, 2013, 8, e73142.	1.1	40
27	Automatic lung segmentation method for MRI-based lung perfusion studies of patients with chronic obstructive pulmonary disease. International Journal of Computer Assisted Radiology and Surgery, 2015, 10, 403-417.	1.7	39
28	Magnetic resonance imaging detects improvements of pulmonary and paranasal sinus abnormalities in response to elexacaftor/tezacaftor/ivacaftor therapy in adults with cystic fibrosis. Journal of Cystic Fibrosis, 2022, 21, 1053-1060.	0.3	39
29	Incomplete pulmonary fissures evaluated by volumetric thin-section CT: Semi-quantitative evaluation for small fissure gaps identification, description of prevalence and severity of fissural defects. European Journal of Radiology, 2013, 82, 2365-2370.	1.2	35
30	Fully Automated Pulmonary Lobar Segmentation: Influence of Different Prototype Software Programs onto Quantitative Evaluation of Chronic Obstructive Lung Disease. PLoS ONE, 2016, 11, e0151498.	1.1	35
31	Outracing Lung Signal Decay â€“ Potential of Ultrashort Echo Time MRI. RoFo Fortschritte Auf Dem Gebiet Der Rontgenstrahlen Und Der Bildgebenden Verfahren, 2019, 191, 415-423.	0.7	35
32	Imaging modalities in cystic fibrosis. Current Opinion in Pulmonary Medicine, 2015, 21, 609-616.	1.2	34
33	Echo time dependence of observed T₁ in the human lung. Journal of Magnetic Resonance Imaging, 2015, 42, 610-616.	1.9	34
34	(NDRG2) Stimulates Amiloride-sensitive Na+ Currents in Xenopus laevis Oocytes and Fisher Rat Thyroid Cells. Journal of Biological Chemistry, 2007, 282, 28264-28273.	1.6	33
35	Novel Genes for Airway Wall Thickness Identified with Combined Genome-Wide Association and Expression Analyses. American Journal of Respiratory and Critical Care Medicine, 2015, 191, 547-556.	2.5	32
36	Quantitative CT detects progression in COPD patients with severe emphysema in a 3-month interval. European Radiology, 2020, 30, 2502-2512.	2.3	30

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37	Simultaneous Assessment of Airway Instability and Respiratory Dynamics with Low-Dose 4D-CT in Chronic Obstructive Pulmonary Disease: A Technical Note. Respiration, 2014, 87, 294-300.	1.2	29
38	Computer-aided detection of artificial pulmonary nodules using an ex vivo lung phantom: Influence of exposure parameters and iterative reconstruction. European Journal of Radiology, 2015, 84, 1005-1011.	1.2	28
39	Variation of Densitometry on Computed Tomography in COPD â€“ Influence of Different Software Tools. PLoS ONE, 2014, 9, e112898.	1.1	27
40	Quantitative CT detects changes in airway dimensions and air-trapping after bronchial thermoplasty for severe asthma. European Journal of Radiology, 2018, 107, 33-38.	1.2	27
41	Non-contrast enhanced magnetic resonance imaging detects mosaic signal intensity in early cystic fibrosis lung disease. European Journal of Radiology, 2018, 101, 178-183.	1.2	26
42	In vivo selfâ€gated ²³Na MRI at 7 T using an ovalâ€shaped body resonator. Magnetic Resonance in Medicine, 2018, 80, 1005-1019.	1.9	25
43	Effect of smoking cessation on quantitative computed tomography in smokers at risk in a lung cancer screening population. European Radiology, 2018, 28, 807-815.	2.3	25
44	Validation of automated lobe segmentation on paired inspiratory-expiratory chest CT in 8-14 year-old children with cystic fibrosis. PLoS ONE, 2018, 13, e0194557.	1.1	25
45	Midterm Reproducibility of Chest Magnetic Resonance Imaging in Adults with Clinically Stable Cystic Fibrosis and Chronic Obstructive Pulmonary Disease. American Journal of Respiratory and Critical Care Medicine, 2019, 200, 103-107.	2.5	25
46	CT volumetry of artificial pulmonary nodules using an ex vivo lung phantom: Influence of exposure parameters and iterative reconstruction on reproducibility. European Journal of Radiology, 2013, 82, 1577-1583.	1.2	24
47	Computed Tomography Imaging for Novel Therapies of Chronic Obstructive Pulmonary Disease. Journal of Thoracic Imaging, 2019, 34, 202-213.	0.8	23
48	Magnetic Resonance Imaging Detects Chronic Rhinosinusitis in Infants and Preschool Children with Cystic Fibrosis. Annals of the American Thoracic Society, 2020, 17, 714-723.	1.5	23
49	Magnetic resonance angiography for the primary diagnosis of pulmonary embolism: A review from the international workshop for pulmonary functional imaging. World Journal of Radiology, 2018, 10, 52-64.	0.5	22
50	Comparison of lung clearance index determined by washout of N2 and SF6 in infants and preschool children with cystic fibrosis. Journal of Cystic Fibrosis, 2019, 18, 399-406.	0.3	21
51	Optical coherence tomography detects structural abnormalitiesof the nasal mucosa in patients with cystic fibrosis. Journal of Cystic Fibrosis, 2016, 15, 216-222.	0.3	19
52	Rapid 3D in vivo 1H human lung respiratory imaging at 1.5â€‰T using ultraâ€fast balanced steadyâ€state free precession. Magnetic Resonance in Medicine, 2017, 78, 1059-1069.	1.9	19
53	Longitudinal airway remodeling in active and past smokers in a lung cancer screening population. European Radiology, 2019, 29, 2968-2980.	2.3	19
54	CFTR Modulator Therapy with Lumacaftor/Ivacaftor Alters Plasma Concentrations of Lipid-Soluble Vitamins A and E in Patients with Cystic Fibrosis. Antioxidants, 2021, 10, 483.	2.2	19

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55	Reproducibility and comparison of oxygen-enhanced T1 quantification in COPD and asthma patients. PLoS ONE, 2017, 12, e0172479.	1.1	18
56	The value of chest magnetic resonance imaging compared to chest radiographs with and without additional lung ultrasound in children with complicated pneumonia. PLoS ONE, 2020, 15, e0230252.	1.1	18
57	Quantification of pulmonary perfusion abnormalities using DCE-MRI in COPD: comparison with quantitative CT and pulmonary function. European Radiology, 2022, 32, 1879-1890.	2.3	18
58	Towards synchrotron phase-contrast lung imaging in patients â€“ a proof-of-concept study on porcine lungs in a human-scale chest phantom. Journal of Synchrotron Radiation, 2018, 25, 1827-1832.	1.0	17
59	Echo Timeâ€Dependence of Observed Lung <scp>T₁</scp> in Patients With Cystic Fibrosis and Correlation With Clinical Metrics. Journal of Magnetic Resonance Imaging, 2020, 52, 1645-1654.	1.9	17
60	Morpho-Functional 1H-MRI of the Lung in COPD: Short-Term Test-Retest Reliability. PLoS ONE, 2015, 10, e0137282.	1.1	15
61	Influence of exposure parameters and iterative reconstruction on automatic airway segmentation and analysis on MDCTâ€”An ex vivo phantom study. PLoS ONE, 2017, 12, e0182268.	1.1	15
62	Ten years of chest MRI for patients with cystic fibrosis. Der Radiologe, 2019, 59, 10-20.	1.7	14
63	Mesopolysaccharides: The extracellular surface layer of visceral organs. PLoS ONE, 2020, 15, e0238798.	1.1	13
64	Improved detection of air trapping on expiratory computed tomography using deep learning. PLoS ONE, 2021, 16, e0248902.	1.1	13
65	MRI accelerating progress in functional assessment of cystic fibrosis lung disease. Journal of Cystic Fibrosis, 2017, 16, 165-167.	0.3	12
66	Fully automated lobe-based airway taper index calculation in a low dose MDCT CF study over 4 time-points. Proceedings of SPIE, 2017, , .	0.8	12
67	Design and application of an MR reference phantom for multicentre lung imaging trials. PLoS ONE, 2018, 13, e0199148.	1.1	11
68	Noncontrast Chest Computed Tomographic Imaging of Obesity and the Metabolic Syndrome. Journal of Thoracic Imaging, 2019, 34, 126-135.	0.8	10
69	Influence of Inspiratory/Expiratory CT Registration on Quantitative Air Trapping. Academic Radiology, 2019, 26, 1202-1214.	1.3	10
70	Towards quantitative perfusion MRI of the lung in COPD: The problem of short-term repeatability. PLoS ONE, 2018, 13, e0208587.	1.1	9
71	Increased Inflammatory Markers Detected in Nasal Lavage Correlate with Paranasal Sinus Abnormalities at MRI in Adolescent Patients with Cystic Fibrosis. Antioxidants, 2021, 10, 1412.	2.2	8
72	Similarities in the Computed Tomography Appearance in Î±1-Antitrypsin Deficiency and Smoking-Related Chronic Obstructive Pulmonary Disease in a Smoking Collective. Respiration, 2018, 96, 231-239.	1.2	7

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73	Influence of acquisition settings and radiation exposure on CT lung densitometryâ€"An anthropomorphic ex vivo phantom study. PLoS ONE, 2020, 15, e0237434.	1.1	6
74	Making Contrast Material Obsolete: Functional Lung Imaging with MRI. Radiology, 2020, 296, 200-201.	3.6	6
75	Echo <scp>Timeâ€Dependent</scp> Observed Lung <scp>T₁</scp> in Patients With Chronic Obstructive Pulmonary Disease in Correlation With Quantitative Imaging and Clinical Indices. Journal of Magnetic Resonance Imaging, 2021, 54, 1562-1571.	1.9	6
76	Spirometryâ€based reconstruction of realâ€time cardiac MRI: Motion control and quantification of heartâ€"lung interactions. Magnetic Resonance in Medicine, 2021, 86, 2692-2702.	1.9	6
77	MA20.10 Lung Cancer Prediction Using Deep Learning Software: Validation on Independent Multi-Centre Data. Journal of Thoracic Oncology, 2018, 13, S428.	0.5	4
78	Case report: a rare cause of a hypervascular nodule in a noncirrhotic liver. Zeitschrift Fur Gastroenterologie, 2019, 57, 57-60.	0.2	4
79	Consolidated lung on contrast-enhanced chest CT: the use of spectral-detector computed tomography parameters in differentiating atelectasis and pneumonia. Heliyon, 2021, 7, e07066.	1.4	4
80	MRI of Pulmonary Nodules: Closing the Gap on CT. Radiology, 2022, 302, 707-708.	3.6	4
81	Pulmonary emphysema, osteoporosis, and unknown pulmonary hyperdensities. Intensivmedizin Und Notfallmedizin, 2011, 48, 53-56.	0.2	3
82	Optimizing airway wall segmentation and quantification by reducing the influence of adjacent vessels and intravascular contrast material with a modified integral-based algorithm in quantitative computed tomography. PLoS ONE, 2020, 15, e0237939.	1.1	3
83	Improving pulmonary lobe segmentation on expiratory CTs by using aligned inspiratory CTs. , 2019, , .		3
84	Percutaneous Treatment of Biliary Cast Syndrome After Orthotopic Liver Transplantation: Comparison of Mechanical Versus Hydraulic Rheolytic Cast Extraction. CardioVascular and Interventional Radiology, 2011, 34, 998-1005.	0.9	2
85	Influence of fissure integrity on quantitative CT and emphysema distribution in emphysema-type COPD using a dedicated COPD software. European Journal of Radiology, 2017, 95, 293-299.	1.2	2
86	GOLD stage predicts thoracic aortic calcifications in patients with COPD. Experimental and Therapeutic Medicine, 2019, 17, 967-973.	0.8	2
87	Percutaneous Embolization of Biliary Leaks: A Systematic Interdisciplinary Review and Proposal for a New Classification. Digestive Disease Interventions, 2020, 04, 214-222.	0.3	2
88	Simultaneous presence of the â€œbullseyeâ€•and â€œreversed haloâ€•sign at CT of COVID-19 pneumonia: A case report. Radiology Case Reports, 2021, 16, 2442-2446.	0.2	2
89	Randomized, double-blind, controlled trial of preventive inhalation of hypertonic saline in infants with CF (PRESIS). , 2018, , .		2
90	CT of the Airways. Medical Radiology, 2017, , 309-329.	0.0	1

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91	Reply to Verbanck and Vanderhelst: The Respective Roles of Lung Clearance Index and Magnetic Resonance Imaging in the Clinical Management of Patients with Cystic Fibrosis. American Journal of Respiratory and Critical Care Medicine, 2018, 197, 410-411.	2.5	1
92	P262 Effects of lumacaftor/ivacaftor therapy on lung disease detected by magnetic resonance imaging in F508del homozygous patients with cystic fibrosis. Journal of Cystic Fibrosis, 2019, 18, S131.	0.3	1
93	Intracardial PMMA bone cement embolism after kyphoplastyâ€"an unusual cause for sudden chest pain, hemothorax and hemopericardium. Medizinische Klinik - Intensivmedizin Und Notfallmedizin, 2021, 116, 61-64.	0.4	1
94	Progression of lung disease detected by MRI and impact of NBS in preschool children with cystic fibrosis. , 2019, , .		1
95	Validation of the ISGLS classification of bile leakage after pancreatic surgery: A rare but severe complication. European Journal of Surgical Oncology, 2022, 48, 2440-2447.	0.5	1
96	WS07.4 MBW and MRI as sensitive markers of stable CF lung disease and at exacerbation in children and adolescents. Journal of Cystic Fibrosis, 2015, 14, S13.	0.3	0
97	Authors' response: Letter to the Editor â€˜Comparison of lung clearance index determined by washout of N2 and SF6 in infants and preschool children with cystic fibrosisâ€™. Journal of Cystic Fibrosis, 2019, 18, e28-e29.	0.3	0
98	Artificial Intelligence for Interstitial Lung Disease: Proudly Supporting Radiologists Since 2021. Radiology, 2022, 302, 198-199.	3.6	0
99	Commentary: Expert Opinion to â€œImaging Bronchopulmonary Dysplasiaâ€"A Multimodality Updateâ€• Frontiers in Medicine, 2021, 8, 737724.	1.2	0
100	MBW and MRI as sensitive markers of stable CF lung disease and at exacerbation in children and adolescents. , 2015, , .		0
101	CT in Chronic Obstructive Pulmonary Disease/Pulmonary Emphysema. Medical Radiology, 2016, , 83-103.	0.0	0
102	LCI in young children with CF â€“ N2 or SF6?. , 2017, , .		0
103	Reduction of bronchial wall thickness and hyperinflation on quantitative CT after bronchial thermoplasty for severe asthma. , 2017, , .		0
104	Development of pulmonary fibrosis in conditional Nedd4-2 deficient mice. , 2019, , .		0
105	LSC - 2019 - Development of pulmonary fibrosis in conditional Nedd4-2 deficient mice. , 2019, , .		0
106	Functional Assessment of Cystic Fibrosis Lung Disease. Medical Radiology, 2021, , 175-206.	0.0	0
107	Reply to: Contrast Enhanced Magnetic Resonance Imaging Does Not Detect a Progression in Lung Morphological Score in Preschool Children with Cystic Fibrosis. American Journal of Respiratory and Critical Care Medicine, 2021, , .	2.5	0
108	Imaging cystic fibrosis lung disease with MRI. , 0, , 188-206.		0

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109	Imaging Biomarkers in Thoracic Oncology: Current Advances in the Use of Radiomics in Lung Cancer Patients and its Potential Use for Therapy Response Prediction and Monitoring. RoFo Fortschritte Auf Dem Gebiet Der Rontgenstrahlen Und Der Bildgebenden Verfahren, 2022, , .	0.7	0
110	Acquisition of a Dose Management System with Consideration ofÂMedico-Legal and Economic Aspects. RoFo Fortschritte Auf Dem Gebiet Der Rontgenstrahlen Und Der Bildgebenden Verfahren, 2022, 194, 363-372.	0.7	0