

LIST OF TITLES AND PUBLICATIONS OF THE CANDIDATE

ROBERTO LANGELLA

Birth date 20/03/1972

Scientific publications

- 1. 2012 Articolo in rivista LANGELLA R, CARPENTIERO V., TESTA A (2012). Hybrid wind-diesel stand-alone system sizing accounting for component expected life and fuel price uncertainty. ELECTRIC POWER SYSTEMS RESEARCH, p. 69-77, ISSN: 0378-7796
- 2. 2012 Contributo in Atti di convegno L. FEOLA, LANGELLA R, P. MARINO, G. RAIMONDO, L. RUBINO, N. SERBIA, A. TESTA (2012). On the Effects of Interharmonic Distortion on Grid Connected Three-Phase PV Inverters. In: 15th International Conference on Harmonics and Quality of Power (ICHQP 2012), Hong Kong.
- 3. 2012 Contributo in Atti di convegno LANGELLA R, L.NUGNES, A.TESTA (2012). Component Modeling for High-Frequency Harmonic Analyses in the Scenario of Smart Grids. In: 15th International Conference on Harmonics and Quality of Power (ICHQP 2012), Hong Kong,.
- 4. 2012 Contributo in Atti di convegno J. SLEZINGR, J. DRAPELA, LANGELLA R, A. TESTA (2012). Simplified Modeling of Compact Fluorescent Lamps in the Presence of Interharmonic Distortion. In: 15th International Conference on Harmonics and Quality of Power (ICHOP 2012), Hong Kong.
- 5. 2012 Contributo in Atti di convegno LANGELLA R, L. NUGNES, A. TESTA (2012). Behavior of MV Lines from 2.5 to 100 kHz. In: IEEE PES GM 2012, San Diego (USA). p. 1-6, ISBN: 978-1-4673-2728-2
- 2012 Contributo in Atti di convegno
 A. EMANUEL, LANGELLA R, A. TESTA (2012). Power Definitions for Circuits with Nonlinear and Unbalanced Loads - The IEEE Standard 1459 - 2010. In: IEEE PES GM 2012, San Diego (USA). p. 1-6, ISBN: 978-1-4673-2728-2
- 7. 2012 Contributo in Atti di convegno A. TESTA, LANGELLA R, V. BUCCINO, F. NUZZO, P. MONTE (2012). Analisi del Costo dell'Energia Elettrica Restituita alla Rete da Alcuni Sistemi di Accumulo dell'Energia. In: Convegno Nazionale Città Energia, Napoli.
- 8. 2012 Monografia o trattato scientifico Langella R, Testa A et Al. (2012). IEEE Guide Adoption of IEC/TR 61000-3-7:2008, Electromagnetic compatibility (EMC) LimitsAssessment of emission limits for the connection of fluctuating installations to MV, HV and EHV power systems. ISBN: 978-0-7381-7391-7
- 9. 2012 Articolo in rivista

 Langella R, Testa A, Emanuel A E (2012). Unbalance Definition for Electrical Power Systems in the Presence of Harmonics and Interharmonics. IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol. 61, p. 2622-2631, ISSN: 0018-9456, doi: 10.1109/TIM.2012.2209909
- 10. 2012 Contributo in Atti di convegno Caldon R, Dal Canto D, Langella R, Pilo F, Pisano G, Scalari S, Testa A, Turri R (2012). ATLANTIDE -

- Digital Archive of the Italian Electric Distribution Network. In: Proc. 2012 CIRED Workshop "Integration of Renewables into the Distribution Grid" Lisbona, 29-30 May 2012. p. 1-6, ISBN: 978-1-84919-628-4
- 11. 2012 Contributo in Atti di convegno Langella R, Testa A (2012). Analysis of the Cost of Electric Energy Discharged to the Grid by Some Energy Storage Systems. In: IEEE Energycon 2012, Firenze, Settembre 2012. p. 1-7, ISBN: 978-1-4673-1452-7
- 12. 2012 Contributo in Atti di convegno Fioretto M, Langella R, Raimondo G, Rubino G, Rubino L, Serbia N, Testa A, Marino P (2012). Design Criteria for AC Link Reactors in Active Front End Converters for Renewable Energy Applications in Smart Grids. In: IEEE Energycon 2012, Firenze, Settembre 2012. p. 1-6, ISBN: 978-1-4673-1452-7
- 13. 2012 Contributo in Atti di convegno Feola L, Langella R, Testa A (2012). On the Behavior of Three-Phase Inverters in the New Smart Grid Context. In: IEEE Energycon 2012, Firenze, Settembre 2012. p. 1-6, ISBN: 978-1-4673-1452-7
- 2012 Contributo in Atti di convegno
 Bracale A, Caldon R, Celli G, Coppo M, Dal Canto D, Langella R, Petretto G, Pilo F, Pisano G, Proto D,
 Scalari S, Turri R (2012). ATLANTIDE Project: Analysis of the Italian Distribution System Evolution
 through Reference Networks. In: IEEE Energycon 2012, Firenze, Settembre 2012. p. 1-6, ISBN:
 978-1-4673-1452-7
- 15. 2012 Contributo in Atti di convegno Feola L, Langella R, Testa A (2012). On the Effects of Interharmonic Distortion on Measurement Instruments Based on PLL Systems. In: International Workshop on Applied Measurements on Power Systems, Aachen, Germania, Settembre 2012. p. 1-6, ISBN: 978-1-4673-1539-5
- 16. 2012 Contributo in Atti di convegno Bracale A, Caldon R, Celli G, Coppo M, Dal Canto D, Langella R, Petretto G, Pilo F, Pisano G, Proto D, Scalari S, Turri R (2012). Analysis of the Italian Distribution System Evolution through Reference Networks. In: Berlino. p. 1-7
- 17. 2012 Contributo in Atti di convegno Langella R, Monsurrò M, Prigiobbo A, Testa A (2012). Hybrid PV-Diesel System Sizing for Telecommunication Stations. In: IEEE MedPower 2012, Cagliari, Ottobre 2012. p. 1-6
- 18. 2012 Contributo in Atti di convegno Bracale A, Caldon R, Celli G, Coppo M, Dal Canto D, Langella R, Petretto G, Pilo F, Pisano G, Proto D, Scalari S, Turri R (2012). ATLANTIDE Project: Analysis of the Italian Distribution System Evolution through Reference Networks. In: IEEE MedPower 2012, Cagliari, Ottobre 2012. p. 1-6
- 19. 2011 Contributo in volume (Capitolo o Saggio)

 LANGELLA R, TESTA A (2011). Markovian Approaches to Model Wind Speed of a Site and Power

 Availability of a Wind Turbine. In: IBRAHIM AL-BAHADLY. Wind Turbines. vol. 1, p. 355-372,

 RIJEKA:InTech, ISBN: 978-953-307-221-0
- 20. 2011 Articolo in rivista LANGELLA R, TESTA A (2011). The Effects of Integration Intervals on Recursive RMS Value and Powers Measurement in Non-Sinusoidal Conditions. IEEE TRANSACTIONS ON INSTRUMENTATION AND MEASUREMENT, vol. 60, p. 3047-3057, ISSN: 0018-9456, doi: 10.1109/TIM.2011.2158154
- 21. 2011 Contributo in Atti di convegno LANGELLA R, NUGNES L, PETRETTO G, PILO F, PISANO G, SCALARI S, TESTA A (2011). Preliminary Analysis of MV Cable Lines Models for High Frequency Harmonic Penetration Studies. In: Proceedings of IEEE PES GM 2011. Detroit (USA), Luglio 2011, p. 1-8, Piscataway (NJ):IEEE, ISBN: 978-1-4577-1001-8
- 22. 2011 Contributo in Atti di convegno LANGELLA R, NUGNES L, TESTA A (2011). Preliminary Analysis of Over-Head Lines Models for High Frequency Harmonic Penetration Studies. In: Proceeding of CIGRE International Symposium 2011. Bologna, Settembre 2011, p. 1-7, ISBN: 978-2-85873-165-7
- 23. 2011 Contributo in Atti di convegno LANGELLA R, TESTA A, EMANUEL A E (2011). Unbalance Analysis for Electrical Power Systems in the Presence of Harmonics and Interharmonics. In: Proceedings of International Workshop on Applied Measurements on Power Systems. Aachen (Germania), Settembre 2011, p. 9-15, IEEE, ISBN: 978-1-61284-945-4
- 24. 2011 Monografia o trattato scientifico

- LANGELLA R, TESTA A, ET AL. (2011). IEEE Recommended Practice Adoption of IEC 61000-4-15:2010, Electromagnetic compatibility (EMC) Testing and measurement techniques Flickermeter Functional and design specifications. New York: IEEE, ISBN: 978-0-7381-6796-1, doi: 10.1109/IEEESTD.2011.6053977
- 25. 2011 Contributo in Atti di convegno KLING W.L., ORTHS A., CUK V., COBBEN J.F.G., TIMENS R.B., VERHELST B., DEBRUYNE C., DESMET J., VANDEVELDE L., RIBEIRO P.F., LEITAO J.J.A.L., DA SILVA LIRA M.M., MACEDO J.R., GRANDI A.L.Z., TESTA A., LANGELLA R, BROWNE N., KONIG S., JAGER J., PREIS D., BOHM M., ROMERO GORDON J.M., MEYER J., SCHEGNER P., HESKES P.J.M., MYRZIK J.M.A (2011). Power quality issues related to new means of distributed generation and loads. In: IEEE PES General Meeting 2011. Detroit (USA), 24-29 Luglio 2011, p. 1-7, ISBN: 978-1-4577-1000-1
- 26. 2011 Contributo in Atti di convegno Ribeiro P.F., Leitao J.J.A.L., Lira M.M.S., Macedo J.R., Grandi A.L.Z., Testa A, Langella R, Cobben J.F.G., Browne N.R. (2011). Harmonic distortion during the 2010 FIFA World Cup. In: Proceedings of the 2011 IEEE Power and Energy Society General Meeting, 24-29 July 2011, Detroit, Michigan. Piscataway. p. 1-8, ISBN: 978-1-4577-1000-1, doi: 10.1109/PES.2011.6039369
- 27. 2010 Articolo in rivista LANGELLA R, SOLLAZZO A, TESTA A (2010). A New Approach for the Computation of Harmonics and Interharmonics Produced by AC/DC/AC Conversion Systems with PWM Inverters. EUROPEAN TRANSACTIONS ON ELECTRICAL POWER, vol. 20, p. 68-82, ISSN: 1430-144X, doi: 10.1002/etep.400
- 28. 2010 Articolo in rivista
 LANGELLA R, MANCO T, TESTA A (2010). Unifying Supply Reliability and Voltage Quality in the
 Representation of an Electrical System Node. IEEE TRANSACTIONS ON POWER DELIVERY, vol. 25,
 N°2, p. 1172-1181, ISSN: 0885-8977
- 29. 2010 Contributo in Atti di convegno LANGELLA R, TESTA A, EMANUEL A (2010). Limiting Low Frequency Interharmonic Distortion and Voltage Fluctuations. In: Proceedings of IEEE PES GM 2010. Minneapolis (USA), Luglio 2010
- 30. 2010 Contributo in Atti di convegno CARPINONE A, M. GIORGIO, LANGELLA R, TESTA A (2010). Very Short-term Probabilistic Wind Power Forecasting based on Markov Chain Models. In: Proceedings of PMAPS 2010. Singapore, Giugno 2010, vol. 1, p. 107-112, ISBN: 978-1-4244-5720-5, doi: 10.1109/PMAPS.2010.5528983
- 31. 2010 Monografia o trattato scientifico LANGELLA R, TESTA A, ET AL. (2010). IEEE Standard Definitions for the Measurement of Electric Power Quantities Under Sinusoidal, Nonsinusoidal, Balanced, or Unbalanced Conditions. vol. 1, Piscataway (NJ):IEEE, ISBN: 978-0-7381-6059-7
- 32. 2010 Contributo in Atti di convegno TESTA A, LANGELLA R (2010). The Effects of Integration Intervals on Recursive RMS and Powers Measurement in the Presence of Non-Sinusoidal Conditions. In: Proceedings of AMPS 2010.
- 33. 2010 Contributo in Atti di convegno LANGELLA R, TESTA A, CARPENTIERO V (2010). Hybrid Wind-Diesel Stand-Alone System Sizing Accounting for Fuel Price Uncertainty. In: Proceedings of PMAPS 2010. Singapore, Giugno 2010, vol. 1, p. 101-106, ISBN: 978-1-4244-5720-5, doi: 10.1109/PMAPS.2010.5528982
- 34. 2010 Contributo in Atti di convegno TESTA A, LANGELLA R, CARBONE R (2010). On the billing of Electrical Energy Flows at Prosumers' Busbar. In: Preoceedings of ICHQP 2010.
- 35. 2010 Contributo in Atti di convegno LANGELLA R, P. MARINO, G. RAIMONDO, L. RUBINO, N. SERBIA, A. TESTA (2010). On the Effects of Interharmonic Distortion on Static Converters Controlled by means of PLL Systems. In: Proceedings of ICHQP 2010.
- 36. 2009 Contributo in Atti di convegno CARBONE R, LANGELLA R, TESTA A (2009). Grid-Connected Photovoltaic Plants: Energy Account Problems. In: Atti del 102° Convegno Nazionale AEIT. Catania, Italia, 27-29 Settembre
- 37. 2009 Contributo in Atti di convegno CARPENTIERO V, CARPINONE A, LANGELLA R, TESTA A (2009). Hybrid Wind-Diesel Stand-Alone System Sizing Accounting for Expected Life of Batteries and Diesel-Generators. In: Atti del 102° Convegno Nazionale AEIT. Catania, Italia, 27-29 Settembre
- 38. 2009 Contributo in volume (Capitolo o Saggio)

- LANGELLA R, TESTA A (2009). Summation of Random Harmonic Currents. In: Time-Varying Waveform Distortions In Power Systems.
- 39. 2009 Contributo in volume (Capitolo o Saggio)

 LANGELLA R, TESTA A (2009). Probabilistic Modeling of Single High-Power Loads. In: Time-Varying
 Waveform Distortions In Power Systems.
- 40. 2009 Contributo in volume (Capitolo o Saggio)

 LANGELLA R, TESTA A (2009). Probabilistic Analysis of Harmonic Impedances. In: Time-Varying
 Waveform Distortions In Power Systems.
- 41. 2009 Contributo in volume (Capitolo o Saggio)

 LANGELLA R, TESTA A (2009). Harmonics and Interharmonics on Adjustable Speed Drives. In:
 Time-Varying Waveform Distortions In Power Systems.
- 42. 2008 Articolo in rivista
 GALLO D, LANGELLA R, LANDI C, TESTA A (2008). On the Use of the Flickermeter to Limit Low
 Frequency Interharmonic Voltages. IEEE TRANSACTIONS ON POWER DELIVERY, vol. Vol. 23, Issue 4,
 p. 1720-1727, ISSN: 0885-8977
- 43. 2008 Articolo in rivista
 LANGELLA R, TESTA A, EMANUEL A (2008). On the Effects of Subsynchronus Interharmonic Voltages
 on Power Transformers: Single Phase Units. IEEE TRANSACTIONS ON POWER DELIVERY, vol. Vol. 23,
 Issue 4, p. 2480-2487, ISSN: 0885-8977
- 44. 2008 Contributo in Atti di convegno LANGELLA R, TESTA A (2008). Some Considerations on Interharmonic Voltage Limits and their Assessment. In: 43rd International Universities Power Engineering Conference (UPEC 2008). Padova, Italia, Settembre 2008
- 45. 2008 Contributo in Atti di convegno LANGELLA R, TESTA A (2008). The Effects of the Smoothing of the Results on the Measurement Accuracy of RMS and Powers in Systems under Nonsinusoidal Conditions. In: 13th International Conference on Harmonics and Quality of Power (ICHQP 2008). Wollongong, Australia, Ottobre 2008, ISBN: 978-1-4244-1771-1
- 46. 2008 Contributo in Atti di convegno LANGELLA R, TESTA A (2008). On the Use of Flickermeter and DFT Based Techniques for the Assessment of Light Flicker and Interharmonic Distortion Produced by Arc Furnaces. In: IEEE PES General Meeting 2008. Pittsburgh, Pennsylvania, USA, 20-24 Luglio 2008, ISBN: 978-1-4244-1905-0
- 47. 2008 Contributo in Atti di convegno CARPENTIERO V, LANGELLA R, MANCO T, TESTA A (2008). A Markovian Approach to Size a Hybrid Wind-Diesel Stand Alone System. In: PMAPS 2008 - Probabilistic Methods Applied to Power Systems. Mayagüez - Puerto Rico, 25-29 Maggio 2008
- 48. 2008 Articolo in rivista
 TESTA A., LANGELLA R., EMANUEL A. (2008). On the Effects of Subsynchronus Interharmonic
 Voltages on Power Transformers: Three Phase Units. IEEE TRANSACTIONS ON POWER DELIVERY, vol.
 23, p. 2461-2471, ISSN: 0885-8977, doi: 10.1109/TPWRD.2008.923084
- 49. 2007 Contributo in Atti di convegno GALLO D, LANDI C, LANGELLA R, TESTA A (2007). On the Accuracy of Electric Energy Revenue Meter Chain Under Non-Sinusoidal Conditions: A Modeling Based Approach. In: IEEE Instrumentation and Measurement Technology Conference 2007, Varsavia, Polonia, Maggio 2007. Varsavia, Maggio 2007
- 50. 2007 Contributo in Atti di convegno LANGELLA R, LICCARDO F, MARINO P, TESTA A, TRIGGIANESE M (2007). On the assessment Light Flicker due to the Interharmonic Distortion Produced by Wind Turbines. In: International Conference on Clean Electrical Power Renewable Energy Resources Impact, Capri, Italia, Maggio 2007. Capri, Maggio 2007
- 51. 2007 Contributo in Atti di convegno LANGELLA R, TESTA A (2007). A New Algorithm for Energy Measurement at Positive Sequence of Fundamental Power Frequency, Under Unbalanced Non-Sinusoidal Conditions. In: IEEE Power Tech 2007. Loasanna, Luglio 2007
- 52. 2007 Contributo in Atti di convegno LANGELLA R, TESTA A (2007). A circular convolution based algorithm for electric energy measurement under non-sinusoidal condition. In: IEEE Instrumentation and Measurement Technology Conference 2007, Varsavia, Polonia, Maggio 2007. Varsavia, Maggio 2007

- 53. 2007 Contributo in Atti di convegno LANGELLA R, TESTA A (2007). Harmonic Pollution in Italian Distribution Networks in Coincidence with Important Sport Events. In: IEEE PES Annual Meeting 2007. Tampa, Giugno 2007
- 54. 2007 Contributo in Atti di convegno LANGELLA R, TESTA A (2007). Switching Power Supplies: Analysis of Waveform Distortion and Absorbed Powers. In: 9-th International Conference on Electrical Power Quality and Utilization. Barcellona, Ottobre 2007
- 55. 2007 Articolo in rivista
 BRACALE A, CARPINELLI G, LANGELLA R, TESTA A (2007). Accurate Methods for Signal Processing of
 Distorted Waveforms in Power Systems. EURASIP JOURNAL ON ADVANCES IN SIGNAL PROCESSING,
 vol. Article ID 92191, ISSN: 1687-6172
- 56. 2007 Articolo in rivista LANGELLA R, TESTA A (2007). Amplitude and Phase Modulation Effects of Waveform Distortion in Power Systems. JAKOść I UżYTKOWANIE ENERGII ELEKTRYCZNEJ, vol. XIII N°1, p. 25-32, ISSN: 1234-6799
- 57. 2007 Articolo in rivista
 LANGELLA R., TESTA A., IEEE TASK FORCE ON HARMONICS MODELING a.S. (2007). Interharmonics:
 Theory and Modeling. IEEE TRANSACTIONS ON POWER DELIVERY, vol. 22, p. 2335-2348, ISSN:
 0885-8977, doi: 10.1109/TPWRD.2007.905505
- 58. 2006 Contributo in Atti di convegno CASTALDO D, LANGELLA R, TESTA A (2006). Low Cost Devices for Distributed Power Quality Monitoring: Computational Burden. In: International Conference on Harmonics and Quality of Power (ICHQP 2006). Cascais, Portugal, 1-5 Ottobre
- 59. 2006 Contributo in Atti di convegno FERRUCCI M, LANGELLA R, TESTA A (2006). Sulla Definizione delle Potenze e sul Conteggio dell'Energia Elettrica in Regime Periodico Deformato. In: 101° Convegno Nazionale AEIT. Capri, 16-20 Settembre
- 60. 2006 Contributo in Atti di convegno LANGELLA R, SOLLAZZO A, TESTA A (2006). A New Simplified Model for the Assessment of Harmonics and Interharmonics produced by AC/DC 12-pulses Converters. In: International Conference on Harmonics and Quality of Power (ICHQP 2006). Cascais, Portugal, 1-5 Ottobre
- 61. 2006 Contributo in Atti di convegno
 LANGELLA R, TESTA A (2006). A New Method for Statistical Assessment of the System Harmonic
 Impedance and of the Background Voltage Distortion. In: 9th International Conference on Probabilistic
 Methods Applied to Power Systems, Stoccolma, Svezia. Stoccolma, 11-15 Giugno
- 62. 2006 Contributo in Atti di convegno BRACALE A., CARPINELLI G., LANGELLA R, TESTA A. (2006). On some Advanced Methods for Waveform Distortion Assessment in presence of Interharmonics. In: 2006 IEEE PES General Meeting. 18-22 Giugno
- 63. 2006 Articolo in rivista
 E. FIORUCCI, D.GALLO, C.LANDI, LANGELLA R (2006). Light Flicker: Theoretical and Metrological
 Aspects. TRANSACTIONS ON SYSTEMS, SIGNALS AND DEVICES, vol. 1, p. 343-360, ISSN: 1861-5252
- 64. 2006 Contributo in Atti di convegno LANGELLA R, A. TESTA (2006). Amplitude and Phase Modulation Effects of Waveform Distortion in Power Systems. In: Seventh International Workshop on Power Definitions and Measurements under Non-Sinusoidal Conditions, Cagliari, Italia.
- 65. 2005 Contributo in Atti di convegno GALLO D., LANDI C., LANGELLA R, TESTA (2005). Limits for Low Frequency Interharmonic Voltages: can They be Based on the Flickermeter Use?. In: 2005 IEEE ST.PETERSBURG POWERTECH. 27-30 GIUGNO
- 66. 2005 Contributo in Atti di convegno LANGELLA R, TESTA A. (2005). Power System Subharmonics. In: IEEE PES ANNUAL MEETING 2005. 12-15 giugno
- 67. 2005 Contributo in Atti di convegno LANGELLA R, TESTA A. (2005). Interharmonics from a Probabilistic Perspective. In: IEEE PES Annual Meeting 2005, S. Francisco, USA, Giugno 2005. 12-15 giugno
- 68. 2005 Contributo in Atti di convegno

- GIORGIO M, LANGELLA R, MANCO T, TESTA A (2005). COMBINED MODELLING OF LONG, SHORT INTERRUPTIONS AND VOLTAGE DIPS: A MARKOVIAN SOLUTION. In: 18th International Conference on Electricity Distribution. 6-9 Giugno
- 69. 2005 Articolo in rivista LANGELLA R., TESTA A., SOLLAZZO A., DE ROSA F. (2005). On the interharmonics compnents generated by adjustable speed drives. IEEE TRANSACTIONS ON POWER DELIVERY, vol. 20, p. 2535-2543, ISSN: 0885-8977
- 70. 2005 Articolo in rivista

 LANGELLA R., TESTA A., DE ROSA F., CARBONE R. (2005). A new approach for the computation harmonics and interharmonics produced by line commutated AC/DC/AC converters. IEEE
 TRANSACTIONS ON POWER DELIVERY, vol. 20, p. 2227-2234, ISSN: 0885-8977
- 71. 2005 Contributo in Atti di convegno D. GALLO, C. LANDI, LANGELLA R, A. TESTA (2005). Performances Analysis of Adjustable Speed Drive in Presence of Low Frequency Pollution. In: IEEE Instrumentation and Measurement Technology Conference 2006, Ottawa, Canada.
- 72. 2004 Articolo in rivista
 D. GALLO, LANGELLA R, A. TESTA (2004). "Is it Always Possible to Separately Analyze Different Power
 Quality Phenomena? The Case of the Voltage Peak". L'ENERGIA ELETTRICA, ISSN: 0013-7308
- 73. 2004 Articolo in rivista

 D. GALLO, LANGELLA R, A. TESTA (2004). "Interharmonics. Part 2: Aspects Related to Measurement and Limits". L'ENERGIA ELETTRICA, vol. 81, p. 174-181, ISSN: 0013-7308
- 74. 2004 Articolo in rivista
 D. GALLO, LANGELLA R, A. TESTA (2004). "Interharmonics. Part 1: Aspects Related to Modeling and Simulation". L'ENERGIA ELETTRICA, vol. 81, p. 168-173, ISSN: 0013-7308
- 75. 2004 Articolo in rivista
 D. CASTALDO, D. GALLO, C. LANDI, LANGELLA R, A. TESTA (2004). "Misura dei disturbi non
 stazionari. La soluzione Smart Web Sensor". AUTOMAZIONE E STRUMENTAZIONE, p. 100-103, ISSN:
 0005-1284
- 76. 2004 Articolo in rivista D. CASTALDO, D. GALLO, C. LANDI, LANGELLA R, A. TESTA (2004). "La misura della qualità della tensione". AUTOMAZIONE E STRUMENTAZIONE, p. 89-94, ISSN: 0005-1284
- 77. 2004 Contributo in Atti di convegno D. GALLO, C. LANDI, LANGELLA R, A. TESTA (2004). "The impact of electric disturbances on the performance of induction motors fed by multistage converters: theoretical analysis and experimental verification". In: IMTC 2004. 20-22 May 2004
- 78. 2004 Contributo in Atti di convegno LANGELLA R, A. SOLLAZZO, A. TESTA (2004). "Modeling Waveform Distortion Produced by DC Locomotive Conversion System. Part 1: Locomotive Model". In: ICHQP 2004. Sept. 12-15, 2004
- 79. 2004 Contributo in Atti di convegno LANGELLA R, A. SOLLAZZO, A. TESTA (2004). "Modeling Waveform Distortion Produced by DC Locomotive Conversion System. Part 2: Italian Railway System Model". In: ICHQP 2004. Sept. 12-15, 2004
- 80. 2004 Contributo in Atti di convegno F. DE ROSA, LANGELLA R, A. TESTA (2004). "Evaluation of Harmonics and Interharmonics Produced by AC/DC/AC Conversion Systems". In: ICHQP 2004. Sept. 12-15, 2004
- 81. 2004 Contributo in Atti di convegno D. GALLO, LANGELLA R, A. TESTA, A. EMANUEL (2004). "On the Effects of Voltage Subharmonics on Power Transformers: A preliminary study". In: 11th International Conference on Harmonics and Quality of Power Lake Placid, USA, Settembre 2004. Sept. 12-15, 2004
- 82. 2004 Contributo in Atti di convegno D. GALLO, LANGELLA R, C. LANDI, A. TESTA (2004). "IEC Flickermeter Response to Interharmonic Pollution". In: ICHQP 2004. Sept. 12-15, 2004
- 83. 2004 Contributo in Atti di convegno D. GALLO, LANGELLA R, C. LANDI, A. TESTA (2004). "On the Effects of Voltage Disturbances on Adjustable Speed Drives Performances". In: SPEEDAM, 2004. 16-18 June 2004
- 84. 2004 Contributo in Atti di convegno D. CASTALDO, D. GALLO, LANGELLA R, A. TESTA (2004). "Harmonic Voltages: Probabilistic Modeling

- for Compatibility Analysis". In: International Conference on Probabilistic Methods Applied to Power Systems. 25-28 September 2004
- 85. 2004 Contributo in Atti di convegno LANGELLA R, A. TESTA (2004). "A Statistical Method to Assess the System Harmonic Impedance and the Background Voltage Distortion: a Preliminary Study". In: International Conference on Power Systems, Kathmandu, Nepal. November 3 5, 2004
- 86. 2004 Articolo in rivista
 GALLO D., TESTA A., LANGELLA R. (2004). On the Processing of Harmonics and Interharmonics: Using
 Hanning Window in Standard Framework. IEEE TRANSACTIONS ON POWER DELIVERY, vol. 19 n.1, p.
 28-34, ISSN: 0885-8977
- 87. 2004 Articolo in rivista
 GALLO D., LANGELLA R., TESTA A. (2004). Desynchronized Processing Technique for Harmonic and
 Interharmonic Analysis. IEEE TRANSACTIONS ON POWER DELIVERY, vol. 19 n.3, p. 993-1001, ISSN:
 0885-8977
- 88. 2004 Articolo in rivista

 GALLO D., LANDI C., LANGELLA R., TESTA A. (2004). Implementation of a Test System for Advanced
 Calibration and Performance Analyses of Flickermeters. IEEE TRANSACTIONS ON INSTRUMENTATION
 AND MEASUREMENT, vol. 53 n.4, p. 1078-1085, ISSN: 0018-9456, doi: 10.1109/TIM.2004.831493
- 89. 2003 Articolo in rivista F. DE ROSA, LANGELLA R, A. SOLLAZZO, A. TESTA (2003). Waveform Distortion Caused by High Power Adjustable Speed Drives Part I: High Computational Efficiency Models. EUROPEAN TRANSACTIONS ON ELECTRICAL POWER, vol. 13, p. 347-354, ISSN: 1430-144X
- 90. 2003 Articolo in rivista D. CASTALDO, F. DE ROSA, LANGELLA R, A. SOLLAZZO, A. TESTA (2003). Waveform Distortion Caused by High Power Adjustable Speed Drives Part II: Probabilistic Analysis. EUROPEAN TRANSACTIONS ON ELECTRICAL POWER, vol. 13, p. 355-363, ISSN: 1430-144X
- 91. 2003 Contributo in Atti di convegno D GALLO, LANGELLA R, A. TESTA (2003). Predicting Voltage Stress Effects on MV/LV Components. In: IEEE Power Tech '03. 23-26 June 2003
- 92. 2003 Contributo in Atti di convegno D. GALLO, C. LANDI, LANGELLA R, A. TESTA (2003). Implementation of a Test System for Advanced Calibration and Performance Analyses of Flickermeters. In: IMTC 2003. 20-22 May 2003
- 93. 2003 Contributo in Atti di convegno D. CASTALDO, D GALLO, C. LANDI, LANGELLA R, A. TESTA (2003). Power Quality Analysis: a Distributed Measurement System. In: IEEE Power Tech '03. 23-26 June 2003
- 94. 2003 Contributo in Atti di convegno D. GALLO, LANGELLA R, A. TESTA (2003). Interharmonics Part 2: Aspects Related to Measurement and Limits. In: 6th Inter. Workshop on Power Definitions and Measurements under Non-Sinusoidal*. October 13-15, 2003
- 95. 2003 Contributo in Atti di convegno R. CARBONE, F. DE ROSA, LANGELLA R, A. SOLLAZZO, A. TESTA (2003). Modeling Waveform Distortion Produced by High Speed AC Locomotive Converters. In: IEEE Power Tech '03. 23-26 June 2003
- 96. 2003 Contributo in Atti di convegno D. GALLO, LANGELLA R, A. TESTA (2003). Interharmonics Part 1: Aspects Related to Modeling and Simulation. In: 6th Inter. Workshop on Power Definitions and Measurements under Non-Sinusoidal*. October 13-15, 2003
- 97. 2003 Contributo in Atti di convegno D. GALLO, LANGELLA R, A. TESTA (2003). Is it Always Possible to Separately Analyze Different Power Quality Phenomena? The Case of the Voltage Peak. In: 6th Inter. Workshop on Power Definitions and Measurements under Non-Sinusoidal*. October 13-15, 2003
- 98. 2003 Contributo in Atti di convegno E. FIORUCCI, D. GALLO, C. LANDI, LANGELLA R (2003). Light Flicker: Theoretical and Metrological Aspects. In: IEEE Signals, Systems, Decision & Information Technology Conference.
- 99. 2002 Articolo in rivista R. CARBONE, H. W. DOMMEL, LANGELLA R, A. TESTA (2002). Analysis and Estimation of Truncation Errors in Modelling Complex Resonant Circuits with the Emtp. INTERNATIONAL JOURNAL OF

- ELECTRICAL POWER & ENERGY SYSTEMS, vol. 24/4, p. 295-304, ISSN: 0142-0615
- 100. 2002 Articolo in rivista
 D. GALLO, LANGELLA R, A. TESTA (2002). Self tuning Harmonic and Interharmonic Processing
 Technique. EUROPEAN TRANSACTIONS ON ELECTRICAL POWER, vol. 12, p. 25-31, ISSN: 1430-144X
- 101. 2002 Articolo in rivista

 LANGELLA R, A. TESTA (2002). Time Varying Harmonics: Part II Harmonic Summation and
 Propagation. IEEE TRANSACTIONS ON POWER DELIVERY, vol. 17, p. 279-285, ISSN: 0885-8977
- 102. 2002 Contributo in Atti di convegno D. GALLO, LANGELLA R, A. TESTA (2002). Toward a New Flickermeter Based on Voltage Spectral Analysis. In: International Symposium on Industrial Electronics, IEEE-ISIE 2002. 8-11 July 2002
- 103. 2002 Contributo in Atti di convegno D. CASTALDO, LANGELLA R, A. TESTA (2002). Probabilistic Aspects of Harmonic Impedances. In: IEEE Winter Power Meeting. 27-31 January 2002
- 104. 2002 Contributo in Atti di convegno D. GALLO, LANGELLA R, A. TESTA (2002). Interharmonic Measurement in IEC Framework. In: IEEE Summer Power Meeting. 21-25 July 2002
- 105. 2002 Contributo in Atti di convegno D. GALLO, LANGELLA R, A. TESTA (2002). A Digital Implementation of a Flickermeter based on a Voltage Spectral Analysis. In: International Symposium on Industrial Electronics, IEEE-ISIE 2002. 8-11 July 2002
- 106. 2002 Contributo in Atti di convegno D. GALLO, LANGELLA R, A. TESTA (2002). On the Effects on MV/LV Component Expected Life of Slow Voltage Variations and Harmonic Distortion. In: 10th IEEE International Conference on Harmonics and Quality of Power, ICHQP 2002. October 2002
- 107. 2002 Contributo in Atti di convegno R. CARBONE, F. DE ROSA, LANGELLA R, A. SOLLAZZO, A. TESTA (2002). Modelling of AC/DC/AC Conversion Systems with PWM Inverter. In: IEEE Summer Power Meeting. 21-25 July 2002
- 108. 2002 Contributo in Atti di convegno F. DE ROSA, LANGELLA R, A. SOLLAZZO, A. TESTA (2002). On the Interharmonic Components Generated by Adjustable Speed Drives. In: 10th IEEE International Conference on Harmonics and Quality of Power, ICHQP 2002. October 2002
- 109. 2002 Contributo in Atti di convegno R. CARBONE, D. CASTALDO, D. GALLO, F. DE ROSA, LANGELLA R, A. SOLLAZZO, A. TESTA (2002). Tutorial on Harmonic and Interharmonic Distortion: Power System Modeling Aspects for Compatibility Analyses. In: IEEE International Symposium on Industrial Electronics.
- 110. 2002 Contributo in Atti di convegno F. DE ROSA, LANGELLA R, A. SOLLAZZO, A. TESTA (2002). Waveform Distortion Caused by High Power Adjustable Speed Drives Part I: High Computational Efficiency Models. In: 7th International Conference on Probabilistic Methods Applied to Power Systems.
- 111. 2002 Contributo in Atti di convegno D. CASTALDO, F. DE ROSA, LANGELLA R, A. SOLLAZZO, A. TESTA (2002). Waveform Distortion Caused by High Power Adjustable Speed Drives Part II: Probabilistic Analysis. In: 7th International Conference on Probabilistic Methods Applied to Power Systems.
- 112. 2001 Contributo in Atti di convegno D. GALLO, LANGELLA R, A. TESTA (2001). Light Flicker Prediction Based on Voltage Spectral Analysis. In: IEEE International Conference Power Tech '01. 10-13 September 2001.
- 113. 2001 Contributo in Atti di convegno
 D. GALLO, LANGELLA R, A. TESTA (2001). Interharmonic Analysis Utilizing Optimized Harmonic
 Filtering. In: IEEE SDEMPED. 1-3 September 2001
- 114. 2001 Contributo in Atti di convegno R. CARBONE, F. DE ROSA, F. GAGLIARDI, LANGELLA R, A. TESTA (2001). Un modello analitico semplificato per l'analisi probabilistica della distorsione di sistemi di conversione statica a doppio stadio. In: General Meeting AEI 2001. 3-5 October 2001
- 115. 2001 Contributo in Atti di convegno R. CARBONE, F. DE ROSA, LANGELLA R, A. TESTA (2001). A New Approach to Model AC/DC/AC Conversion Systems. In: IEEE Summer Power Meeting. 2001
- 116. 2001 Contributo in Atti di convegno

- R. CARBONE, D. CASTALDO, F. DE ROSA, LANGELLA R, A. TESTA (2001). Monte Carlo Simulation of AC/DC/AC Power Converter Distortion. In: IEEE Power Tech '01. September 2001
- 117. 2001 Contributo in Atti di convegno D.GALLO, LANGELLA R, A.TESTA (2001). A Self tuning Harmonic and Interharmonic Processing Technique. In: Fifth International Workshop on Power Definitions and Measurements under Non-Sinusoidal Conditions.
- 118. 2000 Contributo in Atti di convegno D. GALLO, LANGELLA R, A. TESTA (2000). On The Processing Of Harmonics And Interharmonics In Electrical Power Systems. In: IEEE Power Engineering Society Winter Meeting 2000. 23-27 January 2000
- 119. 2000 Contributo in Atti di convegno
 P. CARAMIA, G. CARPINELLI, P. VARILONE, D. GALLO, LANGELLA R, A. TESTA, P. VERDE (2000). High
 Speed Ac Locomotives: Harmonic and Interharmonic Analysis at a Vehicle Test Room. In: 9th IEEE
 International Conference on Harmonics and Quality of Power, ICHQP 2000. 1-4 October 2000
- 120. 2000 Contributo in Atti di convegno
 D. GALLO, LANGELLA R, A. TESTA (2000). Comparison Among Techniques for Distorted Waveforms
 Analysis in Power Systems. In: 9th IEEE International Conference on Harmonics and Quality of Power.
 1-4 October 2000
- 121. 2000 Contributo in Atti di convegno C. XIE, S.B. TENNAKOON, D. GALLO, LANGELLA R, A. TESTA, A. WIXON (2000). Harmonic impedance measurement of 25KV single phase AC supply systems. In: 9th IEEE International Conference on Harmonics and Quality of Power, ICHQP 2000. 1-4 October 2000
- 122. 2000 Contributo in Atti di convegno
 D. GALLO, LANGELLA R, A. TESTA (2000). New Harmonic and Interharmonic Processing Techniques.
 In: Int. Conf. on Electric Power Systems at the Beginning of the Third Millennium. 12-17 May 2000
- 123. 2000 Contributo in Atti di convegno D. GALLO, LANGELLA R, A. TESTA (2000). Double Stage Harmonic and Interharmonic Processing Technique. In: IEEE Power Engineering Society Summer Meeting 2000. July 2000
- 124. 2000 Contributo in Atti di convegno R. CARBONE, D. CASTALDO, LANGELLA R, A. TESTA (2000). Probabilistic Modeling of Industrial Systems for Voltage Distortion Analyses. In: 9th IEEE International Conference on Harmonics and Quality of Power. 1-4 October 2000
- 125. 2000 Contributo in Atti di convegno R. CARBONE, LANGELLA R, A. TESTA (2000). EMTP Errors in Modelling Resonant Circuits. In: Int. Conf. on Electric Power Systems at the Beginning of the Third Millennium. 12-17 May 2000
- 126. 2000 Contributo in Atti di convegno R. CARBONE, LANGELLA R, A. TESTA (2000). Simplified Probabilistic Modeling of AC/DC/AC Power Converter Interharmonic Distortion. In: 6th International Conference on Probabilistic Methods Applied to Power Systems. 25-28 September 2000.
- 127. 1999 Contributo in Atti di convegno R. CARBONE, D. CASTALDO, LANGELLA R, P. MARINO, A. TESTA (1999). Network Impedance Uncertainty in Harmonic and Interharmonic Distortion Studies. In: IEEE International Conference Power Tech '99. 29 August-2 September 1999.
- 128. 1999 Contributo in Atti di convegno D. GALLO, G. IULIANO, LANGELLA R, S.B. TENNAKOON, A. TESTA, A. WIXON, C. XIE (1999). Report on Techniques to analyze harmonic distortion due to modern AC Rails. In: Final User Meeting of the Project "TRAIN". 6 November 1999
- 129. 1999 Contributo in Atti di convegno
 P. CARAMIA, G. CARPINELLI, D. GALLO, G. IULIANO, LANGELLA R, P. TAMBURRINI, A. TESTA, P.
 VARILONE, P. VERDE (1999). Report on investigation of X/R ratio of realistic 25kV equipment. In:
 Final User Meeting of the Project "TRAIN". 6 November 1999
- 130. 1998 Contributo in Atti di convegno A. CAVALLINI, LANGELLA R, F. RUGGIERO, A. TESTA (1998). Gaussian Modeling of Harmonic Vectors in Power Systems. In: 8th IEEE International Conference on Harmonics and Quality of Power, ICHQP '98. vol. 2, p. 1010-1017
- 131. 1997 Contributo in Atti di convegno M. BARET, P. CARAMIA, R. CARBONE, LANGELLA R, A. TESTA, P. VARILONE, P. VERDE, M.FRACCHIA,

- R. E. MORRISON, L. PIERRAT, S. B. TENNAKOON (1997). Research activities on probabilistic techniques to analyze harmonic distortion: modeling and testing of an AC rail. In: Final Technical Scientific Meeting of the Project "Hosting and Training of Researchers and Testing of Components and Systems for Urban and Rail Electrical Transport. June 1997, p. 151-167
- 132. 1997 Contributo in Atti di convegno LANGELLA R, P. MARINO, F. RUGGIERO, A. TESTA (1997). Summation of random harmonic vectors in presence of statistic dependences. In: 5th PMAPS. September 1997, p. 21-25

Titles

Scientific responsibilty for international and national research projects, selected for funding based on calls that involved competitive peer review

Project	Period	Role
WorkPackage 3 (WP3) "Electrical Network Components Models" of the research project titled: "Archivio TeLemAtico per il riferimento Nazionale di reTI di Distribuzione Elettrica: ATLANTIDE", funded by the Italian Ministry for the Production Activities (MAP) (Project Budget: 2.2 M).	36	Scientific WP Coordinator
"Distributed Monitoring of Power Quality by means of Low-cost Devices", funded by the Campania Region Scientific Research Department (Project Budget: 60 k).	12	Scientific Project Leader
Scientific Action Leader of the Action 2 of the "Workpackage 2 - Advanced Technologies for the Intergation of Electric Distributed Energy Resourches" funded by the Campania Region Scientific Research Department (Project budget: 2.9 M).	36	Scientific Action Leader
WorkPackage 3 (WP3) "Monitoring of Conducted Disturbances in Distribution Networks of Electrical Power Systems" of the research project "Realization of Center for Monitoring and Analysis of Low Frequency Electro-Magnetic Compatibility Problems in Electrical Power Systems", funded by the Italian Ministry for University and Scientific and Technology Research (MURST) (Project Budget: 1.3 M).	60	Scientific WP Leader
WorkPackage 1 (WP1) "Interactions between the Supply Network and Innovative DC/DC and DC/AC Power Converters for Traction Applications" of the research project "Numerical and Experimental Analisys of Interactions between the Supply Network and Innovative Power Converters for Industrial and Traction Applications", funded by the Italian Ministry for University and Scientific and Technology Research (MURST) (Project Budget: 0.5 M).	36	Scientific WP Leader

Partecipation in editorial boards of recognised: journals, collections of books, encyclopedias and treatises

Type Title From To

Riviste WSEAS Transactions on Power Systems (ATT_C) 01/2006

Assignment of teaching duties or research (fellowship) ufficiale at universities and research institutes, foreign and international, of high quality

Туре	Institution	From	То
Insegnamento e Ricerca	Faculty of Electrical Power Engineering and Communication of the BRNO University of Technology (Czech Republic) - Contract Number	02/2012	02/2012

45/18320/2012 (AT

Insegnamento e Ricerca	Department of Electric Engineering of the University of Jaén (Spain) (ATT_D_2)	06/2011	06/2011
Insegnamento e Ricerca	Faculty of Electrical Power Engineering and Communication of the BRNO University of Technology (Czech Republic) - Contract Number 04/18915/09 (ATT_D_3)	11/2009	11/2009
Ricerca	Electrical and Computer Engineering Department of the Worcester Polytechnic Institute (USA) (ATT_D_4)	08/2006	09/2006
Ricerca	Staffordshire University (UK) (ATT_D_5)	05/1999	05/1999

achievement of awards for scientific activity

Vice-Chair from 2010 and elected, in July 2012, Chair from 2013 of the "Task Force on Harmonic Modeling and Simulation" of the "IEEE Harmonic Working Group Subcommittee" of the "Transmission and Distribution Committee" (ATT_G_1).

Elevatated Senior Member of the Institute of Electrical and Electronic Engineering - Power and Energy Society (IEEE - PES) in 2010 (ATT_G_2).

Winner of the First Prize Award "IEEE - Power Engineering Society Winter Meeting 2001 Student Poster Competition" with the poster "On the Processing of Interharmonic Distorted Signals in Electrical Power Systems" (ATT_G_3).

Winner of the "Prize Paper of PMAPS 2008" at the 10-th edition of the International Conference on Probabilistic Methods Applied to Power Systems, with the paper "A Markovian Approach to Size a Hybrid Wind-Diesel Stand Alone System" (ATT_G_4).

other titles

SCIENTIFIC RESPONSIBLE OF RESEARCH SECTIONS

Scientific Responsible of the Second University of Naples local Research Section of EnSiEL - - Consortium of Italian Universities operating in the area of Energy and Power Systems since 2012 (ATT_I_1).

SCIENTIFIC RESPONSIBILITY OF INTERNATIONAL RESEARCH PROJECTS NOT IN SECTION A AND PARTICIPATION TO INTERNATIONAL RESEARCH PROJECTS

Scientific Project Leader of the research project titled: "On the Impact of Sub-sinchronous Interharmonic Voltages on Power transformers", funded by the Department of Information Engineering of the Second University of Naples in 2006 and conducted in collaboration with the Worchester Polytechnic Institute, USA. Member of the research unit, from January to April 1999, in collaboration with the University of Cassino (Italy), Staffordshire University (UK) and "Consortium of Innovative researches for the South of Italy" of Ansaldo Trasporti (Italy), of the project titled "Research activities on techniques to analyze harmonic distortion due to modern AC Rails and investigation of X/R ratio of realistic 25kV equipment", in the framework of the project "TRAIN" funded by the European Union "Human Capital and Mobility - Access to Large-Scale Facilities".

Member of the research unit, from February to June 1997, in collaboration with different Italian (Cassino, Trieste and Genoa) and European Universities (École Polytechnique de Grenoble (France), Staffordshire University (UK)) and "Consortium of Innovative researches for the South of Italy" of Ansaldo Trasporti (Italy), of the project titled "Research activities on probabilistic techniques to analyze harmonic distortion: modeling and testing of an ac rail", in the framework of the project "Hosting and Training of Researchers and Testing of Components and Systems for Urban and Rail Electrical Transport" funded by the European Union "Human Capital and Mobility - Access to Large-Scale Facilities".

SCIENTIFIC RESPONSIBILITY OF RESEARCH PROJECTS NOT IN SECTION A AND PARTICIPATION TO NATIONAL RESEARCH PROJECTS

Scientific Project Leader of the research project: "Disturbances in Electrical Power Systems in the Presence of Distributed Generation: Analysis and Compensation", funded by the Second University of Naples in 2010 (Project budget: 5 k).

Scientific Project Leader of the research project titled: "Disturbances in Electrical Power Systems: Analysis, Distributed Measurements and Compensation", funded by the Second University of Naples in 2009 (Project budget: 6 k).

Member of the research unit of the Second University of Naples in the research contract: "SMART GRIDS" funded in the biennium 2008-2009 by Enel Research and Innovation conducted in collaboration with different Italian Universities (Bologna, Genoa, Pisa e Padova) (Project budget: 100 k).

Member of the research unit of the Second University of Naples in the research project: "Low Cost WEB Sensors for the monitoring and control of quality in electrical power systems - PRIN 2009", funded by the Italian Ministry of University and Scientific Research (MIUR) (Project budget: 60 k).

Member of the research unit of the Second University of Naples in the research project: "Smart GRID with Distributed POLIgeneration systems (POLIGRID)", funded by the Campania Region in the framework of FSE 2007/2013 (Project budget: 200 k).

Member of the research unit of the Faculty of Engineering in the research project: "Distributed Generation from Traditional and Renewable Resources: Engineering- Juridical - Economical and Environmental Aspects", funded by the Second University of Naples in 2009 (Project budget: 110 k).

Member of the research unit of the Second University of Naples in the research project: "Risk and Quality Management in the Liberalized Energy Market - PRIN 2002", funded by the Italian Ministry of University and Scientific Research (MIUR) in collaboration with different Italian Universities (Napoli "Federico II", Bologna, Genoa, Bari, L'Aquila, Cassino, Milano, Pavia, Reggio Calabria, Palermo, Cosenza) (Project budget: 500 k). Member of the research unit of the Second University of Naples in the research project: "Static and Dynamic Characterization of Fuel Cells and their impact in Electrical Networks by means of experimental measurements", funded by the Campania Region Scientific Research Department (Project budget: 30 k).

INTERNATIONAL SCIENTIFIC COLLABORATIONS

Collaborates, since 2011, with professors of the Department of Electrical Engineering of the Faculty of Engineering of the University of Jaen (Spain) on a research activity on the harmonic impact of large PV systems and on Energy Management Systems of "Stand-Alone Hybrid Wind-PV-Diesel Systems". Collaborates, since 2008, with professors of the Department of Electrical Engineering and Telecommunications of the Brno University of Technologies (Czech Republic) on a research activity on the effects of voltage fluctuations and Light Flicker.

Collaborates, since 2003, with prof. A. Emanuel of the Worchester Polytechnic Institute (USA) to a research activity on the impact of sub-synchronous interharmonic voltages on power transformers (ATT_I_2). Collaborates, since with prof. G. W. Chang of the "Department of Electrical Engineering National Chung Cheng University" (Taiwan) on a research activity on Harmonic modeling and simulation in electrical power systems (ATT_I_3).

Collaborates, since with prof. P.F. Ribeiro of the Department of Electrical Engineering and Electrical Energy Systems of the Technische Universiteit Eindhoven (The Netherlands) on a research activity on probabilistic modeling of harmonic distortion in electrical power systems (ATT_I_4).

He has been collaborated, from January 1999 to March 2002, with prof. H. Dommel of the British Columbia University (Canada), on a research activity on the errors introduced by algorithms for the solution of differential equations, representing the operation of electrical systems in the presence of resonances.

PARTICIPATION TO INTERNATIONAL RESEARCH WORKING GROUPS AND CHAPTERS OF IEEE Member since 2009 of the "Non-Sinusoidal Situations Working Group" of the "Transmission and Distribution Committee".

Member of the Executive Committee and Secretariat since 2007 of the Italian Chapter of the IEEE Power and Energy Society, PE31, since 2002.

Member since 1999 of the "Task Force on Probabilistic Aspect of Harmonics" of the "IEEE Harmonic Working Group Subcommittee" of the "Transmission and Distribution Committee".

Member since 2001 of the "Task Force on Harmonic Modeling and Simulation" of the "IEEE Harmonic Working Group Subcommittee" of the "Transmission and Distribution Committee".

Active participant since 1999 to the works of the IEEE "Voltage Flicker Task Force" of the "IEEE Harmonic Working Group Subcommittee" of the "Transmission and Distribution Committee".

Active participant since 1999 to the works and Member since 2004 of the IEEE "Task Force on Light Flicker" of the "IEEE Harmonic Working Group Subcommittee" of the "Transmission and Distribution Committee".

EDITORIAL ACTIVITY

Member of the "Non-Sinusoidal Situations Working Group" for the preparation of the "IEEE Standard Definitions for the Measurement of Electric Power Quantities Under Sinusoidal, Non-sinusoidal, Balanced, or Unbalanced Conditions", January 2010 (ISBN - 978-0-7381-6059-7).

Member of the "Voltage Flicker Task Force" for the preparation of the "IEEE Recommended Practice Adoption of IEC 61000-4-15:2010, Electromagnetic compatibility (EMC)Testing and measurement techniquesFlickermeter Functional and design specifications", October 2011 (ISBN - 978-0-7381-6796-1). Member of the "Voltage Flicker Task Force" for the preparation of the "IEEE Guide Adoption of IEC/TR 61000-3-7:2008, Electromagnetic compatibility (EMC) LimitsAssessment of emission limits for the connection of fluctuating installations to MV, HV and EHV power systems", July 2012 (ISBN - 978-0-7381-7391-7).

Member of the Technical Review Committee of the International Conference "IEEE Power Tech" since 2003. Member of the Technical Review Committee of the International Conference "IEEE International Conference on Harmonics and Quality of Power (ICHQP)" since 2004.

Reviewer of Electric Power System Research since 2005.

Reviewer of IEEE Transaction on Power Delivery since 2008.

Reviewer of European Transaction on Power Systems since 2008.

Reviewer of IEEE transaction on Instrumentation and Measurement since 2010.

Reviewer of IET Renewable Power Generation since 2012.

CHAIRMEN AT SCIENTIFIC INTERNATIONAL CONFERENCES

Chairmen of the session titled "Power system state and mode estimation" at the International Workshop on Applied Measurements for Power Systems (IEEE AMPS 2012), Aachen, Germany, September 2012. Co-Chairmen, together with prof. G.W. Chang, of the panel session titled "Theories, Experiences, and Practices on Waveform Distortion in Power System" sponsored by the Transmission and Distribution Committee at the 2012 IEEE Power and Energy Society General Meeting (IEEE PES GM 2012), San Diego, USA, July 2012.

Chairmen of the session titled "Storage equipment and systems for Future Energy Grids and Systems" at the 2012 IEEE International Energy Conference and Exhibition (IEEE EnergyCon 2012), Florence, Italy, September 2012.

Chairmen of the session titled "Power distribution control and optimization" at the the 2012 IEEE International Energy Conference and Exhibition (IEEE EnergyCon 2012), Florence, Italy, September 2012. Chairmen of the session titled "Power Quality Case Studies" at the International Conference on Harmonics and Quality of Power (ICHQP 2010), Bergamo, Italy, September 2010.

Chairmen of the session titled "Interharmonics and other non-harmonic distortion I" at the International Conference on Harmonics and Quality of Power (ICHQP 2008), Wollongong, Australia, September 2008. Chairmen of the session titled "Voltage Sag Analysis" at the International Conference on Harmonics and Quality of Power (ICHQP 2006), Cascais, Portugal, October 2006.

Chairmen of the session titled "Power Quality and Reliability" at the International Conference on Power Systems (ICPS 2004), Kathmandu, Nepal, November 2004.

INVITED AT PANEL SESSIONS AND AT INTERNATIONAL SCIENTIFIC WORKSHOPS

Panel Session titled "Time-Varying and Probabilistic Methods for Harmonics Aggregation Analysis in a Smart Grid Context" at the 2013 IEEE PES General Meeting (Vancouver, Canada) with the paper "Case-Studies on Harmonic Impact of Large PV Plants".

Panel Session titled "Theories, Experiences, and Practices onWaveform Distortion in Power System" at the 2012 IEEE PES General Meeting (San Diego, USA) with the papers "Behavior of MV Lines from 2.5 to 100 kHz" and "Power Definitions for Circuits with Nonlinear and Unbalanced Loads - The IEEE Standard 1459 - 2010".

Panel Session titled "Power Quality Issues Related to New Means of Distributed Generation and Loads" at the 2011 IEEE PES General Meeting (Detroit, USA) with the paper "Harmonic Distortion During the 2010 FIFA World Cup".

Panel Session titled "Measuring Techniques and Experiences on Harmonics, Interharmonics and Voltage Fluctuations" at the 2010 IEEE PES General Meeting (Minneapolis, USA) with the paper "Limiting Low Frequency Interharmonic Distortion and Voltage Fluctuations".

Panel Session titled "Measuring Techniques and Modeling Issues of Electric Arc Furnaces" at the 2008 IEEE PES General Meeting (Pittsburgh, USA) with the paper "On the Use of Flickermeter and DFT Based Techniques for the Assessment of Light Flicker and Interharmonic Distortion Produced by Arc Furnaces".

Panel Session titled "Impact of Television Viewing on the Utility Grid Harmonic Distortion" at the 2007 IEEE PES General Meeting (Tampa, USA) with the paper "Harmonic Pollution in Italian Distribution Networks in Coincidence with Important Sport Events".

Panel Session titled "Advanced Topics of Harmonics Modeling & Simulation" at the 2005 IEEE PES General Meeting (San Francisco, USA), with the paper "Power System Subharmonics".

Panel Session titled "An Overview of Probabilistic Aspects of Harmonics" at the 2005 IEEE PES General Meeting (San Francisco, USA) with the paper "Interharmonics from a Probabilistic Perspective".

Panel Session titled "Methodologies for Harmonic Modeling and Simulation" at the 2003 IEEE PES General Meeting (Toronto, Canada) with the paper "Considerations on Probabilistic Harmonic Voltages".

Panel Session titled "Harmonic Measurement Methods" at the 2002 IEEE PES General Meeting (Chicago, USA) with the paper "Interharmonic Measurement in IEC Framework".

Panel Session titled "Probabilistic Aspects of Harmonics" at the 2002 IEEE PES General Meeting (New York, USA) with the paper "Probabilistic Aspects of Harmonic Impedances".

International Workshop on Power Definitions and Measurements under Non-Sinusoidal Conditions (7-th edition) held in Cagliari, Italy in July 2006 with the paper "Amplitude and Phase Modulation Effects of Waveform Distortion in Power Systems".

International Workshop on Power Definitions and Measurements under Non-Sinusoidal Conditions (6-th edition) held in Milan, Italy, in October 2003 with the papers "Interharmonics. Part 1: Aspects Related to Modeling and Simulation", "Interharmonics. Part 2: Aspects Related to Measurement and Limits" and "Is it Always Possible to Separately Analyze Different Power Quality Phenomena? The Case of the Voltage Peak". International Workshop on Power Definitions and Measurements under Non-Sinusoidal Conditions (5-th edition) held in Milan, Italy in October 2000 with the paper "Self tuning Harmonic and Interharmonic Processing Technique".

ORGANIZATION OF INTERNATIONAL CONFERENCES

Member since 2010 of the International Scientific Commeettee of the International Conference on "Electric Power Engineering" held yearly in Czech Republic.

Co-chairmen of the 5-th WSEAS International Conference on POWER SYSTEMS and ELECTROMAGNETIC COMPATIBILITY (PSE 2005), Corfu, Greece, August 2005.

Responsible of the Scientific Secretariat of the 7-th edition of the International Conference "Probabilistic Methods Applied to Power Systems (PMAPS 2002)" held in Naples, Italy in September 2002.

SCIENTIFIC RESPONSIBILITY OF RESEARCH CONTRACTS AND SCIENTIFIC CONSULTANCIES

Scientific Leader of the scientific contract: "Definition of Technical Specification for the Monitoring and Analysis of Power Quality Produced by Small Size Distributed Energy Resources connected to the Distribution Network" between ENEL Engineering and the Department of Information Engineering of the Second University of Naples in 2009 (Contract budget 15 k)

Scientific Consultant contract, from May to July 2007, with the Department of Electrical Engineering of the University of Naples "Federico II", for the "Determination of Background Harmonic Distortion in the Framework of International Standards for Experimental Laboratory Tests".

Scientific Consultant contract, from May to July 2005, with the Department of Engineering of the University of Sannio, for the "Analysis of the Risks Connected to the Specificity of the Electrical System of the Italian Aerospace Research Center".

Scientific Consultant contract, from April to June 1997, with the Department of Industrial Engineering of the University of Cassino, for the "Development of Algorithmms for the Security Evaluation of High Speed Trains".

TUTORSHIP OF PH.D. STUDENTS

Luigi Feola of the XXVII Cycle of the Ph.D. Course in Energy Conversion.

Luigi Nugnes of the XXV Cycle of the Ph.D. Course in Energy Conversion.

Adolfo Sollazzo of the XII Cycle of the Ph.D. Course in Electrical Energy Conversion.

Juan Perez Torreglosa from Spain during his stay as visiting researcher at the Second University of Naples in the period from June 2012 to September 2012.

Jan Slezingr from Czech Republic during his stay as visiting researcher at the Second University of Naples in the period from September 2011 to December 2011.

BILATERAL AGREEMENT RESPONSIBILITY IN THE FRAMEWORK OF THE SOCRATES/ERASMUS PROGRAM

Faculty of Engineering of the University of Jaen (Spain) from 2005.

Faculty of Electrical Power Engineering and Communication of the BRNO University of Technology (Czech Republic) from 2009.

Faculty of Electrical Engineering of the University of Ljubljana (Slovenia) from 2010.

TEACHING ACTIVITY AT THE SECOND UNIVERSITY OF NAPLES

He has been responsible of the following courses at the Faculty of Engineering:

"Industrial Electrical Systems" (60 hours) Course in Electronic Engineering - AA.AA. 2000/2001, 2001/2002, 2002/2003, 2003/2004.

"Industrial Electrical Systems": (5 CFU) Course in Electronic Engineering - AA.AA. 2002/2003, 2003/2004, 2004/2005, 2005/2006, 2006/2007, 2007/2008.

"Electrical Power Systems": (3 CFU) Course in Mechanical Engineering - A.A. 2002/2003.

"Industrial Electrical Systems 1 e 2": (6 CFU) Course in Mechanical Engineering - AA.AA. 2003/2004, 2004/2005, 2005/2006, 2006/2007, 2007/2008.

"Power Electronic Systems": (3 CFU) Course in Mechanical Engineering - AA.AA. 2004/2005, 2005/2006, e 2007/2008.

"Electrical Power Systems": (3 CFU) Course in Civil Engineering - A.A. 2005/2006.

"Industrial Electrical Systems": (6 CFU) Course in Mechanical Engineering - AA.AA. 2006/2007, 2007/2008, 2008/2009.

"Industrial Electrical Systems": (6 CFU) Course in Electronic Engineering- AA.AA. 2006/2007, 2007/2008, 2008/2009, 2009/2010.

"Electrical Power Systems": (6 CFU) Course in Electronic Engineering- AA.AA. 2010/2011, 2011/2012, 2012/2013.

"Industrial Electrical Systems": (3 CFU) Course in Mechanical Engineering- AA.AA. 2010/2011, 2011/2012, 2012/2013.

"Electrical Systems and Machines": (3 CFU) Course in Mechanical Engineering - AA.AA. 2010/2011, 2011/2012.

"Principles of Electrical Safety": (3 CFU) Course in Electronic Engineering- 2011/2012, 2012/2013.