PERSONAL INFORMATION Marco Raugi

Marco.raugi@unipi.it

https://www.unipi.it/index.php/prorettori/item/8680-marco-raugi-prorettore-per-la-ricerca-applicata-e-il-trasferimento-tecnologico

2000-date : Full professor of “Electrical Engineering” University of Pisa (Italy)

Job-related skills

Research

Topics:
Computational Electromagnetics (Integral and differential formulations)
Electromagnetic Compatibility
Transmission lines analysis
Wavelet Transform application to Computational Electromagnetics
Non destructive testing. Magnetostrictive sensors
Computational intelligence techniques for Smart Grid analysis
Sustainable Energy Communities

Achievements:
The research activity of Professor Marco Raugi has produced more than 250 publications in international journals and conferences. The achievements of his studies have been acknowledged by several invitations to international conferences as session chairman or chairman of the editorial board, and as author of invited speech and tutorials.
He was also General Chairman of two international conferences (PIERS Progress in Electromagnetic Research Symposium 2004 and IEEE ISPLC International Symposium on PowerLine Communications, 2007)
He also received the 2002 Melcher Prize Paper Award from the IEEE-Industry Application Society.

Professor Raugi was national principal investigator of Italian MIUR research programs PRIN 2003 and PRIN 2007 and principal coordinator of projects financed by banking foundations (Cassa Risparmio Pisa, Cassa Risparmio Livorno), ENI, GERG and several Italian SMEs.

He has been Chairman of the International Doctorate of Applied Electromagnetics in Electrical and Biomedical Engineering, Electronics, Intelligent Sensors, Nano-technologies. He has been first Head of the Department of Energy and Systems Engineering and later Head of the Department of Energy, Systems Territory and Construction Engineering (DESTEC). He has been reference member for the University of Pisa in the European Energy Research Alliance (EERA).

He is currently:

- Vice-Rector for Applied Research and Technology Transfer of the University of Pisa
- Delegate for Sustainability of the University of Pisa

- Head of the Interdepartmental Center for Research on Energy for Sustainable Development (CIRESS)
- Member of the Board of the National Scientific Group of Electrical Engineering
- Chair Holder of the UNESCO/UNITWIN Chair “Sustainable Energy Communities”

- In 2017 he received the “Order of Cherubino” an academic honor given to full professors of University of Pisa who have significantly contributed to increasing the University prestige for particular scientific merits and who have made a significant contribution to the organization of the University having held important institutional positions. https://www.unipi.it/index.php/documenti-ateneo/item/9698

ADDITIONAL INFORMATION

Recents Publications

Aloini, D., Dulmin, R., Mininno, V., Raugi, M., Schito, E., Testi, D., Tucci, M., Zerbino, P. A multi-objective methodology for evaluating the investment in building-integrated hybrid renewable energy systems (2021) Journal of Cleaner Production, 329, art. no. 129780

Bai, L., Crisostomi, E., Raugi, M., Tucci, M. Wind turbine power curve estimation based on earth mover distance and artificial neural networks (2019) IET Renewable Power Generation, 13 (15), pp. 2939-2946.

Bai, L., Tucci, M., Raugi, M. Impulsive noise mitigation with interleaving based on music in power line communication (2019) IEEE Transactions on Smart Grid, 10 (4), art. no. 8352871, pp. 3575-3584.

Bai, L., Tucci, M., Barmada, S., Raugi, M., Zheng, T. Impulsive noise characterization in narrowband power line communication (2018) Energies, 11 (4), art. no. 863.

Ferraro, P., Crisostomi, E., Raugi, M., Milano, F. Analysis of the Impact of Microgrid Penetration on Power System Dynamics (2017) IEEE Transactions on Power Systems, 32 (5), art. no. 7801060, pp. 4101-4109.

Ferraro, P., Crisostomi, E., Raugi, M., Milano, F. Decentralized stochastic control of microgrids to improve system frequency stability (2017) 2017 IEEE PES Innovative Smart Grid Technologies Conference Europe, ISGT

Ferraro, P., Crisostomi, E., Tucci, M., Raugi, M. Comparison and clustering analysis of the daily electrical load in eight European countries (2016) Electric Power Systems Research, 141, pp. 114-123.

Barmada, S., Raugi, M., Tucci, M. An evolutionary algorithm for global optimization based on self-organizing maps (2016) Engineering Optimization, 48 (10), pp. 1740-1758.

Tucci, M., Crisostomi, E., Giunta, G., Raugi, M. A multi-objective

method for short-term load forecasting in European countries (2016) IEEE Transactions on Power Systems, 31 (5), art. no. 7362255, pp. 3537-3547.

Crisostomi, E., Gallicchio, C., Micheli, A., Raugi, M., Tucci, M. Prediction of the Italian electricity price for smart grid applications (2015) Neurocomputing, 170, pp. 286-295.

Crisostomi, E., Liu, M., Raugi, M., Shorten, R. Plug-and-play distributed algorithms for optimized power generation in a microgrid (2014) IEEE Transactions on Smart Grid, 5 (4), art. no. 6839087, pp. 2145-2154.

Aloini, D., Crisostomi, E., Raugi, M., Rizzo, R. Optimal power scheduling in a Virtual Power Plant (2011) IEEE PES Innovative Smart Grid Technologies Conference Europe, art. no. 6162768, .

Tucci, M., Raugi, M. A filter based neuron model for adaptive incremental learning of self-organizing maps (2011) Neurocomputing, 74 (11), pp. 1815-1822.

Barmada, S., Musolino, A., Raugi, M., Rizzo, R., Tucci, M. A wavelet based method for the analysis of impulsive noise due to switch commutations in Power Line Communication (PLC) systems (2011) IEEE Transactions on Smart Grid, 2 (1), art. no. 5701676, pp. 92-101.

Tucci, M., Raugi, M. Adaptive fir neural model for centroid learning in self-organizing maps (2010) IEEE Transactions on Neural Networks, 21 (6), art. no. 5452989, pp. 948-960.