Fernando Suarez Sipmann

List of Publications by Year
in descending order

105 papers	5,353 citations	147786 31 h-index	85537 71 g-index
114 all docs	114 docs citations	114 times ranked	3612 citing authors

#	Article	IF	Citations
1	Monitoring dead space during recruitment and PEEP titration in an experimental model. Intensive Care Medicine, 2006, 32, 1863-1871.	8.2	611
2	Imbalances in Regional Lung Ventilation. American Journal of Respiratory and Critical Care Medicine, 2004, 169, 791-800.	5.6	555
3	Bedside estimation of recruitable alveolar collapse and hyperdistension by electrical impedance tomography. Intensive Care Medicine, 2009, 35, 1132-1137.	8.2	341
4	Clinical features, ventilatory management, and outcome of ARDS caused by COVID-19 are similar to other causes of ARDS. Intensive Care Medicine, 2020, 46, 2200-2211.	8.2	295
5	An Early PEEP/FiO2Trial Identifies Different Degrees of Lung Injury in Patients with Acute Respiratory Distress Syndrome. American Journal of Respiratory and Critical Care Medicine, 2007, 176, 795-804.	5.6	261
6	Use of dynamic compliance for open lung positive end-expiratory pressure titration in an experimental study. Critical Care Medicine, 2007, 35, 214-221.	0.9	240
7	Open Lung Approach for the Acute Respiratory Distress Syndrome. Critical Care Medicine, 2016, 44, 32-42.	0.9	215
8	Rationale of Dead Space Measurement by Volumetric Capnography. Anesthesia and Analgesia, 2012, 114, 866-874.	2.2	204
9	Lung Recruitment Improves the Efficiency of Ventilation and Gas Exchange During One-Lung Ventilation Anesthesia. Anesthesia and Analgesia, 2004, 98, 1604-1609.	2.2	155
10	Individualised perioperative open-lung approach versus standard protective ventilation in abdominal surgery (iPROVE): a randomised controlled trial. Lancet Respiratory Medicine,the, 2018, 6, 193-203.	10.7	155
11	Effects of hydroxyethyl starch administration on renal function in critically ill patients. British Journal of Anaesthesia, 2007, 98, 216-224.	3.4	144
12	Regional lung perfusion estimated by electrical impedance tomography in a piglet model of lung collapse. Journal of Applied Physiology, 2012, 112, 225-236.	2.5	134
13	Alveolar recruitment improves ventilation during thoracic surgery: a randomized controlled trial. British Journal of Anaesthesia, 2012, 108, 517-524.	3.4	105
14	Alveolar recruitment improves ventilatory efficiency of the lungs during anesthesia. Canadian Journal of Anaesthesia, 2004, 51, 723-727.	1.6	102
15	Assessment of PaO2/FiO2 for stratification of patients with moderate and severe acute respiratory distress syndrome. BMJ Open, 2015, 5, e006812-e006812.	1.9	98
16	Volumetric capnography. Current Opinion in Critical Care, 2014, 20, 333-339.	3.2	93
17	A Quantile Analysis of Plateau and Driving Pressures: Effects on Mortality in Patients With Acute Respiratory Distress Syndrome Receiving Lung-Protective Ventilation*. Critical Care Medicine, 2017, 45, 843-850.	0.9	88
18	Validation of Bohr dead space measured by volumetric capnography. Intensive Care Medicine, 2011, 37, 870-874.	8.2	71

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19	Veno-venous extracorporeal CO2 removal for the treatment of severe respiratory acidosis: pathophysiological and technical considerations. Critical Care, 2014, 18, R124.	5.8	69
20	Noninvasive Monitoring of Lung Recruitment Maneuvers in Morbidly Obese Patients. Anesthesia and Analgesia, 2014, 118, 137-144.	2.2	58
21	Model fitting of volumetric capnograms improves calculations of airway dead space and slope of phase III. Journal of Clinical Monitoring and Computing, 2009, 23, 197-206.	1.6	56
22	Early Inflammation Mainly Affects Normally and Poorly Aerated Lung in Experimental Ventilator-Induced Lung Injury*. Critical Care Medicine, 2014, 42, e279-e287.	0.9	56
23	Capnography reflects ventilation/perfusion distribution in a model of acute lung injury. Acta Anaesthesiologica Scandinavica, 2011, 55, 597-606.	1.6	53
24	Non-invasive monitoring of central blood pressure by electrical impedance tomography: first experimental evidence. Medical and Biological Engineering and Computing, 2011, 49, 409-415.	2.8	49
25	Advanced Uses of Pulse Oximetry for Monitoring Mechanically Ventilated Patients. Anesthesia and Analgesia, 2017, 124, 62-71.	2.2	49
26	Open lung approach versus standard protective strategies: Effects on driving pressure and ventilatory efficiency during anesthesia - A pilot, randomized controlled trial. PLoS ONE, 2017, 12, e0177399.	2.5	45
27	Effect of pulmonary perfusion on the slopes of single-breath test of CO2. Journal of Applied Physiology, 2005, 99, 650-655.	2.5	43
28	Lung Recruitment and Positive End-Expiratory Pressure Have Different Effects on CO2 Elimination in Healthy and Sick Lungs. Anesthesia and Analgesia, 2010, 111, 968-977.	2.2	41
29	The accuracy of postoperative, non-invasive Air-Test to diagnose atelectasis in healthy patients after surgery: a prospective, diagnostic pilot study. BMJ Open, 2017, 7, e015560.	1.9	35
30	Efficacy of dexamethasone treatment for patients with the acute respiratory distress syndrome caused by COVID-19: study protocol for a randomized controlled superiority trial. Trials, 2020, 21, 717.	1.6	35
31	Reference values for volumetric capnography-derived non-invasive parameters in healthy individuals. Journal of Clinical Monitoring and Computing, 2013, 27, 281-288.	1.6	31
32	Lung Inflammation Persists After 27 Hours of Protective Acute Respiratory Distress Syndrome Network Strategy and Is Concentrated in the Nondependent Lung. Critical Care Medicine, 2015, 43, e123-e132.	0.9	30
33	The Sensitivity and Specificity of Pulmonary Carbon Dioxide Elimination for Noninvasive Assessment of Fluid Responsiveness. Anesthesia and Analgesia, 2016, 122, 1404-1411.	2.2	30
34	Photoplethysmographic characterization of vascular tone mediated changes in arterial pressure: an observational study. Journal of Clinical Monitoring and Computing, 2019, 33, 815-824.	1.6	29
35	Effects of oxygen on post-surgical infections during an individualised perioperative open-lung ventilatory strategy: a randomised controlled trial. British Journal of Anaesthesia, 2020, 124, 110-120.	3.4	28
36	Pulmonary blood flow generates cardiogenic oscillations. Respiratory Physiology and Neurobiology, 2009, 167, 247-254.	1.6	23

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37	Real-time images of tidal recruitment using lung ultrasound. The Ultrasound Journal, 2015, 7, 19.	2.0	23
38	Corrections of Enghoff's dead space formula for shunt effects still overestimate Bohr's dead space. Respiratory Physiology and Neurobiology, 2013, 189, 99-105.	1.6	22
39	Individualized lung recruitment maneuver guided by pulseâ€oximetry in anesthetized patients undergoing laparoscopy: a feasibility study. Acta Anaesthesiologica Scandinavica, 2018, 62, 608-619.	1.6	22
40	States of low pulmonary blood flow can be detected non-invasively at the bedside measuring alveolar dead space. Journal of Clinical Monitoring and Computing, 2012, 26, 183-190.	1.6	21
41	Pressure safety range of barotrauma with lung recruitment manoeuvres. European Journal of Anaesthesiology, 2013, 30, 567-574.	1.7	21
42	Programming Pressure Support Ventilation in Pediatric Patients in Ambulatory Surgery with a Laryngeal Mask Airway. Anesthesia and Analgesia, 2007, 105, 1585-1591.	2.2	20
43	Adjusting tidal volume to stress index in an open lung condition optimizes ventilation and prevents overdistension in an experimental model of lung injury and reduced chest wall compliance. Critical Care, 2015, 19, 9.	5.8	20
44	High respiratory rate is associated with early reduction of lung edema clearance in an experimental model of <scp>ARDS</scp>. Acta Anaesthesiologica Scandinavica, 2016, 60, 79-92.	1.6	20
45	Heart-lung interactions in acute respiratory distress syndrome: pathophysiology, detection and management strategies. Annals of Translational Medicine, 2018, 6, 27-27.	1.7	20
46	Rationale and Study Design for an Individualized Perioperative Open Lung Ventilatory Strategy in Patients on One-Lung Ventilation (iPROVE-OLV). Journal of Cardiothoracic and Vascular Anesthesia, 2019, 33, 2492-2502.	1.3	20
47	Altering the mechanical scenario to decrease the driving pressure. Critical Care, 2015, 19, 342.	5.8	19
48	Should the ART trial change our practice?. Journal of Thoracic Disease, 2017, 9, 4871-4877.	1.4	18
49	A novel continuous capnodynamic method for cardiac output assessment in a porcine model of lung lavage. Acta Anaesthesiologica Scandinavica, 2015, 59, 1022-1031.	1.6	17
50	Lung recruitment improves right ventricular performance after cardiopulmonary bypass. European Journal of Anaesthesiology, 2017, 34, 66-74.	1.7	17
51	Recruit the lung before titrating the right positive end-expiratory pressure to protect it. Critical Care, 2009, 13, 134.	5.8	16
52	Capnodynamic assessment of effective lung volume during cardiac output manipulations in a porcine model. Journal of Clinical Monitoring and Computing, 2016, 30, 761-769.	1.6	16
53	Postural lung recruitment assessed by lung ultrasound in mechanically ventilated children. The Ultrasound Journal, 2017, 9, 22.	2.0	16
54	Dead space analysis at different levels of positive end-expiratory pressure in acute respiratory distress syndrome patients. Journal of Critical Care, 2018, 45, 231-238.	2.2	16

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55	Feasibility of (68)Ga-labeled Siglec-9 peptide for the imaging of acute lung inflammation: a pilot study in a porcine model of acute respiratory distress syndrome. American Journal of Nuclear Medicine and Molecular Imaging, 2016, 6, 18-31.	1.0	16
56	A modified breathing pattern improves the performance of a continuous capnodynamic method for estimation of effective pulmonary blood flow. Journal of Clinical Monitoring and Computing, 2017, 31, 717-725.	1.6	15
57	Performance of a capnodynamic method estimating effective pulmonary blood flow during transient and sustained hypercapnia. Journal of Clinical Monitoring and Computing, 2018, 32, 311-319.	1.6	14
58	Sequential lateral positioning as a new lung recruitment maneuver: an exploratory study in early mechanically ventilated Covid-19 ARDS patients. Annals of Intensive Care, 2022, 12, 13.	4.6	14
59	Dead space during one-lung ventilation. Current Opinion in Anaesthesiology, 2015, 28, 10-17.	2.0	13
60	Suctioning through a double-lumen endotracheal tube helps to prevent alveolar collapse and to preserve ventilation. Intensive Care Medicine, 2005, 31, 431-440.	8.2	12
61	Alveolar recruitment during mechanical ventilation â€“ Where are we in 2013?. Trends in Anaesthesia and Critical Care, 2013, 3, 238-245.	0.9	12
62	Alveolar Recruitment Maneuvers for One-Lung Ventilation During Thoracic Anesthesia. Current Anesthesiology Reports, 2014, 4, 160-169.	2.0	12
63	Open lung approach ventilation abolishes the negative effects of respiratory rate in experimental lung injury. Acta Anaesthesiologica Scandinavica, 2016, 60, 1131-1141.	1.6	12
64	Unsuccessful and Successful Clinical Trials in Acute Respiratory Distress Syndrome: Addressing Physiology-Based Gaps. Frontiers in Physiology, 2021, 12, 774025.	2.8	12
65	Clinical and experimental validation of a capnodynamic method for endâ€expiratory lung volume assessment. Acta Anaesthesiologica Scandinavica, 2020, 64, 670-676.	1.6	11
66	Prevention of atelectasis by continuous positive airway pressure in anaesthetised children. European Journal of Anaesthesiology, 2021, 38, 41-48.	1.7	10
67	Methodology of a Large Multicenter Observational Study of Patients with COVID-19 in Spanish Intensive Care Units. Archivos De Bronconeumologia, 2022, 58, 22-31.	0.8	10
68	Standardized Unloading of Respiratory Muscles during Neurally Adjusted Ventilatory Assist. Anesthesiology, 2018, 129, 769-777.	2.5	9
69	Monitoring Expired CO2 Kinetics to Individualize Lung-Protective Ventilation in Patients With the Acute Respiratory Distress Syndrome. Frontiers in Physiology, 2021, 12, 785014.	2.8	9
70	Pulmonary artery pulsatility is the main cause of cardiogenic oscillations. Journal of Clinical Monitoring and Computing, 2013, 27, 47-53.	1.6	8
71	The Open Lung Approach Improves Pulmonary Vascular Mechanics in an Experimental Model of Acute Respiratory Distress Syndrome. Critical Care Medicine, 2017, 45, e298-e305.	0.9	8
72	A noninvasive postoperative clinical score to identify patients at risk for postoperative pulmonary complications: the Air-Test Score. Minerva Anestesiologica, 2020, 86, 404-415.	1.0	8

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73	Nuevos modos de ventilaciÃ³n asistida. Medicina Intensiva, 2014, 38, 249-260.	0.7	7
74	Doppler images of intra-pulmonary shunt within atelectasis in anesthetized children. The Ultrasound Journal, 2016, 8, 19.	2.0	7
75	Rationale and study design for an individualised perioperative open-lung ventilatory strategy with a high versus conventional inspiratory oxygen fraction (iPROVE-O2) and its effects on surgical site infection: study protocol for a randomised controlled trial. BMJ Open, 2017, 7, e016765.	1.9	7
76	Performance of a capnodynamic method estimating cardiac output during respiratory failure - before and after lung recruitment. Journal of Clinical Monitoring and Computing, 2020, 34, 1199-1207.	1.6	7
77	Comparison between capnodynamic and thermodilution method for cardiac output monitoring during major abdominal surgery. European Journal of Anaesthesiology, 2021, Publish Ahead of Print, 1242-1252.	1.7	7
78	Intraoperative open lung condition and postoperative pulmonary complications. A secondary analysis of iPROVE and iPROVEâ€O2 trials. Acta Anaesthesiologica Scandinavica, 2022, 66, 30-39.	1.6	7
79	Neurally adjusted ventilatory assist in patients with acute respiratory failure: study protocol for a randomized controlled trial. Trials, 2016, 17, 500.	1.6	6
80	Multimodal non-invasive monitoring to apply an open lung approach strategy in morbidly obese patients during bariatric surgery. Journal of Clinical Monitoring and Computing, 2020, 34, 1015-1024.	1.6	6
81	PERIOPERATIVE CONTINUOUS NON-INVASIVE CARDIAC OUTPUT MONITORING IN CARDIAC SURGERY PATIENTS BY A NOVEL CAPNODYNAMIC METHOD. Journal of Cardiothoracic and Vascular Anesthesia, 2022, , .	1.3	6
82	New modes of assisted mechanical ventilation. Medicina Intensiva (English Edition), 2014, 38, 249-260.	0.2	5
83	Physiological Markers for Acute Respiratory Distress Syndrome: Letâ€™s Get More Efficient!. American Journal of Respiratory and Critical Care Medicine, 2019, 199, 260-261.	5.6	5
84	Positive end-expiratory pressure individualization guided by continuous end-expiratory lung volume monitoring during laparoscopic surgery. Journal of Clinical Monitoring and Computing, 2022, 36, 1557-1567.	1.6	5
85	THAM reduces CO2-associated increase in pulmonary vascular resistance â€“ an experimental study in lung-injured piglets. Critical Care, 2015, 19, 331.	5.8	4
86	Effects on Pulmonary Vascular Mechanics of Two Different Lung-Protective Ventilation Strategies in an Experimental Model of Acute Respiratory Distress Syndrome. Critical Care Medicine, 2017, 45, e1157-e1164.	0.9	4
87	PEEP titration guided by transpulmonary pressure: lessons from a negative trial. Journal of Thoracic Disease, 2019, 11, S1957-S1962.	1.4	3
88	Continuous monitoring of intrinsic PEEP based on expired CO2 kinetics: an experimental validation study. Critical Care, 2019, 23, 192.	5.8	3
89	Bedside estimation of recruitable alveolar collapse and hyperdistension by electrical impedance tomography. , 2012, , 165-170.		3
90	Clinical perspectives of "the open lung concept". Minerva Anestesiologica, 1999, 65, 310-2.	1.0	3

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91	How We Stretch the Lung Matters*. Critical Care Medicine, 2013, 41, 1153-1155.	0.9	2
92	Intraoperative Ventilation Strategies to Reduce Pulmonary Complications in Obese Patients. JAMA - Journal of the American Medical Association, 2019, 322, 1828.	7.4	2
93	Continuous Non-invasive Monitoring of Cardiac Output and Lung Volume Based on CO2 Kinetics. Annual Update in Intensive Care and Emergency Medicine, 2019, , 215-229.	0.2	2
94	Volumetric Capnography for Monitoring Lung Function During Mechanical Ventilation. Yearbook of Intensive Care and Emergency Medicine, 2006, , 458-467.	0.1	1
95	Validation of Bohr dead space measured by volumetric capnography: reply to Graf. Intensive Care Medicine, 2011, 37, 1397-1398.	8.2	1
96	Reply to Hellige and Hahn and Hellige. Journal of Applied Physiology, 2012, 112, 2128-2128.	2.5	1
97	0985. Open lung ventilation improves conditions for right ventricle performance by decreasing pulmonary vascular wave reflections in an experimental model of ARDS. Intensive Care Medicine Experimental, 2014, 2, .	1.9	1
98	Protective Ventilation during Anesthesia: Too Soon for Final Recommendations. Anesthesiology, 2015, 123, 1478-1479.	2.5	1
99	Validation of Bohr dead space measured by volumetric capnography. , 2012, , 195-199.		1
100	201. Critical Care Medicine, 2013, 41, A45.	0.9	0
101	202. Critical Care Medicine, 2013, 41, A45.	0.9	0
102	329. Critical Care Medicine, 2013, 41, A77.	0.9	0
103	Position-dependent distribution of lung ventilation â€" A feasability study. , 2015, , .		0
104	In Response. Anesthesia and Analgesia, 2016, 123, 1332-1333.	2.2	0
105	Reply to. European Journal of Anaesthesiology, 2018, 35, 62-63.	1.7	0