

# Wim Vos

## List of Publications by Year in descending order

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Version: 2024-02-01

50  
papers

1,740  
citations

257357

24  
h-index

289141

40  
g-index

51  
all docs

51  
docs citations

51  
times ranked

1712  
citing authors

#	ARTICLE	IF	CITATIONS
1	Validation of Computational Fluid Dynamics in CT-based Airway Models with SPECT/CT. <i>Radiology</i> , 2010, 257, 854-862.	3.6	150
2	A review in radiomics: Making personalized medicine a reality via routine imaging. <i>Medicinal Research Reviews</i> , 2022, 42, 426-440.	5.0	103
3	Functional imaging using computational fluid dynamics to predict treatment success of mandibular advancement devices in sleep-disordered breathing. <i>Journal of Biomechanics</i> , 2007, 40, 3708-3714.	0.9	99
4	Correlation between severity of sleep apnea and upper airway morphology based on advanced anatomical and functional imaging. <i>Journal of Biomechanics</i> , 2007, 40, 2207-2213.	0.9	99
5	Flow analyses in the lower airways: Patient-specific model and boundary conditions. <i>Medical Engineering and Physics</i> , 2008, 30, 872-879.	0.8	95
6	Longitudinal assessment of bleomycin-induced lung fibrosis by Micro-CT correlates with histological evaluation in mice. <i>Multidisciplinary Respiratory Medicine</i> , 2017, 12, 8.	0.6	72
7	Computational fluid dynamics can detect changes in airway resistance in asthmatics after acute bronchodilation. <i>Journal of Biomechanics</i> , 2008, 41, 106-113.	0.9	71
8	Upper airway imaging in pediatric obstructive sleep apnea syndrome. <i>Sleep Medicine Reviews</i> , 2015, 21, 59-71.	3.8	68
9	A case series on lung deposition analysis of inhaled medication using functional imaging based computational fluid dynamics in asthmatic patients: effect of upper airway morphology and comparison with <i>in vivo</i> data. <i>Inhalation Toxicology</i> , 2012, 24, 81-88.	0.8	54
10	The acute effect of budesonide/formoterol in COPD: a multi-slice computed tomography and lung function study. <i>European Respiratory Journal</i> , 2012, 40, 298-305.	3.1	51
11	Novel imaging techniques using computer methods for the evaluation of the upper airway in patients with sleep-disordered breathing: A comprehensive review. <i>Sleep Medicine Reviews</i> , 2008, 12, 437-447.	3.8	48
12	Novel Functional Imaging of Changes in Small Airways of Patients Treated with Extrafine Beclomethasone/Formoterol. <i>Respiration</i> , 2013, 86, 393-401.	1.2	47
13	The Effects of Extrafine Beclomethasone/Formoterol (BDP/F) on Lung Function, Dyspnea, Hyperinflation, and Airway Geometry in COPD Patients: Novel Insight Using Functional Respiratory Imaging. <i>Journal of Aerosol Medicine and Pulmonary Drug Delivery</i> , 2015, 28, 88-99.	0.7	46
14	Anatomical and functional changes in the upper airways of sleep apnea patients due to mandibular repositioning: A large scale study. <i>Journal of Biomechanics</i> , 2011, 44, 442-449.	0.9	42
15	The effects of long-term noninvasive ventilation in hypercapnic COPD patients: a randomized controlled pilot study. <i>International Journal of COPD</i> , 2011, 6, 615.	0.9	41
16	Functional imaging using computer methods to compare the effect of salbutamol and ipratropium bromide in patient-specific airway models of COPD. <i>International Journal of COPD</i> , 2011, 6, 637.	0.9	40
17	Functional respiratory imaging as a tool to assess upper airway patency in children with obstructive sleep apnea. <i>Sleep Medicine</i> , 2013, 14, 433-439.	0.8	38
18	The effect of roflumilast in addition to LABA/LAMA/ICS treatment in COPD patients. <i>European Respiratory Journal</i> , 2014, 44, 527-529.	3.1	38

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19	Patient-Specific Modeling of Regional Antibiotic Concentration Levels in Airways of Patients with Cystic Fibrosis: Are We Dosing High Enough?. PLoS ONE, 2015, 10, e0118454.	1.1	38
20	Pulmonary vascular effects of pulsed inhaled nitric oxide in COPD patients with pulmonary hypertension. International Journal of COPD, 2016, Volume 11, 1533-1541.	0.9	34
21	Correlation between the severity of sleep apnea and upper airway morphology in pediatric and adult patients. Current Opinion in Allergy and Clinical Immunology, 2010, 10, 26-33.	1.1	32
22	Effect of high-dose N-acetylcysteine on airway geometry, inflammation, and oxidative stress in COPD patients. International Journal of COPD, 2013, 8, 569.	0.9	32
23	Comparison of CT-based Lobar Ventilation with $^3\text{He}$ MR Imaging Ventilation Measurements. Radiology, 2016, 278, 585-592.	3.6	32
24	Development and Validation of an Automated Radiomic CT Signature for Detecting COVID-19. Diagnostics, 2021, 11, 41.	1.3	31
25	Dynamic flow characteristics in normal and asthmatic lungs. International Journal for Numerical Methods in Biomedical Engineering, 2015, 31, .	1.0	26
26	A method for quantitative analysis of regional lung ventilation using deformable image registration of CT and hybrid hyperpolarized gas/ $^1\text{H}$ MRI. Physics in Medicine and Biology, 2014, 59, 7267-7277.	1.6	24
27	Functional respiratory imaging (FRI) for optimizing therapy development and patient care. Expert Review of Respiratory Medicine, 2016, 10, 193-206.	1.0	24
28	Machine Learning Algorithms Utilizing Quantitative CT Features May Predict Eventual Onset of Bronchiolitis Obliterans Syndrome After Lung Transplantation. Academic Radiology, 2018, 25, 1201-1212.	1.3	24
29	A randomized study using functional respiratory imaging to characterize bronchodilator effects of glycopyrrolate/formoterol fumarate delivered by a metered dose inhaler using co-suspension delivery technology in patients with COPD. International Journal of COPD, 2018, Volume 13, 2673-2684.	0.9	21
30	Machine Learning Algorithms Utilizing Functional Respiratory Imaging May Predict COPD Exacerbations. Academic Radiology, 2019, 26, 1191-1199.	1.3	20
31	A Multimodal Imaging Approach Based on Micro-CT and Fluorescence Molecular Tomography for Longitudinal Assessment of Bleomycin-Induced Lung Fibrosis in Mice. Journal of Visualized Experiments, 2018, , .	0.2	19
32	Pathophysiological mechanism of long-term noninvasive ventilation in stable hypercapnic patients with COPD using functional respiratory imaging. International Journal of COPD, 2017, Volume 12, 2197-2205.	0.9	18
33	Acute effects of intrapulmonary percussive ventilation in COPD patients assessed by using conventional outcome parameters and a novel computational fluid dynamics technique. International Journal of COPD, 2012, 7, 667.	0.9	17
34	Functional respiratory imaging to assess the interaction between systemic roflumilast and inhaled ICS/LABA/LAMA. International Journal of COPD, 2016, 11, 263.	0.9	16
35	Use of functional respiratory imaging to characterize the effect of inhalation profile and particle size on lung deposition of inhaled corticosteroid/long-acting $\beta_2$ -agonists delivered via a pressurized metered-dose inhaler. Therapeutic Advances in Respiratory Disease, 2018, 12, 175346661876094.	1.0	16
36	Exploring PI3K $\hat{\imath}$ Molecular Pathways in Stable COPD and Following an Acute Exacerbation, Two Randomized Controlled Trials. International Journal of COPD, 2021, Volume 16, 1621-1636.	0.9	13

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37	The Role of Functional Respiratory Imaging in Treatment Selection of Children With Obstructive Sleep Apnea and Down Syndrome. <i>Journal of Clinical Sleep Medicine</i> , 2018, 14, 651-659.	1.4	12
38	An Inhaled PI3K $\gamma$ Inhibitor Improves Recovery in Acutely Exacerbating COPD Patients: A Randomized Trial. <i>International Journal of COPD</i> , 2021, Volume 16, 1607-1619.	0.9	12
39	Privacy preserving distributed learning classifiers – Sequential learning with small sets of data. <i>Computers in Biology and Medicine</i> , 2021, 136, 104716.	3.9	12
40	Particle Deposition in Airways of Chronic Respiratory Patients Exposed to an Urban Aerosol. <i>Environmental Science &amp; Technology</i> , 2012, 46, 12162-12169.	4.6	11
41	Predicting the effect of treatment in paediatric OSA by clinical examination and functional respiratory imaging. <i>Pediatric Pulmonology</i> , 2017, 52, 799-805.	1.0	10
42	Changes in ventilation&ndash;perfusion during and after an COPD exacerbation: an assessment using fluid dynamic modeling. <i>International Journal of COPD</i> , 2018, Volume 13, 833-842.	0.9	8
43	Functional respiratory imaging: heterogeneity of acute exacerbations of COPD. <i>International Journal of COPD</i> , 2018, Volume 13, 1783-1792.	0.9	8
44	Functional Respiratory Imaging as a Tool to Personalize Respiratory Treatment in Patients With Unilateral Diaphragmatic Paralysis. <i>Respiratory Care</i> , 2014, 59, e127-e131.	0.8	7
45	Efficacy of inhaled medications in asthma and COPD related to disease severity. <i>Expert Opinion on Drug Delivery</i> , 2016, 13, 1719-1727.	2.4	6
46	Estimation of post-operative forced expiratory volume by functional respiratory imaging. <i>European Respiratory Journal</i> , 2015, 45, 544-546.	3.1	4
47	Functional respiratory imaging, regional strain, and expiratory time constants at three levels of positive end expiratory pressure in an ex vivo pig model. <i>Physiological Reports</i> , 2016, 4, e13059.	0.7	3
48	The role of ethnicity in the upper airway in a Belgian paediatric population with obstructive sleep apnoea. <i>European Respiratory Journal</i> , 2017, 50, 1701278.	3.1	2
49	Functional respiratory imaging of the airways in the acute respiratory distress syndrome. <i>Anaesthesia, Critical Care &amp; Pain Medicine</i> , 2020, 39, 207-213.	0.6	2
50	The Role of Imaging in the Detection of Non-COVID-19 Pathologies during the Massive Screening of the First Pandemic Wave. <i>Diagnostics</i> , 2022, 12, 1567.	1.3	1