David G Mccormack

List of Publications by Year
in descending order

91 papers	5,516 citations	94433 37 h-index	79698 73 g-index
91 all docs	91 docs citations	91 times ranked	3581 citing authors

#	Article	IF	Citations
1	Tiotropium in Combination with Placebo, Salmeterol, or Fluticasoneâ€“Salmeterol for Treatment of Chronic Obstructive Pulmonary Disease. Annals of Internal Medicine, 2007, 146, 545.	3.9	590
2	Asthma Control during the Year after Bronchial Thermoplasty. New England Journal of Medicine, 2007, 356, 1327-1337.	27.0	544
3	Noninvasive Positive-Pressure Ventilation for Postextubation Respiratory Distress. JAMA - Journal of the American Medical Association, 2002, 287, 3238.	7.4	330
4	Effect of noninvasive positive pressure ventilation on mortality in patients admitted with acute respiratory failure. Critical Care Medicine, 1997, 25, 1685-1692.	0.9	296
5	Hyperpolarized³He and¹²⁹Xe MR Imaging in Healthy Volunteers and Patients with Chronic Obstructive Pulmonary Disease. Radiology, 2012, 265, 600-610.	7.3	198
6	Role of Inducible Nitric Oxide Synthase in Pulmonary Microvascular Protein Leak in Murine Sepsis. American Journal of Respiratory and Critical Care Medicine, 2002, 165, 1634-1639.	5.6	187
7	Imaging of lung function using hyperpolarized heliumâ€3 magnetic resonance imaging: Review of current and emerging translational methods and applications. Journal of Magnetic Resonance Imaging, 2010, 32, 1398-1408.	3.4	185
8	Hyperpolarized 3He Magnetic Resonance Functional Imaging Semiautomated Segmentation. Academic Radiology, 2012, 19, 141-152.	2.5	170
9	Pulmonary Neutrophil Infiltration in Murine Sepsis. American Journal of Respiratory and Critical Care Medicine, 2004, 170, 227-233.	5.6	151
10	Hyperpolarized 3He Ventilation Defects and Apparent Diffusion Coefficients in Chronic Obstructive Pulmonary Disease. Investigative Radiology, 2007, 42, 384-391.	6.2	137
11	Hyperpolarized ³He and ¹²⁹Xe MRI: Differences in asthma before bronchodilation. Journal of Magnetic Resonance Imaging, 2013, 38, 1521-1530.	3.4	134
12	Chronic Obstructive Pulmonary Disease: Longitudinal Hyperpolarized³He MR Imaging. Radiology, 2010, 256, 280-289.	7.3	102
13	What are ventilation defects in asthma?. Thorax, 2014, 69, 63-71.	5.6	94
14	Accuracy of Portable Chest Radiography in the Critical Care Setting. Chest, 1994, 105, 885-887.	0.8	88
15	Pulmonary oxidant stress in murine sepsis is due to inflammatory cell nitric oxide*. Critical Care Medicine, 2005, 33, 1333-1339.	0.9	88
16	Hyperpolarized³He Ventilation Defects Used to Predict Pulmonary Exacerbations in Mild to Moderate Chronic Obstructive Pulmonary Disease. Radiology, 2014, 273, 887-896.	7.3	84
17	Functional Inhibition of Constitutive Nitric Oxide Synthase in a Rat Model of Sepsis. American Journal of Respiratory and Critical Care Medicine, 2002, 165, 1426-1432.	5.6	83
18	Pulmonary ventilation visualized using hyperpolarized helium-3 and xenon-129 magnetic resonance imaging: differences in COPD and relationship to emphysema. Journal of Applied Physiology, 2013, 114, 707-715.	2.5	81

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19	Hyperpolarized 3He Magnetic Resonance Imaging of Chronic Obstructive Pulmonary Disease. Academic Radiology, 2008, 15, 1298-1311.	2.5	79
20	On the role of abnormal DL_{CO}in ex-smokers without airflow limitation: symptoms, exercise capacity and hyperpolarised helium-3 MRI. Thorax, 2013, 68, 752-759.	5.6	78
21	Chronic Obstructive Pulmonary Disease: Quantification of Bronchodilator Effects by Using Hyperpolarized He MR Imaging. Radiology, 2011, 261, 283-292.	7.3	75
22	Capillary and arteriolar responses to local vasodilators are impaired in a rat model of sepsis. Journal of Applied Physiology, 1998, 84, 837-844.	2.5	68
23	Hyperpolarized 3He Magnetic Resonance Imaging of Ventilation Defects in Healthy Elderly Volunteers. Academic Radiology, 2008, 15, 776-785.	2.5	67
24	Hyperpolarized 129Xe Magnetic Resonance Imaging. Academic Radiology, 2012, 19, 941-951.	2.5	67
25	Effects of inhaled nitric oxide in a mouse model of sepsis-induced acute lung injury*. Critical Care Medicine, 2002, 30, 868-873.	0.9	66
26	Lung morphometry using hyperpolarized ¹²⁹Xe apparent diffusion coefficient anisotropy in chronic obstructive pulmonary disease. Magnetic Resonance in Medicine, 2013, 70, 1699-1706.	3.0	62
27	Is ventilation heterogeneity related to asthma control?. European Respiratory Journal, 2016, 48, 370-379.	6.7	62
28	Hyperpolarized 3He magnetic resonance imaging: Preliminary evaluation of phenotyping potential in chronic obstructive pulmonary disease. European Journal of Radiology, 2011, 79, 140-146.	2.6	61
29	Ultra-short echo-time pulmonary MRI: Evaluation and reproducibility in COPD subjects with and without bronchiectasis. Journal of Magnetic Resonance Imaging, 2015, 41, 1465-1474.	3.4	61
30	Noninvasive positive-pressure ventilation in patients with milder chronic obstructive pulmonary disease exacerbations: a randomized controlled trial. Respiratory Care, 2005, 50, 610-6.	1.6	58
31	Effects of inhaled nitric oxide in a rat model of Pseudomonas aeruginosa pneumonia. Critical Care Medicine, 2000, 28, 2397-2405.	0.9	56
32	Regional pulmonary response to a methacholine challenge using hyperpolarized ³He magnetic resonance imaging. Respirology, 2012, 17, 1237-1246.	2.3	56
33	Pulmonary Imaging Biomarkers of Gas Trapping and Emphysema in COPD:³He MR Imaging and CT Parametric Response Maps. Radiology, 2016, 279, 597-608.	7.3	52
34	Free-breathing Pulmonary 1H and Hyperpolarized 3He MRI. Academic Radiology, 2015, 22, 320-329.	2.5	50
35	â€œSepsisâ€â€“Clarity of existing terminology ... or more confusion?. Critical Care Medicine, 1991, 19, 996-998.	0.9	47
36	Is Computed Tomography Airway Count Related to Asthma Severity and Airway Structure and Function?. American Journal of Respiratory and Critical Care Medicine, 2020, 201, 923-933.	5.6	46

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37	Micro-CT imaging of rat lung ventilation using continuous image acquisition during xenon gas contrast enhancement. Journal of Applied Physiology, 2007, 103, 1848-1856.	2.5	38
38	Evaluating bronchodilator effects in chronic obstructive pulmonary disease using diffusion-weighted hyperpolarized helium-3 magnetic resonance imaging. Journal of Applied Physiology, 2012, 112, 651-657.	2.5	38
39	COPD: Do Imaging Measurements of Emphysema and Airway Disease Explain Symptoms and Exercise Capacity?. Radiology, 2015, 277, 872-880.	7.3	36
40	Hyperpolarized 3 He and 129 Xe magnetic resonance imaging apparent diffusion coefficients: physiological relevance in older never- and ex-smokers. Physiological Reports, 2014, 2, e12068.	1.7	35
41	Albumin leak across human pulmonary microvascular vs. umbilical vein endothelial cells under septic conditions. Microvascular Research, 2006, 71, 40-47.	2.5	32
42	Free-breathing Pulmonary MR Imaging to Quantify Regional Ventilation. Radiology, 2018, 287, 693-704.	7.3	32
43	Oscillatory Positive Expiratory Pressure in Chronic Obstructive Pulmonary Disease. COPD: Journal of Chronic Obstructive Pulmonary Disease, 2016, 13, 66-74.	1.6	31
44	What is the minimal clinically important difference for helium-3 magnetic resonance imaging ventilation defects?. European Respiratory Journal, 2018, 51, 1800324.	6.7	29
45	Free-breathing Functional Pulmonary MRI. Academic Radiology, 2017, 24, 1268-1276.	2.5	27
46	Hyperpolarized heliumâ€3 magnetic resonance imaging of chronic obstructive pulmonary disease exacerbation. Journal of Magnetic Resonance Imaging, 2013, 37, 1223-1227.	3.4	26
47	Chronic Obstructive Pulmonary Disease: Thoracic CT Texture Analysis and Machine Learning to Predict Pulmonary Ventilation. Radiology, 2019, 293, 676-684.	7.3	26
48	Pulmonary Functional Magnetic Resonance Imaging. Academic Radiology, 2014, 21, 1402-1410.	2.5	25
49	Mapping and quantifying hyperpolarized 3He magnetic resonance imaging apparent diffusion coefficient gradients. Journal of Applied Physiology, 2008, 105, 693-699.	2.5	24
50	Hyperpolarized Helium 3 MRI in Mild-to-Moderate Asthma: Prediction of Postbronchodilator Reversibility. Radiology, 2019, 293, 212-220.	7.3	23
51	Noninvasive quantification of alveolar morphometry in elderly never- and ex-smokers. Physiological Reports, 2015, 3, e12583.	1.7	22
52	Ventilation Heterogeneity in Never-smokers and COPD:. Academic Radiology, 2016, 23, 398-405.	2.5	21
53	Reproducibility of Hyperpolarized 129Xe MRI Ventilation Defect Percent in Severe Asthma to Evaluate Clinical Trial Feasibility. Academic Radiology, 2020, 28, 817-826.	2.5	21
54	Longitudinal Computed Tomography and Magnetic Resonance Imaging of COPD: Thoracic Imaging Network of Canada (TINCan) Study Objectives. Chronic Obstructive Pulmonary Diseases (Miami, Fla), 2014, 1, 200-211.	0.7	21

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55	MRI ventilation abnormalities predict quality-of-life and lung function changes in mild-to-moderate COPD: longitudinal TINCan study. Thorax, 2017, 72, 475-477.	5.6	20
56	Pulmonary Imaging Phenotypes of Chronic Obstructive Pulmonary Disease Using Multiparametric Response Maps. Radiology, 2020, 295, 227-236.	7.3	20
57	Effects of Nebulized Diethylenetetraamine-NONOate in a Mouse Model of Acute Pseudomonas aeruginosa Pneumonia. Chest, 2002, 122, 2127-2136.	0.8	19
58	Ventilation Heterogeneity in Ex-smokers without Airflow Limitation. Academic Radiology, 2015, 22, 1068-1078.	2.5	19
59	Cyclooxygenase Inhibition and Vascular Reactivity in a Rat Model of Hyperdynamic Sepsis. Journal of Cardiovascular Pharmacology, 1996, 28, 30-35.	1.9	19
60	Pulmonary ventilation defects in older never-smokers. Journal of Applied Physiology, 2014, 117, 297-306.	2.5	16
61	Differential inducible nitric oxide synthase activity in circulating neutrophils vs. mononuclears of septic shock patients. Intensive Care Medicine, 2005, 31, 1132-1135.	8.2	14
62	Hyperpolarized ³He magnetic resonance imaging-derived pulmonary pressure-volume curves. Journal of Applied Physiology, 2010, 109, 574-585.	2.5	14
63	Hyperpolarized3He Functional Magnetic Resonance Imaging of Bronchoscopic Airway Bypass in Chronic Obstructive Pulmonary Disease. Canadian Respiratory Journal, 2012, 19, 41-43.	1.6	14
64	Computed Tomography Density Histogram Analysis to Evaluate Pulmonary Emphysema in Ex-smokers. Academic Radiology, 2013, 20, 537-545.	2.5	14
65	Noncystic Fibrosis Bronchiectasis. Academic Radiology, 2017, 24, 4-12.	2.5	13
66	Regional Heterogeneity of Chronic Obstructive Pulmonary Disease Phenotypes: Pulmonary ³He Magnetic Resonance Imaging and Computed Tomography. COPD: Journal of Chronic Obstructive Pulmonary Disease, 2016, 13, 601-609.	1.6	12
67	A framework for Fourierâ€decomposition freeâ€breathing pulmonary 1 H MRI ventilation measurements. Magnetic Resonance in Medicine, 2019, 81, 2135-2146.	3.0	12
68	The Contrasting Influence of Two Lipoxygenase Inhibitors on Hypoxic Pulmonary Vasoconstriction in Anesthetized Pigs. The American Review of Respiratory Disease, 1989, 139, 100-105.	2.9	11
69	Comparison of hyperpolarized ³He MRI with Xeâ€enhanced computed tomography imaging for ventilation mapping of rat lung. NMR in Biomedicine, 2011, 24, 1073-1080.	2.8	11
70	A Persistent Pulmonary Lesion following Chemotherapy for Metastatic Choriocarcinoma. Chest, 1993, 103, 269-270.	0.8	10
71	Second-order Texture Measurements of 3He Ventilation MRI:. Academic Radiology, 2016, 23, 176-185.	2.5	10
72	Effects of dopexamine hydrochloride on hypoxic pulmonary vasoconstriction in isolated rat lung. Critical Care Medicine, 1990, 18, 520-523.	0.9	9

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73	CT Pulmonary Vessels and MRI Ventilation in Chronic Obstructive Pulmonary Disease: Relationship with worsening FEV1 in the TINCan cohort study. Academic Radiology, 2021, 28, 495-506.	2.5	9
74	Pulmonary Artery Contractility in Pneumonia: Role of Cyclooxygenase Products and Nitric Oxide. Journal of Cardiovascular Pharmacology, 1999, 34, 468-474.	1.9	9
75	Quantitative 1H and hyperpolarized 3He magnetic resonance imaging: Comparison in chronic obstructive pulmonary disease and healthy never-smokers. European Journal of Radiology, 2014, 83, 64-72.	2.6	8
76	On the Potential Role of MRI Biomarkers of COPD to Guide Bronchoscopic Lung Volume Reduction. Academic Radiology, 2018, 25, 159-168.	2.5	8
77	Accelerated ¹²⁹Xe MRI morphometry of terminal airspace enlargement: Feasibility in volunteers and those with alphaâ€1 antitrypsin deficiency. Magnetic Resonance in Medicine, 2020, 84, 416-426.	3.0	8
78	Diagnosis and management of pergolide-induced fibrosis. Movement Disorders, 2005, 20, 512-513.	3.9	6
79	Nonidentical Twins With Asthma. Chest, 2019, 156, e111-e116.	0.8	6
80	Advanced pulmonary MRI to quantify alveolar and acinar duct abnormalities: Current status and future clinical applications. Journal of Magnetic Resonance Imaging, 2019, 50, 28-40.	3.4	6
81	FEV₁and MRI ventilation defect reversibility in asthma and COPD. European Respiratory Journal, 2020, 55, 1901947.	6.7	6
82	Calcitonin Gene-Related Peptide Does Not Mediate the Abnormal Vascular Reactivity Observed in a Rat Model of Acute Pseudomonas Pneumonia. Journal of Cardiovascular Pharmacology, 1996, 27, 901-907.	1.9	6
83	Pulmonary Abnormalities and Carotid Atherosclerosis in Ex-Smokers without Airflow Limitation. COPD: Journal of Chronic Obstructive Pulmonary Disease, 2015, 12, 62-70.	1.6	5
84	Oscillatory Positive Expiratory Pressure (oPEP) Treatment in Chronic Obstructive Pulmonary Disease. Chest, 2013, 144, 741A.	0.8	4
85	Ultra-short echo-time magnetic resonance imaging lung segmentation with under-Annotations and domain shift. Medical Image Analysis, 2021, 72, 102107.	11.6	4
86	Bleomycin-induced acute lung injury in the rat does not influence pulmonary vascular responsiveness in vitro. Critical Care Medicine, 1992, 20, 641-644.	0.9	3
87	Delayed rectifier potassium channels contribute to the depressed pulmonary artery contractility in pneumonia. Journal of Applied Physiology, 2002, 93, 957-965.	2.5	3
88	Predicting Postoperative FEV1 Using Spiral Computed Tomography. Academic Radiology, 2010, 17, 607-613.	2.5	3
89	Reproducibility of Protected Brush Catheter Specimen Cultures in Critically Ill Patients with Suspected Nosocomial Pneumonia. Canadian Respiratory Journal, 1995, 2, 173-178.	1.6	2
90	Pulmonary 3 He Magnetic Resonance Imaging Biomarkers of Regional Airspace Enlargement in Alpha-1 Antitrypsin Deficiency. Academic Radiology, 2017, 24, 1402-1411.	2.5	2

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91	Vasodilator Therapy in Acute Respiratory Failure. Chest, 1996, 109, 596-597.	0.8	1