

Inez Frerichs

List of Publications by Year in Descending Order

Source: <https://exaly.com/author-pdf/6086401/inez-frerichs-publications-by-year.pdf>

Version: 2024-04-28

This document has been generated based on the publications and citations recorded by exaly.com. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

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	Regional ventilation distribution in patients with scoliosis assessed by electrical impedance tomography: is individual thorax shape required?. <i>Respiratory Physiology and Neurobiology</i> , 2022 , 103854 ^{2.8}		
223	Electrical Impedance Tomography 2022 , 353-363		
222	Prevalence and prognosis of respiratory pendelluft phenomenon in mechanically ventilated ICU patients with acute respiratory failure: a retrospective cohort study.. <i>Annals of Intensive Care</i> , 2022 , 12, 22	8.9	1
221	Respiratory image analysis 2022 , 169-212		0
220	Classification of Electrical Impedance Tomography Data Using Machine Learning. <i>Annual International Conference of the IEEE Engineering in Medicine and Biology Society IEEE Engineering in Medicine and Biology Society Annual International Conference</i> , 2021 , 2021, 349-353	0.9	
219	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
218	Regional ventilation distribution in healthy lungs: can reference values be established for electrical impedance tomography parameters?. <i>Annals of Translational Medicine</i> , 2021 , 9, 789	3.2	3
217	Identification of lung overdistension caused by tidal volume and positive end-expiratory pressure increases based on electrical impedance tomography. <i>British Journal of Anaesthesia</i> , 2021 , 126, e167-e170 ^{5.4}		0
216	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
215	Individualization of PEEP and tidal volume in ARDS patients with electrical impedance tomography: a pilot feasibility study. <i>Annals of Intensive Care</i> , 2021 , 11, 89	8.9	4
214	Identification and analysis of stable breathing periods in electrical impedance tomography recordings. <i>Physiological Measurement</i> , 2021 , 42,	2.9	1
213	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
212	Lung ventilation distribution in patients after traditional full sternotomy and minimally invasive thoracotomy: An observational study. <i>Acta Anaesthesiologica Scandinavica</i> , 2021 , 65, 877-885	1.9	0
211	Rapid dynamic bedside assessment of pulmonary perfusion defect by electrical impedance tomography in a patient with acute massive pulmonary embolism. <i>Pulmonary Circulation</i> , 2021 , 11, 20458940203984043	2.7	3
210	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
209	Is the Recruited Lung Volume Underestimated in Presence of Overdistension?. <i>Critical Care Medicine</i> , 2021 , 49, e206-e207	1.4	1
208	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

207	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
206	Inferring Respiratory and Circulatory Parameters from Electrical Impedance Tomography With Deep Recurrent Models. <i>IEEE Journal of Biomedical and Health Informatics</i> , 2021 , 25, 3105-3111	7.2	1
205	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
204	Model Selection Based Algorithm in Neonatal Chest EIT. <i>IEEE Transactions on Biomedical Engineering</i> , 2021 , 68, 2752-2763	5	0
203	The Effect of Physical Therapy on Regional Lung Function in Critically Ill Patients. <i>Frontiers in Physiology</i> , 2021 , 12, 749542	4.6	1
202	Personalisation of Therapies in COVID-19 Associated Acute Respiratory Distress Syndrome, Using Electrical Impedance Tomography. <i>The Journal of Critical Care Medicine</i> , 2021 , 7, 62-66	1.2	4
201	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
200	Spatial Ventilation Inhomogeneity Determined by Electrical Impedance Tomography in Patients With Chronic Obstructive Lung Disease.. <i>Frontiers in Physiology</i> , 2021 , 12, 762791	4.6	0
199	COVID-19 pneumonia: phenotype assessment requires bedside tools. <i>Critical Care</i> , 2020 , 24, 272	10.8	3
198	Electrical impedance tomography reveals pathophysiology of neonatal pneumothorax during NAVA. <i>Clinical Case Reports (discontinued)</i> , 2020 , 8, 1574-1578	0.7	2
197	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
196	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
195	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
194	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
193	Effect of sternal electrode gap and belt rotation on the robustness of pulmonary electrical impedance tomography parameters. <i>Physiological Measurement</i> , 2020 , 41, 035003	2.9	4
192	Towards a thoracic conductive phantom for EIT. <i>Medical Engineering and Physics</i> , 2020 , 77, 88-94	2.4	2
191	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
190	Monitoring bronchoalveolar lavage with electrical impedance tomography: first experience in a patient with COVID-19. <i>Physiological Measurement</i> , 2020 , 41, 085008	2.9	4

189	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
188	Oxygen Therapy Delivery and Body Position Effects Measured With Electrical Impedance Tomography. <i>Respiratory Care</i> , 2020 , 65, 281-287	2.1	4
187	Multimodal remote chest monitoring system with wearable sensors: a validation study in healthy subjects. <i>Physiological Measurement</i> , 2020 , 41, 015006	2.9	13
186	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
185	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
184	Mortality in COVID-19 is not merely a question of resource availability. <i>Lancet Respiratory Medicine</i> , 2020 , 8, 832-833	35.1	8
183	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
182	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
181	Noninvasive measurement of stroke volume changes in critically ill patients by means of electrical impedance tomography. <i>Journal of Clinical Monitoring and Computing</i> , 2020 , 34, 903-911	2	3
180	Regional pulmonary effects of bronchoalveolar lavage procedure determined by electrical impedance tomography. <i>Intensive Care Medicine Experimental</i> , 2019 , 7, 11	3.7	6
179	Initial Observations on the Effect of Repeated Surfactant Dose on Lung Volume and Ventilation in Neonatal Respiratory Distress Syndrome. <i>Neonatology</i> , 2019 , 116, 385-389	4	4
178	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
177	Calculation of mechanical power for pressure-controlled ventilation. <i>Intensive Care Medicine</i> , 2019 , 45, 1321-1323	14.5	33
176	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
175	Chest electrical impedance tomography measures in neonatology and paediatrics-a survey on clinical usefulness. <i>Physiological Measurement</i> , 2019 , 40, 054001	2.9	13
174	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
173	Compressive sensing in electrical impedance tomography for breathing monitoring. <i>Physiological Measurement</i> , 2019 , 40, 034010	2.9	4
172	Inspiratory muscle training can be monitored by electrical impedance tomography. <i>Australian Critical Care</i> , 2019 , 32, 79-80	2.9	3

171	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
170	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
169	Performance of new spirometry reference values in preoperative assessment of lung function. <i>Clinical Respiratory Journal</i> , 2019 , 13, 239-246	1.7	1
168	Wearable Sensors for Frequency-Multiplexed EIT and Multilead ECG Data Acquisition. <i>IEEE Transactions on Biomedical Engineering</i> , 2019 , 66, 810-820	5	31
167	Respiratory muscle endurance training with normocapnic hyperpnoea for patients with chronic spinal cord injury: A pilot short-term randomized controlled trial. <i>Journal of Rehabilitation Medicine</i> , 2019 , 51, 616-620	3.4	2
166	Adaptive mechanical ventilation with automated minimization of mechanical power-a pilot randomized cross-over study. <i>Critical Care</i> , 2019 , 23, 338	10.8	3
165	Electrical impedance tomography 2019 , 129-135		1
164	Regional lung function in nonsmokers and asymptomatic current and former smokers. <i>ERJ Open Research</i> , 2019 , 5,	3.5	3
163	PEEP guided by electrical impedance tomography during one-lung ventilation in elderly patients undergoing thoracoscopic surgery. <i>Annals of Translational Medicine</i> , 2019 , 7, 757	3.2	4
162	Electrical impedance tomography for chest imaging in acute respiratory failure. <i>European Respiratory Journal</i> , 2019 , 54,	13.6	2
161	Applying translational medicine by Using the WELCOME Remote Monitoring System on Patients with COPD and Comorbidities 2019 ,		4
160	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
159	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
158	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
157	Comparison of different functional EIT approaches to quantify tidal ventilation distribution. <i>Physiological Measurement</i> , 2018 , 39, 01NT01	2.9	14
156	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
155	Clinical performance of a novel textile interface for neonatal chest electrical impedance tomography. <i>Physiological Measurement</i> , 2018 , 39, 044004	2.9	28
154	Determination of respiratory system compliance during pressure support ventilation by small variations of pressure support. <i>Journal of Clinical Monitoring and Computing</i> , 2018 , 32, 741-751	2	3

153	Optimized breath detection algorithm in electrical impedance tomography. <i>Physiological Measurement</i> , 2018 , 39, 094001	2.9	14
152	Experience of Using the WELCOME Remote Monitoring System on Patients with COPD and Comorbidities. <i>IFMBE Proceedings</i> , 2018 , 97-102	0.2	
151	Regional lung function testing in children using electrical impedance tomography. <i>Pediatric Pulmonology</i> , 2018 , 53, 293-301	3.5	11
150	The Value of Phase Angle in Electrical Impedance Tomography Breath Detection 2018 ,		1
149	Lung aeration and ventilation after percutaneous tracheotomy measured by electrical impedance tomography in non-hypoxemic critically ill patients: a prospective observational study. <i>Annals of Intensive Care</i> , 2018 , 8, 110	8.9	2
148	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	34 ⁸
147	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
146	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
145	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
144	Prone Positioning Improves Ventilation Homogeneity in Children With Acute Respiratory Distress Syndrome. <i>Pediatric Critical Care Medicine</i> , 2017 , 18, e229-e234	3	13
143	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
142	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
141	Signalling mechanisms in PAF-induced intestinal failure. <i>Scientific Reports</i> , 2017 , 7, 13382	4.9	3
140	Spontaneous breathing trials after prolonged mechanical ventilation monitored by electrical impedance tomography: an observational study. <i>Acta Anaesthesiologica Scandinavica</i> , 2017 , 61, 1166-1175	4.9	26
139	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
138	Automatic lung segmentation in the presence of alveolar collapse. <i>Current Directions in Biomedical Engineering</i> , 2017 , 3, 807-810	0.5	1
137	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
136	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

135	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
134	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
133	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
132	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
131	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
130	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
129	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
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	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
126	Assessment of Lung Recruitment by Electrical Impedance Tomography and Oxygenation in ARDS Patients. <i>Medicine (United States)</i> , 2016 , 95, e3820	1.8	23
125	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
124	Correlation between alveolar ventilation and electrical properties of lung parenchyma. <i>Physiological Measurement</i> , 2015 , 36, 1211-26	2.9	18
123	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
122	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
121	A novel method to determine respiratory system mechanics during assisted ventilation. <i>Intensive Care Medicine Experimental</i> , 2015 , 3,	3.7	78
120	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
119	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
118	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

117	Monitoring Lung Volumes During Mechanical Ventilation 2015 , 441-471		
116	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
115	0736. Role of CAMP in PAF-induced intestinal endo-and epithelial dysfunction. <i>Intensive Care Medicine Experimental</i> , 2014 , 2,	3.7	78
114	Elevation of procalcitonin after implantation of an interventional lung assist device in critically ill patients. <i>ASAIO Journal</i> , 2014 , 60, 249-53	3.6	
113	Functional validation and comparison framework for EIT lung imaging. <i>PLoS ONE</i> , 2014 , 9, e103045	3.7	13
112	Unilateral empyema impacts the assessment of regional lung ventilation by electrical impedance tomography. <i>Physiological Measurement</i> , 2014 , 35, 975-83	2.9	8
111	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
110	Getting a better picture of the correlation between lung function and structure using electrical impedance tomography. <i>American Journal of Respiratory and Critical Care Medicine</i> , 2014 , 190, 1186-7	10.2	4
109	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
108	Methodology of electrical impedance tomography-derived measures of regional lung ventilation. <i>Critical Care</i> , 2014 , 18, 635	10.8	5
107	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
106	Electrical impedance tomography imaging of the cardiopulmonary system. <i>Current Opinion in Critical Care</i> , 2014 , 20, 323-32	3.5	33
105	Individual thorax geometry reduces position and size differences in reconstructed images of electrical impedance tomography. <i>Journal of X-Ray Science and Technology</i> , 2014 , 22, 797-807	2.1	4
104	Pulmonary function testing in children and infants. <i>Physiological Measurement</i> , 2014 , 35, R59-90	2.9	19
103	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
102	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
101	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
100	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

99	Non-invasive determination of respiratory system mechanics in pressure support ventilation using the expiratory time constant?. <i>Critical Care</i> , 2013 , 17, 424	10.8	1
98	Ventilatory strategies in septic patients. Results from a nationwide observational trial. <i>Der Anaesthetist</i> , 2013 , 62, 27-33	2.2	3
97	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
96	Regional respiratory inflation and deflation pressure-volume curves determined by electrical impedance tomography. <i>Physiological Measurement</i> , 2013 , 34, 567-77	2.9	14
95	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
94	Customized electrical impedance tomography based analysis of regional lung function: a feasibility study. <i>Biomedizinische Technik</i> , 2013 , 58 Suppl 1,	1.3	2
93	Does thorax EIT image analysis depend on the image reconstruction method?. <i>Journal of Physics: Conference Series</i> , 2013 , 434, 012040	0.3	3
92	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
91	Developing Customized Evaluation Software for Clinical Trials: An Example with Obstructive Lung Diseases. <i>Engineering</i> , 2013 , 05, 103-107	0.4	1
90	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
89	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
88	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
87	Level-set-based reconstruction algorithm for EIT lung images: first clinical results. <i>Physiological Measurement</i> , 2012 , 33, 739-50	2.9	23
86	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
85	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
84	Regional ventilation in cystic fibrosis measured by electrical impedance tomography. <i>Journal of Cystic Fibrosis</i> , 2012 , 11, 412-8	4.1	67
83	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
82	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

81	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
80	Automatic segmentation of collapsed lung regions in thorax CT. <i>Biomedizinische Technik</i> , 2012 , 57,	1.3	2
79	EIT image reconstruction with individual thorax geometry. <i>IFAC Postprint Volumes IPPV / International Federation of Automatic Control</i> , 2012 , 45, 103-106		
78	A new technique for bedside placement of enteral feeding tubes: a prospective cohort study. <i>Critical Care</i> , 2011 , 15, R8	10.8	8
77	Regional Respiratory Time Constants During Lung Recruitment in High Frequency Oscillatory Ventilated Preterm Infants. <i>Pediatric Research</i> , 2011 , 70, 43-43	3.2	
76	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
75	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
74	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
73	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
72	Pneumothorax in a preterm infant monitored by electrical impedance tomography: a case report. <i>Neonatology</i> , 2011 , 99, 10-3	4	23
71	Data-driven classification of ventilated lung tissues using electrical impedance tomography. <i>Physiological Measurement</i> , 2011 , 32, 903-15	2.9	6
70	Measurement of regional pulmonary oxygen uptake--a novel approach using electrical impedance tomography. <i>Physiological Measurement</i> , 2011 , 32, 877-86	2.9	8
69	Ingestion of (n-3) fatty acids augments basal and platelet activating factor-induced permeability to dextran in the rat mesenteric vascular bed. <i>Journal of Nutrition</i> , 2011 , 141, 1635-42	4.1	4
68	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
67	Effects of restricted thoracic movement on the regional distribution of ventilation. <i>Acta Anaesthesiologica Scandinavica</i> , 2010 , 54, 751-60	1.9	9
66	PEEP titration guided by ventilation homogeneity: a feasibility study using electrical impedance tomography. <i>Critical Care</i> , 2010 , 14, R8	10.8	119
65	Ventilation inhomogeneity is one criterion among many in multidimensional PEEP titration. <i>Critical Care</i> , 2010 , 14, 424	10.8	2
64	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

63	A model of the isolated perfused rat small intestine. <i>American Journal of Physiology - Renal Physiology</i> , 2010 , 298, G304-13	5.1	27
62	Regional lung volume changes during high-frequency oscillatory ventilation. <i>Pediatric Critical Care Medicine</i> , 2010 , 11, 610-5	3	21
61	Regional tidal ventilation and compliance during a stepwise vital capacity manoeuvre. <i>Intensive Care Medicine</i> , 2010 , 36, 1953-61	14.5	78
60	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
59	Electrical impedance tomography 2010 , 195-205		2
58	Electrical Impedance Tomography in Acute Respiratory Distress Syndrome. <i>The Open Nuclear Medicine Journal</i> , 2010 , 2, 110-118		3
57	Assessment of changes in distribution of lung perfusion by electrical impedance tomography. <i>Respiration</i> , 2009 , 77, 282-91	3.7	68
56	GREIT: a unified approach to 2D linear EIT reconstruction of lung images. <i>Physiological Measurement</i> , 2009 , 30, S35-55	2.9	399
55	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
54	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
53	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
52	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
51	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
50	Tension pneumopericardium after esophagectomy: an extremely rare complication. <i>Journal of Cardiothoracic and Vascular Anesthesia</i> , 2008 , 22, 267-9	2.1	1
49	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
48	Regional Lung Function in Critically Ill Neonates: A New Perspective for Electrical Impedance Tomography 2008 , 224-234		0
47	Regional Lung Function in Critically Ill Neonates: A New Perspective for Electrical Impedance Tomography. <i>Yearbook of Intensive Care and Emergency Medicine</i> , 2008 , 224-234		1
46	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

45	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
44	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
43	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
42	Distribution of regional ventilation during restricted chest wall movement determined by EIT. <i>IFMBE Proceedings</i> , 2007 , 531-534	0.2	
41	Analysis of ventilatory conditions under different inspiratory oxygen concentrations and positive end-expiratory pressure levels by EIT 2007 , 524-527		1
40	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
39	Automatic weaning from mechanical ventilation--no progress in the last 10 years?. <i>European Journal of Cardio-thoracic Surgery</i> , 2006 , 30, 415-6; author reply 416-7	3	
38	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
37	Imaging pathologic pulmonary air and fluid accumulation by functional and absolute EIT. <i>Physiological Measurement</i> , 2006 , 27, S187-98	2.9	67
36	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
35	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
34	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
33	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
32	Electrical Impedance Tomography and its Perspectives in Intensive Care Medicine 2006 , 437-447		1
31	Electrical Impedance Tomography and its Perspectives in Intensive Care Medicine. <i>Yearbook of Intensive Care and Emergency Medicine</i> , 2006 , 437-447		3
30	Funktionelle elektrische Impedanztomographie. <i>Intensivmedizin Und Notfallmedizin</i> , 2005 , 42, 66-73		4
29	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
28	Elektrische Impedanztomographie Ein Verfahren zur Berwachung der regionalen Lungenfunktion (Electrical Impedance Tomography Is Method for Monitoring Regional Lung Function). <i>TM Technisches Messen</i> , 2004 , 71, 519-526	0.7	1

27	Transarterial aortic valve replacement with a self expanding stent in pigs. <i>Heart</i> , 2004 , 90, 1326-31	5.1	33
26	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
25	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
24	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
23	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
22	Creatinine clearance versus serum creatinine as a risk factor in cardiac surgery. <i>BMC Surgery</i> , 2003 , 3, 4	2.3	31
21	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
20	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
19	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
18	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
17	Quantitative evaluation of the performance of different electrical tomography devices. <i>Biomedizinische Technik</i> , 2001 , 46, 91-5	1.3	24
16	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
15	ELEKTROTOMOGRAPHIE-SYSTEM ZUR BESTIMMUNG DER LOKALEN VENTILATIONSVERTEILUNG IN DER SCHWERELOSIGKEIT. <i>Biomedizinische Technik</i> , 2000 , 45, 71-72	1.3	2
14	A simple method to check the dynamic performance of electrical impedance tomography systems. <i>Physiological Measurement</i> , 2000 , 21, 53-60	2.9	17
13	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
12	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
11	Optimizing deconvolution techniques by the application of the MÜchhausen meta algorithm. <i>Biomedizinische Technik</i> , 1999 , 44, 308-13	1.3	1
10	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

9	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
8	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
7	Electrical impedance tomography in monitoring experimental lung injury. <i>Intensive Care Medicine</i> , 1998 , 24, 829-36	14.5	579
6	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
5	Development and Initial in Vivo Testing of a New Hydraulic Drive System (Paedipump) for Circulatory Support in Infants. <i>International Journal of Artificial Organs</i> , 1998 , 21, 417-424	1.9	1
4	Neue Verfahren zur Verbesserung der Abbildungsqualität bei funktionellen EIT-Tomogrammen der Lunge. <i>Biomedizinische Technik</i> , 1997 , 42, 470-471	1.3	10
3	Gravity-dependent phenomena in lung ventilation determined by functional EIT. <i>Physiological Measurement</i> , 1996 , 17 Suppl 4A, A149-57	2.9	46
2	Local mechanics of the lung tissue determined by functional EIT. <i>Physiological Measurement</i> , 1996 , 17 Suppl 4A, A159-66	2.9	46
1	Unravelling the complexities of the first breaths of life		1