

PUBLICATIONS OF CARLO ALBERTO NUCCI

- [1] C.A. Nucci, F. Tarroni and D. Zanobetti, "Characteristics of dielectric fluids for medium-voltage power capacitors", Conf. rec. 8th Int. Conf. on Conduction and breakdown in dielectric liquids, Pavia, 24-27 July 1984. Published, enlarged, on IEEE Trans. on Electrical Insulation, Vol. EI-20, No. 2, pp. 423-426, April 1985.
- [2] C.A. Nucci, "Il fenomeno dell'impulso elettromagnetico di origine nucleare", memoria presentata al Seminario sull'Impulso elettromagnetico di origine nucleare, Consiglio Nazionale delle Ricerche, Rome, 15 June 1984. Published on L'Energia Elettrica, Vol. LXII, No. 5, pp. 191-200, May 1985.
- [3] C.A. Nucci, "Tests on tubular plate lead-acid accumulators for electric vehicles", Proc. Drive electric, paper 2.15, Sorrento, October 1-3, 1985.
- [4] M. Ianovici, C.A. Nucci, "The high altitude electromagnetic pulse (HAEMP), an impending threat for electrical, electronic and communication systems", Proc. XXXIII Int. meeting on Transportation and communications - Communications and transportation in case of emergency, pp. 389-397, Genoa, October 9-12, 1985.
- [5] F. Colla, C.A. Nucci, D. Zanobetti, "All-film capacitors for commutation applications", Proc. 7th European conference on Electrotechnics, pp. 217-221, Paris, April, 21-23 1986.
- [6] C.A. Nucci, S. Pirani, M. Rinaldi: "Tests on the electrode contact degradation caused by current pulses in self-healing low voltage metalized polypropylene capacitors for power electronics", CIGRE, WG 15-05, IWD, rep. 86-25, Paris, August 1986.
- [7] C.A. Nucci, D. Zanobetti: "Prestazioni e durata di accumulatori al piombo per trazione elettrica stradale" (in Italian), 1986. Report published by 'Progetto finalizzato Energetica 1983-1987, Sottoprogetto Produzione, accumulo, trasporto e distribuzione dell'energia elettrica', pp. 503-513, Rome, January 1987.
- [8] C.A. Nucci, D. Zanobetti, G. Lodi, G. Ceccarini, "Studio dell'influenza delle modalità di carica e delle profondità di scarica sulle prestazioni e sulla durata degli accumulatori al piombo per servizio di trazione di autoveicoli commerciali", Proc. Seminario generale delle Unità operative del PFE (Pisa 3-6 November 1986), Report published by 'Progetto finalizzato Energetica 1983-1987, Sottoprogetto Produzione, accumulo, trasporto e distribuzione dell'energia elettrica', pp. 278-285, Roma, December 1986.
- [9] C. Mazzetti, C.A. Nucci, M. Ianovici, F. Rachidi, "Frequency analysis of lightning stroke electromagnetic fields", Proc. 7th Int. Symp. on Electromagnetic compatibility, pp. 79-84, Zurich, 3-5 March 1987.
- [10] M. Longo, C.A. Nucci, "Esercizi per il corso di Economia ed organizzazione aziendale" (in Italian), , Università degli studi di Bologna, May 1987.
- [11] M. Ianoz, Ph. Blech, C.A. Nucci, "Analyse de sensibilité des paramètres du couplage entre une IEM et une ligne aérienne", Proc. 4e Colloque Int. sur la Compatibilité électromagnétique, Limoges, 23-25 June 1987.
- [12] C.A. Nucci, C. Mazzetti, F. Rachidi, M. Ianoz, "Influence des paramètres du courant de foudre sur le spectre de son champ électromagnétique", Proc. 4e Colloque Int. sur la Compatibilité électromagnétique, Limoges, 23-25 June 1987. Published, enlarged, with title "Analyse du champ électromagnétique dû à une décharge de foudre dans les domaines temporel et fréquentiel" on Annales des Télécommunications, Vol. 43, No. 11-12, pp. 625-637, 1988.
- [13] D. Zanobetti, C.A. Nucci, "Sui danni e pericoli causati all'ambiente ed alle persone dalla produzione d'energia elettrica" (in Italian), Tecnica Italiana, No. 3, pp. 191-201, 1987.

- [14] Z. Flisowski, C. Mazzetti, C.A. Nucci, M. Pompili, "Il controllo del rischio di danno per fulminazione diretta delle strutture" (in Italian), Proc. 'Riunione annuale dell'Associazione elettrotecnica italiana, Catania, September 1987'. Published on L'Energia Elettrica, Vol. LXV, No. 3, pp. 123-129, March 1988.
- [15] C. Mazzetti, C.A. Nucci, "Caratterizzazione degli impulsi elettromagnetici originati dalla scarica atmosferica e dall'esplosione nucleare in alta quota" (in Italian), Proc. 'Giornate di studio "Compatibilità elettromagnetica in apparati, impianti e sistemi elettrici"', pp. 9-18, Milan, 11-13 November 1987. Published, enlarged, in cooperation with Z. Flisowsky, on Prezeglad Elektrotechniczny, Vol. LXIV, No. 2, 1988.
- [16] C.A. Nucci, C. Mazzetti, F. Rachidi, M. Ianoz, "On lightning return stroke models for LEMP calculations", Proc. 19th Int. Conf. on Lightning protection, pp. 463-469, Graz, 25-29 April 1988.
- [17] Z. Flisowski, C. Mazzetti, C.A. Nucci, M. Pompili, "Explosion and fire hazard due to lightning stroke into arrangement of structure protection", Proc. 19th International conference on Lightning protection, pp. 443-447, Graz, 25-29 April 1988.
- [18] M. Ianoz, C.A. Nucci, F.M. Tesche, "Transmission line theory for field-to-transmission line coupling calculations", Electromagnetics, Vol. 8, No. 2-4, pp. 171-211, 1988.
- [19] C.A. Nucci, S. Pirani, M. Rinaldi, "Study on the compatibility of self-healing polypropylene capacitors with impulsive conditions met in power electronics applications", Proc. 2nd Int. Conf. on Properties and applications of dielectric materials, pp. 740-745, Beijing, 12-16 September 1988. Published, enlarged, with title "Pulse withstand capability of self-healing metalized polypropylene capacitors in power applications. An experimental investigation", on IEEE Trans. on Electrical Insulation, Vol. EI-26, No. 1, pp. 146-155, February 1991.
- [20] C.A. Nucci, F. Rachidi, "Experimental validation of a modification to the Transmission Line model for LEMP calculations", Proc. 8th Int. Zurich Symp. and Technical Ex. on Electromagnetic compatibility, pp. 389-394, Zurich, 7-9 March 1989.
- [21] M. Ianoz, C. Mazzetti, C.A. Nucci, F. Rachidi, "Tension induite par une décharge de foudre sur une ligne aérienne. Modélisation et validation expérimentale", Proc. '5eme Colloque int. sur la Compatibilité électromagnétique', 6 pp., Evian, 12-13 September 1989.
- [22] C.F. Chizzolini, M. Loggini, R. Miglio, G.C. Montanari, C.A. Nucci, "Studio delle interazioni fra rete e convertitori: simulazione con EMTP e verifica sperimentale" (in Italian), L'Energia Elettrica, Vol. LXVI, No. 9, pp. 419-426, September 1989.
- [23] C.A. Nucci, D. Zanobetti, "Prestazioni e durata di accumulatori per servizio di trazione", Proc. 'Seminario generale delle Unità operative del PFE' (Montecatini, 13-15 April 1989), Report published by Progetto finalizzato Energetica 1983-1987, pp. 237-242, Roma, September 1989.
- [24] Mazzetti, M. Pompili, Z. Flisowski, C.A. Nucci, "Lightning hazard of structures and protection system efficiency", Conf. rec. IEEE IAS Annual meeting, pp. 1180-1185, San Diego CA, USA, October 1989.
- [25] C.A. Nucci, "Sovratensioni indotte su linee aeree da campi elettromagnetici impulsivi originati da scariche atmosferiche" (in Italian), Proc. 'Giornata di studio Protezioni da scariche atmosferiche', pp. 109-122, Bologna, 22 March 1990.
- [26] F. Rachidi, M. Ianoz, C.A. Nucci, "On the inclusion of loss in time-domain solutions of field-to-transmission line coupling", Nuclear Electromagnetic Meeting 1990, Albuquerque, NM, 21-24 May 1990.
- [27] C.A. Nucci, S. Pirani, M. Rinaldi, "Degradation of the electrode-end contact in mpp capacitors", CIGRE, WG 15-05, rep. 90-05, Parigi, August 1990.
- [28] M. Ianoz, C. Mazzetti, C.A. Nucci, F. Rachidi, "Induced overvoltages on overhead transmission lines by indirect lightning return strokes: a sensitivity analysis", Proc. 20th Int. Conf. on Lightning protection, paper 4.2, 24-28 September, 1990.

- [29] C.A. Nucci, G. Diendorfer, M.A. Uman, F. Rachidi, M. Ianoz, C. Mazzetti, "Lightning return stroke current models with specified channel-base current: a review and comparison", Journal of Geophysical Research, Vol. 95, No. D12, pp. 20,395-20,408, 20 November 1990.
- [30] F. Rachidi, C.A. Nucci, "On the Master, Uman, Lin, Standler and the Modified Transmission Line lightning return stroke current models", Journal of Geophysical Research, Vol. 95, No. D12, pp. 20,389-20,393, 20 November 1990.
- [31] R. Caldon, C.A. Nucci, "Il codice modulare Lego per la simulazione dei sistemi dinamici" (in Italian), L'Energia Elettrica, Vol. LXVII, No. 12, pp. 543-551, December 1990.
- [32] C.A. Nucci, S. Pirani, M. Rinaldi, "Electrode-end contact degradation of metallized polypropylene capacitors in power applications", Proc. 3rd Int. Conf. on Properties and applications of dielectric materials, pp. 466-469, Tokio, 8-12 July 1991.
- [33] F. Arrehini, M. Ianoz, C.A. Nucci, F. Rachidi, "Une comparaison entre les méthodes de calcul temporel et fréquentiel appliquées au problème de couplage IEM-ligne aérienne", Proc 6ème Colloque int. sur la Compatibilité électromagnétique, 5 pp., Lyon, 2-4 June, 1992.
- [34] F. Rachidi, M. Ianoz, C.A. Nucci, C. Mazzetti, "Modified Transmission Line Model for LEMP calculations. Effect of the return stroke velocity decreasing and elevated strike objects on close fields", Proc. 9th Int. Conference on Atmospheric electricity, Vol. III, pp. 664-667, St. Petersburg, 15-19 June 1992.
- [35] F. Rachidi, M. Ianoz, C.A. Nucci, C. Mazzetti, "Calculation methods of the horizontal component of lightning return stroke electric fields", Proc. 11th Int. Wroclaw Symp. on Electromagnetic compatibility, pp. 452-456, 2-4 September, 1992.
- [36] M. Ianoz, C. Mazzetti, C.A. Nucci, F. Rachidi, "Lightning EMP effects on data transmission lines in HV substations", Proc. 11th Int. Wroclaw Symp. on Electromagnetic compatibility, pp. 508-511, 2-4 September, 1992.
- [37] C.A. Nucci, F. Rachidi, M. Ianoz, C. Mazzetti, "Comparison of two coupling models for lightning-induced overvoltage calculations", Proc. 21st Int. Conf. on Lightning protection, pp. 183-188, Berlin, 22-25 September, 1992.
- [38] C.A. Nucci, D. Zanobetti, C. Faglioni, A. Albertini, "Aging indexes for tubular-plate lead-acid accumulators for electric vehicles", Proc. 11th Electric Vehicle Symposium, Florence, 27-30 September 1992.
- [39] M. Ianoz, C. Mazzetti, C.A. Nucci, F. Rachidi, "Modelling of indirect lightning return stroke effects", Proc. 1992 Regional Symp. on EMC, Tel Aviv, Israel, pp. 1-6, 2-5 November 1992.
- [40] C.A. Nucci, F. Rachidi, M. Ianoz, C. Mazzetti, "Lightning-induced voltages on overhead lines", IEEE Trans. on Electromagnetic Compatibility, Vol. 35, No. 1, pp. 75-86, February 1993.
- [41] F. Rachidi, M. Ianoz, C.A. Nucci, C. Mazzetti, "Coupling of external electromagnetic fields to transmission lines: theory, numerical simulation and experimental validation", Proc. Int. Conf. on Electrical Engineering ICEE, Tehran, May 1993.
- [42] F. Rachidi, C.A. Nucci, "On the representation of source terms in field-to-transmission line coupling equations", XXIV General Assembly of the International Union of Radio Science (URSI), Kyoto, 25 August-3 September 1993.
- [43] M. Ianoz, C. Mazzetti, C.A. Nucci, F. Rachidi, "Response of multiconductor power lines to close indirect lightning strokes", Proc. CIGRE Symp. "Power system electromagnetic compatibility", Lausanne, 18-20 October 1993.
- [44] R. Iorio, C.A. Nucci, A. Porrino, F. Rachidi, "Lightning-induced overvoltages on distribution overhead lines in presence of distribution transformers or short cables", Proc. CIGRE Symp. "Power system electromagnetic compatibility", 6 pp., Lausanne, 18-20 October 1993.
- [37bis] C.A. Nucci, F. Rachidi, M. Ianoz, C. Mazzetti, "Comparison of two coupling models for lightning-induced overvoltage calculations", IEEE PES Summer Meeting 93, paper #93 SM 424-2 PWDR,

- Vancouver, B.C., July 1993, also on IEEE Trans. on Power Delivery, Vol. 10, No. 1, pp. 330-339, January 1995.
- [45] A. Borghetti, C.A. Nucci, G. Pasini, S. Pirani, M. Rinaldi, "Tests on self-healing metallized polypropylene capacitors for power applications", CIGRE WG 15/03, paper 05/93, Hakone, Japan, 30 August 1993.
 - [46] A. Borghetti, C.A. Nucci, "Life-tests on tubular-plate lead-acid batteries for electric vehicles", Proc. Symp. Realites and prospects of the electric vehicle, pp. 130-133, La Rochelle, 15-19 November 1993.
 - [47] R. Giglioli, C.A. Nucci, "Accumulatori al piombo per veicolo elettrico stradale. Caratteristiche e gestione razionale" (in Italian), Proc. 'Giornata di studio sulla Innovazione nei veicoli elettrici', Bologna, Facoltà di Ingegneria, 3-5 nov. 1993
 - [48] A. Borghetti, S. Guerrieri, C.A. Nucci, F. Rachidi, "Modèles de calcul des surtensions induites par la foudre: analyse comparative", Proc. 7ème Colloque International sur la CEM, Toulouse 2-4 March 1994.
 - [49] S. Guerrieri, M. Ianoz, F. Rachidi, P. Zweicker, A. Borghetti, C.A. Nucci, "Effet d'une impulsion électromagnétique sur des réseaux électriques à plusieurs branches. Modélisation et validation expérimentale", Proc. 7ème Colloque International sur la CEM, Toulouse, 2-4 March 1994.
 - [50] C.A. Nucci, F. Rachidi, "On field-to-transmission line coupling models", Proc. of the PIERS 1994 Int. Conf., Noordwijk, The Netherlands, July 11-15, 1994.
 - [45bis] A. Borghetti, C.A. Nucci, G. Pasini, S. Pirani, M. Rinaldi, "Tests on self-healing metallized polypropylene capacitors for power applications", IEEE PES Summer Meeting 93, paper #94 SM 424-2 PWDR, S. Francisco, CA, July 1994. Also on IEEE Trans. on PWDR, Vol. 10, No. 1, pp. 556-561, January 1995.
 - [51] S. Guerrieri, C.A. Nucci, F. Rachidi, M. Rubinstein, "On the influence of elevated strike objects on the lightning return stroke current and the distant electric field", Proc. of Roma '94 Int. Conf. on EMC, pp. 38-43, vol. I, Rome, September 13-16, 1994.
 - [52] C.A. Nucci, M. Ianoz, F. Rachidi, M. Rubinstein, F.M. Tesche, M.A. Uman, C. Mazzetti, "Modelling of lightning-induced voltages on overhead lines: Recent developments", Proc. of Roma '94 Int. Conf. on EMC, pp. 38-43, vol. I, Rome, September 13-16, 1994, Published on Elektrotechnik und Informationstechnik, Vol. 112, No. 6, pp. 290-296, June, 1995.
 - [53] F. Rachidi, M. Rubinstein, C.A. Nucci, S. Guerrieri, "Influence of the leader electric field change on voltages induced by very close lightning on overhead lines", Proc. 22nd International Conference on Lightning Protection, Budapest, 19-23 September, 1994.
 - [54] C.A. Nucci, F. Rachidi, M. Ianoz, V. Cooray, C. Mazzetti, "Coupling models for lightning-induced overvoltage calculations: a comparison and consolidation", Proc. 22nd International Conference on Lightning Protection, Budapest, 19-23 September, 1994.
 - [55] C.A. Nucci, V. Bardazzi, R. Iorio, A. Mansoldo, A. Porrino, "A code for the calculation of lightning-induced overvoltages and its interface with the Electromagnetic Transient program", Proc. 22nd International Conference on Lightning Protection, Budapest, 7 pp., 19-23 September, 1994.
 - [49bis] S. Guerrieri, F. Rachidi, M. Ianoz, P. Zweicker, A. Borghetti, C.A. Nucci, "Metodo per il calcolo delle sovrattensioni e sovraccorrenti indotte da un impulso elettromagnetico esterno su reti di energia e sua validazione" (In Italian), Proc. 95^ Riunione annuale AEI, Bologna, 2-5 October 1994.
 - [56] S. Guerrieri, F. Rachidi, M. Ianoz, P. Zweicker, C.A. Nucci, "A time-domain approach to evaluate induced voltages on tree-shaped electrical networks by external electromagnetic fields", 11th Int. Symp. on Electromagnetic compatibility, Zurigo, March 1995.
 - [57] P. Chiarusi, A. Porrino, E. Severini, L. Deller, C.A. Nucci, "Behavior of MV overhead lines for lightning strokes and relevant protections", Proc. 13 Int. Conf. on Electricity distribution, CIRED, paper 223, Bruxelles, May 1995.

- [58] M. Rubinstein, F. Rachidi, M.A. Uman, R. Thottappillil, V.A. Rakov, C.A. Nucci, "Characterization of vertical electric fields 500 m and 30 m from triggered lightning", *J. of Geophys. Res.*, Vol. 100., No. D5, pp. 8863-8872, May 1995.
- [63bis] A. Borghetti, C.A. Nucci, R. Iorio, P. Pelacchi, "Calculation of lightning-induced voltages in presence of distribution transformers and protection devices", *CIGRE SC 33 Colloquium*, Contr. 1.13, Harare Zimbabwe, 29-30 May 1995.
- [59] S. Guerrieri, M. Lammens, C.A. Nucci, F. Rachidi, "Models for the calculation of lightning-induced overvoltages", *CIGRE SC 33 Colloquium*, Contr. 1.14, Harare Zimbabwe, 29-30 May 1995.
- [60] A. Borghetti, C.A. Nucci, P. Pagani, S. Spelta, V. Vannelli, D. Zanobetti, "Model of the electrical auxiliaries system of a thermoelectric power station for a real-time training simulator", *Proc. Int. 'Stockholm Power Tech Symposium'*, pp. 66-73, 18-22 June 1995.
- [61] C.A. Nucci, "Lightning-induced voltages on overhead power lines. Part I: Return-stroke current models with specified channel-base current for the evaluation of the return-stroke electromagnetic fields", *Electra*, pp. 75-102, No. 161, August 1995.
- [62] C.A. Nucci, S. Guerrieri, M.T. Correia de Barros, F. Rachidi, "Influence of corona on lightning-induced voltages on overhead power lines", *Proc. Int. Conf. on Power systems transients*, pp. 306-310, Lisbon, 3-7 September 1995.
- [63] A. Borghetti, R. Iorio, C.A. Nucci, P. Pelacchi, "Calculation of voltages induced by nearby lightning on overhead lines terminated on distribution transformers", *Proc. Int. Conf. on Power systems transients*, pp. 311-316, Lisbon, 3-7 September 1995.
- [64] A. Borghetti, R. Caldon, A. Mari, C.A. Nucci, "Voltage stability, the role of dynamic loads representation in dynamic analyses", *Proc. '1995 UPEC Conference'*, UK, September 1995.
- [65] C.A. Nucci, "Lightning-induced voltages on overhead power lines. Part II: Coupling models for the evaluation of the induced voltages", *Electra*, No. 162, pp. 121-145, October 1995.
- [66] A. Porrino, V. Biscaglia, G. Como, C.A. Nucci, R. Iorio, "Sovratensioni indotte da fulminazioni sulle linee elettriche aeree in media tensione. Applicazione delle nuove conoscenze acquisite ai problemi di protezione delle apparecchiature e di continuità di servizio" (In Italian), *Proc. 96a Riunione annuale AEI*, Rome, October 1995.
- [60bis] A. Borghetti, C.A. Nucci, P. Pagani, S. Spelta, V. Vannelli, D. Zanobetti, "Modello del sistema degli ausiliari di centrale termoelettrica per simulatore di addestramento" (In Italian), *Proc. 96a Riunione annuale AEI*, Rome, October 1995.
- [67] A. Borghetti, S. Guerrieri, C. Mazzetti, C.A. Nucci, F. Rachidi, "Sovratensioni indotte sulle linee di distribuzione da fulminazioni indirette su linee aeree di distribuzione" (In Italian), *Atti della 96a Riunione annuale AEI*, Rome, October, 1995.
- [50bis] C.A. Nucci, F. Rachidi, "On the contribution of the electromagnetic field components in field-to-transmission lines interaction", *IEEE Trans. on Electromagnetic Compatibility*, Vol. 37, No. 4, pp. 505-508, November 1995.
- [68] M.A. Uman, V.A. Rakov, K.J. Rambo, T.W. Vaught, M.I. Fernandez, J.A. Bach, Y. Su, A. Eybert-Berard, J.P. Berlandis, B. Bador, P. Lalande, S. Chauzy, S. Soula, C.D. Weidman, F. Rachidi, M. Rubinstein, C.A. Nucci, S. Guerrieri, H.K. Høidalen, V. Cooray, "1995 triggered lightning campaign in Florida", *Eos Transactions, American Geophysical Union*, 1995 Fall meeting, Vol. 76, No. 46, November 7, 1995/Supplement.
- [69] A. Borghetti, R. Caldon, A. Mari, C.A. Nucci, "On Dynamic Load Models for Voltage Stability Studies", *IEEE Power Engineering Society 1996 Winter Meeting*, January 21-25, Baltimore, MD, 1996, published on *IEEE Trans. on Power Systems*, Vol. 12, No. 1, pp. 293-303, February 1997.
- [71] A. Borghetti, C.A. Nucci, P. Pagani, S. Spelta, V. Vannelli, D. Zanobetti, "Lego modelling of the power station electrical auxiliaries for a real time training simulation", *Proc. 8th Mediterranean Electrotechnical Conference*, pp. 1634-1637, Melecon '96, Bari, 13-16 May 1996.

- [72] C.A. Nucci, "Metodologie per il rilevamento dei fulmini" (in Italian), Atti della Giornata di Studio AEI 'Evoluzione della normativa per la protezione contro i fulmini e per i quadri elettrici', Firenze, Palazzo degli Affari, 8 May 1996.
- [68 bis] M.A. Uman, V.A. Rakov, K.J. Rambo, T.W. Vaught, M.I. Fernandez, J.A. Bach, Y. Su, A. Eybert-Berard, J.P. Berlandis, B. Bador, P. Lalande, S. Chauzy, S. Soula, C.D. Weidman, F. Rachidi, M. Rubinstein, C.A. Nucci, S. Guerrieri, H.K. Høidalen, V. Cooray, "1995 triggered lightning experiment in Florida", Proc. 10th Int. Conf. on Atmospheric Electricity, Osaka, 10-14 June, 1996.
- [73] F. Rachidi, C.A. Nucci, M. Ianoz, C. Mazzetti, "Influence of a lossy ground on lightning-induced voltages on overhead lines", IEEE Trans. on EMC, Vol. 38, No. 3, pp. 250-264, August 1996.
- [74] F. Rachidi, C.A. Nucci, M. Ianoz, C. Mazzetti, "Response of multiconductor power lines to nearby lightning return stroke electromagnetic fields", 14th IEEE/PES Transmission and Distribution Conference, Los Angeles, 15-20 September 1996, published on IEEE Trans. on Power Delivery, Vol. 12, N.3, pp. 1404-1411, July 1997.
- [75] M. Ianoz , L. Dellera, C.A. Nucci, L. Quinchon, "Modeling of fast transient effects in power networks and substations", 1996 CIGRE Session, Group 36: Power system Electromagnetic Compatibility, 8 pp., Paris, September 1996.
- [76] V.A. Rakov, M.A. Uman, M.I. Fernandez, R. Thottappillil, A. Eybert-Berard, J.P. Berlandis, F. Rachidi, M. Rubinstein, S. Guerrieri, C.A. Nucci, "Observed electromagnetic environment close to the lightning channel", Proc. 23rd Int. Conf. on Lightning Protection, Florence, 23-27 September, 1996.
- [77] S. Guerrieri, C.A. Nucci, M.T. Correia de Barros, F. Rachidi, "Lightning induced voltages in presence of corona", Proc. 23rd Int. Conf. on Lightning Protection, Firenze, 23-27 Sept., 1996.
- [78] S. Guerrieri, M. Ianoz, C. Mazzetti, C.A. Nucci, F. Rachidi, "Lightning induced voltages on an overhead line above a lossy ground: a sensitivity analysis", Proc. 23rd Int. Conf. on Lightning Protection, Firenze, 23-27 Sept., 1996.
- [79] S. Guerrieri, F. Heidler, C.A. Nucci, F. Rachidi, M. Rubinstein, "Extention of two return stroke models to consider the influence of elevated strike objects on the lightning return-stroke current and the radiated electromagnetic field: comparison with experimental results", Proc. of EMC'96 Roma Int. Symp. on Electromagnetic compatibility, Rome, September 17-20, 1996.
- [80] F. Rachidi, C.A. Nucci, M. Ianoz, C. Mazzetti, "Importance of losses in the determination of lightning-induced voltages on overhead lines", Proc. of EMC'96 Roma Int. Symp. on Electromagnetic compatibility, Rome, September 17-20, 1996.
- [81] F. Rachidi, M. Rubinstein, S. Guerrieri, C.A. Nucci, "Voltages induced on overhead lines by dart leaders and subsequent return-strokes in natural and rocket triggered lightning", IEEE Trans. on EMC, Vol. 39, No. 2, pp. 160-166, May 1997.
- [82] A. Porrino, C. Mirra, A. Ardito, C.A. Nucci, "Lightning overvoltages in low voltage networks", Proc. 14th Int. Conf. and Exhibition on Electricity distribution, Birmingham, 2-5 June, 1997.
- [83] Task Force CIGRE-CIRED, "Lightning protection of distribution networks. Part I: Basic information", 14th Int. Conf. and Exhibition on Electricity distribution, Birmingham, 2-5 June, 1997.
- [84] Task Force CIGRE-CIRED, "Lightning protection of distribution networks. Part II: Application to MV networks", 14th Int. Conf. and Exhibition on Electricity distribution, Birmingham, 2-5 June, 1997.
- [85] A. Borghetti, S. Guerrieri, R. Iorio, A. Mansoldo, C.A. Nucci, A. Porrino, F. Rachidi, "Codice di calcolo delle sovratensioni indotte su reti elettriche da fulminazioni indirette" (in Italian), Proc '97a Riuniuone annuale AEI, pp. 39-46, Baveno, May 1997.
- [86] A. Andreotti, U. De Martinis, F. Gagliardi, C.A. Nucci, "Valutazioni statistiche sulle sovratensioni indotte su reti elettriche da fulminazioni indirette", Proc '97a Riuniuone annuale AEI, pp. 39-46, Baveno, Italy, May 1997.
- [87] A. Borghetti, C.A. Nucci, "Construction of Legocad models for real-time training simulator: thermal power station electrical auxiliaries and power station restart from remote hydro station", Proc. 'First

- annual meeting of the Legocad users for the dynamic simulation of industrial plants', Piacenza, 21-23 May, 1997.
- [88] A. Borghetti, S. Guerrieri, M. Ianoz, C.A. Nucci, D. Orzan, F. Rachidi, "Link of the field-to-transmission line coupling codes to the electromagnetic transients program", III International Symposium on Electromagnetic Compatibility and Electromagnetic Ecology (EMC-97) St. Petersburg, Russia, 23-27 June 1997.
- [89] C.A. Nucci, "Lightning induced voltages on overhead distribution lines (with special reference to low-voltage networks)", IV SIPDA - IV International Seminar on Lightning Protection, São Paulo, Brazil, 8 - 12 September, 1997. (Invited paper)
- [90] S. Guerrieri, C.A. Nucci, F. Rachidi, M. Rubinstein, "On the Influence of Elevated Strike Objects on Directly Measured and Indirectly Estimated Lightning Currents", IEEE PES SM, Berlino, July 1997, pubblicato su IEEE Trans. on PWDR, Vol. 13, No. 4, pp. 1543- 1555, October 1998.
- [91] S. Guerrieri, C.A. Nucci, F. Rachidi, "Influence of the Ground Resistivity on the Polarity and Intensity of Lightning Induced Voltages", Proc. 10th Int. Symp. on High voltage engineering, (on CD Rom), Montreal, August 24-30, 1997.
- [92] F. Rachidi, M. Rubinstein, S. Guerrieri, C.A. Nucci, "Recent observation of lightning electromagnetic fields at very close range: implications to lightning-induced voltages on overhead lines", CIGRE SC 33 Colloquium on Power Systems Insulation Coordination, Toronto, September 2-3, 1997.
- [93] C.A. Nucci, S. Guerrieri, M.T. Correia de Barros, F. Rachidi, "Effect of corona on lightning induced voltages", CIGRE SC 33 Colloquium on Power Systems Insulation Coordination, Toronto, September 2-3, 1997.
- [94] A. Borghetti, C.A. Nucci, "Estimation of probability distribution of lightning-induced voltages on an overhead line above an ideal and a lossy ground", CIGRE SC 33 Colloquium on Power Systems Insulation Coordination, Toronto, September 2-3, 1997.
- [95] A. Borghetti, R. Caldon, A. Mari, C.A. Nucci, "Modelling of generic dynamic loads for voltage collapse numerical simulations", Proc. UPEC '97, pp. 971-974, Manchester, UK, 10-12 September 1997.
- [96] M. Ianoz, F. Deschamps, P. Baraton, C.A. Nucci, "Research collaboration on EMC modelling", Gigré General Session, Sessione 'Link Universities-Cigré' 3, paper 3-13, Parigi 1998.
- [97] F. De la Rosa, C.A. Nucci, V.A. Rakov, "Lightning impact on power systems", Proc. Cigré International Conference, 'Insulation coordination for electricity development in Central European Countries', Zagreb, September 1998.
- [98] A. Borghetti, C.A. Nucci, "Estimation of the frequency distribution of lightning-induced voltages on an overhead line above a lossy ground: a sensitivity analysis", Proc. 24th Int. Conf. on Lightning Protection, pp. 306-313, Birmingham, UK, September 14-18, 1998.
- [99] C.A. Nucci, A. Borghetti, A. Piantini, J.M. Janiszewski, "Lightning-induced voltages on distribution overhead lines: Comparison between experimental results from a reduced-scale model and most recent approaches", Proc. 24th Int. Conf. on Lightning Protection, pp. 314-320, Birmingham, UK, September 14-18, 1998.
- [100] F. Rachidi, W. Janischewskyj, A.M. Hussein, C.A. Nucci, S. Guerrieri, J.S. Chang, "Electromagnetic fields radiated by lightning return strokes to high towers", International Conference on Lightning protection ICLP, Birmingham, UK, September 14-18, 1998.
- [101] A.P.S. Meliopoulos, J. Kennedy, C.A. Nucci, A. Borghetti, G. Contaxis, "Power distribution practices in USA and Europe: Impact on power quality", Proc. 8th IEEE ICHQP, Athens, Grece, October 14-16 1998.
- [102] F. Rachidi, C.A. Nucci, M. Ianoz, "Transient Analysis of Multiconductor Lines above a Lossy Ground", IEEE Trans. on PWDR, Vol. 14, No. 1, pp. 294-302, January 1999.

- [103] A. Borghetti, C.A. Nucci, “*Frequency distribution of lightning-induced voltages on an overhead line above a lossy ground*”, Proc. 5th International Symposium on Lightning Protection, Sao Paulo, May, 17-21, 1999.
- [104] C.A. Nucci, “*Research activity within CIGRÉ and IEEE Working Groups on protection of distribution lines against lightning-induced voltages*”, Proc. 5th International Symposium on Lightning Protection, Sao Paulo, May, 17-21, 1999.
- [105] C.A. Nucci, F. Rachidi, "Lightning-Induced Overvoltages", *IEEE Transmission and Distribution Conference, Invited paper, Panel Session on Distribution Lightning Protection*, New Orleans, April 1999. (*Invited paper*)
- [106] A. Borghetti, G. Migliavacca, C.A. Nucci, S. Spelta, F. Tarsia, “*Simulation of the load following capability of a repowered plant during the first phase of the system restoration*”, Proc. 14th World Congress of the International Federation of Automatic Control (IFAC), Beijing, July 5-9, 1999.
- [107] M. T. Correia de Barros, J. Festas, C.A. Nucci, F. Rachidi, “*Corona on Multiconductor Overhead Lines Illuminated by LEMP*”, Proc. 4th Int. Symp. on Power System Transients, Budapest, June 1999.
- [108] F. Rachidi, C.A. Nucci, M. Rubinstein, S. Guerrieri, and M. Ianoz, “*Use of Natural and Triggered Lightning Data for the Validation of LEMP-To-Transmission Line Interaction Models*”, URSI General Assembly, Toronto, August 1999. (*Invited paper*)
- [109] A. Borghetti, C.A. Nucci, “*Statistical evaluation of lightning-induced voltages on overhead lines above a lossy ground*”, Proc. Cigré SC 33 Colloquium, Lucern, August 29-September 1, 1999.
- [110] F. De La Rosa, C.A. Nucci, “*Fundamental issues regarding lightning parameters, in relation to the ongoing work in CIGRE WG33.01 ‘Lightning’*” Proc. Cigré SC 33 Colloquium, Lucern, August 29-September 1, 1999.
- [111] F.Rachidi, W. Janischewskyj, V. Shostak, A.M. Hussein, C.A. Nucci, S Guerrieri, J.S. Chang and B. Kordi, “*On the determination of lightning current parameters from remote electromagnetic field data*” Proc. Cigré SC 33 Colloquium, Lucern, August 29-September 1, 1999.
- [112] C.A. Nucci, F. Rachidi, M. Ianoz, C. Mazzetti, “*TL Models for Overhead Lines Excited by External Electromagnetic Fields*”, Proc. Inter. Conf. on Electromagnetics in Advanced Applications, ICEAA99, Turin, September 1999.
- [113] C.A. Nucci, S. Guerrieri, M.T. Correia de Barros, F. Rachidi, “*Influence of corona on the voltages induced by nearby lightning on overhead distribution lines*”, IEEE Trans. On Power Delivery, Vol 15, No. 4, pp. 1265-1273, October 2000.
- [114] C.A. Nucci, “*The Lightning Induced Over-Voltage (LIOV) code*”, Proc. Power Engineering Society Winter Meeting 2000. IEEE vol. 4 , pp: 2417 –2418, 2000.
- [115] S.L. Loyka, F. Rachidi, C.A. Nucci, F. Rachidi, “*Sur un problème de singularité dans l’expression de la résistance du sol des lignes aériennes en régime transitoire*” (In French), Proc. 10^e Colloque International sur la Compatibilité Electromagnétique, Clermont-Ferrand, pp. 156-159, 14-16 March 2000.
- [116] A. Borghetti, R. Caldon, C.A. Nucci, “*Generic dynamic load models in long-term voltage stability studies*”, Electrical Power & Energy Systems, 22, pp291-301, 2000.
- [117] A. Borghetti, G. Migliavacca, C.A. Nucci, S. Spelta, “*The black-startup simulation of a repowered thermoelectric unit*”, Proc. IFAC Symposium on Control of Power Plants and Power Systems, Bruxelles, 26-29 April 2000. *Best paper award*. Published, enlarged, on Control Engineering Practice, Vol. 9/7, pp 791-803, July 2001.
- [118] S. Barsali, A. Borghetti, B. Delfino, G.B. Denegri, R. Giglioli, M. Invernizzi, C.A. Nucci, “*Remarks on Power system restoration in open electricity markets*”, Proc. Int. Symp. on Electric Power Engineering at the beginning of the Third Millennium, Capri, May 2000.

- [119] A. Borghetti, S. Guerrieri, C.A. Nucci, M. Paolone, F. Rachidi, "Lightning performance of distribution lines", Proc. Int. Symp. on Electric Power Engineering at the beginning of the Third Millennium, Capri, May 2000.
- [120] M. Ianoz, C. Mazzetti, C.A. Nucci, F. Rachidi, "Lightning-induced effects and EMC", Proc. Int. Symp. on Electric Power Engineering at the beginning of the Third Millennium, Capri, May 2000.
- [121] M. Ianoz, C. Mazzetti, C.A. Nucci, F. Rachidi, "Lightning indirect effects modeling applied to protection design and evaluation", Proc. Wroclaw International Conference on Electromagnetic Compatibility, Wroclaw, June 2000.
- [122] A. Borghetti, C.A. Nucci, M. Paolone, "Statistical methods for evaluating lightning induced effects on distribution lines", (invited paper), Panel session "Statistics in Transient Analysis", Proc. IEEE PES Summer Meeting, Seattle, Washington, USA 16 – 20 July 2000, (on CD: ISBN 0-7803-6423-6).
- [123] M. Paolone, C.A. Nucci, F. Rachidi, "Mitigation of Lightning-induced overvoltages by means of periodical grounding of shielding wires and of surge arresters", Proc 4th European Symposium on Electro Magnetic Compatibility, Brugge, Belgium, 11-15 Sept. 2000.
- [124] A. Borghetti, C.A. Nucci, M. Paolone, M. Bernardi, "Effect of the lateral distance expression and of the presence of shielding wires on the evaluation of the number of lightning induced voltages", Proc. ICLP 2000, 25th International conference on lightning protection, Rhodos, September 18-22, 2000.
- [125] A. Borghetti, C.A. Nucci, M. Paolone, F. Rachidi, "Characterization of the response of an overhead distribution line to lightning electromagnetic fields", Proc. ICLP 2000, 25th International conference on lightning protection, Rhodos, September 18-22, 2000.
- [126] F. Rachidi, S.L. Loyka, C.A. Nucci, M. Ianoz, "On the Singularity of the Ground Transient Resistance of Overhead Transmission Lines", Proc. ICLP 2000, 25th International conference on lightning protection, September 18-22, 2000.
- [127] S. Guerrieri, E.P. Krider, C.A. Nucci, "Effects of traveling -waves of current on the initial response of a tall Franklin rod", Proc. ICLP 2000, 25th International conference on lightning protection, September 18-22, 2000.
- [128] A. Borghetti, G. Gross, C.A. Nucci, "Auctions with explicit demand-side bidding in competitive electricity markets". In 'The next generation of unit commitment models', (B.F. Hobbs, M. Rothkopf, R.P. O'Neill e H.P. Chao editors), Kluwer Academic Press, Boston, 2001.
- [129] A. Borghetti, C.A. Nucci, M. Paolone, "Lightning performances of distribution lines: sensitivity to computational methods and to data", IEEE PES WM 2001 Panel on Statistics, sensitivity and precision in transient analysis, Columbus (Ohio), January 2001. on CD: ISBN 0-7803-6674-3; Presentation download at <http://ewh.ieee.org/soc/pes/lpd1/>. (Invited paper)
- [130] A. Borghetti, C.A. Nucci, M. Paolone, "Valutazione statistica dei guasti a terra nelle linee MT prodotti da fulminazioni indirette", L'Energia Elettrica, (In Italian) January-February 2001, pp. 40-43.
- [131] C.A. Nucci, "Lightning-induced effects on transmission lines", Invited Tutorial, Proc. 14th Int. Zurich Symposium on Electromagnetic Compatibility, Zurich, February 20-22, 2001. (Invited paper)
- [132] A. Borghetti, S. Guerrieri, C.A. Nucci, M. Paolone, F. Rachidi, P. Rinaldi, "Valutazione statistica dei guasti a terra prodotti da fulminazioni indirette nelle linee MT", (In Italian), L'Energia Elettrica, Vol. 78 (2001), 'Ricerche'.
- [133] J. Tarchini, C.A. Nucci, F. De La Rosa, "Estimaciòn del rendimiento de lìneas de alta tensiòn frente a descargas atmosféricas directas utilizando el EMTP", Proc. Int. Conf. ERLAC, 2001.
- [134] E. Petrache, F. Rachidi, M. Ianoz, J.L. Bermudez, A. Rubinstein, M. Paolone, C.A. Nucci, A. Borghetti, B. Reusser, "An experimental test for the validation of time domain codes for the analysis of transient field coupling to transmission line networks", Proc. International Workshop on EMC Measurement Techniques for Complex and Distributed Systems, Lille, France, June 2001.

- [135] M. Paolone, C.A. Nucci and F. Rachidi, "A New Finite Difference Time Domain Scheme for the Evaluation of Lightning Induced Overvoltages on Multiconductor Overhead Lines", Proc. 5th Int. Conf. on Power System Transients, Rio de Janeiro, June 2001.
- [136] A. Borghetti, C.A. Nucci and M. Paolone, "Statistical Evaluation of Lightning Performances of Distribution Lines", Proc. 5th Int. Conf. on Power System Transients, Rio de Janeiro, June 2001.
- [137] M. Paolone, C.A. Nucci, A. Borghetti, E. Petrache, F. Rachidi, "A New Interface for Lightning Induced Overvoltages Calculation Between EMTP and LIOV code", Proc. EMTP user group meeting, IEEE Summer Meeting July 15-19 2001, Vancouver, British Columbia, Canada.
- [138] F. Rachidi, C.A. Nucci, S. Guerrieri, M.T. Correia de Barros, "On the Amplitude Enhancement of Voltages Induced by External EM Fields on Transmission Lines due to Ground Losses and Corona Phenomenon", Proc. IEEE 2001 Int. EMC Symposium, Montreal, Canada, Aug. 13-17, 2001.
- [139] J.L. Bermudez, F. Rachidi, W. Janischewskyj, A.M. Hussein, M. Rubinstein, C.A. Nucci, M. Paolone, V. Shostak, J.S. Chang, "On the enhancement of radiated electric and magnetic fields associated with lightning return strokes to tall structures", Proc. IEEE 2001 Int. EMC Symposium, Montreal, Canada, Aug. 13-17, 2001.
- [140] C.A. Nucci, "Modelling of Lightning Return Strokes and of Lightning Induced Effects in View of Overhead Line Protection", Proc. 12th Int. Symposium on High Voltage Engineering, Bangalore, India, 20-24 August 2001. (Invited paper)
- [141] F. Rachidi, W. Janischewskyj, A.M. Hussein, C.A. Nucci, S. Guerrieri, B. Kordi, J.S. Chang, "Current and electromagnetic field associated with lightning return strokes to tall towers", IEEE Trans. on Electromagnetic Compatibility, Vol. 43, No. 3, August 2001.
- [142] S. Barsali A. Borghetti, B. Delfino, G.B. Denegri, R. Giglioli, M. Invernizzi, C.A. Nucci, M. Paolone, "Guidelines for ISO Operator Aid and Training for Power System Restoration in Open Electricity Markets", Proc. of the IREP 2001 Bulk Power System Dynamics and Control V, August 26-31, 2001, Onomichi, Japan.
- [143] A. Borghetti, A. Frangioni, F. Lacalandra, A. Lodi, S. Martello, C. A. Nucci, A. Trebbi, "Lagrangian Relaxation and Tabu Search Approaches for the Unit Commitment Problem", Proc. 4th IEEE Power Tech, Porto, September 10th-13rd, 2001.
- [144] C.A. Nucci, "Lightning performances of distribution lines", Proc. 6th Int. Symp. on Lightning Protection, VI SIPDA, Nov. 19th – 23rd Santos, Brazil, 2001. (Invited paper)
- [145] A. Borghetti, C.A. Nucci, M. Paolone, F. Rachidi, 'Valutazione del numero annuale di scariche a terra dovute a sovrattensioni indotte da fulminazioni indirette su una tipica linea aerea di media tensione', Proc. of General meeting of the Associazione Elettrotecnica ed Elettronica Italiana 2001, Padova, Italy, 3-5 Oct. 2001.
- [146] R. Sasdelli, A. Borghetti, C.A. Nucci, M. Paolone, L. Peretto, R. Tinarelli, "Sistemi di misura per l'analisi della qualità dell'energia elettrica: problemi teorici e tecnologici" (In Italian), Proc. of General meeting of the Associazione Elettrotecnica ed Elettronica Italiana 2001, Padova, Italy, 3-5 Oct. 2001.
- [147] J.A. Gutierrez, M- Paolone, A. Borghetti, C.A. Nucci, E. Petrache, F. Rachidi, "Lightning-induced overvoltage calculation in Matlab environment", Proc. Int. Symp. on Power Quality SICEL'2001, Bogota, November 2001.
- [148] J.L. Bermudez, J.A. Gutierrez, W. Chisholm, F. Rachidi, M. Paolone, P. Moreno, "A reduced-scale model to evaluate the response of tall towers hit by lightning", Proc. Int. Symp. on Power Quality SICEL'2001, Bogota, November 2001.
- [149] A. Borghetti, G. Naldi, C. A. Nucci, S. Sbarzaglio, "Modello dinamico di piccola centrale idroelettrica con generatori mossi da pompe centrifughe in un impianto di ravanamento della falda freatica" (in Italian), Proc. 'Giornata di studio AEI sulle Fonti rinnovabili e la cogenerazione nel futuro mercato dell'energia. Riflessi sui sistemi di trasmissione e distribuzione', Roma, 22 January 2002.

- [150] C. A. Nucci, M. Paolone, A. Venturoli, ‘*Analysis of Ni-Zn Batteries Performance for Hybrid Light-Vehicles Applications*’, Proc. of the IEEE Int. Symp. on Industrial Electronics ISIE'2002, 8-12 July 2002, l’Aquila Italy.
- [151] C. A. Nucci, W. Hauschild, F. Rizk, “*Special Report for Group 33 (Power System Insulation Coordination)*”, Proc. International Council on large Electric Systems, CIGRE 2002 Session, Paris, Aug. 25-30, 2002
- [152] J. A. Gutiérrez, J. L. Bermúdez, F. Rachidi, M. Paolone, C. A. Nucci, W. A. Chisholm, P. Moreno, J. L. Naredo, “*A Reduced-Scale Model to Evaluate the Response of Nonuniform Towers to a Lightning Strike*”, Proc. of 26th Int. Conf. on Lightning Protection, ICLP, 2-6 Sept. 2002, Krakow Poland.
- [153] A. Borghetti, J.A. Gutierrez, C.A. Nucci, M. Paolone, E. Petrache, F. Rachidi, “*Software Tools for the calculation of Lightning-Induced Voltages on Complex Distribution Systems*”, Proc. of 26th Int. Conf. on Lightning Protection, ICLP, 2-6 Sept. 2002, Krakow Poland.
- [154] C.A. Nucci, “*Lightning Induced Voltages*”, Proc. of 26th Int. Conf. on Lightning Protection, ICLP, 2-6 Sept. 2002, Krakow Poland. (*Invited paper*)
- [155] E. Petrache, F. Rachidi, M. Paolone, C. A. Nucci, “*An experiment to validate a theory for the calculation of transients induced by external electromagnetic fields on overhead transmission line networks*”, Proc. of 5th European Symposium on Electro Magnetic Compatibility, Sorrento, Sept. 9-13, 2002.
- [156] 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*”, Proc. of the International Conference Probabilistics Methods Applied to Power Systems, 22-26 Sept. 2002, Naples Italy. Improved and enlarged, in press on ETEP, 2003.
- [157] C.A. Nucci, M. Paolone, M. Bernardi, “*Use of Lightning Location Systems Data in Integrated Systems for Power Quality Monitoring*”, Proc. IEEE T&D Conference, Yokohama, October 2002. (*Invited paper*)
- [158] 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, Feb. 2003, pp. 313 -323.
- [159] M. Paolone, Peretto L., Sasdelli R., Tinarelli R., Bernardi M., and Nucci C. A., “*On the Use of Data from Di-stributed Measurement Systems for Correlating Voltage Transients to Lightning*”, Proc. of the 20th IEEE Instrumentation and Measurement Technology Conference, vol. II, pp. 1565-1570,Vail (USA), 20-22 May 2003.
- [160] F. Rachidi, V. A. Rakov, C.A. Nucci, J.L. Bermudez, “*Effect of vertically extended strike object on the distribution of current along the lightning channel*”, Journal of Geophysical Research, vol 107, no. D23, 2003
- [161] F. Rachidi, S. Loyka, C.A. Nucci, M. Ianoz, “*A New Expression For the Ground Transient Resistance Matrix Elements of Multiconductor Overhead Transmission Lines*”, Electrical Power Systems Research 65, p. 41-46, 2003.
- [162] A. Borghetti, A. Frangioni, F. Lacalandra, C.A. Nucci, P. Pelacchi, “*Using of a cost-based Unit Commitment algorithm to assist bidding strategy decisions*”, Proc. 2003 IEEE Bologna PowerTech, Bologna, Italy, 23-26 June, 2003.
- [163] M. Paolone, R. Berti, C. A. Nucci, G. Camera Roda, P.L. Rossi, L. Bruzzi, A. Bazzi, “*A Power Systems Plant for In-Situ Vitrification of Contaminated Soils*”, Proc. 2003 IEEE Bologna Power Tech Conference, Bologna, Italy, 23-26 June, 2003.
- [164] Petrache E., Paolone M., Rachidi F., Nucci C.A., Rakov V., Uman M., Jordan D., Rambo K., Shoene J., Cordier A., Verhaege T., “*Measurement of lightning-induced currents in an experimental coaxial buried*”, Proc. IEEE Power Engineering Society meeting, Toronto, July, 2003.
- [165] M. Bernardi, S. Malgarotti, A. Porrino, C.A. Nucci, M. Paolone, “*Sovratensioni di origine atmosferica*” (in Italian), AEI, Vol. 90, September 2003.

- [166] M. Paolone, C.A. Nucci, E. Petrache, F. Rachidi, "*Mitigation of Lightning-Induced Overvoltages in Medium Voltage Distribution Lines by Means of Periodical Grounding of Shielding Wires and of Surge Arresters: Modelling and Experimental Validation*", in press on IEEE Trans. on Power Delivery, 2003.
- [167] A. Borghetti, C. A. Nucci, M. Paolone, "*Estimation of the statistical distributions of lightning current para-meters at ground level from the data recorded by instrumented towers*", in press on IEEE Transactions on Power Delivery, 2003.
- [168] J.A. Gutierrez, P. Morenno, J.L. Naredo, J.L. Bermudez, M. Paolone, C.A. Nucci, F. Rachidi, "*Nonuniform Transmission Tower Model For Lightning Transients Studies*", in press on IEEE Transactions on Power Delivery, 2003.
- [153bis] 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*", in press on Electrostatics, Special issue on Lightning, 2003.

IEEE STANDARD, CIGRE GUIDES

- [1] IEEE Working Group on the Lightning Performance of Distribution Lines (incl. C.A. Nucci), "*Guide for improving the lightning performance of electric power overhead distribution lines*", IEEE Standard 1410-2003.
- [2] CIGRE Task Force 33.01.0 (incl. C.A. Nucci), "*Characterization of lightning for applications in electric power systems*", CIGRE Thematic Brochure No 172, December 2000.

BOOK CHAPTERS

- [1] C.A. Nucci, C. Mazzetti, "*Lightning-induced overvoltages*", in "High Voltage Technique" (in Rumenian), Editor: Academiei Romane, Bucarest, 2001.
- [128bis] A. Borghetti, G. Gross, C.A. Nucci, "*Auctions with explicit demand-side bidding in competitive electricity markets*". Chapter 5 in the book "The next generation of unit commitment models", (B.F. Hobbs, M. Rothkopf, R.P. O'Neill e H.P. Chao editors), Kluwer Academic Press, Boston, 2001.
- [3] C.A. Nucci, F. Rachidi, "*Interaction of electromagnetic fields with electrical networks generated by lightning*", Chapter 8 of "The Lightning Flash: Physical and Engineering Aspects", IEE Press, 2003.