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Selected Scholarly Contributions [Data Provided by **Scopus**]

Roscia, M., Zaninelli, D., LazaroIU, G.C., Shadmehr, H.

[Using design optimization in radio frequency energy harvesting systems](#)

(2013) 4th International Conference on Clean Electrical Power: Renewable Energy Resources Impact, ICCEP 2013, art. no. 6586939, pp. 740-744.

Brenna, M., Foadelli, F., Mussetta, M., Shadmehr, H., Zaninelli, D.

[Charging electrical vehicles with wireless power transmission](#)

(2013) 4th International Conference on Clean Electrical Power: Renewable Energy Resources Impact, ICCEP 2013, art. no. 6586930, pp. 698-702.

Golovanov, N., LazaroIU, G.C., Roscia, M., Zaninelli, D.

[Power quality assessment in small scale renewable energy sources supplying distribution systems](#)

(2013) Energies, 6 (2), pp. 634-645.

Brenna, M., De Berardinis, E., Delli Carpini, L., Foadelli, F., Paulon, P., Petroni, P., Sapienza, G., Scrosati, G., Zaninelli, D.

[Automatic distributed voltage control algorithm in smart grids applications](#)

(2013) IEEE Transactions on Smart Grid, 4 (2), art. no. 6296741, pp. 877-885.

Brenna, M., Foadelli, F., Zaninelli, D.

[Integration of recharging infrastructures for electric vehicles in urban transportation system](#)

(2012) 2012 IEEE International Energy Conference and Exhibition, ENERGYCON 2012, art. no. 6347726, pp. 1060-1064.

Brenna, M., Foadelli, F., Roscia, M., Zaninelli, D.

[Synergy between renewable sources and electric vehicles for energy integration in distribution systems](#)

(2012) Proceedings of International Conference on Harmonics and Quality of Power, ICHQP, art. no. 6381274, pp. 865-869.

LazaroIU, G.C., Zaninelli, D., Popescu, M.O., Roscia, M.

[Grid connected and stand alone DC power system prototype](#)

(2012) Proceedings of International Conference on Harmonics and Quality of Power, ICHQP, art. no. 6381295, pp. 529-534.

Brenna, M., Foadelli, F., LazaroIU, G.C., Zaninelli, D.

[Harmonic analysis of the secondary distribution network in naval systems](#)

(2012) Proceedings of International Conference on Harmonics and Quality of Power, ICHQP, art. no. 6381288, pp. 541-545.

Brenna, M., Foadelli, F., Sapienza, G., Zaninelli, D.

[Directional ground relay failure caused by line-to-ground with load-side broken conductor fault](#)

(2012) European Transactions on Electrical Power, 22 (7), pp. 907-923.

Brenna, M., Foiadelli, F., Petroni, P., Sapienza, G., Zaninelli, D.
[Distributed generation regulation for intentional islanding in Smart Grids](#)
(2012) 2012 IEEE PES Innovative Smart Grid Technologies, ISGT 2012, art. no. 6175713, .

Lazaroiu, G.C., Lipan, L., Roscia, M., Zaninelli, D.
[Influence of voltage flicker propagation on power systems operation](#)
(2011) IEEE Power and Energy Society General Meeting, art. no. 6039773, .

Brenna, M., Foiadelli, F., Zaninelli, D.
[The compatibility between DC and AC supply of the Italian railway system](#)
(2011) IEEE Power and Energy Society General Meeting, art. no. 6039536, .

Brenna, M., Foiadelli, F., Zaninelli, D.
[Power and energy estimation for Plug-in electric vehicles recharge in metropolitan area](#)
(2011) Proceeding of the International Conference on Electrical Power Quality and Utilisation, EPQU, art. no. 6128908, pp. 65-70.

Foiadelli, F., Leva, S., Zaninelli, D.
[PQ and protection system analysis of a new topology for grid connected PV plant](#)
(2011) 3rd International Conference on Clean Electrical Power: Renewable Energy Resources Impact, ICCEP 2011, art. no. 6036263, pp. 243-248.

Brenna, M., Capasso, A., Falvo, M.C., Foiadelli, F., Lamedica, R., Zaninelli, D.
[Investigation of resonance phenomena in high speed railway supply systems: Theoretical and experimental analysis](#)
(2011) Electric Power Systems Research, 81 (10), pp. 1915-1923.

Foiadelli, F., Brenna, M., Zaninelli, D.
[The influence of controller parameters on the quality of the train converter current](#)
(2011) Advances in Power Electronics, 2011, art. no. 832737, .

Dumbrava, V., Lazaroiu, C., Roscia, C., Zaninelli, D.
[Expansion planning and reliability evaluation of distribution networks by heuristic algorithms](#)
(2011) 2011 10th International Conference on Environment and Electrical Engineering, EEEIC.EU 2011 - Conference Proceedings, art. no. 5874766, .

Brenna, M., De Berardinis, E., Delli Carpini, L., Paulon, P., Petroni, P., Sapienza, G., Scrosati, G., Zaninelli, D.
[Petersen coil regulators analysis using a real-time digital simulator](#)
(2011) IEEE Transactions on Power Delivery, 26 (3), art. no. 5696794, pp. 1479-1488.

Brenna, M., Foiadelli, F., Zaninelli, D.
[New stability analysis for tuning PI controller of power converters in railway application](#)
(2011) IEEE Transactions on Industrial Electronics, 58 (2), art. no. 5446384, pp. 533-543.

Golovanov, N., Lazaroiu, G.C., Roscia, M., Zaninelli, D.

[Harmonic summation in power systems with power electronic interfaced loads](#)

(2010) ICHQP 2010 - 14th International Conference on Harmonics and Quality of Power, art. no. 5625345, .

Brenna, M., De Berardinis, E., Delli Carpini, L., Paulon, P., Petroni, P., Sapienza, G., Scrosati, G., Zaninelli, D.

[Real time simulation of smart grids for interface protection test and analysis](#)

(2010) ICHQP 2010 - 14th International Conference on Harmonics and Quality of Power, art. no. 5625444, .

Brenna, M., Foiadelli, F., Zaninelli, D.

[Protection selectivity analysis in electric system for hospital application. Part I: Radial and loop distribution](#)

(2010) ICHQP 2010 - 14th International Conference on Harmonics and Quality of Power, art. no. 5625351, .

Brenna, M., Foiadelli, F., Zaninelli, D.

[Protection selectivity analysis in electric system for hospital application. Part II: New protection proposal for PQ improvement](#)

(2010) ICHQP 2010 - 14th International Conference on Harmonics and Quality of Power, art. no. 5625352, .

Brenna, M., Foiadelli, F., Sapienza, G., Zaninelli, D.

[Voltage profile calculation in distribution networks under sinusoidal and distorted operation](#)

(2010) ICHQP 2010 - 14th International Conference on Harmonics and Quality of Power, art. no. 5625457, .

Brenna, M., Dolara, A., Leva, S., Zaninelli, D.

[Effects of the DC stray currents on subway tunnel structures evaluated by FEM analysis](#)

(2010) IEEE PES General Meeting, PES 2010, art. no. 5589590, .

Lazaroiu, G.C., Zaninelli, D.

[A control system for dc arc furnaces for power quality improvements](#)

(2010) Electric Power Systems Research, 80 (12), pp. 1498-1505.

Brenna, M., Foiadelli, F., Zaninelli, D.

[Electromagnetic model of high speed railway lines for power quality studies](#)

(2010) IEEE Transactions on Power Systems, 25 (3), art. no. 5428786, pp. 1301-1308.

Lăzăroiu, C., Zaninelli, D.

[Dc arc furnace modelling for power quality analysis](#)

(2010) UPB Scientific Bulletin, Series C: Electrical Engineering, 72 (1), pp. 191-200.

Brenna, M., Foiadelli, F., Zaninelli, D., Roscia, M.

[Evaluation of the interferences in the interconnection point between 2x25kVAC high-speed railway lines and 3kVDC regional system](#)

(2009) 2009 10th International Conference on Electrical Power Quality and Utilisation, EPQU'09, art. no. 5318820, .

Brenna, M., Foiadelli, F., Zaninelli, D.

[Stability investigation of HV networks in presence of large wind farms](#)

(2009) 2009 IEEE Bucharest PowerTech: Innovative Ideas Toward the Electrical Grid of the Future, art. no. 5281793, .

Golovanov, N., Lazaroiu, G.C., Roscia, M., Zaninelli, D.

[Integrating RES into the Romanian transport system](#)

(2009) 2009 IEEE Bucharest PowerTech: Innovative Ideas Toward the Electrical Grid of the Future, art. no. 5281985, .

Brenna, M., Foiadelli, F., Roscia, M., Zaninelli, D.

[Short circuit currents evaluation in Combined Heat Cooling and Power \(CHCP\) Systems](#)

(2009) 2009 IEEE Power and Energy Society General Meeting, PES '09, art. no. 5275996, .

Brenna, M., Foiadelli, F., Zaninelli, D.

[Influence of leakage parameters on resonance phenomena in radial distribution networks](#)

(2009) IET Conference Publications, (550 CP), .

Golovanov, N., Lazaroiu, G.C., Manole, M.A., Roscia, M., Zaninelli, D.

[Wind farms access to the Romanian transport system](#)

(2009) 2009 IEEE/PES Power Systems Conference and Exposition, PSCE 2009, art. no. 4840164, .

Leva, S., Zaninelli, D.

[Hybrid renewable energy-fuel cell system: Design and performance evaluation](#)

(2009) Electric Power Systems Research, 79 (2), pp. 316-324.

Golovanov, N., Lazaroiu, G.C., Roscia, M., Zaninelli, D.

[Power quality impact of high capacity end-users](#)

(2008) ICHQP 2008: 13th International Conference on Harmonics and Quality of Power, art. no. 4668853, .

Brenna, M., Foiadelli, F., Zaninelli, D.

[Dissymmetrical switching in the 4Q interlaced converters for high speed trains: THD analysis](#)

(2008) ICHQP 2008: 13th International Conference on Harmonics and Quality of Power, art. no. 4668862, .

Brenna, M., Foiadelli, F., Zaninelli, D., Burchi, G.

[New simulation algorithm for electric transportation supply system sizing](#)

(2008) Proceedings of the Universities Power Engineering Conference, art. no. 4651679, .

Dumbrava, V., Bazacliu, G., Nicoara, B., Lazaroiu, C., Zaninelli, D.

[Load profiling for the electricity market](#)

(2008) Proceedings of the Universities Power Engineering Conference, art. no. 4651483, .

Brenna, M., Foiadelli, F., Roscia, M., Zaninelli, D.

[Evaluation of solar collector plant to contribute climate change mitigation](#)

(2008) 2008 IEEE International Conference on Sustainable Energy Technologies, ICSET 2008, art. no. 4747001, pp. 198-202.

Brenna, M., Foiadelli, F., Roscia, M., Zaninelli, D.

[Harmonic analysis of a high speed train with interlaced four quadrant converters](#)

(2008) IEEE Power and Energy Society 2008 General Meeting: Conversion and Delivery of Electrical Energy in the 21st Century, PES, art. no. 4596049, .

Brenna, M., Foiadelli, F., Zaninelli, D.

[The impact of the wind generation connected to weak grids](#)

(2008) SPEEDAM 2008 - International Symposium on Power Electronics, Electrical Drives, Automation and Motion, art. no. 4581309, pp. 1481-1485.

Lazaroiu, G.C., Leva, S., Venturelli, M.M.V., Zaninelli, D.

[Industrial frequency magnetic field shielding: Different theories and comparison](#)

(2007) International Journal of Power and Energy Systems, 27 (4), pp. 398-406.

Brenna, M., Foiadelli, F., Zaninelli, D., Roscia, M.

[Harmonic emission of double stage converter for auxiliary services in electric trains](#)

(2007) 2007 9th International Conference on Electrical Power Quality and Utilisation, EPQU, art. no. 4424219, .

Eremia, M., Lazaroiu, G.C., Leva, S., Zaninelli, D.

[On board multimachine network: PQ effects on stability studies](#)

(2007) 2007 IEEE Power Engineering Society General Meeting, PES, art. no. 4275723, .

Iannone, F., Zaninelli, D.

[Life cycle assessment applications to electrical energy production: A possible sustainability analysis tool](#)

(2007) 2007 IEEE Power Engineering Society General Meeting, PES, art. no. 4275724, .

Esposito, G., Zaninelli, D., Lazaroiu, G.C., Golovanov, N.

[Impact of embedded generation on the voltage quality of distribution networks](#)

(2007) 2007 9th International Conference on Electrical Power Quality and Utilisation, EPQU, art. no. 4424154, .

Brenna, M., Foiadelli, F., Tironi, E., Zaninelli, D.

[Ultracapacitors application for energy saving in subway transportation systems](#)

(2007) 2007 International Conference on Clean Electrical Power, ICCEP '07, art. no. 4272359, pp. 69-73.

Brenna, M., Foiadelli, F., Zaninelli, D.

[A new concept of a light rail vehicle for city, interurban and subway services](#)

(2006) International Symposium on Power Electronics, Electrical Drives, Automation and Motion, 2006. SPEEDAM 2006, 2006, art. no. 1649925, pp. 1063-1067.

Contino, R., Iannone, F., Leva, S., Zaninelli, D.

[Hybrid photovoltaic-fuel cell system controller sizing and dynamic performance evaluation](#)

(2006) 2006 IEEE Power Engineering Society General Meeting, PES, art. no. 1709410, .

Brenna, M., Iannone, F., LazaroIU, C., Zaninelli, D.

[Power systems safety analysis with power quality devices](#)

(2006) 2006 IEEE Power Engineering Society General Meeting, PES, art. no. 1709451, .

Foiadelli, F., Roscia, M., Zaninelli, D.

[Optimization of storage devices for regenerative braking energy in subway systems](#)

(2006) 2006 IEEE Power Engineering Society General Meeting, PES, art. no. 1708894, .

Chiumeo, R., Esposito, G., Malgarotti, S., Prudenzi, A., Quaia, S., Simioli, G., Zaninelli, D.

[Surveying supply reliability and voltage quality at italian customers](#)

(2005) IEE Conference Publication, 2 (2005-11034), pp. 437-440.

LazaroIU, G., Desideri, U., Zaninelli, D., LazaroIU, C.

[Dynamic performance of the proton exchange membrane fuel cells](#)

(2005) Proceedings of the 1st European Fuel Cell Technology and Applications Conference 2005 - Book of Abstracts, 2005, p. 141.

Gagliardi, F., Iannone, F., LazaroIU, G.C., Roscia, M., Zaninelli, D.

[Sustainable building for the quality of power supply](#)

(2005) 2005 IEEE Russia Power Tech, PowerTech, art. no. 4524614, .

Desideri, U., Zaninelli, D., LazaroIU, G., LazaroIU, C.

[A Matlab-Simulink analysis of hybrid SOFC dynamic behavior](#)

(2005) Proceedings of the 3rd International Conference on Fuel Cell Science, Engineering, and Technology, 2005, art. no. FUELCELL2005-74056, pp. 245-251.

Foiadelli, F., LazaroIU, G.C., Zaninelli, D.

[Probabilistic method for harmonic analysis in railway system](#)

(2005) 2005 IEEE Power Engineering Society General Meeting, 3, pp. 2397-2401.

Iannone, F., Leva, S., Zaninelli, D.

[Hybrid photovoltaic and hybrid photovoltaic-Fuel Cell system: Economic and environmental analysis](#)

(2005) 2005 IEEE Power Engineering Society General Meeting, 2, pp. 1503-1509.

Golovanov, N., LazaroIU, G.C., Roscia, M., Zaninelli, D.

[Voltage unbalance vulnerability areas in power systems supplying high speed railway](#)

(2005) 2005 IEEE Power Engineering Society General Meeting, 3, pp. 2509-2514.

Brenna, M., Iannone, F., Zaninelli, D.

[Electrical safety analysis in low voltage systems with electronic power converters](#)

(2005) 2005 IEEE Power Engineering Society General Meeting, 3, pp. 2462-2468.

Leva, S., Morando, A.P., Zaninelli, D.

[Evaluation of line voltage drop in presence of unbalance, harmonics, and interharmonics: Theory and applications](#)

(2005) IEEE Transactions on Power Delivery, 20 (1), pp. 390-396.

Golovanov, N., Lazaroiu, G.C., Roscia, M., Zaninelli, D.

[Steady state disturbance analysis in PV systems](#)

(2004) 2004 IEEE Power Engineering Society General Meeting, 2, pp. 1952-1957.

Bertola, A., Lazaroiu, G.C., Roscia, M., Zaninelli, D.

[A Matlab-simulink flickermeter model for power quality studies](#)

(2004) 2004 11th International Conference on Harmonics and Quality of Power, pp. 734-738.

Iannone, F., Leva, S., Zaninelli, D.

[Hybrid photovoltaic system and sustainability: Economic aspects](#)

(2004) 2004 IEEE Power Engineering Society General Meeting, 2, pp. 1933-1938.

Golovanov, N., Lazaroiu, G.C., Leva, S., Zaninelli, D.

[Induction motor supply voltage variations for distribution system faults](#)

(2004) 2004 11th International Conference on Harmonics and Quality of Power, pp. 272-277.

Foiadelli, F., Pinato, P., Zaninelli, D.

[Statistical model for harmonic propagation studies in electric traction supply systems](#)

(2004) 2004 11th International Conference on Harmonics and Quality of Power, pp. 753-758.

Prudenzi, A., Quaia, S., Zaninelli, D.

[Surveying PQ Aspects in Italian Industrial Customers](#)

(2003) Proceedings of the IEEE Power Engineering Society Transmission and Distribution Conference, 1, pp. 211-216.

Ardizzon, L., Pinato, P., Zaninelli, D.

[Electric traction and electrolytic corrosion: A software tool for stray currents calculation](#)

(2003) Proceedings of the IEEE Power Engineering Society Transmission and Distribution Conference, 2, pp. 550-555.

Casini, D., Ceraolo, M., Superti Furga, G., Zaninelli, D.

[A multifunction power supply center for experimental electric traction tests and certification](#)

(2003) 2003 IEEE Bologna PowerTech - Conference Proceedings, 3, art. no. 1304475, pp. 749-757.

Ceraolo, M., Casini, D., Masini, P., Antonacci, G.A., Manigrasso, R., Mapelli, F.L., Pinato, P., Superti Furga, G., Zaninelli, D.

[Schema di alimentazione multitemperatura](#)

(2003) Ingegneria Ferroviaria, 58 (4), pp. 393-402.

Dalbon, W., Leva, S., Roscia, M., Zaninelli, D.

[Hybrid photovoltaic system control for enhancing sustainable energy](#)

(2002) Proceedings of the IEEE Power Engineering Society Transmission and Distribution Conference, 1 (SUMMER), pp. 134-139.

Leva, S., Morando, A.P., Zaninelli, D.

[Influence of PQ disturbances on dynamic stability of isolated system](#)

(2001) Proceedings of the IEEE Power Engineering Society Transmission and Distribution Conference, 1 (SUMMER), pp. 694-699.

Lamedica, R., Esposito, G., Tironi, E., Zaninelli, D., Prudenzi, A.

[A survey on power quality cost in industrial customers](#)

(2001) Proceedings of the IEEE Power Engineering Society Transmission and Distribution Conference, 2 (WINTER MEETING), pp. 938-943.

Faranda, R., Zaninelli, D., Zanini, A.

[Electric power quality on aircraft: Analysis and propagation of disturbances](#)

(2001) Proceedings of the IEEE Power Engineering Society Transmission and Distribution Conference, 1 (SUMMER), pp. 222-227.

Zaninelli, D.

[Nonlinear passive filters in power systems](#)

(2000) Proceedings of the IEEE Power Engineering Society Transmission and Distribution Conference, 2, pp. 773-777.

Zaninelli, D., Balocchi, G.

[Fault analysis of AC/H cable transmission lines](#)

(2000) Proceedings of the IEEE Power Engineering Society Transmission and Distribution Conference, 2, p. 857.

Berizzi, A., Silvestri, A., Zaninelli, D.

[IEC standard proposals on AC short-circuit current calculations](#)

(2000) International Journal of Power and Energy Systems, 20 (3), pp. 140-145.

Zaninelli, D., Balocchi, G.

[Fault analysis on AC/HV cable transmission lines](#)

(2000) IEEE Transactions on Power Delivery, 15 (2), pp. 616-622.

Berizzi, A., Castelli-Dezza, F., Silvestri, A., Zaninelli, D.

[Expert system for filter optimum location](#)

(1999) IEEE Engineering Society, Winter Meeting, 2, pp. 1269-1274.

Berizzi, A., Piovan, U., Silvestri, A., Zaninelli, D., Pavani, R.

[Complete symbolic factorization for the security analysis of power systems](#)

(1998) European Transactions on Electrical Power, 8 (3), pp. 167-173.

Zahedi, A.M., Emanuel, A.E., Zaninelli, D.

[Optimum location and size of the LC harmonic filters in the feeders with uniformly distributed linear and nonlinear loads](#)
(1998) Electric Power Systems Research, 44 (2), pp. 127-136.

Lamedica, R., Prudenzi, A., Tironi, E., Zaninelli, D.

[A model of large load areas for harmonic studies in distribution networks](#)

(1997) IEEE Transactions on Power Delivery, 12 (1), pp. 418-423.

Berizzi, A., Silvestri, A., Tironi, E., Zaninelli, D.

[Power flows and voltage control in electric systems by traditional and innovative devices](#)

(1996) Proceedings of the Mediterranean Electrotechnical Conference - MELECON, 3, pp. 1620-1626.

Berizzi, A., Silvestri, A., Zaninelli, D.

[Convergence improving minimization technique for a modified fast decoupled load flow](#)

(1996) European Transactions on Electrical Power, 6 (3), pp. 201-206.

Berizzi, A., Silvestri, A., Zaninelli, D., Marconato, R.

[The capability of alternators in voltage collapse analysis](#)

(1996) Electric Machines and Power Systems, 25 (2), pp. 169-180.

Zaninelli, D., Balocchi, G.

[H.V. cable transmission: A study on torsional stability](#)

(1996) Electric Machines and Power Systems, 25 (7), pp. 725-743.

Berizzi, Alberto, Silvestri, Andrea, Zaninelli, Dario, Massucco, Stefano

[IEC draft standard evaluation and dynamic simulation of short-circuit currents in DC systems](#)

(1995) Conference Record - IAS Annual Meeting (IEEE Industry Applications Society), 3, pp. 2189-2198.