

Kelly Burrowes

List of Publications by Year in descending order

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Version: 2024-02-01

51
papers

1,168
citations

331538

21
h-index

395590

33
g-index

51
all docs

51
docs citations

51
times ranked

1167
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 1 | Simulating Multi-Scale Pulmonary Vascular Function by Coupling Computational Fluid Dynamics With an Anatomic Network Model. <i>Frontiers in Network Physiology</i> , 2022, 2, . | 0.8 | 3 |
| 2 | In Silico Ventilation Within the Dose-Volume is Predictive of Lung Function Post-radiation Therapy in Patients with Lung Cancer. <i>Annals of Biomedical Engineering</i> , 2021, 49, 1416-1431. | 1.3 | 2 |
| 3 | Integrative Computational Models of Lung Structure–Function Interactions. , 2021, 11, 1501-1530. | | 2 |
| 4 | Mobile Pulmonary Rehabilitation: Feasibility of Delivery by a Mobile Phone-Based Program. <i>Frontiers in Computer Science</i> , 2021, 3, . | 1.7 | 3 |
| 5 | A computational model of contributors to pulmonary hypertensive disease: impacts of whole lung and focal disease distributions. <i>Pulmonary Circulation</i> , 2021, 11, 1-15. | 0.8 | 4 |
| 6 | Bridging the gap between respiratory research and health literacy: an interactive web-based platform. <i>BMJ Simulation and Technology Enhanced Learning</i> , 2021, 7, 163-166. | 0.7 | 1 |
| 7 | A viscoelastic two-dimensional network model of the lung extracellular matrix. <i>Biomechanics and Modeling in Mechanobiology</i> , 2020, 19, 2241-2253. | 1.4 | 9 |
| 8 | Human lungs are created to breathe clean air: the questionable quantification of vaping safety "95% less harmful". <i>New Zealand Medical Journal</i> , 2020, 133, 100-106. | 0.5 | 2 |
| 9 | Ventilation/Perfusion Matching: Of Myths, Mice, and Men. <i>Physiology</i> , 2019, 34, 419-429. | 1.6 | 9 |
| 10 | Lung Computational Models and the Role of the Small Airways in Asthma. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2019, 200, 982-991. | 2.5 | 91 |
| 11 | Integrated lung tissue mechanics one piece at a time: Computational modeling across the scales of biology. <i>Clinical Biomechanics</i> , 2019, 66, 20-31. | 0.5 | 11 |
| 12 | In silico modeling of oxygen-enhanced MRI of specific ventilation. <i>Physiological Reports</i> , 2018, 6, e13659. | 0.7 | 8 |
| 13 | Capturing complexity in pulmonary system modelling. <i>Proceedings of the Institution of Mechanical Engineers, Part H: Journal of Engineering in Medicine</i> , 2017, 231, 355-368. | 1.0 | 17 |
| 14 | Image–based computational fluid dynamics in the lung: virtual reality or new clinical practice?. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2017, 9, e1392. | 6.6 | 21 |
| 15 | Cover Image, Volume 9, Issue 6. <i>Wiley Interdisciplinary Reviews: Systems Biology and Medicine</i> , 2017, 9, e1409. | 6.6 | 0 |
| 16 | A poroelastic model coupled to a fluid network with applications in lung modelling. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2016, 32, e02731. | 1.0 | 39 |
| 17 | Dynamic flow characteristics in normal and asthmatic lungs. <i>International Journal for Numerical Methods in Biomedical Engineering</i> , 2015, 31, . | 1.0 | 26 |
| 18 | Computational models for patient-specific analysis of pulmonary vascular disease. <i>Drug Discovery Today: Disease Models</i> , 2015, 15, 29-36. | 1.2 | 1 |

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|----|--|-----|-----------|
| 19 | Development and Analysis of Patient-Based Complete Conducting Airways Models. PLoS ONE, 2015, 10, e0144105. | 1.1 | 45 |
| 20 | Hypoxic Pulmonary Vasoconstriction as a Contributor to Response in Acute Pulmonary Embolism. Annals of Biomedical Engineering, 2014, 42, 1631-1643. | 1.3 | 25 |
| 21 | Lack of functional information explains the poor performance of "clot load scores"™ at predicting outcome in acute pulmonary embolism. Respiratory Physiology and Neurobiology, 2014, 190, 1-13. | 0.7 | 24 |
| 22 | Systems Medicine: from molecular features and models to the clinic in COPD. Journal of Translational Medicine, 2014, 12, S4. | 1.8 | 23 |
| 23 | Computational modeling of the obstructive lung diseases asthma and COPD. Journal of Translational Medicine, 2014, 12, S5. | 1.8 | 44 |
| 24 | From imaging to functional outcome in pulmonary embolism. Proceedings of SPIE, 2013, , . | 0.8 | 0 |
| 25 | Multi-scale computational models of the airways to unravel the pathophysiological mechanisms in asthma and chronic obstructive pulmonary disease (AirPROM). Interface Focus, 2013, 3, 20120057. | 1.5 | 40 |
| 26 | Translational Research: Multi-Scale Models of the Pulmonary Circulation in Health and Disease. Studies in Mechanobiology, Tissue Engineering and Biomaterials, 2013, , 259-286. | 0.7 | 0 |
| 27 | Spatial redistribution of perfusion and gas exchange in patient-specific models of pulmonary embolism. , 2012, , . | | 6 |
| 28 | Assessing potential errors of MRI-based measurements of pulmonary blood flow using a detailed network flow model. Journal of Applied Physiology, 2012, 113, 130-141. | 1.2 | 22 |
| 29 | 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 |
| 30 | The impact of micro-embolism size on haemodynamic changes in the pulmonary micro-circulation. Respiratory Physiology and Neurobiology, 2011, 175, 365-374. | 0.7 | 17 |
| 31 | Computational Models of the Pulmonary Circulation: Insights and the Move towards Clinically Directed Studies. Pulmonary Circulation, 2011, 1, 224-238. | 0.8 | 37 |
| 32 | Blood Flow Redistribution and Ventilation-Perfusion Mismatch During Embolic Pulmonary Arterial Occlusion. Pulmonary Circulation, 2011, 1, 365-376. | 0.8 | 67 |
| 33 | Pulmonary embolism: predicting disease severity. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2011, 369, 4255-4277. | 1.6 | 24 |
| 34 | Computational Modeling of Airway and Pulmonary Vascular Structure and Function: Development of a "Lung Physiome". Critical Reviews in Biomedical Engineering, 2011, 39, 319-336. | 0.5 | 19 |
| 35 | Modeling of the Pulmonary Vasculature. , 2011, , 91-103. | | 0 |
| 36 | Coupling of lung tissue tethering force to fluid dynamics in the pulmonary circulation. International Journal for Numerical Methods in Biomedical Engineering, 2010, 26, 862-875. | 1.0 | 7 |

| # | ARTICLE | IF | CITATIONS |
|----|---|-----|-----------|
| 37 | Contribution of serial and parallel microperfusion to spatial variability in pulmonary inter- and intra-acinar blood flow. <i>Journal of Applied Physiology</i> , 2010, 108, 1116-1126. | 1.2 | 42 |
| 38 | Species-Specific Pulmonary Arterial Asymmetry Determines Species Differences in Regional Pulmonary Perfusion. <i>Annals of Biomedical Engineering</i> , 2009, 37, 2497-2509. | 1.3 | 23 |
| 39 | Relationship between structural changes and hyperpolarized gas magnetic resonance imaging in chronic obstructive pulmonary disease using computational simulations with realistic alveolar geometry. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2009, 367, 2347-2369. | 1.6 | 11 |
| 40 | Modelling pulmonary blood flow. <i>Respiratory Physiology and Neurobiology</i> , 2008, 163, 150-157. | 0.7 | 19 |
| 41 | Multi-scale Models of the Lung Airways and Vascular System. <i>Advances in Experimental Medicine and Biology</i> , 2008, 605, 190-194. | 0.8 | 12 |
| 42 | Towards a virtual lung: multi-scale, multi-physics modelling of the pulmonary system. <i>Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences</i> , 2008, 366, 3247-3263. | 1.6 | 51 |
| 43 | The effect of lung orientation on functional imaging of blood flow. , 2007, , . | | 2 |
| 44 | Computational predictions of pulmonary blood flow gradients: Gravity versus structure. <i>Respiratory Physiology and Neurobiology</i> , 2006, 154, 515-523. | 0.7 | 58 |
| 45 | Computational models of structure-function relationships in the pulmonary circulation and their validation. <i>Experimental Physiology</i> , 2006, 91, 285-293. | 0.9 | 20 |
| 46 | The IUPS Physiome Project: Progress and Plans. , 2006, , 383-393. | | 3 |
| 47 | Evaluation of arterial blood flow heterogeneity via an image-based computational model. , 2005, , . | | 2 |
| 48 | Anatomically based finite element models of the human pulmonary arterial and venous trees including supernumerary vessels. <i>Journal of Applied Physiology</i> , 2005, 99, 731-738. | 1.2 | 114 |
| 49 | Evaluation of the effect of postural and gravitational variations on the distribution of pulmonary blood flow via an image-based computational model. , 2005, 2005, 6138-40. | | 4 |
| 50 | Investigation of the Relative Effects of Vascular Branching Structure and Gravity on Pulmonary Arterial Blood Flow Heterogeneity via an Image-based Computational Model1. <i>Academic Radiology</i> , 2005, 12, 1464-1474. | 1.3 | 41 |
| 51 | Modeling RBC and Neutrophil Distribution Through an Anatomically Based Pulmonary Capillary Network. <i>Annals of Biomedical Engineering</i> , 2004, 32, 585-595. | 1.3 | 54 |