

Curriculum Vitae Europass

Informazioni personali

Cognome Nome BORGHETTI, ALBERTO
Luogo e data di nascita
Codice fiscale o partita IVA

Esperienza professionale

Università Università di Bologna
Data 1994-oggi
Lavoro o posizione ricoperti Professore ordinario di Sistemi elettrici per l'energia settore scientifico disciplinare ING-IND/33 Dipartimento di Ingegneria dell'Energia Elettrica e dell'Informazione "Guglielmo Marconi" dal 2018.
In precedenza, dal 2004 Professore associato (confermato dal 2007) e dal 1994 al 2004 Ricercatore nello stesso settore.

Principali attività e responsabilità

Attualmente insegna
- Centrali elettriche e generazione distribuita (laurea magistrale in ing. Elettrica e ing. Energetica)
- Electric power systems and smart grid (laurea magistrale – curriculum internazionale in Electrical Engineering)
- Sistemi elettrici per l'energia (laurea magistrale in Ingegneria dell'Energia Elettrica)

Dal 2007 al 2015 ha fatto parte del Consiglio Scientifico del master universitario di II livello denominato "Progettazione di impianti oil & gas", promosso da ENI Corporate University, ENI Exploration & Production e Tecnomare in collaborazione con l'Università di Bologna. Nell'ambito di questo master è docente di un modulo didattico su Generazione e distribuzione dell'energia elettrica.

Dal 2003 è istruttore in vari corsi post laurea organizzati dall'associazione europea EES-UETP (Electric Energy Systems - University Enterprise Training Partnership). In particolare ha svolto lezioni nei corsi organizzati dall'Univ. di Bologna (2003 e 2007), Univ. di Cagliari (2004 e 2007), CESI - Milano (2004), Politecnico Federale di Losanna (2006, 2012 e 2014), Sungkyunkwan University – Seoul (2009), Politecnico di Stoccolma KTH (2013). Nel 2016 è stato istruttore alla European PhD School: Power Electronics, Electrical Machines, Energy Control and Power Systems – Gaeta, Italy (lecture on "Controlled islanding for blackout prevention and restoration processes after blackouts").

	<p>E' stato membro del collegio di Dottorato in Ingegneria Elettrotecnica dell'Università di Bologna dal 2008 al 2016. Dal 2017 è membro del collegio di Dottorato IBES dell'Univ. di Bologna.</p> <p>E' stato membro di commissioni di valutazione finale delle tesi di dottorato in varie Università italiane (Padova, Genova, Pisa, Pavia, Sapienza Univ. di Roma) e straniere (Univ. di Uppsala - Svezia, Politecnico di Berlino TU Berlin - Germania, Istituto di Tecnologia di Dublino DIT- Irlanda, Università di Vaasa – Finlandia, Université Grenoble Alpes - France).</p> <p>L'attività scientifica, svolta all'interno del Laboratorio di Ingegneria dei Sistemi Elettrici di Potenza (http://lispeng.unibo.it), riguarda principalmente i seguenti temi:</p> <ul style="list-style-type: none"> - il comportamento dinamico delle centrali e dei sistemi elettrici di potenza, - gli strumenti di supporto alle decisioni dei produttori d'energia elettrica in un mercato competitivo, - il coordinamento delle protezioni dalle sovratensioni in particolare contro gli effetti delle fulminazioni, - la localizzazione automatica dei guasti nelle reti di distribuzione in media tensione, - il miglioramento della qualità del servizio nelle reti di distribuzione, - l'esercizio delle reti di distribuzione in presenza di generazione anche da fonte rinnovabile e delle microreti. <p>E' membro del Centro Interdipartimentale di Ricerca Industriale "Fonti Rinnovabili, Ambiente, Mare ed Energia – FRAME" e dell'Advanced Research Center for Electronic Systems "E. De Castro" (ARCES) dell'Università di Bologna.</p>
<p>Riconoscimenti</p>	<p>IEEE Fellow (classe 2015) con la motivazione "for contributions to modeling of power distribution systems under transient conditions".</p> <p>Ha ricevuto il Scientific Committee Award 2016 dell'Int. Conf. on Lightning Protection (ICLP).</p> <p>Ha ricevuto il 2018 Technical Council Award della CIGRE (International Council on Large Electric Systems), per l'attività nello Study Committee C4 "System Technical Performance".</p> <p>Hanno ricevuto l'attestato di migliore contributo presentato a conferenza i seguenti articoli:</p> <ul style="list-style-type: none"> - "The black-startup simulation of a repowered thermoelectric unit", scritto con Migliavacca, Nucci e Spelta, all'IFAC Symposium on Control of Power Plants and Power Systems (Bruxelles, 2000) - "Analysis of black-startup and islanding capabilities of a combined cycle power plant", con Bosetti, Nucci, Paolone, Ciappi e Solari, al 43rd Int. Universities Power Engineering Conference UPEC (Padova, 2008).
<p>Responsabilità progetti</p>	

Comitati editoriali di riviste internazionali

Nel 2001 e nel 2003 è stato responsabile scientifico di due progetti di ricerca fra CESI-Milano e il Dip. di Ing. Elettrica dell'Università di Bologna su temi riguardanti la generazione distribuita.

2006-2009

Membro del Management Committee di un programma di ricerca COST (European Cooperation in the Field of Scientific and Technical Research): action P18 "The Physics of Lightning Flash and its Effects".

2007 - 2008

Responsabile Scientifico dell'Unità di ricerca di Bologna di un progetto PRIN 2005 (Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale - Ministero dell'istruzione dell'Università e della Ricerca) su "La vulnerabilità dei sistemi elettrici di potenza nei mercati elettrici competitivi" (coordinatore nazionale: Prof. Roberto Napoli del Politecnico di Torino)

2009-2010

Responsabile Scientifico dell'Unità di ricerca di Bologna di un progetto PRIN 2007 (Programmi di Ricerca Scientifica di Rilevante Interesse Nazionale) su "Cogenerazione distribuita per applicazioni civili-residenziali" (coordinatore nazionale: Prof. Pier Ruggero Spina dell'Univ. di Ferrara)

2009- 2010

Responsabile scientifico di due progetti di ricerca commissionati da HERA SpA sul funzionamento in isola di carico della centrale a ciclo combinato di Imola con verifica sull'impianto.

2010

Responsabile scientifico di un progetto di ricerca in collaborazione con il Dip. Di Ingegneria dell'Univ. di Ferrara nell'ambito di una attività R&D ENEA.

2011-2014

Responsabile dell'Unità dell'Univ. di Bologna del Progetto CERSE "SMARTGEN - Studio, sviluppo e validazione di metodi e strumenti innovativi per la gestione di reti di distribuzione attive con generazione da fonte rinnovabile", Ministero dello Sviluppo Economico.

2014-2015

Responsabile di un WP di un progetto EIT ICT labs "Planning Tool for electric vehicle deployment and related user centric services" coordinato da Siemens.

2012-2015

Responsabile per il consorzio nazionale IUNET del Progetto EU ARTEMIS / ENIAC JOINT UNDERTAKING - "E2SG – Energy to smart Grid", coordinato da Infineon Technologies AG, Monaco, Germania, e co-responsabile del WP "Grid Control". Il progetto ha ricevuto l'ECSEL Innovation Award nel 2015

Congressi

2016 – 2019

Responsabile dell'Unità dell'Univ. di Bologna nel progetto EU Marie Skłodowska-Curie European Training Network "INCITE - Innovative controls for renewable source integration into smart energy systems", coordinato da IREC di Barcellona,

Spagna, e responsabile del task ESR4.1 “Integrated simulation for MAS design and testing”.

Dal 2018 è Editor della rivista IEEE Transactions on Power System

Dal 2010 al 2016 è stato Editor della rivista IEEE Transactions on Smart Grid

Dal 2019 è Editor-in-Chief di Electrical Engineering – Archiv fur Elektrotechnik

Dal 2018 è Associate Editor del "Journal of Modern Power Systems and Clean Energy (MPCE)", SGEPRI Press e Springer.

Dal 2008 è membro del “Editorial Advisory Panel” della rivista internazionale “Electric Power Systems Research”, edita da Elsevier

E' stato Technical Program Committee chairperson del 30th International Conference on Lightning Protection (Cagliari, 2010) e chair del Bologna Cigré Colloquium on Lightning and Power systems (Bologna, 2016)

Partecipa e ha fatto parte dei comitati scientifici di varie conferenze internazionali (IEEE PowerTech Conference 2007-2009-2011-2015-2017-2019, IEEE Innovative Smart Grid Technologies Conference North America 2012 and 2014, IEEE ISGT Australia 2011, Power Systems Computation Conf. PSCC 2016-2018-2020).

E' stato chair o moderatore di varie sessioni e revisore per varie conferenze internazionali. Con il Prof. Lorenzo Peretto (Univ. di Bologna) ha organizzato e presieduto la sessione panel su “Power system islands, autonomous microgrids and relevant instrumentation” alla IEEE PES Innovative Smart Grid Technologies Conference, Washington DC, USA, 2012. (panelist: Prof. Geza Joós, McGill Univ., Canada, Prof. Reza Iravani, Univ. of Toronto, Canada, Dr. S.S. Mani Venkata, Alstom, USA, oltre agli organizzatori).

Con il Prof. Luciano Bononi (Univ. di Bologna) ha organizzato e presieduto la sessione su “Smart Grids and Smart Mobility for Smart Cities”, al IEEE Research and Technologies for Society and Industry – IEEE RTSI 2016, Bologna.

E' stato relatore invitato presso:

- International Conference on Smart Energy Systems and Technologies (SEST), September 9 –September 11, 2019, Porto, Portugal (plenary talk on “Distributed Energy Management in Local Communities”)

- International Conference on Power Systems (ICPS), Pune, India, 2017 (tutorial on “Distributed Volt/Var control in medium voltage networks” and plenary talk on “Improved analysis of the lightning performance of distribution lines”)

- V Russian conference on lightning protection in Saint Petersburg, 2016 (plenary talk on “Advancements in Insulation Coordination for Improving Lightning Performance of Distribution Lines”)

CIGRE

- 23rd Int. Conference on Electricity distribution, CIRED, Lyon, France, 2015 (tutorial on " ICT and Power System Co-simulation for the analysis of networked control strategies in distribution systems")
- 18th Power Systems Computation Conference PSCC, Wrocław, Poland, 2014 (tutorial on "ICT Integration for a Smarter Power System");
- International Symposium on Electromagnetic Compatibility EMC EUROPE, Rome, Italy, 2012 (tutorial on "EMC Aspects of Lightning");
- Itajubá Federal University - UNIFEI, Brazil, 2010 (lecture on "Lightning induced voltages on distribution lines");
- Sungkyunkwan University, Seoul, South Korea, 2009 (lecture on "Tools for distribution systems operation with embedded generation");
- 16th PSCC, Glasgow, UK, 2008 (tutorial on "Blackouts and Blackout Prevention");
- Zürich Symp. on EMC, Singapore, 2006 (tutorial on "EMC Aspects of Lightning ");
- 18th International Conference and Exhibition on Electricity Distribution CIRED, Turin, Italy, 2005 (round table on "Lightning Protection of MV and LV Lines");
- 3rd Int Symp. on Power Quality Sicel, Bogotá, Colombia, 2005 (invited lecture on "Power system restoration").

E' coautore delle seguenti brochure della CIGRE (Consiglio internazionale delle grandi reti elettriche, Parigi):

- No. 441, WG C4.402, "Protection of Medium Voltage and Low Voltage Networks Against Lightning Part 2: Lightning protection of Medium Voltage networks", 2010;
- No. 287, JWG C4.4.02, "Protection of MV and LV networks against lightning – Part 1: Common topics", 2006;
- No. 549, WG C4.407, "Lightning parameters for engineering applications", 2013;
- No. 550, WG C4.408, "Lightning protection of low-voltage networks", 2013;
- No. 566, WG C4.605, Modelling and Aggregation of Loads in Flexible Power Networks, 2013;
- No. 704, WG C4.26, "Evaluation of lightning shielding analysis methods for EHV and UHV DC and AC transmission lines", 2017

In ambito Cigré è stato segretario del WG C4.407 "Lightning Parameters for Engineering Applications". Ha fatto parte del WG "Protection of MV and LV networks against lightning", del WG C4.605 "Modelling and aggregation of loads in flexible power networks" e del WG C4.26 "Evaluation of Lightning Shielding Analysis Methods for EHV and UHV DC and AC Transmission-lines". Dal 2017 è

	<p>membro dell'advisory group AG C4.1 "Strategic directions" dello Study Committee C4 "Technical performance".</p> <p>E' stato special reporter della sessione generale di Parigi del 2018 per lo Study Committee C4.</p>
Pubblicazioni	<p>E' autore o coautore di più di 150 lavori su varie riviste, monografie, atti di conferenze nazionali ed internazionali.</p> <p>Con Gross e Nucci è coautore del capitolo "Auctions with explicit demand-side bidding in competitive electricity markets" del libro "The next generation of unit commitment models ", Kluwer, 2001; con Nucci e Paolone è coautore del capitolo "Restoration processes after blackouts" del libro " Handbook of electrical power system dynamics ", John Wiley & Son, 2013; con D'Ambrosio, Lodi, e Martello è coautore del capitolo "Optimal scheduling of a multiunit hydro power station in a short-term planning horizon" del libro "Case Studies in Operations Research", Springer, 2014; con Nucci è coautore del capitolo "Integration of distributed energy resources in distribution power systems" del libro "Integration of Distributed Energy Resources in Power Systems: Implementation, Operation and Control", Elsevier, 2016; con Napolitano, Nucci, Rachidi, e Rubinstein è coautore del capitolo "Telegrapher's equations for field-to-transmission line interaction" del libro "Advances in Power System Modelling, Control and Stability Analysis", IET, 2016; è autore del capitolo "Mixed Integer Linear Programming Models for Network Reconfiguration and Resource Optimization in Power Distribution Networks", del libro "From Smart Grids to Smart Cities: New Challenges in Optimizing Energy Grids", John Wiley & Sons, 2017.</p> <p>E' coautore della seguente norma IEEE:</p> <p>- IEEE Std 1410 – 2010, "IEEE Guide for Improving the Lightning Performance of Electric Power Overhead Distribution Lines".</p> <p>L'elenco delle pubblicazioni è riportato in allegato</p>
Istruzione e formazione	
Data	<p>1986-1992</p> <p>Laureato con lode in Ingegneria Elettrotecnica il 24 giugno 1992.</p> <p>Università di Bologna – Facoltà di Ingegneria</p> <p>Abilitato alla professione d'ingegnere nel 1993</p>

**Il sottoscritto pre
sulla privacy.**

consenso al trattamento dei dati personali per i fini indicati nell'informativa

Luogo e data: Bologna, 20 gennaio 2020

Firma Alberto Borghetti.....

Pubblicazioni

Su rivista internazionale

- [J.1] A. Borghetti, C.A. Nucci, G. Pasini, S. Pirani, M. Rinaldi, "Tests on self-healing metallized polypropylene capacitors for power applications", IEEE Transactions on Power Delivery, vol. 10, no. 1, pp. 556-561, 1995. ISSN:0885-8977 doi: 10.1109/61.368354
- [J.2] A. Borghetti, R. Caldon, A. Mari, C.A. Nucci, "On Dynamic Load Models for Voltage Stability Studies", IEEE Transactions on Power Systems, Vol. 12, No. 1, pp. 293-303, 1997. ISSN: 0885-8950 doi: 10.1109/59.574950
- [J.3] A. Borghetti, R. Caldon, C.A. Nucci, "Generic dynamic load models in long-term voltage stability studies", International Journal of Electrical Power & Energy Systems, vol. 22, n. 4, pp. 291-301, 2000. ISSN:0142-0615 doi: 10.1016/S0142-0615(99)00063-0
- [J.4] A. Borghetti, G. Migliavacca, C.A. Nucci, S. Spelta, "The black-startup simulation of a repowered thermoelectric unit", IFAC Journal "Control Engineering Practice", Vol 9/7, pp 791-803, July 2001. ISSN: 0967-0661 doi: 10.1016/S0967-0661(01)00034-X
- [J.5] A. Borghetti, A. Frangioni, F. Lacalandra, C.A. Nucci, "Lagrangian heuristics based on disaggregated Bundle methods for hydrothermal unit commitment", IEEE Transactions on Power Systems, Vol. 18 No. 1, pp. 313 -323, Feb. 2003. ISSN: 0885-8950 doi: 10.1109/TPWRS.2002.807114
- [J.6] A. Borghetti, C.A. Nucci, M. Paolone, "Effect of tall instrumented towers on the statistical distributions of lightning current parameters and its influence on the power system lightning performance assessment", European Transactions on Electrical Power - ETEP, Vol. 13, No. 6, pp. 365-372, November/December 2003. ISSN: 1430-144X doi: 10.1002/etep.4450130605
- [J.7] A. Borghetti, J.A. Gutierrez R, C.A. Nucci, M. Paolone, E. Petrache, F. Rachidi, "Lightning-induced voltages on complex distribution systems: models, advanced software tools and experimental validation", Journal of Electrostatics, Volume 60, Issues 2-4, Pages 163-174, March 2004. ISSN: 0304-3886 doi: 10.1016/j.elstat.2004.01.001
- [J.8] A. Borghetti, C. A. Nucci, M. Paolone, "Estimation of the statistical distributions of lightning current parameters at ground level from the data recorded by instrumented towers", IEEE Transactions on Power Delivery, Volume 19, Issue 3, Pages:1400 – 1409, July 2004. ISSN: 0885-8977 doi: 10.1109/TPWRD.2004.829116
- [J.9] A. Borghetti, S. Corsi, C.A. Nucci, M. Paolone, L. Peretto and R. Tinarelli, "On the use of continuous-wavelet transform for fault location in distribution power systems", International Journal of Electrical Power & Energy Systems, Volume 28, Issue 9, Pages 608-617, November 2006. ISSN: 0142-0615 doi: 10.1016/j.ijepes.2006.03.001
- [J.10] A. Borghetti, A. Lodi, S. Martello, M. Martignani, C. A. Nucci, A. Trebbi, "An Optimization Problem in the Electricity Market", 4OR: A Quarterly Journal of Operations Research, Springer Berlin / Heidelberg, ISSN 1619-4500 (Print) 1614-2411 (Online), 2006. ISSN: 1619-4500. doi: 10.1007/s10288-006-0003-7
- [J.11] M. Bagnoli, B. Belvedere, M. Bianchi, A. Borghetti, A. De Pascale, M. Paolone, "A feasibility study of an auxiliary power unit based on a PEM fuel cell for on-board applications", Journal of fuel cell science and technology, vol. 3, no. 4, pp. 445 – 451, 2006. ISSN: 1550-624X doi: 10.1115/1.2349527
- [J.12] A. Borghetti, C. A. Nucci, M. Paolone, "An improved procedure for the assessment of overhead line indirect lightning performance and its comparison with the IEEE Std. 1410 method", IEEE Trans. on Power Delivery, pp. 684-692, January 2007. ISSN: 0885-8977 doi:

10.1109/TPWRD.2006.881463

- [J.13] A. Piantini, J. M. Janiszewski, A. Borghetti, C. A. Nucci, M. Paolone, "A scale model for the study of the LEMP response of complex power distribution networks", IEEE Trans. on Power Delivery, Vol. 22, No. 1, pp. 710-720, January 2007. ISSN: 0885-8977 doi: 10.1109/TPWRD.2006.881410
- [J.14] A. Borghetti, M. Bosetti, M. Di Silvestro, C. A. Nucci, M. Paolone, L. Peretto, E. Scala, R. Tinarelli, "Assessment of fault location in power distribution networks", Electrical Power Quality and Utilization Journal, Vol. 13(1), pp. 33-41, 2007. ISSN: 1234-6799
- [J.15] A. Borghetti, M. Bosetti, M. Di Silvestro, C. A. Nucci, M. Paolone, "Continuous-Wavelet Transform for Fault Location in Distribution Power Networks: Definition of Mother Wavelets Inferred From Fault Originated Transients", IEEE Transactions on Power Systems, Volume 23, Issue 2, pp. 380 – 388, May 2008, ISSN: 0885-8950 doi: 10.1109/TPWRS.2008.919249
- [J.16] A. Borghetti, C. D'Ambrosio, A. Lodi, S. Martello, "An MILP Approach for Short-Term Hydro Scheduling and Unit Commitment With Head-Dependent Reservoir", IEEE Transactions on Power Systems, Volume 23, Issue 2, pp. 1115 – 1124, Aug. 2008. ISSN: 0885-8950 doi: 10.1109/TPWRS.2008.926704
- [J.17] A. Borghetti, A.S. Morched, F. Napolitano, C.A. Nucci, M. Paolone, "Lightning-Induced Overvoltages Transferred Through Distribution Power Transformers", IEEE Trans. on Power Delivery, Vol. 24, No. 1, pp. 360-372, Jan. 2009. ISSN: 0885-8977 doi: 10.1109/TPWRD.2008.2002674
- [J.18] A. Borghetti, S. Massucco, F. Silvestro, "Influence of feasibility constraints on the bidding strategy selection in a day-ahead electricity market session", Electric Power Systems Research, Vol. 79, No. 12, pp. 1727-1737, 2009. ISSN:0378-7796 doi: 10.1016/j.epsr.2009.07.011
- [J.19] M. Paolone, F. Rachidi, A. Borghetti, C.A. Nucci, M. Rubinstein, V.A. Rakov, M.A. Uman, "Lightning electromagnetic field coupling to overhead lines: theory, numerical simulations, and experimental validation", IEEE Trans. on Electromagnetic Compatibility, Vol. 51, No. 3, pp. 532 - 547, Aug. 2009. ISSN: 0018-9375 doi:10.1109/TEMC.2009.2025958
- [J.20] A. Borghetti, C.A. Nucci, M. Paolone, "Indirect-lightning performance of overhead distribution networks with complex topology", IEEE Transactions on Power Delivery, Vol. 24, Issue 4, pp. 2206 – 2213, Oct. 2009. ISSN: 0885-8977 doi:10.1109/TPWRD.2009.2021038
- [J.21] A. Borghetti, M. Bosetti, S. Grillo, S. Massucco, C.A. Nucci, M. Paolone, F. Silvestro, "Short-term scheduling and control of active distribution systems with high penetration of renewable resources", IEEE Systems Journal, Vol. 4, No. 3, pp. 313 - 322, Sept. 2010. ISSN: 1932-8184 doi: 10.1109/JSYST.2010.2059171
- [J.22] A. Borghetti, M. Bosetti, C.A. Nucci, M. Paolone, A. Abur, "Integrated use of time-frequency wavelet decompositions for fault location in distribution networks: theory and experimental validation", IEEE Transactions on Power Delivery, Vol. 25, no. 4, Page(s): 3139 - 3146, Oct. 2010. ISSN: 0885-8977 doi: 10.1109/TPWRD.2010.2046655
- [J.23] F. Napolitano, M. Paolone, A. Borghetti, C.A. Nucci, A. Cristofolini, C. Mazzetti, F. Fiamingo, M. Marzinotto, "Models of wind-turbine main-shaft bearings for the development of specific lightning protection systems", IEEE Transactions on Electromagnetic Compatibility, Vol. 53, No. 1, Page(s): 99 – 107, 2011. ISSN: 0018-9375 doi: 10.1109/TEMC.2010.2052462
- [J.24] F. Napolitano, A. Borghetti, M. Paolone and M. Bernardi, "Voltage transient measurements in a distribution network correlated with data from lightning location system and from sequence of events recorders", Electric Power Systems Research, Volume 81, Issue 2, Pages 237–253 2011. ISSN: 0378-7796 doi: 10.1016/j.epsr.2010.08.001

- [J.25] A. Borghetti, C.A. Nucci, M. Paolone, G. Ciappi, A. Solari, A., "Synchronized phasors monitoring during the islanding maneuver of an active distribution network", IEEE Transactions on Smart Grid, Vol. 2, No. 1, Page(s): 82 – 91, 2011. ISSN: 1949-3053 doi: 10.1109/TSG.2010.2094213
- [J.26] B. Belvedere, Bianchi M., Borghetti A., Nucci C.A., Paolone M., Peretto A., "A microcontroller-based power management system for standalone microgrids with hybrid power supply". IEEE Transactions on Sustainable Energy. 3:422-431, 2012. ISSN: 1949-3029 doi: 10.1109/TSTE.2012.2188654
- [J.27] A. Borghetti, "A mixed-integer linear programming approach for the computation of the minimum-losses radial configuration of electrical distribution networks". IEEE Transactions on Power Systems. 27:1264-1273, 2012. ISSN: 0885-8950 doi: 10.1109/TPWRS.2012.2184306
- [J.28] A. Borghetti, F. Napolitano, C. A. Nucci, M. Paolone, "Effects of nearby buildings on lightning induced voltages on overhead power distribution lines". Electric Power Systems Research. vol. 94, pp. 38 - 45, 2013. ISSN:0378-7796 doi: 10.1016/j.epsr.2012.05.008
- [J.29] F. Napolitano, A. Borghetti, C. A. Nucci, F. Rachidi, M. Paolone. "Use of the full-wave Finite Element Method for the numerical electromagnetic analysis of LEMP and its coupling to overhead lines". Electric Power Systems Research. vol. 94, pp. 24 – 29, 2013. ISSN: 0378-7796 doi: 10.1016/j.epsr.2012.05.002
- [J.30] B. Belvedere, M. Bianchi, A. Borghetti, A. De Pascale, M. Paolone, R. Vecchi. "Experimental analysis of a PEM fuel cell performance at variable load with anodic exhaust management optimization", Intern. Journal of Hydrogen Energy, vol. 38, pp. 385-393, 2013. ISSN: 1879-3487 doi: 10.1016/j.ijhydene.2012.09.147
- [J.31] A. Borghetti, Using mixed integer programming for the volt/var optimization in distribution feeders, Electric Power Systems Research, vol. 98, pp. 39 – 50, 2013. ISSN: 0378-7796 doi: 10.1016/j.epsr.2013.01.003
- [J.32] M. Akbari, K. Sheshyekani, A. Pirayesh, F. Rachidi, M. Paolone, A. Borghetti, C. A. Nucci, "Evaluation of lightning electromagnetic fields and their induced voltages on overhead lines considering the frequency dependence of soil electrical parameters", IEEE Transactions on Electromagnetic Compatibility, vol. 55, pp. 1210 – 1219, 2013. ISSN:0018-9375 doi:10.1109/TEMC.2013.2258674
- [J.33] F. Napolitano, A. Borghetti, D. Messori, C.A. Nucci, M. L. B. Martinez, G. P. Lopes, J. I. L. Uchoa, "Assessment of the lightning performance of compact overhead distribution lines", IEEE Transactions on Power and Energy, vol. 133, pp. 987 – 993, 2013. ISSN: 03854213 doi: 10.1541/ieejpes.133.987
- [J.34] A. Necci, G. Antonioni, V. Cozzani, E. Krausmann, A. Borghetti, C. A. Nucci, "A model for process equipment damage probability assessment due to lightning", Reliability Engineering & System Safety, vol. 115, pp. 91 – 99, 2013. ISSN: 0951-8320 doi: 10.1016/j.res.2013.02.018
- [J.35] R. Bottura, A. Borghetti, "Simulation of the volt/var control in distribution feeders by means of a networked multiagent system", IEEE Transactions on Industrial Informatics, vol. 10, pp. 2340 – 2353, 2014. ISSN: 15513203 doi:10.1109/TII.2014.2331025
- [J.36] A. Necci, G. Antonioni, V. Cozzani, E. Krausmann, A. Borghetti, C.A. Nucci, "Assessment of lightning impact frequency for process equipment", Reliability Engineering & System Safety, vol. 130, pp. 95 – 105, 2014. ISSN: 09518320 doi:10.1016/j.res.2014.05.001
- [J.37] A. Borghetti, F. Napolitano, C.A. Nucci, "Volt/var optimization of unbalanced distribution feeders via mixed integer linear programming", International Journal of Electrical Power & Energy Systems, vol. 72, pp. 40-47, 2015 ISSN: 01420615 doi:10.1016/j.ijepes.2015.02.009

- [J.38] A. D'Elia, F. Viola, F. Montori, M. Di Felice, L. Bedogni, L. Bononi, A. Borghetti, P. Azzoni, P. Bellavista, D. Tarchi, R. Mock, and T. S. Cinotti, "Impact of interdisciplinary research on planning, running, and managing electromobility as a smart grid extension", *IEEE Access*, vol. 3, pp. 2281–2305, 2015. ISSN: 21693536 doi:10.1109/ACCESS.2015.2499118
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