

LISTĂ DE LUCRĂRI

Liliana Preda

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Tabel centralizator al activității:

A1. Activitate didactică			A2. Activitate de cercetare		A3. R&I	Indice Hirsch
<i>Cărți și manuale</i>	<i>Conf. ISI</i>	<i>Coordonare proiect</i>	<i>Articole prim autor</i>	<i>Articole coautor</i>	<i>Nr. citări</i>	
4	20	2	9	32	81	5

1. Articole din reviste indexate ISI, prim autor

Nr.crt.	Referință bibliografică
1	Preda, L.,A. , Preda, A.M., Cristescu, C.P., Scarlat, E.I., Babalić, R., Diffraction pattern generated by self-focusing of a laser beam in a liquid iodine solution, UPB Scientific Bulletin, Series A: Applied Mathematics and Physics 61(1-2), pp. 125-134, 1999
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3	Preda, L., Mihailescu, M., Scarlat, E., Preda, A., Laser printed hologram generation and analysis, UPB Scientific Bulletin, Series A: Applied Mathematics and Physics 67(4), pp. 17-27, 2005
4	Preda, L ; Mihailescu, M., Dimensional analysis of the photonic crystals, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS 70 (4):15-20 2008
5	Preda, L ; Scarlat, E; Mihailescu, M; Preda, A., Photonic crystal with cayley tree as photonic atom, ROMANIAN JOURNAL OF PHYSICS 54 (5-6):521-528 2009
6	Preda, L ; Mihailescu, M; Preda, A Application of fractional derivative to the relaxation of laser target, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS 71 (4):11-20 2009
7	L. Preda , Fractional derivative applied to the retrieval of phase distribution from an interferogram, Appl Phys B, 108(3), 533-538 (2012); DOI 10.1007/s00340-012-5035-4
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2. Articole în reviste indexate ISI, coautor

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2	Preda, A.M., Scarlat, E., Preda, L., Mihăilescu, M., A removable compact disk grating interferometer, UPB Scientific Bulletin, Series A: Applied Mathematics and Physics 63(3), pp. 89-90, 2001
3	Preda, A.M., Scarlat, E.I., Preda, L., Mihăilescu, M., Determination of a small change in the refractive index of liquids, UPB Scientific Bulletin, Series A: Applied Mathematics and Physics 64(2), pp. 45-52, 2002
4	27.E. I. Scarlat, A. M. Preda, Liliana Preda, Mona Mihailescu, Diffractive optical element in liquid media with variable optical path, Rom. Journ. Phys., 48, Nos. 1–4, p. 469–477, 2003
5	Mihăilescu, M., Preda, L., Preda, A.M., Scarlat, E.I., Modified gerchberg-saxton algorithm for diffractive optical element image retrieval, UPB Scientific Bulletin, Series A: Applied Mathematics and Physics 67(4), pp. 65-76, 2005
6	Scarlat, E.I., Cristescu, C.P., Stan, C., Preda, A.M., Preda, L., Mihailescu, M., Coloured chaos in the ROL-usd exchange rate via time-frequency analysis, UPB Scientific Bulletin, Series A: Applied Mathematics and Physics Volume 68, Issue 1, 2006, Pages 49-62, 2006
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9	Mihailescu, M; Preda, AM; Cojoc, D; Preda, L; Scarlat, EI; Popescu, IM, Intensity redistribution in diffractive pattern due to fractal phase changes, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS 9 (8):2485-2492 2007
10	Mihailescu, M; Preda, AM; Sobetskii, A; Scarlat, EI; Preda, L., Diffractive optics for spatial and temporal analysis of pollution in liquid media, JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS 9 (11):3499-3504 2007

- 11 E. I. Scarlat, Al. M. Preda, [Liliana Preda](#), Mihaela Scarlat, Mona Mihăilescu, The influence of UV-A laser radiation upon the cancer markers TPS and CA15-3, *Journ. Opt. Adv. Mat.*, 9, (4), p. 940-941, 2007
- 12 Scarlat, E.I., Cristescu, C.P., Stan, C., Preda, A., Mihailescu, M., [Preda, L.](#), Econophysics approach to the dynamics of the romanian exchange rate ROL-USD, *UPB Scientific Bulletin, Series A: Applied Mathematics and Physics* 69(1), pp. 43-52, 2007
- 13 Mihailescu, M; [Preda, L](#); Preda, A; Scarlat, E
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- 14 Mihailescu, M; Preda, A; Cojoc, D; Scarlat, E; [Preda, L.](#), Diffraction patterns from a phyllotaxis-type arrangement, *OPTICS AND LASERS IN ENGINEERING* 46 (11):802-809 2008
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- 16 Mihailescu, M; [Preda, L](#); Preda, A; Scarlat, E
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- 17 Petcu, A; [Preda L.](#) , The optical transmission of one-dimensional photonic crystal, *ROMANIAN JOURNAL OF PHYSICS* 54 (5-6):539-546 2009
- 18 Ciobanu, M; [Preda, L](#); Popescu, A; Mihailescu, M; Rusu, MI, Designing Tunable Photonic Crystals with Band Gaps in Microwave Range, *JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE* 7 (6):1032-1034 2010
- 19 M. Ciobanu, [L. Preda](#), D. Savastru, S. Dontu
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- 30 Dandocsi A., [Preda L.](#), Nicolae D., Nemuc A. - Planetary boundary layer investigation from LIDAR measurements over Bucharest, UPB Sci. Bull. Series A 78 (1), 265-274 2016
- 31 Calin BS, [Preda L.](#) Jipa F. Zamfirescu M. - Laser fabrication of diffractive optical elements based on detour-phase computer-generated holograms for two-dimensional Airy beams, applied Optics 57(6), 1367- 1372, (2018)
- 32 Multifractal Cross Correlation Analysis between Aerosols and Meteorological Data, C. Marin, C. Stan, [L. Preda](#), L. Marmureanu, L. Belegante, C. P. Cristescu, Romanian Journal of Physics 63, 805 (2018) WOS:000440033800011

3. Conferințe indexate ISI

Nr.crt.	Proceedings ISI
1	Preda, A.M., Scarlat, E.N., Preda, L. , Popescu, I.M., Optical devices with silica-gel small spheres, Proceedings of SPIE - The International Society for Optical Engineering, Volume 3405, 1998, Pages 211-217 ROMOPTO '97: 5th Conference on Optics; Bucharest; Romania; 9 September 1997 through 9 September 1997; Code 74547
2	Scarlat, E.N., Preda, L. , Cristescu, C.P., Preda, A.M., High-resolution spectral analysis of a pulsed CuBr laser, Proceedings of SPIE - The International Society for Optical Engineering, Volume 3405, 1998, Pages 65-69 ROMOPTO '97: 5th Conference on Optics; Bucharest; Romania; 9 September 1997 through 9 September 1997; Code 74547
3	Preda, A.M., Cristescu, C.P., Popescu, I.M., Preda, L. , Scarlat, E.I., Interferometric detection of photothermal effects in uranyl optical glass, Proceedings of SPIE - The International Society for Optical Engineering Volume 4430, 2000, Pages 784-792 6th Conference on Optics (ROMOPTO 2000); Bucharest; Romania; 4 September 2000 through 7 September 2000; Code 58664
4	Preda, A.M., Scarlat, E., Preda, L. , Scarlat, M., Determination of the refractive index of human serum by using a removable compact disk grating, Proceedings of SPIE - The International Society for Optical Engineering Volume 4762, 2002, Pages 373-380 ALT '01 International Conference on 'Advanced Laser Technologies; Constanta; Romania; 11 September 2001 through 14 September 2001; Code 60322
5	Scarlat, E.I., Preda, A.M., Preda, L. , Mihailescu, M., Structured light interferometer for space-time refraction index profile, Proceedings of SPIE - The International Society for Optical Engineering Volume 5227, 2003, Pages 233-239 Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies; Bucharest; Romania; 21 November 2002 through 23 November 2002; Code 62318
6	Scarlat, E.I., Preda, A.M., Cristescu, C.P., Preda, L. , Mihailescu, M., The influence of the rise time of the excitation pulse upon the output of a copper bromide laser, Proceedings of SPIE - The International Society for Optical Engineering Volume 5581, 2004, Article number 31, Pages 258-267 ROMOPTO 2003: Seventh Conference on Optics; Constanta; Romania; 8 September 2003 through 11 September 2003; Code 64543
7	Preda, M., Scarlat, E.I., Preda, L. , Mihailescu, M., Depolarization analysis of a laser beam scattered by a dusty plasma, Proceedings of SPIE - The International Society for Optical Engineering Volume 5581, 2004, Article number 65, Pages 509-516 ROMOPTO 2003: Seventh Conference on Optics; Constanta; Romania; 8 September 2003 through 11 September 2003; Code 64543

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- 9** Scarlat, E.I. , Cristescu, C.P., Preda, A.M., [Preda, L.](#), Mihailescu, M. , Magneto-mechanical oscillations revisited, Proceedings of SPIE - The International Society for Optical Engineering Volume 5972, 2005, Article number 59720C
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- 10** Mihailescu, M. , Preda, A., Cojoc, D., Scarlat, E, [Preda, L.](#), Iterative algorithm analysis for phase-only diffractive control access system, Proceedings of SPIE - The International Society for Optical Engineering Volume 6785, 2007, Article number 678513
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- 11** Mihailescu, M., Preda, A., Cojoc, D., Scarlat, E., [Preda, L.](#), Iterative algorithm analysis for phase-only diffractive control access system, Proceedings of SPIE - The International Society for Optical Engineering 6785,678513, 2007
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Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies IV; Constanta; Romania; 28 August 2008 through 31 August 2008; Code 75949
- 13** Scarlat, E.I. , [Preda, L.](#), Mihailescu, M. , A generalized devil staircase-based generator for the JPY-USD exchange rate, IFAC Proceedings Volumes (IFAC-PapersOnline) Volume 2, Issue PART 1, 2009, Pages 321-326
2nd IFAC Conference on Analysis and Control of Chaotic Systems, CHAOS09; London; United Kingdom; 22 June 2009 through 24 June 2009; Code 85829
- 14** Grigoriu, M. , [Preda, L.](#) , Cornelia, D.D. , Photovoltaic sources efficiency evaluation in urban ecosystems conditions, Sel. Topics in Energy, Environ., Sustainable Dev. and Landscaping - 6th WSEAS Int. Conf. on Energy, Environ., Ecosystems and Sustainable Dev., EEESD'10, 3rd WSEAS Int. Conf. on Landsc. Archit., LA'10, 010, Pages 382-386,, 6th WSEAS International Conference on Energy, Environment, Ecosystems and Sustainable Development, EEESD'10, 3rd WSEAS International Conference on Landscape Architecture, LA'10; Timisoara; Romania; 21 October 2010 through 23 October 2010; Code 84934
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- 15** [Liliana Preda](#); Mona Mihailescu; Eugen Scarlat, Light control using photonic crystals and metallic slits, Proc. SPIE 7821, Advanced Topics in Optoelectronics, Microelectronics, and Nanotechnologies V, 78211L (4 December 2010); doi: 10.1117/12.882263
- 16** Mihailescu, M, [Preda, L.](#), Gheorghiu, A., Kusko, M., Curcan, O., Kusko, C., Asymmetric diffraction orders based on axicon and helical phase combination, Pacific Rim Conference on Lasers and Electro-Optics, CLEO - Technical Digest 2013, Article number 6600459
10th Conference on Lasers and Electro-Optics Pacific Rim, CLEO-PR 2013; Kyoto; Japan; 30 June 2013 through 4 July 2013; Category number CFP13CPA-USB; Code 100080
- 17** M. Mihailescu ; C. Kusko ; [L. Preda](#), Optical information transfer based on helico-conical laser beams, Proc. SPIE 9194, Laser Beam Shaping XV, 919406 (September 25, 2014); doi:10.1117/12.2062036
- 18** Mihailescu, M., [Preda, L.](#), Kusko, C., Scarlat, E.I., Diffraction patterns from holographic masks generated using combined axicon and helical phase distributions Proceedings of SPIE - The International Society for Optical Engineering Volume 9258, 2015, Article number 92580T
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- 19** Cristina Marin' Jeni Vasilescu, Luminita Marmureanu, Dragos Ene, [Liliana Preda](#) and Mona Mihailescu' Biomass burning aerosols characterization from ground based and profiling measurements, EPJ Web of Conferences 176, 08013 (2018), <https://doi.org/10.1051/epjconf/201817608013>, eISSN: 2100-014X
- 20** Dandocsi Alexandru, Sapartoc Georgiana, [Preda Liliana](#), Stan Cristina and Radu Cristian, Aerosol characterization from active and passive ground measurements and satellite data, EPJ Web of Conferences 176, 08014 (2018), <https://doi.org/10.1051/epjconf/201817608014>, eISSN: 2100-014X

4. Manuale și cărți

Nr.crt.	Titlul cărții
1	“Indrumar de utilizare a calculatorului in lucrarile practice de fizica”, Maria Ana Popovici, Liliana Preda , E. Scarlat, published to Litografia UPB, Bucharest 1993, 147 pages
2	“Mecanică cuantică - Culegere de probleme”, - Luminița Daniello, Liliana Preda : published to S.C. ANDOR TIPO.SRL, Bucharest1998, 135 pages
3	.“Sinteza si prelucrarea materialelor în plasmă”, – Liliana Preda , A. Preda, published to Printech, ISBN 973-652-233-4, Bucharest, 2000, 162 pages
4	“Teste de fizica pentru admitere UPB” , Department of Physics, published to Politehnica Press, Bucharest 2002, ISBN 973-85-237-6-1, cu completari in editiile din 2010,2013

5. Proiecte diverse

Nr.crt.	Titlu contract/proiect
1	„Sistem laser avansat in femtosecunde pentru nanostructurare de metamateriale si cristale fotonice” – FEMAT – PNCDI II, perioada de desfasurare: 2007-2010, responsabil de proiect din partea UPB
2	„Join Physicists in festival – Researchers’ night 2009”, FP7-PEOPLE-2009-NIGHT, 2009, Director de proiect