

Karel RoubĀ-k

List of Publications by Year in descending order

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Version: 2024-02-01

24
papers

104
citations

1478505

6
h-index

1372567

10
g-index

25
all docs

25
docs citations

25
times ranked

94
citing authors

#	ARTICLE	IF	CITATIONS
1	Work of Breathing into Snow in the Presence versus Absence of an Artificial Air Pocket Affects Hypoxia and Hypercapnia of a Victim Covered with Avalanche Snow: A Randomized Double Blind Crossover Study. PLoS ONE, 2015, 10, e0144332.	2.5	20
2	Intravenous administration of normal saline may be misinterpreted as a change of end-expiratory lung volume when using electrical impedance tomography. Scientific Reports, 2019, 9, 5775.	3.3	12
3	Demand flow facilitates spontaneous breathing during high-frequency oscillatory ventilation in a pig model. Critical Care Medicine, 2009, 37, 1068-1073.	0.9	11
4	Design and Control of a Demand Flow System Assuring Spontaneous Breathing of a Patient Connected to an HFO Ventilator. IEEE Transactions on Biomedical Engineering, 2011, 58, 3225-3233.	4.2	11
5	Effects of pleural effusion drainage in the mechanically ventilated patient as monitored by electrical impedance tomography and end-expiratory lung volume: A pilot study. Journal of Critical Care, 2020, 59, 76-80.	2.2	9
6	Models of PaO ₂ response to the continuous distending pressure maneuver during high frequency oscillatory ventilation in healthy and ARDS lung model pigs. Experimental Lung Research, 2016, 42, 87-94.	1.2	6
7	Response time of indirectly accessed gas exchange depends on measurement method. Biomedizinische Technik, 2018, 63, 647-655.	0.8	6
8	Delivery of heliox with a semi-closed circuit during spontaneous breathing: a comparative economic theoretical study. BMC Pulmonary Medicine, 2015, 15, 65.	2.0	5
9	Spontaneous Breathing of Heliox Using a Semi-Closed Circuit: A Bench Study. International Journal of Artificial Organs, 2012, 35, 466-470.	1.4	4
10	Selection of the Baseline Frame for Evaluation of Electrical Impedance Tomography of the Lungs. , 2015, , .		3
11	Breathing Experiments into the Simulated Avalanche Snow: Medical and Technical Issues of the Outdoor Breathing Trials. IFMBE Proceedings, 2019, , 711-717.	0.3	3
12	MATERIALS SUITABLE TO SIMULATE SNOW DURING BREATHING EXPERIMENTS FOR AVALANCHE SURVIVAL RESEARCH. Lekar A Technika, 2020, 50, 32-39.	0.1	3
13	Perlite is a suitable model material for experiments investigating breathing in high density snow. Scientific Reports, 2022, 12, 2070.	3.3	2
14	Tidal volume significantly affects oxygenation in healthy pigs during high-frequency oscillatory ventilation compared to conventional ventilation. BioMedical Engineering OnLine, 2022, 21, 14.	2.7	2
15	Model of SpO ₂ signal of the neonate. Current Directions in Biomedical Engineering, 2019, 5, 549-552.	0.4	1
16	Computer model of oxygenation in neonates. Current Directions in Biomedical Engineering, 2019, 5, 73-76.	0.4	1
17	In Vitro Estimation of Relative Compliance during High-Frequency Oscillatory Ventilation. Applied Sciences (Switzerland), 2021, 11, 899.	2.5	1
18	First Clinical Use of Rapidly Designed and Manufactured Mechanical Lung Ventilator CoroVent for COVID-19 Patients. , 2021, , .		1

#	ARTICLE	IF	CITATIONS
19	Pulse Oximeter Performance during Rapid Desaturation. Sensors, 2022, 22, 4236.	3.8	1
20	Design and performance of a flow sensor CoroQuant used with emergency lung ventilator CoroVent during COVID-19 pandemic. Measurement: Sensors, 2022, 22, 100383.	1.7	1
21	Continuous distending pressure effects on variables contributing to oxygenation in healthy and ARDS model pigs during HFOV. , 2014, , .		0
22	Models of a PaO ₂ Course during a Stepwise Change of Continuous Distending Pressure in HFOV. , 2015, , .		0
23	COMPARISON OF END-EXPIRATORY LUNG VOLUME MEASUREMENT BY ELECTRICAL IMPEDANCE TOMOGRAPHY AND NITROGEN WASHOUT METHOD IN PIGS. Lekar A Technika, 2020, 50, 146-151.	0.1	0
24	Decrease in brain oxygenation is significantly less pronounced than decrease in SpO ₂ during short-time breathing experiments in simulated avalanche snow. , 2021, , .		0