List of Publications

Gionata Cimini

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Journal Articles

[1] G. Cimini, A. Freddi, G. Ippoliti, A. Monteri, and M. Pirro, "A smart lighting system for visual comfort and energy savings in industrial and domestic use", *Electric Power Components and Systems*, vol. 43, no. 15, pp. 1696–1706, 2015.

[2] G. Cimini, G. Ippoliti, G. Orlando, and M. Pirro, "Sensorless pfc for mixed conduction mode boost converter using passivity-based control", *IET Power Electronics*, vol. 7, 2988–2995(7), 12 2014.

[3] G. Cimini, M. L. Corradini, G. Ippoliti, G. Orlando, and M. Pirro, "A rapid prototyping scenario for power factor control in permanent magnet synchronous motor drives: Control solutions for interleaved boost converters", *Electric Power Components and Systems*, vol. 42, no. 6, pp. 639–649, 2014.

Book's Chapter

[4] G. Cimini, F. Ferracuti, A. Freddi, S. Iarlori, and A. Monteri˘, "An odometry and qr code landmarks-based navigation system for impaired wheelchair users", in *Ambient Assisted Living: Italian Forum 2013.* G. M. M. A. Longhi S. Siciliano P., Ed., Berlin Heidelberg:Springer-Verlag, 2014.

Conference Proceedings

[5] G. Cimini, D. Bernardini, A. Bemporad, and S. Levijoki, "Online model predictive torque control for permanent magnet synchronous motors", in *Industrial Technology (ICIT), 2015 IEEE International Conference on*, 2015, pp. 2308–2313.

[6] G. Cimini, G. Ippoliti, G. Orlando, S. Longhi, and R. Miceli, "Robust current observer design for dc-dc converters", in *International Conference on Renewable Energy Research and Application (ICRERA)*, 2014, pp. 958–963.

[7] G. Cimini, A. Bemporad, G. Ippoliti, and S. Longhi, "Fram evaluation as unified memory for convex optimization algorithms", in *6th European Embedded Design in Education and Research Conference (EDERC)*, 2014, pp. 187–191.

[8] G. Cimini, G. Ippoliti, S. Longhi, G. Orlando, and M. Pirro, "Synchronous buck converter control via robust periodic pole assignment", in *European Control Conference (ECC)*, 2014, pp. 1921–1926.

[9] L. Ciabattoni, G. Cimini, M. Grisostomi, G. Ippoliti, and S. Longhi, "An interoperable framework for home automation design, testing and control", in *22nd Mediterranean Conference of Control and Automation (MED)*, 2014, pp. 1049–1054.

[10] G. Calisse, G. Cimini, L. Colombo, A. Freddi, G. Ippoliti, A. Monteriu, and M. Pirro, "Development of a smart led lighting system: Rapid prototyping scenario", in *11th International Multi-Conference on Systems, Signals Devices (SSD)*, 2014, pp. 1–6.

[11] G. Cimini, V. Fossi, G. Ippoliti, S. Mencarelli, G. Orlando, and M. Pirro, "Model predictive control solution for permanent magnet synchronous motors", in *39th Annual Conference of the IEEE Industrial Electronics Society, IECON*, 2013, pp. 5824–5829.

[12] E. Alidori, G. Cimini, G. Ippoliti, G. Orlando, and M. Pirro, "A passivity-based solution for ccm-dcm boost converter power factor control", in *39th Annual Conference of the IEEE Industrial Electronics Society, IECON*, 2013, pp. 7752–7757.

[13] G. Cimini, G. Ippoliti, G. Orlando, and M. Pirro, "Explicit sensorless model predictive control of synchronous buck converter", in *International Conference on Renewable Energy Research and Applications (ICRERA)*, 2013, pp. 1200–1205.

[14] ——, "Sensorless passivity-based control for mixed conduction mode boost converter with power factor correction", in *International Conference on Renewable Energy Research and Applications (ICRERA)*, 2013, pp. 1194–1199.

[15] G. Cimini, M. L. Corradini, G. Ippoliti, G. Orlando, and M. Pirro, "Passivity-based PFC for interleaved boost converter of PMSM drives", in *11th International Workshop on Adaptation and Learning in Control and Signal Processing*, 2013, pp. 128–133.

[16] G. Cimini, G. Ippoliti, G. Orlando, and M. Pirro, "Current sensorless solution for pfc boost converter operating both in dcm and ccm", in *21st Mediterranean Conference on Control Automation (MED)*, 2013, pp. 137–142.

[17] ——, "Current sensorless solutions for pfc of boost converters with passivity-based and sliding mode control", in *Fourth International Conference on Power Engineering, Energy and Electrical Drives (POWERENG)*, 2013, pp. 1175–1180.

[18] ——, "Pmsm control with power factor correction: rapid prototyping scenario", in *Fourth International Conference on Power Engineering, Energy and Electrical Drives (POWERENG)*, 2013, pp. 688–693.

[19] G. Cimini, M. Corradini, G. Ippoliti, N. Malerba, and G. Orlando, "Control of variable speed wind energy conversion systems by a discrete-time sliding mode approach", in *IEEE International Conference on Mechatronics (ICM)*, 2013, pp. 736–741.

[20] L. Ciabattoni, G. Cimini, M. Grisostomi, G. Ippoliti, S. Longhi, and E. Mainardi, "Supervisory control of pv-battery systems by online tuned neural networks", in *IEEE International Conference on Mechatronics (ICM)*, 2013, pp. 99–104.

Forthcoming or Under Review

[21] L. Ciabattoni, G. Cimini, F. Ferracuti, M. Grisostomi, G. Ippoliti, and M. Pirro, "Indoor thermal comfort control through fuzzy logic pmv optimization", in *Neural Networks, 2015. IJCNN '15. Proceedings. 2005 IEEE International Joint Conference on*, 2015, **forthcoming**.

[22] L. Ciabattoni, G. Cimini, F. Ferracuti, A. Freddi, G. Ippoliti, and A. Monteriú, "A novel lda-based approach for motor bearing fault detection", in *Industrial Informatics, 2015. INDIN 2015. Proceedings. IEEE International Conference on*, 2015, **forthcoming**.

[23] G. Cimini, M. Corradini, G. Ippoliti, G. Orlando, and M. Pirro, "A sliding mode observer for the load resistance estimation in a boost converter", in *Industrial Informatics, 2015. INDIN 2015. Proceedings. IEEE International Conference on*, 2015, **forthcoming**.

[24] L. Ciabattoni, G. Cimini, F. Ferracuti, and G. Ippoliti, "Humidex based multi room thermal comfort regulation via fuzzy logic", in *Consumer Electronics (ISCE 2015), The 19th IEEE International Symposium on*, 2015, **forthcoming**.

[25] L. Ciabattoni, G. Cimini, F. Ferracuti, M. Grisostomi, G. Ippoliti, and M. Pirro, "Bayes error based feature selection: an electric motors fault detection case study", in *41th Annual Conference of the IEEE Industrial Electronics Society, IECON*, 2015, **forthcoming**.