

Inez Frerichs

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224
papers

6,707
citations

41
h-index

75
g-index

249
ext. papers

7,979
ext. citations

4.8
avg, IF

5.82
L-index

| # | Paper | IF | Citations |
|-----|--|------|-----------|
| 224 | Electrical impedance tomography in monitoring experimental lung injury. <i>Intensive Care Medicine</i> , 1998 , 24, 829-36 | 14.5 | 579 |
| 223 | GREIT: a unified approach to 2D linear EIT reconstruction of lung images. <i>Physiological Measurement</i> , 2009 , 30, S35-55 | 2.9 | 399 |
| 222 | Chest electrical impedance tomography examination, data analysis, terminology, clinical use and recommendations: consensus statement of the TRanslational EIT developmenT stuDY group. <i>Thorax</i> , 2017 , 72, 83-93 | 7.3 | 348 |
| 221 | Detection of local lung air content by electrical impedance tomography compared with electron beam CT. <i>Journal of Applied Physiology</i> , 2002 , 93, 660-6 | 3.7 | 259 |
| 220 | Electrical impedance tomography (EIT) in applications related to lung and ventilation: a review of experimental and clinical activities. <i>Physiological Measurement</i> , 2000 , 21, R1-21 | 2.9 | 228 |
| 219 | Evaluation of an electrical impedance tomography-based Global Inhomogeneity Index for pulmonary ventilation distribution. <i>Intensive Care Medicine</i> , 2009 , 35, 1900-6 | 14.5 | 156 |
| 218 | Lung volume recruitment after surfactant administration modifies spatial distribution of ventilation. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2006 , 174, 772-9 | 10.2 | 142 |
| 217 | Electrical impedance tomography: a method for monitoring regional lung aeration and tidal volume distribution?. <i>Intensive Care Medicine</i> , 2003 , 29, 2312-2316 | 14.5 | 141 |
| 216 | Regional lung perfusion as determined by electrical impedance tomography in comparison with electron beam CT imaging. <i>IEEE Transactions on Medical Imaging</i> , 2002 , 21, 646-52 | 11.7 | 128 |
| 215 | Whither lung EIT: where are we, where do we want to go and what do we need to get there?. <i>Physiological Measurement</i> , 2012 , 33, 679-94 | 2.9 | 123 |
| 214 | PEEP titration guided by ventilation homogeneity: a feasibility study using electrical impedance tomography. <i>Critical Care</i> , 2010 , 14, R8 | 10.8 | 119 |
| 213 | Current practice in nutritional support and its association with mortality in septic patients--results from a national, prospective, multicenter study. <i>Critical Care Medicine</i> , 2008 , 36, 1762-7 | 1.4 | 106 |
| 212 | Comparison of different methods to define regions of interest for evaluation of regional lung ventilation by EIT. <i>Physiological Measurement</i> , 2006 , 27, S115-27 | 2.9 | 96 |
| 211 | Monitoring perioperative changes in distribution of pulmonary ventilation by functional electrical impedance tomography. <i>Acta Anaesthesiologica Scandinavica</i> , 1998 , 42, 721-6 | 1.9 | 94 |
| 210 | Pulmonary functional imaging: qualitative comparison of Fourier decomposition MR imaging with SPECT/CT in porcine lung. <i>Radiology</i> , 2011 , 260, 551-9 | 20.5 | 85 |
| 209 | Thoracic electrical impedance tomographic measurements during volume controlled ventilation-effects of tidal volume and positive end-expiratory pressure. <i>IEEE Transactions on Medical Imaging</i> , 1999 , 18, 764-73 | 11.7 | 84 |
| 208 | Gravity effects on regional lung ventilation determined by functional EIT during parabolic flights. <i>Journal of Applied Physiology</i> , 2001 , 91, 39-50 | 3.7 | 80 |

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| 207 | 0736. Role of CAMP in PAF-induced intestinal endo-and epithelial dysfunction. <i>Intensive Care Medicine Experimental</i> , 2014 , 2, | 3.7 | 78 |
| 206 | A novel method to determine respiratory system mechanics during assisted ventilation. <i>Intensive Care Medicine Experimental</i> , 2015 , 3, | 3.7 | 78 |
| 205 | Regional tidal ventilation and compliance during a stepwise vital capacity manoeuvre. <i>Intensive Care Medicine</i> , 2010 , 36, 1953-61 | 14.5 | 78 |
| 204 | Spatial and temporal heterogeneity of regional lung ventilation determined by electrical impedance tomography during pulmonary function testing. <i>Journal of Applied Physiology</i> , 2012 , 113, 1154-61 | 3.7 | 71 |
| 203 | Non-invasive radiation-free monitoring of regional lung ventilation in critically ill infants. <i>Intensive Care Medicine</i> , 2001 , 27, 1385-94 | 14.5 | 70 |
| 202 | Assessment of changes in distribution of lung perfusion by electrical impedance tomography. <i>Respiration</i> , 2009 , 77, 282-91 | 3.7 | 68 |
| 201 | Regional ventilation in cystic fibrosis measured by electrical impedance tomography. <i>Journal of Cystic Fibrosis</i> , 2012 , 11, 412-8 | 4.1 | 67 |
| 200 | Electrical impedance tomography compared to positron emission tomography for the measurement of regional lung ventilation: an experimental study. <i>Critical Care</i> , 2009 , 13, R82 | 10.8 | 67 |
| 199 | Imaging pathologic pulmonary air and fluid accumulation by functional and absolute EIT. <i>Physiological Measurement</i> , 2006 , 27, S187-98 | 2.9 | 67 |
| 198 | Distribution of lung ventilation in spontaneously breathing neonates lying in different body positions. <i>Intensive Care Medicine</i> , 2003 , 29, 787-94 | 14.5 | 67 |
| 197 | Lung function tests in neonates and infants with chronic lung disease: global and regional ventilation inhomogeneity. <i>Pediatric Pulmonology</i> , 2006 , 41, 105-21 | 3.5 | 65 |
| 196 | Reproducibility of regional lung ventilation distribution determined by electrical impedance tomography during mechanical ventilation. <i>Physiological Measurement</i> , 2007 , 28, S261-7 | 2.9 | 63 |
| 195 | Changes in lung volume and ventilation during surfactant treatment in ventilated preterm infants. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2011 , 184, 100-5 | 10.2 | 55 |
| 194 | Automatic control of pressure support for ventilator weaning in surgical intensive care patients. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2012 , 185, 637-44 | 10.2 | 54 |
| 193 | Regional lung volume changes in children with acute respiratory distress syndrome during a derecruitment maneuver. <i>Critical Care Medicine</i> , 2007 , 35, 1972-8 | 1.4 | 54 |
| 192 | Changes in lung volume and ventilation during lung recruitment in high-frequency ventilated preterm infants with respiratory distress syndrome. <i>Journal of Pediatrics</i> , 2011 , 159, 199-205.e2 | 3.6 | 53 |
| 191 | Monitoring regional lung ventilation by functional electrical impedance tomography during assisted ventilation. <i>Annals of the New York Academy of Sciences</i> , 1999 , 873, 493-505 | 6.5 | 52 |
| 190 | Body and head position effects on regional lung ventilation in infants: An electrical impedance tomography study. <i>Intensive Care Medicine</i> , 2006 , 32, 1392-8 | 14.5 | 51 |

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|-----|---|------|----|
| 189 | Regional airway obstruction in cystic fibrosis determined by electrical impedance tomography in comparison with high resolution CT. <i>Physiological Measurement</i> , 2013 , 34, N107-14 | 2.9 | 49 |
| 188 | Regional pulmonary pressure volume curves in mechanically ventilated patients with acute respiratory failure measured by electrical impedance tomography. <i>Acta Anaesthesiologica Scandinavica</i> , 2006 , 50, 331-9 | 1.9 | 49 |
| 187 | Gravity-dependent phenomena in lung ventilation determined by functional EIT. <i>Physiological Measurement</i> , 1996 , 17 Suppl 4A, A149-57 | 2.9 | 46 |
| 186 | Local mechanics of the lung tissue determined by functional EIT. <i>Physiological Measurement</i> , 1996 , 17 Suppl 4A, A159-66 | 2.9 | 46 |
| 185 | Regional ventilation distribution determined by electrical impedance tomography: reproducibility and effects of posture and chest plane. <i>Respirology</i> , 2011 , 16, 523-31 | 3.6 | 45 |
| 184 | The EIT-based global inhomogeneity index is highly correlated with regional lung opening in patients with acute respiratory distress syndrome. <i>BMC Research Notes</i> , 2014 , 7, 82 | 2.3 | 42 |
| 183 | Effect of PEEP and tidal volume on ventilation distribution and end-expiratory lung volume: a prospective experimental animal and pilot clinical study. <i>PLoS ONE</i> , 2013 , 8, e72675 | 3.7 | 41 |
| 182 | Regional lung function determined by electrical impedance tomography during bronchodilator reversibility testing in patients with asthma. <i>Physiological Measurement</i> , 2016 , 37, 698-712 | 2.9 | 41 |
| 181 | Effect of nasal continuous and biphasic positive airway pressure on lung volume in preterm infants. <i>Journal of Pediatrics</i> , 2013 , 162, 691-7 | 3.6 | 40 |
| 180 | Positive end-expiratory pressure titration with electrical impedance tomography and pressure-volume curve in severe acute respiratory distress syndrome. <i>Annals of Intensive Care</i> , 2019 , 9, 7 | 8.9 | 39 |
| 179 | Regional lung opening and closing pressures in patients with acute lung injury. <i>Journal of Critical Care</i> , 2012 , 27, 323.e11-8 | 4 | 39 |
| 178 | Enteral nutrition is associated with improved outcome in patients with severe sepsis. A secondary analysis of the VISEP trial. <i>Medizinische Klinik - Intensivmedizin Und Notfallmedizin</i> , 2013 , 108, 223-33 | 3.2 | 39 |
| 177 | Regional filling characteristics of the lungs in mechanically ventilated patients with acute lung injury. <i>European Journal of Anaesthesiology</i> , 2007 , 24, 414-24 | 2.3 | 39 |
| 176 | Effect of Minimally Invasive Surfactant Therapy on Lung Volume and Ventilation in Preterm Infants. <i>Journal of Pediatrics</i> , 2016 , 170, 67-72 | 3.6 | 36 |
| 175 | Cross-sectional changes in lung volume measured by electrical impedance tomography are representative for the whole lung in ventilated preterm infants. <i>Critical Care Medicine</i> , 2014 , 42, 1524-30 ^{1.4} | | 34 |
| 174 | Regional lung response to bronchodilator reversibility testing determined by electrical impedance tomography in chronic obstructive pulmonary disease. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2016 , 311, L8-L19 | 5.8 | 34 |
| 173 | Calculation of mechanical power for pressure-controlled ventilation. <i>Intensive Care Medicine</i> , 2019 , 45, 1321-1323 | 14.5 | 33 |
| 172 | Electrical impedance tomography imaging of the cardiopulmonary system. <i>Current Opinion in Critical Care</i> , 2014 , 20, 323-32 | 3.5 | 33 |

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| 171 | Transarterial aortic valve replacement with a self expanding stent in pigs. <i>Heart</i> , 2004 , 90, 1326-31 | 5.1 | 33 |
| 170 | An individualized approach to sustained inflation duration at birth improves outcomes in newborn preterm lambs. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2015 , 309, L1138-49 | 5.8 | 32 |
| 169 | Regional distribution of blood volume within the preterm infant thorax during synchronised mechanical ventilation. <i>Intensive Care Medicine</i> , 2010 , 36, 2101-8 | 14.5 | 32 |
| 168 | Distribution of ventilation in young and elderly adults determined by electrical impedance tomography. <i>Respiratory Physiology and Neurobiology</i> , 2004 , 143, 63-75 | 2.8 | 32 |
| 167 | Wearable Sensors for Frequency-Multiplexed EIT and Multilead ECG Data Acquisition. <i>IEEE Transactions on Biomedical Engineering</i> , 2019 , 66, 810-820 | 5 | 31 |
| 166 | Creatinine clearance versus serum creatinine as a risk factor in cardiac surgery. <i>BMC Surgery</i> , 2003 , 3, 4 | 2.3 | 31 |
| 165 | Effect of closed endotracheal suction in high-frequency ventilated premature infants measured with electrical impedance tomography. <i>Intensive Care Medicine</i> , 2009 , 35, 2130-4 | 14.5 | 30 |
| 164 | Effectiveness of an intravascular cooling method compared with a conventional cooling technique in neurologic patients. <i>Journal of Neurosurgical Anesthesiology</i> , 2007 , 19, 130-5 | 3 | 30 |
| 163 | COPD care delivery pathways in five European Union countries: mapping and health care professionals' perceptions. <i>International Journal of COPD</i> , 2016 , 11, 2831-2838 | 3 | 30 |
| 162 | Spatiotemporal Aeration and Lung Injury Patterns Are Influenced by the First Inflation Strategy at Birth. <i>American Journal of Respiratory Cell and Molecular Biology</i> , 2016 , 54, 263-72 | 5.7 | 29 |
| 161 | Regional respiratory time constants during lung recruitment in high-frequency oscillatory ventilated preterm infants. <i>Intensive Care Medicine</i> , 2012 , 38, 294-9 | 14.5 | 29 |
| 160 | Clinical performance of a novel textile interface for neonatal chest electrical impedance tomography. <i>Physiological Measurement</i> , 2018 , 39, 044004 | 2.9 | 28 |
| 159 | Performance of electrical impedance tomography in detecting regional tidal volumes during one-lung ventilation. <i>Acta Anaesthesiologica Scandinavica</i> , 2008 , 52, 1131-9 | 1.9 | 28 |
| 158 | A model of the isolated perfused rat small intestine. <i>American Journal of Physiology - Renal Physiology</i> , 2010 , 298, G304-13 | 5.1 | 27 |
| 157 | Identification of regional overdistension, recruitment and cyclic alveolar collapse with electrical impedance tomography in an experimental ARDS model. <i>Critical Care</i> , 2016 , 20, 119 | 10.8 | 27 |
| 156 | Spontaneous breathing trials after prolonged mechanical ventilation monitored by electrical impedance tomography: an observational study. <i>Acta Anaesthesiologica Scandinavica</i> , 2017 , 61, 1166-1175 | 1.9 | 26 |
| 155 | Assessment of respiratory system compliance with electrical impedance tomography using a positive end-expiratory pressure wave maneuver during pressure support ventilation: a pilot clinical study. <i>Critical Care</i> , 2014 , 18, 679 | 10.8 | 26 |
| 154 | Quantification of ventilation distribution in regional lung injury by electrical impedance tomography and xenon computed tomography. <i>Physiological Measurement</i> , 2013 , 34, 1303-18 | 2.9 | 26 |

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| 153 | The effect of airway pressure and oscillation amplitude on ventilation in pre-term infants. <i>European Respiratory Journal</i> , 2012 , 40, 479-84 | 13.6 | 26 |
| 152 | High-frequency oscillatory ventilation in patients with acute exacerbation of chronic obstructive pulmonary disease. <i>Journal of Critical Care</i> , 2012 , 27, 172-81 | 4 | 25 |
| 151 | Dynamics of regional lung aeration determined by electrical impedance tomography in patients with acute respiratory distress syndrome. <i>Multidisciplinary Respiratory Medicine</i> , 2012 , 7, 44 | 3 | 25 |
| 150 | Quantitative evaluation of the performance of different electrical tomography devices. <i>Biomedizinische Technik</i> , 2001 , 46, 91-5 | 1.3 | 24 |
| 149 | Level-set-based reconstruction algorithm for EIT lung images: first clinical results. <i>Physiological Measurement</i> , 2012 , 33, 739-50 | 2.9 | 23 |
| 148 | Pneumothorax in a preterm infant monitored by electrical impedance tomography: a case report. <i>Neonatology</i> , 2011 , 99, 10-3 | 4 | 23 |
| 147 | Assessment of Lung Recruitment by Electrical Impedance Tomography and Oxygenation in ARDS Patients. <i>Medicine (United States)</i> , 2016 , 95, e3820 | 1.8 | 23 |
| 146 | Regional lung volume changes during high-frequency oscillatory ventilation. <i>Pediatric Critical Care Medicine</i> , 2010 , 11, 610-5 | 3 | 21 |
| 145 | Electrical Impedance Tomography Can Identify Ventilation and Perfusion Defects: A Neonatal Case. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2019 , 199, 384-386 | 10.2 | 21 |
| 144 | Patient examinations using electrical impedance tomography--sources of interference in the intensive care unit. <i>Physiological Measurement</i> , 2011 , 32, L1-10 | 2.9 | 20 |
| 143 | Effectiveness of individualized lung recruitment strategies at birth: an experimental study in preterm lambs. <i>American Journal of Physiology - Lung Cellular and Molecular Physiology</i> , 2017 , 312, L32-L41 | 5.8 | 20 |
| 142 | Pulmonary function testing in children and infants. <i>Physiological Measurement</i> , 2014 , 35, R59-90 | 2.9 | 19 |
| 141 | Oxygenation effect of interventional lung assist in a lavage model of acute lung injury: a prospective experimental study. <i>Critical Care</i> , 2006 , 10, R56 | 10.8 | 19 |
| 140 | Correlation between alveolar ventilation and electrical properties of lung parenchyma. <i>Physiological Measurement</i> , 2015 , 36, 1211-26 | 2.9 | 18 |
| 139 | Changes in lung volume and ventilation following transition from invasive to noninvasive respiratory support and prone positioning in preterm infants. <i>Pediatric Research</i> , 2015 , 77, 484-8 | 3.2 | 18 |
| 138 | Impact of age on the results of coronary artery bypass grafting. <i>Asian Cardiovascular and Thoracic Annals</i> , 2004 , 12, 324-9 | 0.6 | 18 |
| 137 | Thoracic electrical impedance tomography in Chinese hospitals: a review of clinical research and daily applications. <i>Physiological Measurement</i> , 2020 , 41, 04TR01 | 2.9 | 17 |
| 136 | Is age an independent determinant of mortality in cardiac surgery as suggested by the EuroSCORE?. <i>BMC Surgery</i> , 2002 , 2, 8 | 2.3 | 17 |

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| 135 | A simple method to check the dynamic performance of electrical impedance tomography systems. <i>Physiological Measurement</i> , 2000 , 21, 53-60 | 2.9 | 17 |
| 134 | An Official American Thoracic Society/European Respiratory Society Workshop Report: Evaluation of Respiratory Mechanics and Function in the Pediatric and Neonatal Intensive Care Units. <i>Annals of the American Thoracic Society</i> , 2016 , 13, S1-11 | 4.7 | 17 |
| 133 | Functional Regions of Interest in Electrical Impedance Tomography: A Secondary Analysis of Two Clinical Studies. <i>PLoS ONE</i> , 2016 , 11, e0152267 | 3.7 | 16 |
| 132 | Time to lung aeration during a sustained inflation at birth is influenced by gestation in lambs. <i>Pediatric Research</i> , 2017 , 82, 712-720 | 3.2 | 15 |
| 131 | Regional ventilation redistribution measured by electrical impedance tomography during spontaneous breathing trial with automatic tube compensation. <i>Physiological Measurement</i> , 2017 , 38, 1193-1203 | 2.9 | 15 |
| 130 | Bedside Evaluation of Pulmonary Embolism by Saline Contrast Electrical Impedance Tomography Method: A Prospective Observational Study. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2020 , 202, 1464-1468 | 10.2 | 15 |
| 129 | Characteristic pattern of pleural effusion in electrical impedance tomography images of critically ill patients. <i>British Journal of Anaesthesia</i> , 2018 , 120, 1219-1228 | 5.4 | 15 |
| 128 | Influence of torso and arm positions on chest examinations by electrical impedance tomography. <i>Physiological Measurement</i> , 2016 , 37, 904-21 | 2.9 | 15 |
| 127 | Influence of tidal volume on ventilation inhomogeneity assessed by electrical impedance tomography during controlled mechanical ventilation. <i>Physiological Measurement</i> , 2015 , 36, 1137-46 | 2.9 | 14 |
| 126 | Comparison of different functional EIT approaches to quantify tidal ventilation distribution. <i>Physiological Measurement</i> , 2018 , 39, 01NT01 | 2.9 | 14 |
| 125 | Short-term effects of neuromuscular blockade on global and regional lung mechanics, oxygenation and ventilation in pediatric acute hypoxemic respiratory failure. <i>Annals of Intensive Care</i> , 2016 , 6, 103 | 8.9 | 14 |
| 124 | Optimized breath detection algorithm in electrical impedance tomography. <i>Physiological Measurement</i> , 2018 , 39, 094001 | 2.9 | 14 |
| 123 | Regional respiratory inflation and deflation pressure-volume curves determined by electrical impedance tomography. <i>Physiological Measurement</i> , 2013 , 34, 567-77 | 2.9 | 14 |
| 122 | Prone Positioning Improves Ventilation Homogeneity in Children With Acute Respiratory Distress Syndrome. <i>Pediatric Critical Care Medicine</i> , 2017 , 18, e229-e234 | 3 | 13 |
| 121 | Chest electrical impedance tomography measures in neonatology and paediatrics-a survey on clinical usefulness. <i>Physiological Measurement</i> , 2019 , 40, 054001 | 2.9 | 13 |
| 120 | Functional validation and comparison framework for EIT lung imaging. <i>PLoS ONE</i> , 2014 , 9, e103045 | 3.7 | 13 |
| 119 | Multimodal remote chest monitoring system with wearable sensors: a validation study in healthy subjects. <i>Physiological Measurement</i> , 2020 , 41, 015006 | 2.9 | 13 |
| 118 | Influence of overdistension/recruitment induced by high positive end-expiratory pressure on ventilation-perfusion matching assessed by electrical impedance tomography with saline bolus. <i>Critical Care</i> , 2020 , 24, 586 | 10.8 | 12 |

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| 117 | Hydroxyethyl starch (HES 130/0.4) impairs intestinal barrier integrity and metabolic function: findings from a mouse model of the isolated perfused small intestine. <i>PLoS ONE</i> , 2015 , 10, e0121497 | 3.7 | 11 |
| 116 | The influence of image reconstruction algorithms on linear thorax EIT image analysis of ventilation. <i>Physiological Measurement</i> , 2014 , 35, 1083-93 | 2.9 | 11 |
| 115 | A lung area estimation method for analysis of ventilation inhomogeneity based on electrical impedance tomography. <i>Journal of X-Ray Science and Technology</i> , 2010 , 18, 171-82 | 2.1 | 11 |
| 114 | Heterogeneous Distribution of Pulmonary Ventilation in Intensive Care Patients Detected by Functional Electrical Impedance Tomography. <i>Journal of Intensive Care Medicine</i> , 1998 , 13, 168-173 | 3.3 | 11 |
| 113 | Acid sphingomyelinase serum activity predicts mortality in intensive care unit patients after systemic inflammation: a prospective cohort study. <i>PLoS ONE</i> , 2014 , 9, e112323 | 3.7 | 11 |
| 112 | Regional lung function testing in children using electrical impedance tomography. <i>Pediatric Pulmonology</i> , 2018 , 53, 293-301 | 3.5 | 11 |
| 111 | Changes in Electrical Impedance Tomography Findings of ICU Patients during Rapid Infusion of a Fluid Bolus: A Prospective Observational Study. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2019 , 199, 1572-1575 | 10.2 | 10 |
| 110 | Neue Verfahren zur Verbesserung der Abbildungsqualität bei funktionellen EIT-Tomogrammen der Lunge. <i>Biomedizinische Technik</i> , 1997 , 42, 470-471 | 1.3 | 10 |
| 109 | Effect of lower body negative pressure and gravity on regional lung ventilation determined by EIT. <i>Physiological Measurement</i> , 2005 , 26, S27-37 | 2.9 | 10 |
| 108 | Simple Electrical Impedance Tomography Measures for the Assessment of Ventilation Distribution. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2020 , 201, 386-388 | 10.2 | 10 |
| 107 | The calculation of mechanical power is not suitable for intra-patient monitoring under pressure-controlled ventilation. <i>Intensive Care Medicine</i> , 2019 , 45, 749-750 | 14.5 | 9 |
| 106 | Effects of restricted thoracic movement on the regional distribution of ventilation. <i>Acta Anaesthesiologica Scandinavica</i> , 2010 , 54, 751-60 | 1.9 | 9 |
| 105 | Regional air trapping in acute exacerbation of obstructive lung diseases measured with electrical impedance tomography: a feasibility study. <i>Minerva Anestesiologica</i> , 2020 , 86, 172-180 | 1.9 | 9 |
| 104 | Qualitative and quantitative assessment of pendelluft: a simple method based on electrical impedance tomography. <i>Annals of Translational Medicine</i> , 2020 , 8, 1216 | 3.2 | 9 |
| 103 | Regional Lung Perfusion Analysis in Experimental ARDS by Electrical Impedance and Computed Tomography. <i>IEEE Transactions on Medical Imaging</i> , 2021 , 40, 251-261 | 11.7 | 9 |
| 102 | Coupling of EIT with computational lung modeling for predicting patient-specific ventilatory responses. <i>Journal of Applied Physiology</i> , 2017 , 122, 855-867 | 3.7 | 8 |
| 101 | Detection of Acute Pulmonary Embolism by Electrical Impedance Tomography and Saline Bolus Injection. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2020 , 202, 881-882 | 10.2 | 8 |
| 100 | Unilateral empyema impacts the assessment of regional lung ventilation by electrical impedance tomography. <i>Physiological Measurement</i> , 2014 , 35, 975-83 | 2.9 | 8 |

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| 99 | A new technique for bedside placement of enteral feeding tubes: a prospective cohort study. <i>Critical Care</i> , 2011 , 15, R8 | 10.8 | 8 |
| 98 | Measurement of regional pulmonary oxygen uptake--a novel approach using electrical impedance tomography. <i>Physiological Measurement</i> , 2011 , 32, 877-86 | 2.9 | 8 |
| 97 | Errors of the backextrapolation method in determination of the blood volume. <i>Physics in Medicine and Biology</i> , 1999 , 44, 121-30 | 3.8 | 8 |
| 96 | Optimal mean airway pressure during high-frequency oscillatory ventilation in an experimental model of acute respiratory distress syndrome: EIT-based method. <i>Annals of Intensive Care</i> , 2020 , 10, 31 | 8.9 | 8 |
| 95 | Mortality in COVID-19 is not merely a question of resource availability. <i>Lancet Respiratory Medicine</i> , 2020 , 8, 832-833 | 35.1 | 8 |
| 94 | The effect of prolonged lateral positioning during routine care on regional lung volume changes in preterm infants. <i>Pediatric Pulmonology</i> , 2016 , 51, 280-5 | 3.5 | 8 |
| 93 | Positive end-expiratory pressure titration with electrical impedance tomography and pressure-volume curve: a randomized trial in moderate to severe ARDS. <i>Physiological Measurement</i> , 2021 , 42, 014002 | 2.9 | 8 |
| 92 | Early Recognition of Pneumothorax in Neonatal Respiratory Distress Syndrome with Electrical Impedance Tomography. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2019 , 200, 1060-1061 | 10.2 | 7 |
| 91 | Influence of tidal volume and positive end-expiratory pressure on ventilation distribution and oxygenation during one-lung ventilation. <i>Physiological Measurement</i> , 2018 , 39, 034003 | 2.9 | 7 |
| 90 | The incidence and interpretation of large differences in EIT-based measures for PEEP titration in ARDS patients. <i>Journal of Clinical Monitoring and Computing</i> , 2020 , 34, 1005-1013 | 2 | 7 |
| 89 | Imaging the Respiratory Transition at Birth: Unraveling the Complexities of the First Breaths of Life. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2021 , 204, 82-91 | 10.2 | 7 |
| 88 | Automated control of mechanical ventilation during general anaesthesia: study protocol of a bicentric observational study (AVAS). <i>BMJ Open</i> , 2017 , 7, e014742 | 3 | 6 |
| 87 | Regional pulmonary effects of bronchoalveolar lavage procedure determined by electrical impedance tomography. <i>Intensive Care Medicine Experimental</i> , 2019 , 7, 11 | 3.7 | 6 |
| 86 | Effects of interventional lung assist on haemodynamics and gas exchange in cardiopulmonary resuscitation: a prospective experimental study on animals with acute respiratory distress syndrome. <i>Critical Care</i> , 2009 , 13, R17 | 10.8 | 6 |
| 85 | Data-driven classification of ventilated lung tissues using electrical impedance tomography. <i>Physiological Measurement</i> , 2011 , 32, 903-15 | 2.9 | 6 |
| 84 | Lung regions identified with CT improve the value of global inhomogeneity index measured with electrical impedance tomography. <i>Quantitative Imaging in Medicine and Surgery</i> , 2021 , 11, 1209-1219 | 3.6 | 6 |
| 83 | Regional lung function measures determined by electrical impedance tomography during repetitive ventilation manoeuvres in patients with COPD. <i>Physiological Measurement</i> , 2021 , 42, 015008 | 2.9 | 6 |
| 82 | Global and regional assessment of sustained inflation pressure-volume curves in patients with acute respiratory distress syndrome. <i>Physiological Measurement</i> , 2017 , 38, 1132-1144 | 2.9 | 5 |

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| 81 | Detection of pulmonary oedema by electrical impedance tomography: validation of previously proposed approaches in a clinical setting. <i>Physiological Measurement</i> , 2019 , 40, 054008 | 2.9 | 5 |
| 80 | The influence of an electrical impedance tomography belt on lung function determined by spirometry in sitting position. <i>Physiological Measurement</i> , 2020 , 41, 044002 | 2.9 | 5 |
| 79 | A parametric model for the changes in the complex valued conductivity of a lung during tidal breathing. <i>Journal Physics D: Applied Physics</i> , 2018 , 51, 205401 | 3 | 5 |
| 78 | Analysis and compensation for errors in electrical impedance tomography images and ventilation-related measures due to serial data collection. <i>Journal of Clinical Monitoring and Computing</i> , 2017 , 31, 1093-1101 | 2 | 5 |
| 77 | Quinidine, but not eicosanoid antagonists or dexamethasone, protect the gut from platelet activating factor-induced vasoconstriction, edema and paralysis. <i>PLoS ONE</i> , 2015 , 10, e0120802 | 3.7 | 5 |
| 76 | Methodology of electrical impedance tomography-derived measures of regional lung ventilation. <i>Critical Care</i> , 2014 , 18, 635 | 10.8 | 5 |
| 75 | A knowledge- and model-based system for automated weaning from mechanical ventilation: technical description and first clinical application. <i>Journal of Clinical Monitoring and Computing</i> , 2014 , 28, 487-98 | 2 | 5 |
| 74 | Early individualized positive end-expiratory pressure guided by electrical impedance tomography in acute respiratory distress syndrome: a randomized controlled clinical trial. <i>Critical Care</i> , 2021 , 25, 230 | 10.8 | 5 |
| 73 | The use of electrical impedance tomography for individualized ventilation strategy in COVID-19: a case report. <i>BMC Pulmonary Medicine</i> , 2021 , 21, 38 | 3.5 | 5 |
| 72 | Three broad classifications of acute respiratory failure etiologies based on regional ventilation and perfusion by electrical impedance tomography: a hypothesis-generating study. <i>Annals of Intensive Care</i> , 2021 , 11, 134 | 8.9 | 5 |
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