



Europass Curriculum Vitae



Personal information

First name(s) / Surname(s) AVĂDĂNEI OVIDIU GABRIEL
 Address(es) "Alexandru Ioan Cuza" University, Faculty of Physics ,11 Blvd. Carol I, 700506 Iasi, ROMANIA
 Telephone(s) 0232 201203 Mobile: 0722352349
 Fax(es)
 E-mail minu@uaic.ro
 Nationality Romanian
 Date of birth 04.03.1974
 Gender Male

Work experience

	24.01.2008-prezent	01.02.2003-24.01.2008	01.10.1999-01.02.2003	01.05.1999-01.10.1999
Occupation or position held	Lecturer Professor Assistant	Teaching Assistant	Teaching preparatory	PhD student
Main activities and responsibilities	Teaching	Teaching	Teaching	research
Name and address of employer	University "Al.I.Cuza" Iași	University "Al.I.Cuza" Iași	University "Al.I.Cuza" Iași	University "Al.I.Cuza" Iași
Type of business or sector	education	education	education	research

Education and training

	1998 – 2005	1997-1999	1992-1997
Title of qualification awarded	PhD in physics	M.Sc	Physician
Principal subjects/occupational skills covered	Thesis name "Radiating systems in microwave range. Modelling and optimisation"	Speciality "Technologies for materials processing and non-destructive control."	Speciality Technological Physic
Name and type of organisation providing education and training	University "Al.I.Cuza" Iași	University "Al.I.Cuza" Iași	University "Al.I.Cuza" Iași

Personal skills and competences

Mother tongue(s) Romana

Other language(s)

Self-assessment

European level (*)

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B2	Independent user	C1	Proficient user	B2	Independent user	B2	Independent user	C1	Proficient user

French	B2	Independent user	C1	Proficient user	B2	Independent user	B2	Independent user	C1	Proficient user
	(*) Common European Framework of Reference for Languages									
Technical skills and competences	<ul style="list-style-type: none"> - Design of microwave antennas, dielectric resonators, filters - high frequency measurements and materials characterization - Modeling of microwave antenna, dielectric resonators, cavities filters - Electronics physics, analog and numeric electronics. - Designing and manufacture of passive microwave circuits and microwave generators - Microwave interaction with living tissue, 									
Computer skills and competences	HFSS, Maple, Turbo Pascal, Matlab									
Lectured Courses	Methods and Instruments used for electric and electronic Measurements, Radioelectronic and radiocommunications, Microwave Physics. Applications. Electronics. Medical Electronics. Digital Electronics. Computer Architecture.									
Books	Invited chapter MULTI-MODE DIELECTRIC RESONATOR ANTENNAS published in Advances in Engineering Research. Volume 27 2019. Electronics: Problems ISBN 978-973-703-293-5									
Grants:	Responsible for 1 national grant: PN-2 12-078 Propagarea câmpului electromagnetic în materiale cu constantă dielectrică ridicată cu aplicații în realizarea antenelor și a senzorilor de microunde pentru tehnologiile societății informaționale and member in 16 national grants									
Affiliation	IEEE Antenna and Propagation Society									
Additional information	6 month as master student at ENSEEIHT- I.N.P. TOULOUSE FRANTA, 11 exams sustained									
Annexes	22 ISI Papers									
Annexes	Grants									

ISI indexed Papers: 22

1. Cristina E.Ciomaga; AlexandraGuzu; MirelaAirimioaei; Lavinia P.Curecheriu; Vlad AlexandruLukacs; Ovidiu G.Avadanei; GeorgeStoian; MarianGrigoras; NicoletaLupu; MihaiAsandulesa; LilianaMitoseriu "Comparative study of magnetoelectric $\text{BaTiO}_3\text{-Co}_{0.8}\text{Zn}_{0.2}\text{Fe}_2\text{O}_4$ bi-tunable ceramics sintered by Spark Plasma Sintering and classical method", *Ceramics International*, Volume 45, Issue 18, Part A, 15 December 2019, Pages 24168-24175. <https://doi.org/10.1016/j.ceramint.2019.08.125>
2. M. G. Banciu L. Nedelcu ; O. G. Avadanei ; N. Militaru ; D. C. Geambasu ; Lucian Trupina " New half-cylinder microstrip fed dielectric resonator antennas with improved impedance bandwidth", 2019 European Microwave Conference in Central Europe (EuMCE).
3. FeliciaGheorghiu, Cristina , Elena Ciomaga, MantasSimenas, MirelaAirimioaei, ShanQiao, SorinTascu, VidmantasKalendra, JurasBanyas, Ovidiu G.Avadanei, LilianaMitoseriu "Preparation and functional characterization of magnetoelectric $\text{Ba}(\text{Ti}_{1-x}\text{Fe}_x)\text{O}_{3-x/2}$ ceramics. Application for a miniaturized resonator antenna", *Ceramics International*, Volume 44, Issue 17, 1 December 2018, Pages 20862-20870. <https://doi.org/10.1016/j.ceramint.2018.08.091>
4. Marian G. Banciu ; Nicolae Militaru ; Liviu Nedelcu ; Dragos C. Geambasu ; Lucian Trupina ; Ovidiu G. Avadanei "Half-split dielectric resonator antennas using high-dielectric permittivity barium neodymium titanate", 2018 International Symposium on Fundamentals of Electrical Engineering, ISFEE 2018. [10.1109/ISFEE.2018.8742486](https://doi.org/10.1109/ISFEE.2018.8742486)
5. MihaelaAvadanei, VasileCozan, OvidiuAvadanei, " Solvatochromic properties of two related N-salicylidenanilines with dual fluorescenc", *JOURNAL OF MOLECULAR LIQUIDS*, Volume 227, February 2017, Pages 76-86 doi: 10.1016/j.molliq.2016.11.124.
6. Ciomaga Cristina E.; Avadanei, Ovidiu G.; Dumitru, Ioan; Airimioaei, Mirela; Tascu, Sorin; Tufescu, Florin; Mitoseriu, Liliana, " Engineering magnetoelectric composites towards application as tunable microwave filters", *JOURNAL OF PHYSICS D-APPLIED PHYSICS*, Volume 49, Number 12 , 125002, 2016, doi:10.1088/0022-3727/49/12/125002.
7. Avădănei, O. G.; M. G. Banciu; L. Nedelcu "Higher-Order Modes in High-Permittivity Cylindrical Dielectric Resonator Antenna Excited by an Off-Centered Rectangular Slot", *IEEE Antennas and Wireless Propagation Letters*, Volume 13, p.1585-1588 (2014), doi 10.1109/LAWP.2014.2344860.

8. Avădănei, O. G.; M. G. Banciu; L. Nedelcu, “**High-Order Modes in High Permittivity Cylindrical Dielectric Resonator Antenna Excited by a Wide Microstrip Line**”, Conference: 10th International Conference on Communications (COMM) Location: Bucharest, ROMANIA Date: MAY 29-31, 2014.

9. Vasilica Pascariu, Ovidiu Avadanei, Paul Gasner, Iuliana Stoica, Andrea P. Reverberi, Liliana Mitoseriu, “**Preparation and characterization of PbTiO₃-epoxy resin compositionally graded thick films**”, Phase Transitions: A Multinational Journal 2013, Volume 86, Issue 72013, pp. 715-725. [10.1080/01411594.2012.726727](https://doi.org/10.1080/01411594.2012.726727)

10. Vasilica Pascariu, Leontin Padurariu, Ovidiu Avadanei, Liliana Mitoseriu “ **Dielectric properties of PZT-epoxy composite thick films**”, Journal of Alloys and Compounds 574 (2013), pg. 591–599, doi: 10.1016/j.jallcom.2013.05.136

11. Nicolaescu, I; Avadanei, O. G ; Nedelcu, L ; Toacsan, MI ; Banciu, MG; Andrei, I ; Balmus, SB, “**Cylindrical resonator antenna manufactured with Barium Neodymium Titanate**”, *JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS*, Volume: 14, Issue: 11-12, Pages: 1005-1010, Published: NOV-DEC 2012.

12. Ovidiu Gabriel Avădănei, Gabriel Banciu, Ioan Nicolaescu, Liviu Nedelcu, “**Superior Modes in High Permittivity Cylindrical Dielectric Resonator Antenna Excited by a Central Rectangular Slot**” , IEEE Trans. Antennas and Propagation, ISSN : 0018-926X, Volume: 60 , Issue: 11 , Page(s):5032 - 5038, doi: 10.1109/TAP.2012.2207692.

13. M. Avadanei, O. G. Avadanei, G. Fundueanu, “**Effect of comonomer ratio and ionic strength on the thermo-induced conformational changes in N-isopropylacrylamide based copolymers: an ATR – FTIR study**”, Vibrational Spectroscopy, 61 (2012) pp. 133– 143, doi: 10.1016/j.vibspec.2012.03.001.

14. D. D. Sandu, S.B. Balmuş, P. Gasner, O.G. Avădănei „**Electromagnetic map in the 75 – 3000 mhz band in certain areas of iasi city - protection standards**”, Environmental Engineering and Management Journal, Vol.10, No. 4, pp. 471-479, 9 pg., 2011.

15. G.N. Pascariu, O.G. Avădănei, S.B. Balmuş, I. Dumitru, P. Gasner „**A study of patch antenna array on alumina substrate**”, Journal of Optoelectronics and Adv. Materials, vol 12, no 10, pp. 2132-2138, 7 pg., 2010.

16. S. B. Balmus, D. D. Sandu, O. G. Avădănei, G.N. Pascariu, „**Manipulation of CS atoms with laser fields scattered by metallic thin films**”, *Journal of Optoelectronics and Adv. Materials*, 2009, vol. 11, n^o6, pp. 782-789.

17. A. Poita, D.-E. Creanga, A. Airinei, P. Tupu, C. Goiceanu, O. Avadanei, "**Magnetite nanoparticles for biosensor model based on bacteria fluorescence**", *Journal of the European Optical Society - Rapid publications*, Vol 4 (2009), pp 09024-1 - 09024-5

18. O. G. Avădănei, A. Ioachim; P.Gasner; G. N. Pascariu; V.Pascariu, "**A study of patch antennas on ZST substrate**", *Journal of Optoelectronics and Adv. Materials*, 2008, vol. 10, n°3, pp. 639-64.

19. D.D. Sandu, O.G. Avădănei, A. Ioachim, D. Ionesi, „**Contribution to the Cavity Model for Analysis of Microstrip Patch Antennas**”, *Journal of Optoelectronics and Adv. Materials*, vol. 8, No. 1, (2006), pg. 339-345.

20. L. Curecheriu, O. Avadanei, E. L. Focanici, D. E. Creanga, S. Miclaus, I. E. Horga, "**Investigation upon the radiofrequency radiation impact in the biological tissues**", *Romanian Reports of Physics*, No. 53 (1-2), pp. 387-392, 2006.

21. Curecheriu, L; Foca-Nici, E; Vlahovici, A; Avadanei, O; Sandu, DD; Creanga, D; Miclaus, S, "**Radiofrequency wave effects on DNA and RNA levels in some animal tissues** ", *ROMANIAN JOURNAL OF PHYSICS* 52 (3-4) 2007, pg. 389-394.

22. D. D. Sandu, O. G. Avădănei, A. Ioachim, M. G. Banciu, P. Gasner "**Microstrip patch antenna with dielectric substrate**" *Journal of Optoelectronics and Advanced Materials*, Vol. 5, No. 5, 2003, pp. 1381 – 1387.

Papers without ISI index 3

1. O.G. Avădănei, D.D. Sandu, P. Gasner, S.B. Balmuş, "**Microstrip Antenna Array With Multiple Beams**", *SENSOR N.S*, vol. 67, no.2 (2006), pg. 126-139.
2. D.D. Sandu, S.B. Balmuş, O.G. Avădănei, G.N. Pascariu, "**Measurements of Relative Dielectric Permittivity in Microwave Range by the Cavity Perturbation Method**", *SENSOR N.S*, vol. 67, no.2 (2006), pg. 113-125.
3. P. Gasner, O.G. Avădănei, S.B. Balmuş, O. Rusu, D.D. Sandu, "**The Propagation Simulation of an Impulse Voltage Using WCIP Method**", *Tensor N.S* Vol. 67, No. 3 (2006), pg: 270-276.

Papers in Proceedings of International Conferences: 6

1. D.D. Sandu, C. Goiceanu, P. Gasner, O.G. Avădănei, „**Microwave Measurements on the Permittivity of Living Tissues**”, *Transaction on Electronics and Communications, Bulletin of the "Politehnica" University of Timisoara*, Tome 45 (59), Vol II, 218-221, 2000
2. C. Goiceanu, F. Gradinaru, D. D. Sandu, R. Danulescu, Gh. Balaceanu, D. Popa, O. G. Avădănei, „**Some Behavioural and Metabolic Effects in Mice Exposed to Ultra High Frequency Fields**” *IX Mediterranean Conference on Medical and Biological Engineering and Computing - Medicon*, Pula, Croatia, 12-15 June 2001, volume, pp. 777-780.
3. C. Goiceanu , A. Artenie, O. G. Avădănei, V. Artenie, D.E. Creanga, „**Some Evidence of Biological Effects of Ultra High Frequency Waves in *Triticum Aestivum***”, *IX Mediterranean Conference on Medical and Biological*

- Engineering and Computing - Medicon* 2001, Pula, Croatia, 12-15 June 2001, volum de lucrări, 781-784.
4. O.G.AVĂDĂNEI, D.D.SANDU, D.IONESI “**Design and Experiment of Microstrip Patch Antennas**” Proc. SCS (IEEE Chapter) Volum (2001), pg. 37-40.
 5. D.D.Sandu, O.G.Avădănei, C.P.Găinaru, Roxana-Alina Găinaru, „**In Vitro Microwave Irradiation of Catalase Enzyme**”, *Proc. SCS (IEEE Chapter)*, Volume pp. 33-36, 2001
 6. C. Goiceanu, F. Grădinaru, D.D. Sandu, R. Dănulescu, G. Bălăceanu, O.G. Avădănei, „**Possible influence of central nervous activity of mice by exposure to UHF fields**”, *XXVIIth Triennial General Assembly of the International Union of Radio Science, Maastricht, Olanda*, Volume on CD-ROM, rezumate p. 91.17-24 August 2002.

Conferences: 18

1. M. G. Banciu L. Nedelcu ; O. G. Avadanei ; N. Militaru ; D. C. Geambasu ; Lucian Trupina ” **New half-cylinder microstrip fed dielectric resonator antennas with improved impedance bandwidth**”, 2019 European Microwave Conference in Central Europe (EuMCE)
2. Marian G. Banciu ; Nicolae Militaru ; Liviu Nedelcu ; Dragos C. Geambasu ; Lucian Trupina ; Ovidiu G. Avadanei ”**Half-split dielectric resonator antennas using high-dielectric permittivity barium neodymium titanate**”, 2018 International Symposium on Fundamentals of Electrical Engineering, ISFEE 2018.
3. Avădănei, O. G.; M. G. Banciu; L. Nedelcu, “**High-Order Modes in High Permittivity Cylindrical Dielectric Resonator Antenna Excited by a Wide Microstrip Line**”, Conference: 10th International Conference on Communications (COMM) Location: Bucharest, ROMANIA Date: MAY 29-31, 2014
4. I. Nicolaescu, M.G.Banciu, L. Nedelcu, O.G.Avădănei, I.Radu, “**BNT Advanced Ceramics For Slot Coupled Dielectric Resonator Antennas**”, International Semiconductors Conference CAS 2011 17-19 October, Sinaia Romania, pg.193-199.
5. G.N. Pascariu, O.G.Avădănei, S.B. Balmuş, P. Gasner „**A study of patch antenna array on alumina substrate**”, poster la ROCAM (Romanian Conference on Advanced Materials), Braşov, România, 25-28 august 2009.
6. G.N. Pascariu, O.G.Avădănei, V. Dobrinu, D. D. Sandu , P. Gasner “**A STUDY OF PATCH ANTENNAS ON ALUMINA SUBSTRATE WITH CIRCULAR ARRAY**”. 9th INTERNATIONAL BALKAN WORKSHOP ON APPLIED PHYSICS July 7-9, 2008, Constanta, Romania.
7. O.G.Avădănei, P. Gasner, G.N. Pascariu “**ANTENNA ARRAY WITH MULTIPLE BEAM**”. 9th INTERNATIONAL BALKAN WORKSHOP ON APPLIED PHYSICS July 7-9, 2008, Constanta, Romania.
8. G.-N. Pascariu, V. Dobrinu (căş.Pascariu), O.G. Avădănei, P. Gasner „**Theoretical study of hemispherical antenna array using rectangular patch**” International Conference on Fundamental and Applied Reserch in Physics, Comunicare, Iasi, 2007
9. V. Pascariu, G.N. Pascariu, O.G. Avădănei, P.Gasner “**CHARACTERIZATION OF LIQUID BINARY MIXTURES BY T.D.R. METHOD**” 8th INTERNATIONAL BALKAN WORKSHOP ON APPLIED PHYSICS July 5-7, 2007, CONSTANTA, ROMANIA.
10. O.G. Avădănei, D.D. Sandu, P. Gasner, S.B. Balmuş, “**Microstrip Antenna Array With Multiple Beams**”, Tensor, N.S Conference, August 2005, Varna, Bulgaria.
11. D.D. Sandu, S.B. Balmuş, O.G. Avădănei, G.N. Pascariu, “**Measurements of Relative Dielectric Permittivity in Microwave Range by the Cavity Perturbation Method**”, Tensor, N.S Conference, August 2005, Varna, Bulgaria.
12. P. Gasner, O.G. Avădănei, S.B. Balmuş, O. Rusu, D.D. Sandu, “**The Propagation Simulation of an Impulse Voltage Using WCIP Method**”, Tensor, N.S Conference, August 2005, Varna, Bulgaria.
13. D. D. Sandu, O. G. Avădănei, A. Ioachim, M. G. Banciu, P. Gasner “**Microstrip patch antenna with dielectric substrate**”, ROCAM 2003, 15-18 september.
14. C. Goiceanu, F. Grădinaru, D.D. Sandu, R. Dănulescu, G. Bălăceanu, O.G. Avădănei, „**Possible influence of central nervous activity of mice by exposure to UHF fields**”, *XXVIIth Triennial General Assembly of the International Union of Radio Science, Maastricht, Olanda*, 17-24 August 2002.
15. O.G.AVĂDĂNEI, D.D.SANDU, D.IONESI “**Design and Experiment of Microstrip Patch Antennas**” SCS Conference Iaşi 2001.

16. D.D.Sandu, O.G.Avădănei, C.P.Găinaru, Roxana-Alina Găinaru, „**In Vitro Microwave Irradiation of Catalase Enzyme**”, SCS Conference Iași 2001.
17. C. Goiceanu, F. Gradinaru, D. D. Sandu, R. Danulescu, Gh. Balaceanu, D. Popa, O. G. Avădănei, „**Some Behavioural and Metabolic Effects in Mice Exposed to Ultra High Frequency Fields**” IX Mediterranean Conference on Medical and Biological Engineering and Computing - Medicon, Pula, Croatia, 12-15 June 2001.
18. C. Goiceanu, A. Artenie, O. G. Avădănei, V. Artenie, D.E. Creanga, „**Some Evidence of Biological Effects of Ultra High Frequency Waves in *Triticum Aestivum***”, IX Mediterranean Conference on Medical and Biological Engineering and Computing - Medicon 2001, Pula, Croatia.

Grants

Program/Project	Function	Period: from... to...
PN-2 12-078 Propagarea câmpului electromagnetic în materiale cu constantă dielectrică ridicată cu aplicații în realizarea antenelor și a senzorilor de microunde pentru tehnologiile societății informaționale	Responsabil	2008-2011
PN2: 71-046 BIOMAG Noi metode și tehnici biomagnetometrice de înaltă rezoluție pentru investigare și diagnosticare biomedicală	Member	2008-2010
PN2: 41-089 Noi metode și tehnici biomedicale de investigare, diagnosticare și monitorizare neinvazivă cu radiații electromagnetice neionizante	Member	2007-2009
PN2: 71-040 MATPEROL Materiale perovskitice funcționale cu aplicații în domeniul electronicii și optoelectronicii	Member	2007-2010
CEEX C 73S9 2006 Materiale Magnetice cu magnetostricțiune ridicată	Member	2006-2008
CEEX-FEROCER Dezvoltarea integrată de concepte și tehnologii noi în domeniul Preparației, caracterizării, modelării și aplicațiilor materialelor Feroelectrice Ceramice Micro- și Nanostructurate	Member	2006-2008
CEEX PC-D11-PT14-258 2005 Cercetări cu privire la interacția bio-electromagnetică și impactul biologic al expunerii umane în câmpuri electromagnetice de radiofrecvență și microunde	Member	2005-2007
CEEX nr. 20/2005 Metode și tehnici neinvazive cu microunde pentru detecția timpurie a cancerului de sân	Member	2005-2007
CEEX – SMMA Procese fizice în fire magnetice amorfă utilizate în funcționarea senzorilor magnetici	Member	2006-2008
CEEX – ESMMN Efecte de suprafață în materiale magnetice nanostructurate	Member	2005-2008
CEEX – MAGSAT Materiale magnetostrictive multifuncționale pentru sisteme hibride inteligente de senzori, actuatori și traductori	Member	2005-2008

CEEX – MATHYS Dezvoltarea unor modele experimentale si numerice de caracterizare a materialelor magnetice cu histerezis	Member	2006-2008
CNCSIS tip Platforme de cercetare Platforma integrata pentru studii avansate in nanotehnologii moleculare (AMON)	Member	2006-2008
CERES 4-65/2004 MANOPERM Procese de magnetizare in noi materiale nanostructurate cu permeabilitate magnetica ridicata	Member	2004-2006
CEEX NANOEND Sistem automat de examinare nedistructiv a componentelor feroviare de siguran pe baza unor senzori magnetici nano-structurali	Member	2004-2006
Proiect CNCSIS tip A nr. 33373/2004; act aditional nr.34700/2005 Studiul proceselor de magnetizare in nanostructuri magnetice noi pentru medii de inregistrare de ultra-inalta densitate	Member	2004-2006
CERES 4-234/2004 NAPUMAG Procese de magnetizare nanopulberi magnetice din metale de tranzitie si aliaje ale acestora	Member	2004-2006

I, the undersigned, swear or affirm that the information I have supplied herein is true and accurate.

Date

23.02.2022

Title Name, SURENAME

Lect. Dr. Ing Ovidiu Gabriel AVĂDĂNEI

Signature