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# List of Publications

**Journal articles:**

1. Gabriele Spina et al. Identifying Physical Activity Profiles in COPD Patients Using Topic Models IEEE Journal of Biomedical and Health Informatics, 2015.
2. Rafael Mesquita, Gabriele Spina et al. Physical activity patterns and clusters in 1001 patients with COPD, Submitted to Journal of Chronic Respiratory Disease, 2016.
3. Gabriele Spina et al. Estimated nocturnal sleep impairment in patients with COPD in daily life and its association with daytime physical activity, To be submitted, 2016.
4. Gabriele Spina et al. Topic models-based features from nighttime data for classification of patients with COPD, To be submitted to Biomedical and Health Informatics, IEEE Journal, 2016

**Proceedings and conference contributions:**

1. Gabriele Spina, Guannan Huang, Anouk Vaes, Martijn Spruit and Oliver Amft COPDTrainer: Asmartphone-based motion rehabilitation training system with real-time acoustic feedback Ubicomp 2013, ACM Internetional Joint Conference on Pervasive and Ubiquitous Computing, 8-12 September, 2013, Zurich, Switzerland.
2. Gabriele Spina, Frank Roberts, JensWeppner, Paul Lukowicz and Oliver Amft CRNTC+: Asmartphone-based sensor processing framework for prototyping personal healthcare applications PervasiveHealth 2013, IEEE International Conference on Pervasive Computing Technologies for Healthcare, 5-8 May, 2013, Venice, Italy.

**Patent applications:**

1. Apparatus and methods relating to monitoring or assisting breathing in patients, European Patent application 28-01-2016, Philips Internal Reference 2015PF01649, 2016
2. Breathing support system for COPD patients to overcome shortness of breath (breathing tool with feedback), European Patent application 30-10-2015, Philips Internal Reference 2015PF01437, 2015
3. Breathing support system for COPD patients to overcome shortness of breath (breathing tool for use with pressurized gas canister), European Patent application 30-10-2015, Philips Internal Reference 2015PF01532, 2015
4. System and method to detect respiration markers, European and USA Patent application 12-12-2014, Philips Internal Reference 2014PF01453, 2014

**Other contributions:**

1. Gabriele Spina and Oliver Amft Toward smartphone assisted personal rehabilitation training XRDS crossroads, ACM 2015, Volume 20, pp 33-37.
2. Rafael Mesquita, Gabriele Spina et al. Cluster analysis of objectively measured physical activity in 1001 COPD patients ERJ September 1, 2014 vol. 44 no. Suppl 58 3486.