

**Bibliometric Data (March 2013; IF JCR Science Edition 2011)**

Number of PubMed indexed peer-reviewed publications:	32
Sum of impact factor:	174,182
First-, senior- and shared first authorships:	17
h-Index:	9
Patents:	3
Book chapters:	3

**Peer-reviewed PubMed indexed publications:**

1. Effects of intravascular volume replacement on lung and kidney function and damage in non-septic experimental lung injury  
Silva PL, Güldner A, Uhlig C, Carvalho NC, Beda A, Rentzsch I, Kasper M, Wiedemann B, Spieth PM, Koch T, Capelozzi VL, Pelosi P, Rocco PRM, Gama de Abreu M  
Anesthesiology. 2013Feb;118(2):395-408  
IF: 5,359
2. Adaptive control system for volume-controlled ventilation in small animals.  
Huhle R, Spieth PM, Koch T, Abreu MG.  
Biomed Tech (Berl). 2012 Sep 6;57 Suppl 2012  
IF: 0,855
3. Minimally invasive versus open oesophagectomy for patients with oesophageal cancer  
Parotto M, Valenza F, Ori C, Spieth PM  
Lancet. 2012 Sep 8;380(9845):884  
IF: 38,278
4. Pulmonary embolism in mechanically ventilated patients: What the eye doesn't see, the heart can still grieve over  
Spieth PM, Gama de Abreu M  
Crit Care Med. 2012 Dec;40(12):3320-3321  
IF: 6,330
5. Comparative effects of proportional assist and variable pressure support ventilation on lung function and damage in experimental lung injury  
Spieth PM, Güldner A, Beda A, Carvalho NC, Nowack T, Krause A, Rentzsch I, Suchantke S, Thal SC, Engelhard K, Kasper M, Koch T, Pelosi P, Gama de Abreu M  
Crit Care Med. 2012 Sep;40(9):2654-61  
IF: 6,330
6. Effects of anesthetic regimes on inflammatory response in a rat model of acute lung injury  
Fortis S, Spieth PM (equally contributed), Lu WY, Parotto M, Haitsma JJ, Slutsky AS, Zhong N, Mazer CD, Zhang H  
Intensive Care Med. 2012 Sep;38(9):1548-55  
IF: 5,399
7. Lung recruitment in ARDS: We are still confused, but on a higher PEEP level  
Spieth PM, Gama de Abreu M  
Crit Care. 2012 Feb 9;16(1):108  
IF: 4,607
8. Chronic obstructive pulmonary disease  
Spieth PM, Güldner A, Gama de Abreu M  
Curr Opin Anaesthesiol. 2012 Feb;25(1):24-29  
IF: 2,213

9. Circadian rhythms: From basic mechanisms to the intensive care unit  
Chan MC, Spieth PM (equally contributed), Quinn K, Parotto M, Zhang H, Slutsky AS  
Crit Care Med. 2012 Jan;40(1):246-253  
IF: 6,330
10. Mechanical stress induces lung fibrosis by epithelial-mesenchymal transition (EMT)  
Cabrera-Benitez NE, Parotto M, Post M, Han B, Spieth PM, Cheng WE; Valladares F, Villar J, Liu M, Sato M, Zhang H, Slutsky AS  
Crit Care Med. 2012 Feb;40(2):510-517  
IF: 6,330
11. Extrapolation in the analysis of lung aeration by computed tomography: a validation study  
Reske AW, Rau A, Reske AP, Koziol M, Gottwald B, Alef M, Ionita JC, Spieth PM, Hepp P, Seiwerts M, Beda A, Born S, Schermann G, Amato MB, Wrigge H  
Crit Care. 2011 15(6):R279  
IF: 4,607
12. Analyzing lung crackle sounds: stethoscopes and beyond.  
Spieth PM, Zhang H.  
Intensive Care Med. 2011 Aug;37(8):1238-1239  
IF: 5,399
13. Open lung approach vs acute respiratory distress syndrome network ventilation in experimental acute lung injury.  
Spieth PM, Güldner A, Carvalho AR, Kasper M, Pelosi P, Uhlig S, Koch T, Gama de Abreu M.  
Br J Anaesth. 2011 Sep;107(3):388-397  
IF: 4,243
14. Xenon and the developing brain.  
Spieth PM, Parotto M.  
Minerva Anesthesiol. 2011 Jun;77(6):565-566  
IF: 2,656
15. Forced oscillation technique: an alternative tool to define the optimal PEEP?  
Fanelli V, Spieth P, Zhang H.  
Intensive Care Med. 2011 Aug;37(8):1235-1237  
IF: 5,399
16. Computed tomographic assessment of lung weights in trauma patients with early posttraumatic lung dysfunction.  
Reske AW, Reske AP, Heine T, Spieth PM, Rau A, Seiwerts M, Busse H, Gottschaldt U, Schreiter D, Born S, Gama de Abreu M, Josten C, Wrigge H, Amato MB.  
Crit Care. 2011 Feb 25;15(1):R71  
IF: 4,607
17. Distribution of regional lung aeration and perfusion during conventional and noisy pressure support ventilation in experimental lung injury.  
Carvalho AR, Spieth PM (equally contributed), Güldner A, Cuevas M, Carvalho NC, Beda A, Spieth S, Stroczyński C, Wiedemann B, Koch T, Pelosi P, de Abreu MG.  
J Appl Physiol. 2011 Apr;110(4):1083-92  
IF: 3,658

18. Pressure support improves oxygenation and lung protection compared to pressure-controlled ventilation and is further improved by random variation of pressure support.  
Spieth PM, Carvalho AR, Güldner A, Kasper M, Schubert R, Carvalho NC, Beda A, Dassow C, Uhlig S, Koch T, Pelosi P, Gama de Abreu M.  
Crit Care Med. 2011 Apr;39(4):746-755  
IF: 6,330
19. Pretreatment with perfluorohexane vapor attenuates fMLP-induced lung injury in isolated perfused rabbit lungs.  
Bleyl JU, Heller AR, Fehrenbach A, Heintz M, Fehrenbach H, Klenz G, Gama de Abreu M, Hübler M, Spieth PM, Koch T.  
Exp Lung Res. 2010 Aug;36(6):342-51.  
IF: 1,220
20. Effects of perfluorohexane vapor in the treatment of experimental lung injury.  
Bleyl JU, Heller AR, Heintz M, Schlemmer M, Koch R, de Abreu MG, Hübler M, Spieth PM, Koch T.  
Pulm Pharmacol Ther. 2010 Oct;23(5):450-5. Epub 2010 Apr 1.  
IF: 2,800
21. Regional lung aeration and ventilation during pressure support and biphasic positive airway pressure ventilation in experimental lung injury.  
Gama de Abreu M, Cuevas M, Spieth PM, Carvalho AR, Hietschold V, Stroszczynski C, Wiedemann B, Koch T, Pelosi P, Koch E.  
Crit Care. 2010;14(2):R34. Epub 2010 Mar 16.  
IF: 4,607
22. [Anesthesia in patients with chronic obstructive pulmonary diseases].  
Spieth PM, Güldner A, Gama de Abreu M.  
Anaesthesist. 2010 Jan;59(1):89-97  
IF: 0,987
23. A novel adaptive control system for noisy pressure-controlled ventilation: a numerical simulation and bench test study.  
Beda A, Spieth PM, Handzsuj T, Pelosi P, Carvalho NC, Koch E, Koch T, Gama de Abreu M.  
Intensive Care Med. 2010 Jan;36(1):164-8. Epub 2009 Sep 25.  
IF: 5,399
24. Comparison of objective methods to classify the pattern of respiratory sinus arrhythmia during mechanical ventilation and paced spontaneous breathing.  
Carvalho NC, Beda A, de Abreu MG, Spieth PM, Granja-Filho P, Jandre FC, Giannella-Neto A.  
Physiol Meas. 2009 Nov;30(11):1151-62. Epub 2009 Sep 25.  
IF: 1,677
25. Carvalho AR, Spieth PM, Pelosi P, Beda A, Lopes AJ, Neykova B, Heller AR, Koch T, Gama de Abreu M.  
Pressure support ventilation and biphasic positive airway pressure improve oxygenation by redistribution of pulmonary blood flow.  
Anesth Analg. 2009 Sep;109(3):856-65.  
IF: 3,286

26. Spieth PM, Koch T, Gama de Abreu M  
Anästhesiologisches Management der Einlungenanästhesie  
Anaesth Intensivmed 2009; 50: 86-102  
IF: 0,862
27. Effects of different levels of pressure support variability in experimental lung injury.  
Spieth PM, Carvalho AR, Güldner A, Pelosi P, Kirichuk O, Koch T, de Abreu MG.  
Anesthesiology. 2009 Feb;110(2):342-50.  
IF: 5,359
28. Variable tidal volumes improve lung protective ventilation strategies in experimental lung injury  
Spieth PM, Carvalho AR, Pelosi P, Hoehn C, Meissner C, Kasper M, Hübler M, von Neindorff M, Dassow C, Barrenschee M, Uhlig S, Koch T, de Abreu MG.  
Am J Respir Crit Care Med. 2009 Apr 15;179(8):684-93. Epub 2009 Jan 16.  
IF: 11,080
29. Ability of dynamic airway pressure curve profile and elastance for positive end-expiratory pressure titration.  
Carvalho AR, Spieth PM, Pelosi P, Vidal Melo MF, Koch T, Jandre FC, Giannella-Neto A, de Abreu MG.  
Intensive Care Med. 2008 Dec;34(12):2291-9. Epub 2008 Sep 30.  
IF: 5,399
30. Noisy pressure support ventilation: a pilot study on a new assisted ventilation mode in experimental lung injury.  
Gama de Abreu M, Spieth PM, Pelosi P, Carvalho AR, Walter C, Schreiber-Ferstl A, Aikele P, Neykova B, Hübler M, Koch T.  
Crit Care Med. 2008 Mar;36(3):818-27.  
IF: 6,330
31. Effects of vaporized perfluorohexane and partial liquid ventilation on regional distribution of alveolar damage in experimental lung injury.  
Spieth PM, Knels L, Kasper M, Domingues Quelhas A, Wiedemann B, Lupp A, Hübler M, Neto AG, Koch T, Gama de Abreu M.  
Intensive Care Med. 2007 Feb;33(2):308-14.  
IF: 5,399
32. Comparative effects of vaporized perfluorohexane and partial liquid ventilation in oleic acid-induced lung injury.  
de Abreu MG, Quelhas AD, Spieth P, Bräuer G, Knels L, Kasper M, Pino AV, Bleyl JU, Hübler M, Bozza F, Salluh J, Kuhlisch E, Giannella-Neto A, Koch T.  
Anesthesiology. 2006 Feb;104(2):278-89.  
IF: 5,359

**Patents:**

Gama de Abreu M, Spieth PM, Koch T:  
Verfahren und Beatmungseinrichtung zur druckunterstützten Spontanatmung  
Patent: DE 10 2006 052 572

Gama de Abreu M, Spieth PM, Koch T:  
Kontroller für Beatmungsgeräte zur Regelung einer variablen Druckunterstützungsbeatmung  
Patent: DE 10 2008 060 79

Beda A, Gama de Abreu M, Spieth PM, Guldner A  
Verfahren für eine druckkontrollierte Beatmung  
Patent: DE 10 2009 041 247

**Book Chapters:**

Anästhesiologisches Management der Einlungenanästhesie  
Spieth PM, Reske AW, Gama de Abreu M  
Anästhesiologie, 27. Erg.-Lfg. 4/12, Eckart, Jaeger, Möllhoff (Eds.), EcoMed 2012

Automatic Lung Segmentation of Helical CT Scans in Experimental Lung Injury  
Cuevas LM, Spieth PM, Carvalho AR, Gama de Abreu M, Koch E  
IFMBE Proceedings 22 pp 764-767; Vander Sloten P, Verdonck M, Nyssen J (Eds.),  
Springer 2009

Variable Mechanical Ventilation: Breaking the monotony  
Gama de Abreu M, Spieth PM, Pelosi P  
Yearbook of Intensive Care and Emergency Medicine, Vincent JL (Ed.), Springer 2009