

## Curriculum vitae Europass



### Informații personale

Nume / Prenume **DUMITRIU, Lucia Cristina**  
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Naționalitate(-tăți) Romana  
Data nașterii 08.05.1950

### Experiența profesională

Perioada Din 1997 pana in prezent  
(intre 1978 – 1997)  
(1974 - 1977)

Funcția sau postul ocupat Profesor universitar  
(Asistent universitar, Sef de lucrari, Conferentiar universitar)  
(inginer stagiar)

Activități și responsabilități principale - Predare cursuri generale de Bazele Electrotehnicii si Electrotehnica teoretica si aplicata, si cursuri speciale din domeniul Teoriei circuitelor electrice, la formele de invatamant de 5 ani, iar in prezent, de licenta si master.  
- Cercetare stiintifica in domeniul Teoriei circuitelor electrice

Numele și adresa angajatorului Universitatea Politehnica Bucuresti, Splaiul Independentei, 313, sector 6, Bucuresti

Tipul activității sau sectorul de activitate Invatamant superior tehnic

Nivelul în clasificarea națională sau internațională

### Informații suplimentare

#### Cursuri predate in ultimii 5 ani:

- Bazele electrotehnicii (Teoria campului electromagnetic si Teoria circuitelor electrice)- la Facultatea de Energetica, an II; Simularea numerica a circuitelor analogice- la Facultatea de Inginerie electrica, an II.
- Proiectarea asistata de calculator a circuitelor analogice- la Facultatea de Inginerie electrica, master, an I, Complemente de electrotehnica, la Facultatea de Energetica, master, an I.

#### Domeniile de cercetare stiintifica:

- Modelarea, analiza si simularea circuitelor analogice
- Analiza simbolica
- Analiza circuitelor analogice de mari dimensiuni
- Analiza circuitelor de radio-frecventa
- Reducerea ordinului modelului

Premiul Academiei Romane pe 2000 pentru tratatul Teoria moderna a circuitelor electrice (publicat in Editura All, vol. I in 1998 si vol. II in 2000).

#### Granturi ca director:

- Analiza simbolica a circuitelor electrice
- Tehnici de inalta performanta folosite in proiectarea asistata de calculator a circuitelor analogice;
- Metode moderne de simulare a circuitelor analogice integrate in regim periodic.

Referent la:

- IEEE Transaction on Analog Integrated Circuits and Signal Processing, of IEEE Circuits and System Society;
- IEEE Transaction on Computer-Aided Design of Integrated Circuits and Systems of IEEE Circuits and System Society;
- IEEE Transactions on Circuits and Systems I;
- International Scientific Meetings as: International Symposium on Circuits and Systems (ISCAS), International Workshop on Symbolic and Numerical Methods, Modeling and Applications to Circuit Design (SMACD).

Lucrari reprezentative:

1. Lucia Dumitriu, M. Iordache, R. Muntean, R. Botinau, "Efficient generation of symbolic network functions using two-graph decomposition on levels", Proceedings of the Fifth International Workshop on Symbolic Methods and Applications in Circuit Design, *SMACD*, Kaiserslautern, Oct. 8-9, 1998, pp. 191-198.
2. Lucia Dumitriu, M. Iordache, "Techniques for Fast Symbolic Analysis of Large Analog Integrated Circuits", Proceedings of the International Symposium on Signal, Circuits and Systems, *SCS*, Iași, Romania, July 6-7, 1999, pp. 57-60.
3. Lucia Dumitriu, M. Iordache, "Generalisation of Nodal Analysis for Linear Resistive Nonreciprocal Circuits", *Revue Roum. Sci. Techn.-Électrotechn. et Énerg.*, ISSN 0035-4066, no. 4, 1999, pp. 395-408.
4. M. Iordache, Lucia Dumitriu, D. Delion, "Automatic Formulation of Symbolic State Equations for Analog Circuits with Degeneracies", Proceedings of 6<sup>th</sup> International Workshop on Symbolic Methods and Applications in Circuit Design, *SMACD*, Instituto Superior Técnico, Lisbon, Portugal, October 12-13, 2000, pp. 65-72.
5. M. Iordache, Lucia Dumitriu, "Efficient Decomposition Techniques for Symbolic Analysis of Large – Scale Analog Circuits by State Variable Method", *Analog Circuits and Signal Processing, Kluwer Academic Publishers*, Springer Netherlands ISSN: 0925-1030, Vol. 40, no. 3, 2004, pp. 235-255.
6. M. Iordache, Lucia Dumitriu, "The Generalized Topological Formula for Transfer Function Generation by Two-Graph Tree Enumeration", *Analog Integrated Circuits and Signal Processing, Kluwer Academic Publishers*, Springer Netherlands ISSN: 0925-1030, Vol. 47, no. 1, 2006, pp. 85-100.
7. Lucia Dumitriu, M. Iordache, D. Niculae, "State Variable Approach in Steady-State Analysis of Circuits Driven by Multi-Tone Signals", Proc. of 9<sup>th</sup> International Workshop on Symbolic Methods and Applications in Circuit Design, *SMACD*, October 12-13, 2006, Firenze, Italy, ISBN 88-8453-509-3.
8. Lucia Dumitriu, M. Iordache, G. Stamatescu, "Boundary Conditions for Multi-Tone Steady-State of Nonlinear Integrated Analog Circuits", Proc. of 3<sup>th</sup> International Conference on Circuits and Systems in Communications, *ICCSC*, 6-7 iulie, 2006, Bucuresti, Romania, ISBN: (10)973-755-069-2, pp.109-114.
9. Lucia Dumitriu, M. Iordache, "Numerical Steady-State Analysis of Nonlinear Analog Circuits Driven by Multi-Tone Signals", *International Journal of Bifurcation and Chaos*, ISSN: 0218-1274, Vol.17, Issue 10, 2007, pp. 3595-3601.
10. M. Iordache, Lucia Dumitriu, "Time Domain Diakoptic Analysis Based on Reduced-Order State Equations", *International Journal of Bifurcation and Chaos*, ISSN: 0218-1274, Vol.17, Issue 10, 2007, pp. 3625- 3631.
11. Lucia Dumitriu, M. Iordache, N. Voicu, "Symbolic Hybrid Analysis of Nonlinear Analog Circuits", Proc. of the European Conference on Circuit Theory and Design, *ECCTD*, Sevilla, Spain, 26-30 August 2007, pp. 970-973, IEEE: Catalog Number: 07EX1835C, ISBN: 1-4244-1342-7.
12. Lucia Dumitriu, M. Iordache, L. Mandache, "CAD of MIMO Systems by Reduced Order Modeling", Proceedings of the 12<sup>th</sup> International Conference on Optimization of Electrical and Electronic Equipment, *OPTIM*, Brasov, România, 20-22 May, 2010, Vol. I, pp. 957-962, ISBN: 978-973-131-029-9, ISSN 1842-0133.
13. Lucia Dumitriu, M. Iordache, C. Dumitriu, Georgiana Zainea, L. Mandache, Y. Neau, "Circuit Theory VS Coupled Mode Theory in Witricity Concept Description", Buletinul AGIR, anul XVI, No. 4, Octombrie - Decembrie, 2011, Proceedings of the 4<sup>nd</sup> ELS 2011, Editura AGIR, ISSN: 1224 – 7928, pp. 177 – 180.

Tratate:

1. Lucia Dumitriu, M. Iordache, "Teoria moderna a circuitelor electrice. Fundamentare teoretica, aplicatii, algoritmi si programe de calcul", Vol. 1, Editura ALL, București, 1998, ISBN 973-9337-99-6, 520 pag.
2. M. Iordache, Lucia Dumitriu, "Teoria moderna a circuitelor electrice. Fundamentare teoretica, aplicatii, algoritmi si programe de calcul", Vol. 2, Editura ALL, București, 2000, ISBN 973-9337-99-6, 824 pg.
3. M. Iordache, Lucia Dumitriu, "Simularea asistata de calculator a circuitelor analogice", Editura Politehnica Press, 2002, ISBN 973-85238-9-3, 450 pag.

