

Europass Curriculum Vitae



Personal information

Surname(s) / First name(s) **PASCU Mihail Lucian**

Address

Telephone(s) Personal: (40-21) 457 4524 Mobile: (40) 728 91 61 60

Fax(es) (40-21) 457 5739

E-mail mihai.pascu@inflpr.ro; mihailucianpascu@gmail.com

Nationality Romanian

Date of birth 05.01.1946

Gender Male

Desired employment / Occupational field

Work experience

Dates	December 2006 – onwards
Occupation or position held	Senior Research Scientist; Professor
Main activities and responsibilities	Head of Laser Optics and Spectroscopy Group; Professor at Physics Faculty, University of Bucharest; PhD head. Tunable lasers and laser spectroscopy. Laser spectroscopy and optics of biomolecular systems. Development of new methods to fight resistance to treatment acquired by bacteria and tumors; nanophysics and nanomedicine methods (generation of nanodroplets containing modified medicines included). Lasers and optics applications in pollution control. Chaos in laser systems. Physics of micro- and nano-droplets. Spectroscopy of droplets. Econophysics. Optofluidics. Laser microfluidics in hyper- and micro-gravity. Droplet lasers.
Name and address of employer	National Institute for Laser, Plasma and Radiation Physics; Laser Department, 409 Atomistilor str., Magurele, Ilfov, 077125, Romania
Type of business or sector	Research and Education
Dates	January 2004 – November 2006
Occupation or position held	National Detached Expert
Main activities and responsibilities	Science Officer: Medicine and Health; Biomedicine and Molecular Biosciences
Name and address of employer	European Science Office, COST Office, 149 Avenue Louise, 1050 Brussels, Belgium Tel : (32-2) 533 38 10 ; Fax : (32-2) 533 38 93 Address of the European Science Foundation: 1, quai Lezay-Marnesia, BP 90015 67080, Strasbourg Cedex, France; Tel: (33-3) 88 76 71 00; Fax: (33-3) 88 37 05 32; http://www.esf.org/

Type of business or sector	Management of a COST Domain; Organising forward look conferences and strategic workshops.
Dates	September 2001 – December 2003
Occupation or position held	National Detached Expert
Main activities and responsibilities	Science Officer: Medicine and Health; Biomaterials
Name and address of employer	European Commission – DG Research, Sq de Meeus, Brussels
Type of business or sector	Management of COST Domains
Dates	January 1990 – September 2001
Occupation or position held	Senior Research Scientist; Professor
Main activities and responsibilities	Head of Laser Spectroscopy Group; Professor at Physics Faculty, University of Bucharest; PhD head
Name and address of employer	National Institute for Laser, Plasma and Radiation Physics; Laser Department, 409 Atomistilor str., Magurele, Ilfov, 077125, Romania
Type of business or sector	Research and Education
Dates	August 1983 – January 1990
Occupation or position held	Senior Research Scientist
Main activities and responsibilities	Director of the Institute of Physics and Technology of Radiation Devices. Tunable lasers and laser spectroscopy. Laser medical equipment. Laser spectroscopy and optics of biomolecular systems. Lasers and optics applications in pollution control.
Name and address of employer	Institute of Physics and Technology of Radiation Devices; Laser Department, 409 Atomistilor str., Magurele, Ilfov, 077125, Romania
Type of business or sector	Research and Education; Management
Dates	March 1974 – August 1983
Occupation or position held	Research Scientist
Main activities and responsibilities	Tunable (dye) lasers and laser spectroscopy. Lasers and optics applications in pollution control. Laser medical equipment. Laser spectroscopy and optics of biomolecular systems.
Name and address of employer	Institute of Physics and Technology of Radiation Devices; Laser Department, 409 Atomistilor str., Magurele, Ilfov, 077125, Romania
Type of business or sector	Research and Education
Dates	January 1972 – March 1974
Occupation or position held	Assistant Research Scientist
Main activities and responsibilities	PhD student in Optics and Cold Plasma Spectroscopy
Name and address of employer	University of Texas at Dallas, Physics Faculty, Richardson, TX, USA
Type of business or sector	Research
Dates	March 1969 – January 1972
Occupation or position held	Assistant Research Scientist (stagiaire)
Main activities and responsibilities	Beginner/stagiaire research scientist in the field of optics of the solid state
Name and address of employer	Institute of Physics Bucharest, Romanian Academy, Bucharest, Romania
Type of business or sector	Research

Education and training

Dates	September 2001 - January 2004
Title of qualification awarded	Up-graded personnel at EC
Principal subjects/occupational skills covered	These were made at the European Commission, DG. Research and ESF: - Training on how to give interviews to TV stations - Training on how to communicate as EC employee: phone conversations, interviews, etc - Training course for German language
Name and type of organisation providing education and training	- European Commission DG – RTD, COST Secretariat - European Science Foundation, COST Office

Level in national or international classification	It was not mentioned after giving the final tests.
Dates	October 1985 – June 1987
Title of qualification awarded	Graduated with degree in management of research institutes and industrial companies
Principal subjects/occupational skills covered	Evening Student; Management of research institutes and economic enterprises
Name and type of organisation providing education and training	Ministry of Education, Bucharest
Level in national or international classification	Expert
Dates	January 1970 - March 1974
Title of qualification awarded	PhD in Physics
Principal subjects/occupational skills covered	Optics and Cold Plasma Spectroscopy; Title of the PhD Thesis: "The optical study of the molecular ions in the cold plasma".
Name and type of organisation providing education and training	- Faculty of Physics, University of Bucharest, Romania - Faculty of Physics, University of Texas at Dallas, USA
Level in national or international classification	PhD
Dates	October 1963 – June 1968
Title of qualification awarded	Physicist
Principal subjects/occupational skills covered	Optics, Spectroscopy, Plasma, Lasers; title of the master thesis "Light scattering in alkali halide crystals".
Name and type of organisation providing education and training	Faculty of Physics Bucharest, University of Bucharest, Romania
Level in national or international classification	Master

Personal skills and competences

Mother tongue(s) Romanian

Other language(s)

Self-assessment
European level ()*

English

French

German

Italian

Russian

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
C2	Proficient user	C2	Proficient user	C2	Proficient user	C1	Proficient user	C2	Proficient user
C2	Proficient user	C2	Proficient user	C2	Proficient user	C1	Proficient user	C2	Proficient user
C1	Proficient user	B2	Independent user	B2	Independent user	B2	Independent user	B2	Independent user
C2	Proficient user	C1	Proficient user	C1	Proficient user	C1	Proficient user	B2	Independent user
B2	Independent user	B2	Independent user	B2	Independent user	A2	Basic user	A2	Basic user

Social skills and competences	<ul style="list-style-type: none"> - team work: I founded a research team (in average 15 members) which is 45 years old and still performing; as head of this research group I constantly won projects at competitions and I assured cooperations with other research groups within the projects, international cooperation included. - I was, 6 years director of my research institute which had 830 members (categories of personnel: university professors, senior research scientists, PhDs, young researchers, students – thesards, technicians, workers, laborants, military); I assured the interface of my institute with institutes and institutions in Romania and other countries, with Government institutions and Romanian state authorities; I successfully head International projects (bilateral, UNDP, etc). As director of my institute I coordinated national research programs such as: lasers and applications, physical methods in pollution control, plasma physics program, lasers in life sciences, lasers applications in medicine and biology etc. - I worked in International environment for more than 8 years and particularly, between 2001 and 2006 at COST as END at EC COST Secretariat and at ESF COST Office. I coordinated COST networks including more than 3000 scientists from more than 35 COST countries, EU near neighbor countries, other countries (such as USA, Japan, China, India, Korea, Brasil, Canada, South Africa, Australia, New Zealand etc) as well.
Organisational skills and competences	<ul style="list-style-type: none"> - I organized and financed (raised funds whenever necessary) more than 220 international scientific conferences having the number of participants – function of the conference - from 10 to 900. Typically, I organized/approved and financed more than 110 COST meetings. - I organized COST strategic meetings such as: Environment and health (implying: 3 COST domains, EC DG RTD, JRC, EU Council, ESF, ESF-EMRC, ESF-LESC, NATO, EUREKA, WHO, etc), Food and Health (3 COST domains, EC DG RTD, EC DG SANCO, EC DG Agri, ESF, EU Council, EUREKA, WHO, EFSA, etc implied), COST-NATO Strategic meeting on Food Security and Safety (implying: 3 COST domains, NATO Science for Peace, EC DG RTD, ESF, JRC, etc). - Presentation of COST days in separate meetings or meetings joint with other initiatives in geographical areas such as: West Balkans, Romania joined with Republic of Moldova, Region Veneto-Padova, Region Valee de la Loire – Angers, Bulgaria, Austria etc. - Recommendation of experts to evaluate national research strategies in Spain and Romania. - As Director of my research institute I organised research laboratories dedicated to both, fundamental and applied research (small scale production included), I organised and head competitions to promote different categories of personnel, I acted as manager of the institute supervising the economical issues, I organised the institute to solve the scientific programs it was responsible for, from basic and applied research up to small scale production.
Technical skills and competences	<ul style="list-style-type: none"> - Syntheses and coordination of national research programs in Romania. - Heading of International scientific cooperation programs such as: UNDP, French-Romanian networks (Reseaux Formation-Recherche) for research and education, bilateral cooperation programs in science with Italy and Spain etc. - Syntheses concerning evaluations of research programs, COST domains and networks. - Publication of books as co-author. - Publication of one book as editor - As COST science officer, financing of publication (books included) of results by groups of scientists participating in COST networks. - Evaluation of: projects proposals and results, programmes, etc. I am currently EC expert evaluator, expert evaluator in Romania for the National Programme for Research and Development (ANCS - PNCD) and for the National Council for Scientific Research in the High Education System (CNCSIS). I am also expert/evaluator for Belgian, Polish and Portuguese research programmes and projects, as well as for COST – EU networks.
Computer skills and competences	<p>Windows, Office Pack, web sites content, coreldraw / other graphics programs, chemwind, matematica, ZOOM, SKYPE. TEAMS communication tools, etc.</p>
Artistic skills and competences	
Other skills and competences	
Driving license	

Additional information | Publications (see Annex 4)

Annexes | ANNEX 1: MEMBERSHIP OF INTERNATIONAL SOCIETIES
ANNEX 2: MEMBER OF NATIONAL & INTERNATIONAL SCIENTIFIC COMMITTEES
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ANNEX 5: WORKING STAGES ABROAD
ANNEX 6: ACADEMIC RESPONSIBILITIES
ANNEX 7: HEAD OF NATIONAL AND INTERNATIONAL PROJECTS OR EQUIVALENT
ANNEX 8: HONORS AND AWARDS:
ANNEX 9: SELECTED LIST OF COST ACTIONS/NETWORKS, ACTIVITIES AND TECHNICAL
COMMITTEES FOR WHICH I WAS RESPONSIBLE SCIENCE OFFICER

MEMBERSHIP OF INTERNATIONAL SOCIETIES

1. Centro Superiore di Logica e Scienze Comparate, Bologna, Italy; since 1972.
2. Romanian Society for Physics; since 1980.
3. Romanian Society for Lasers in Medicine and Biology; founding member in 1995. President between 1995 and 2001.
4. European Physical Society; since 1983.
5. SPIE; since 1990.
6. European Optical Society; since 1992.
7. European Medical Laser Association; member between 1997 and 2000 and Vicepresident between 1999 and 2000.
8. World Association for Laser Therapy; member since 1999.
9. International Academy for Lasers in Medicine, Florence, Italy; founding member in 2000 and member since 2000.
10. Romanian Academy of Medical Sciences since 2001.
11. International Society of Lasers in Medicine and Surgery, München, (Member of the Executive Board elected for the period 2005 – 2007).
12. WALA - World Association for Lasers Applications, Saudi Arabia (Member of the Board of Directors); since 2007.
13. Liaison Science Officer between COST BMBS and ESF – PESC DOMAIN COMMITTEES: 2007 – 2009
14. Scientific Committee of NESA (New European Surgery Academy), Berlin/Vienna/Frankfurt Am Oder, EU, since 2009.
15. French Academy for Central Europe, since 2010 and Head of the Technical Sciences Section, since 2012.
16. European Laser Association–ELA (Member of the Executive Board); since 2016.
17. Optical Society of America, since 2016.

ANNEX 2

MEMBER OF NATIONAL & INTERNATIONAL SCIENTIFIC COMMITTEES (Selection list)

1. International Scientific Committee, IVth International Conference on Luminescence, Szeged, Hungary, 1982.
2. International Scientific Committee of Trends in Quantum Electronics (TQE), 1985 and 1988, Bucharest, Romania.
3. International Scientific Committee of the VIth Int. Workshop on Ultrafast Phenomena in Spectroscopy '89, Neubrandenburg, Germany, 1989.
4. Organizer and member of the Scientific Committee of the French-Romanian Workshop "Lasers Applications in Biology", Bucharest, 1995.
5. International Scientific Committee, IInd Italian-Hungarian Workshop on "Laser Applications in Medicine", Pecs, 1998.
6. International Scientific Committee, VIth Symposium on Analytical Sciences, Valencia, 1998.
7. International Scientific Committee, Chairman of the Org. Committee, VIth Conf. of the European Medical Laser Association, Bucharest, 1998.
8. International Scientific Board and Laser Physics tutorial course director, 1st International Meeting Laser Florence '98, Florence, 1998.
9. International Scientific Committee, VIIth Symposium on Analytical Sciences, Prague, 1999.
10. International Scientific Board and Laser Physics course director, 2nd International Meeting Laser Florence '99, Florence, 1999.
11. International Scientific Committee, 3rd World Association for Laser Therapy, Athens, 2000.
12. Program Committee, 6th ROMOPTO Conference, Bucharest, 2000, 2003, 2006, 2009, 2012.
13. International Scientific Board and Laser Physics course director, 3rd International Meeting Laser Florence 2000, Florence, 2000.
14. Co-chairman of the 14th International Conference on Lasers in Medicine (ICLM), Florence, 2000.
15. International Scientific Committee, VIIth Conference of the European Medical Laser Association, Dubrovnik, Croatia, 2000.
16. International Scientific Board and Laser Physics course director, 4th International Meeting Laser Florence 2001, Florence, 2001.
17. Co -chairman of the 15th International Conference on Lasers in Medicine (ICLM), Florence, 2001.
18. International Advisory Board, IVth World Association for Laser Therapy Congress, Kansas City, USA, 2002.
19. Co-chairman of the 16th International Conference on Lasers in Medicine (ICLM), Florence, 2002.
20. Co-chairman of the 17th International Conference on Lasers in Medicine (ICLM), Florence, 2003.
21. Co-chairman of the 18th International Conference on Lasers in Medicine (ICLM), Florence, 2004.
22. Seventh International Conference of Anticancer Research, member of Organizing Committee, Corfu, Greece, 2004.
23. International Scientific Board of the 19th International Conference on Lasers in Medicine (ICLM), Florence, 2005.
24. International Scientific Board of the 20th International Conference on Lasers in Medicine (ICLM), Florence, 2006.
25. Organizer/participant in more than 200 COST scientific meetings (from Sept. 2001 to Nov. 2006) boards which I also approved for financing.
26. International Scientific Board of the the 21st Int. Conference on Lasers in Medicine (ICLM), Florence, 2007.
27. International Scientific Board of the the 22th Int. Conference on Lasers in Medicine (ICLM), Florence, 2008.
28. Member of the International Scientific Committee of the 23rd Conference on Lasers in Medicine LASER FLORENCE, Florence, 2009.
29. Member of the International Scientific Committee of the 3rd International Conference on Anti-Aging, AMAA-2009, Eforie Nord, Romania, 2009.
30. Member of the International Scientific Committee of the Yearly Conference of the European network COST BM0701- ATENS, Dublin, 2009.
31. Member of the Programme Committee of the "Micro-to Nano-Photonics II - ROMOPTO 2009", ROMOPTO 2009 International Conference, Sibiu.
32. Member of the International Scientific Committee of the European network COST B30 – NEREPLAS, 2007 – 2010.
 - Bilbao (Spain), April 11-12, 2008 (5th MC and 4th WG Meeting)
 - Cluny (France), October 3-4, 2008 (6th MC and 5th WG Meeting)
 - Antwerp (Belgium), March 27-20, 2009 (7th MC and 6th WG Meeting)
 - Larnarca (Cyprus), October 24-25, 2009 (8th MC and 7th WG Meeting)
 - Stem Cells and Neuroregeneration, Joint meeting of the 4 Working Groups of the European COST-B30 action NEREPLAS (Neuroregeneration and Plasticity of the Brain), February 5 and 6, 2010, in Haarlem, the Netherlands.
 - Carmona (Spain), June 17-19, 2010 (9th MC and 8th WG final Meeting)
33. Member of the International Scientific Committee of the European Network COST BM0601 –NEUROMATH, 2007 – 2011.

- 2nd MC Meeting Joint WG Meeting, 2 – 5 December 2007, Rome, Italy
- 3rd MC Meeting joint with WG meetings and Workshop, 28- 29 April 2008, Dornburg/Jena, Germany
- NeuroMath Workshop, 12 – 13 March 2009, Leuven/Louvain, Belgium
- 5-th MC and WGs meeting, 10 11 September 2008, *Royal Swedish Academy of Sciences, Stockholm, Sweden.*
- 6-th MC and WG meetings 30 November – 1 December 2009, I, Limassol, Cyprus
- 35 Member of the International Scientific Committee of the European Network COST BM0605-CONSCIOUSNESS, 2007 – 2011
- COST ACTION BM0605CORE GROUP MEETING, 6 December 2007 Brussels, Belgium
- First CONFERENCE and Working Groups Meeting 3rd Management Committee, November 20-21, 2008, Gand, Belgium
- 4th Management Committee and Working Groups Meeting, 5 June 2009, Berlin, Germany
- CONSCIOUSNESS AND ITS MEASUREs, A Joint Conference by COST Actions NeuroMath and Consciousness November 29 – December 1, 2009, Limassol, Cyprus
- 36 Member of the International Scientific Committee of the European Network COST P21 – Physics of Droplets, 2006 – 2010
- 3-rd MC and WGs meeting, 11 – 14 Mai 2007, Granada, Spain
- 4th MC meeting, 13-th November 2007, Marne-la-Vallée, France
- 5th MC, Working Groups meeting and Training School, 14- 16 Mai 2008, Capri, Italy.
- COST P21 WG3-Meeting, Sept. 12th, 2008 in Erlangen, Germany
- 6-th Management Committee Meeting joint with IMPULSE - Procter & Gamble project, 16 October 2008, Brussels (Belgium)
- 7-th Conference of the MC and WGs meeting, 4 – 6 Mai, 2009, Parliament Palace, Bucharest. Member of the International Scientific Committee and Chairman of the Local Organising Committee of the Conference.
- 8th Management Committee and Working Groups meetings, 23 – 25 September 2009, Thessaloniki, Greece
- COST P21 Final MC and WG Meetings (linked to the Eufoam conference)14-15 July, 2010 (Borovets, Bulgaria)
- 37. Member of the International Scientific Committee of the European Network COST BM0701 – ATENS, 2007 – 2012; I was elected Vice-Chair of this European network.
- 2nd MC and Working Groups meeting, November 20-21nd 2008, Bruxelles, Belgium
- 3-rd Management Committee Meeting and WGs meeting, 18 – 19 May 2009, Krakow, Poland
- 4-th MC and WG meeting 10 - 11 December 2009, Dublin, Ireland
- 5-th Management Committee Meeting and WGs meeting and training school, 3 - 11 July 2010, Bremen, Germany
- Chairman of the Local Organising Committee of the final meeting of the COST Action BM0701 – ATENS, Palatul Parlamentului (Parliament Palace), Bucharest, 2012
- 38 Member of the National Platform „Food for Life” (RoTP), Bucharest, 2008-2012.
- 39 Member of the International Scientific Committee of the 24th Conference on Lasers in Medicine LASER FLORENCE, Florence, 2010.
- 40 Member of the International Scientific Committee of the 25th Conference on Lasers in Medicine LASER FLORENCE, Florence, 2011.
- 41 Member of the International Scientific Committee of SPIE – ISWLA, Bran, Romania, 2011.
- 42 Member of the International Scientific Committee of SPIE – ISCP, Sinaia, Romania, 2012.
- 43 Member of the International Scientific Committee of the 26th Conference on Lasers in Medicine LASER FLORENCE, Florence, 2012.
- 44 Member of the Programme Committee of the “Micro-to Nano-Photonics III - ROMOPTO 2012”, ROMOPTO 2012 International Conference, Bucharest.
- 45 Member of the Interantional Scientific Committee of APALMS 2011 (Japan), 2012 (Taiwan).
- 46 Member of the Management Committee of the COST Action BM1003, 2010- 2014.
- Annual Conference, october 2013, Aci Trezza, Catania, Italy.
- Final Conference, 12–16 october 2014, University of Napoli, Italy.
- 47 Member of the Management Committee of the COST Action MP1106, 2011- 2016.
- Kick-off meeting, mai 2012, Brussels, Belgium.
- Member of the International Scientific Committee of COST Action MP1106, september 2012, Dublin, Ireland.
- Annual Conference, 20–23 mars 2013, Science Academy, Prague, Czech Republic.
- Joint Working Groups meeting, Smart and Green Interfaces Conference – COST MP1106, April 22nd to 24th, 2014, Marseille, France.
- Annual Conference, September 2015, Aristotle University Thessaloniki, Greece
- Joint Working Groups meeting, march, Belgrade, Serbia
- Final meeting, may 2015, Athens, Greece
- 48 Member of the Management Committee of the COST Action MP1205, 2013- 2016.
- Annual General Meeting, 24 - 25.04.2014, Dublin, Ireland.
- WG/MC Meetings, October 2014, Buerkert Fluid Control Systems, Ingelfingen, Germany.
- Annual General Meeting, May 2015, Porto, Portugal.
- Final meeting, September 2016, Cetraro, Italy.
- 49 Member of the International Scientific Committee of SPIE – ISCP, Bran, Romania, 2013.
- 50 Member of the International Scientific Committee of the 26th Conference on Lasers in Medicine LASER FLORENCE, Florence, 2013.
- 51 Member of the International Scientific Committee of SPIE – ISCP, Orastie, Romania, 2014.
- 52 Member of the International Scientific Committee of the 27th Conference on Lasers in Medicine LASER FLORENCE, Florence, 2015.
- 53 Member of the Programme Committee of the “Micro-to Nano-Photonics IV - ROMOPTO 2015”, ROMOPTO 2015 International Conference, Bucharest.
- 54 Member of the International Scientific Committee of the 27th Conference on Lasers in Medicine LASER FLORENCE, Florence, 2017.
- 55 Member of International Scientific Committee, Laser Florence 2019.
- 56 Member of the Management Committee of the COST Action CA 16215, 2018 – 2022
- 57 Member of International Scientific Committee, International Conference on Laser, Plasma and Radiation - Science and Technology” (ICLPR-ST), June 2022.

INTERNATIONAL JOURNAL BOARDS MEMBER (selection)

1. Editorial Board, Photomedicine and Laser Surgery (USA), since 2005
2. Editorial Board, Lasers in Medicine and Surgery (UK), since 2006.
3. Editorial Board, Letters in Drug Design & Discovery - LDDD (US), since 2006.
* Guest Editor for the Special Issue Letters in Drug Design & Discovery - LDDD (US), LDDD: vol. 8, issue 2, February 2011: Methods to Fight Multiple Drug Resistance.
4. Editorial Board, International Journal of Radiation Biology, since 2011.
5. Editorial Board, Biochemistry & Pharmacology, since 2012.
6. Editorial Board, DOVE GROUP Journals
7. Reviewer at:
 - * International Journal of Radiation Biology
 - * PLOS ONE
 - * Journal of Biophotonics
 - * Journal of Photochemistry and Photobiology
 - * MOLECULES
 - * Journal of Photochemistry and Photobiology A: Chemistry
 - * Colloids and Surfaces A: Physicochemical and Engineering Aspects
 - * European Journal of Pharmaceutical Sciences
 - * International Journal of Pharmaceutics
 - * Lasers in Medical Science
 - * Journal of Photochemistry & Photobiology, B: Biology
 - * Nanoscale Journal
8. Guest Editor of the Special Issue "Laser/Optical Spectroscopy Development and Applications", Molecules 2021, 26, <https://doi.org/10.3390/molecules>

EVALUATIONS:

1. Evaluator for the Belgian SEMAPHORE Programme: National Belgian Science Programme, since 2008 to date.
2. Evaluator as COST expert for COST domains.
3. Romanian CNCSIS Programs, since 2005.
4. Romanian ANCS Programs, since 2007.
5. EC DG RTD COST Secretariat / ESF COST Office, since 2002.
6. NINESIGMA JOURNAL, since 2003.
7. Evaluator of COST Office for new COST networks proposals, since 2010.
8. COST EXPERT since 2011.
9. Evaluator for Polish and Portuguese National Research Programmes, since 2015 to date.

PUBLICATIONS

1. PUBLICATIONS

More than 200 articles published in national or international journals out of which a **selection** is given below:

1.1 Articles (**selection**) published in international journals indexed in the ISI system:

1. **M.L. Pascu**, The relations between the equations of transformation of the Stokes parameters and the conservation of the energy of the light wave, LASER AND UNCONVENTIONAL OPTICS JOURNAL, CEAS-Sweden, 36:9-16, 1971.
2. D. Popescu, **M.L. Pascu**, C. B. Collins, B. W. Johnson, I. I. Popescu, Use of space charge amplification techniques in the absorption spectroscopy of Cs and Cs₂, PHYS REV A, 8(4): 1666-1672, 1973.
3. C. B. Collins, B. W. Johnson, D. Popescu, **M.L. Pascu**, G. Musa, I.I. Popescu, Multiphoton ionization of molecular caesium with a tunable dye laser, PHYS REV A, 8(4): 2197-2201, 1973.
4. L. Nastase, **M.L. Pascu**, G. Musa, Nanosecond currents in gas discharge device, J PHYS D APPL PPHYS, 17: 1149-1156, 1984.
5. **M.L. Pascu**, A.Pascu, G.Dumbraveanu, D. Cristu, Computer controlled dye laser spectrophotometer, J Phy. E SCI INSTRUM, 19: 54-61, 1986.
6. R. Alexandrescu, I. N. Mihailescu, I. Morjan, V. Jianu, **M.L. Pascu**, F. Bunkin, B. Lukyanchiuk, Thermochemical effects by laser irradiation of some solid compounds, PHYS STAT SOL, 104: 687-692, 1987.
7. I. Chis, A. Ciura, V. Draganescu, D. Dragulescu, D. Grigorescu, C. Grigoriu, **M.L. Pascu**, V. Velculescu, M. Abrudean, Design and performance of a high repetition rate TEA CO₂ laser, J PHYS E SCI INSTRUM., 21: 3993-3999, 1988.
8. C. Popa, V. Jianu, R. Alexandrescu, I. Morjan, **M.L. Pascu**, I. N. Mihailescu, Dehydration of some inorganic compounds by CW CO₂ laser irradiation and thermal heating: a comparative study, THERMOCHIMICA ACTA, 129: 269-276, 1988.
9. I. Gutu, **M.L. Pascu**, A new design for high power transverse flow CO₂ lasers, LASER UND OPTOELEKTRONIK, 24(2): 367-374, 1992.
10. C. Timus, M. Lazarescu, R. Medianu, **M.L. Pascu**, Optical investigations of oxygen doped GaAs, OPT APPL, XXII (3-4): 187-193, 1992.

11. M. Enescu, R. Ionescu, G. Dumbraveanu, **M.L. Pascu**, Phosphorescence lifetime studies of interactions between serum albumins and sodium dodecyl sulphate, *PHOTOCHEM PHOTOBIOLOG*, 57(2): 367-372, 1993.
12. M. Lazarescu, E. Elena, A. S. Manea, **M.L. Pascu**, C. Timus, Optical quality GaAs grown from quartz crucible, *CRYST RES TECHNOL*, 28(4): K19-K23, 1993.
13. R. Medianu, **M.L. Pascu**, I. Gutu, Coating method for VRM to be used in high power CW CO₂ laser, *PURE APPL OPT*, 3: 449-455, 1994.
14. F. Bertinotto, **M.L. Pascu**, M. A Greco, A. Staicu, Research on tunable lasers developed as spectral sources of radiation, *ROM REP PHYS*, 46: 407-412, 1994.
15. R. Stoleru, **M.L. Pascu**, A.M. Dumitras, Frequency doubling of the HeNe laser radiation at 632.8 nm, *PURE APPL OPT*, 5: 119-124, 1996.
16. C. Antipa, **M.L. Pascu**, I. V. Bruckner, A. Podoleanu, V. Stanculescu, M. Beuran, E. Ionescu, Monochromatic coherent and noncoherent infrared light comparative effects in some rheumatic diseases, *LASER SURG MED*, 8: 5-8, 1996;
17. S. Hogiu, **M.L. Pascu**, Optical and spectral properties of chlorophyll, *ROM REP PHYS*, 48(3-4): 205-218, 1996.
18. A. Staicu, **M.L. Pascu**, Remote sensing of atmospheric pollutants, *ROM REP PHYS*, 48(9-10):841-854, 1996.
19. A. Staicu, **M.L. Pascu**, I. Iova, Differential absorption measurements in laboratory on air samples containing NO₂ as pollutant substance, *ROM REP PHYS*, 48(7-8): 549-553, 1996.
20. N. Moise, **M.L. Pascu**, C. Carp, C. Volvoreanu, Laser detection of atherosclerotic tissues, *ROM REP PHYS*, 49(8-9-10): 875-905, 1997.
21. F. Bertinotto, **M.L. Pascu**, C.M. Ticos, C. Biloiu, A. M. Dumitras, Experimental tunable semiconductor lasers, *ROM REP PHYS*, 49(8-9-10): 811-827, 1997.
22. A. Staicu, **M.L. Pascu**, J.J. ter Meulen, I. Iova, Cavity ring-down spectroscopy on gas traces, *ROM REP PHYS*, 49(5-6-7): 627-638, 1997.
23. R. Stoleru, **M.L. Pascu**, A. M. Dumitras, CW UV laser radiation obtained from a HeNe laser by means of KDP crystals, *ROM REP PHYS*, 49(1-2): 67-75, 1997.
24. S. Hogiu, M. Enescu, **M.L. Pascu**, Dynamic and thermodynamic effect of glycerol on bovine serum albumin in aqueous solution: a tryptophan phosphorescence study, *J PHOTOCHEM PHOTOBIO B*, 40: 55-60, 1997.
25. **M.L. Pascu**, B. Carstocea, G. Popescu, O. Gafencu, S. Apostol, N. Moise, M. Roman, S. Hogiu, Imaging corneal cells using low power laser beams, *LASER MED. SCI.*, 13: 148-154, 1998.
26. **M.L. Pascu**, N. Moise, A. Staicu, Tunable dye laser applications in environment pollution monitoring, *J MOL STRUCT*, 598(1): 57-64, 2001.
27. **M.L. Pascu**, A. Staicu, L. Voicu, S. Truica, R.A. Pascu, B. Carstocea, D. Gazdaru, Spectral properties of methotrexate to be used as photosensitizing substance, *ANTICANCER RES*, 24: 2925-2930, 2004.
28. **M.L. Pascu**, M. Brezeanu, L. Voicu, A. Staicu, B. Carstocea, R.A. Pascu, 5-Fluorouracil as a photosensitizer, *IN VIVO*, 19: 215-220, 2005.
29. C. Ticos, I.R. Andrei, **M.L. Pascu**, Power drop-out control by optical phase modulation in a chaotic semiconductor laser, *J OPT SOC AM B*, 23(12): 2486-2493, 2006.
30. R. A. Pascu, M. Trifu, M. Dumitrescu, A. Mahamoud, A. Staicu, B. Carstocea, **M.L. Pascu**, In vivo studies of the effects of alkyl substituted benzo[b]pyridinium compounds exposed to optical radiation, *ROM REP PHYS*, 3: 899-908, 2008.
31. R. Fumarel, G. Murgoci, P. Albert, A. Hurduc, **M.L. Pascu**, Increase of Cisplatin therapeutical index through optical irradiation: a case study of choroidal metastasis, *ROM REP PHYS*, 3: 877-884, 2008.
32. A. Pascu, M. O. Romanitan, J.M. Delgado, L. Danaila, **M.L. Pascu**, Laser induced fluorescence, measurements on brain tissues *ANAT REC*, 292: 2013-2022, 2009.
33. K. Wendel, O. Väisänen, J. Malmivuo, N. G. Gencer, B. Vanrumste, P. Durka, R. Magjarević, Selma Supek, **M.L. Pascu**, H. Fontenelle, R. G. de Peralta Menendez, EEG/MEG Source Imaging: Methods, Challenges, and Open Issues, *COMPUT INTEL NEUROSC*, 656092 2009.
34. R.A. Pascu, M. Trifu, M. Dumitrescu, A. Mahamoud, A. Staicu, M. Dicu, B. Carstocea, **M.L. Pascu**, In vivo studies of the effects of alkyl substituted Benzo[b]pyridinium compounds exposed to optical radiation (II), *J OPTOELECTRON ADV M-SYMPOSIA*, 1(4): 761-766, 2009.
35. R. Fumarel, G. Murgoci, P. Albert, A. Hurduc, **M.L. Pascu**, Increase of Cisplatin therapeutic index through optical irradiation, *J OPTOELECTRON ADV M-SYMPOSIA*, 1(4): pg. 754-760, 2009.
36. R.G. Fumarel, P. Albert, A. Hurduc, N. Stafidov, **M.L. Pascu**, Studies on the pharmacokinetics of methotrexate by scintigraphic monitoring of [^{99m}Tc] pteridinic derivatives biodistribution, *LETT DRUG DES DISCOV*, 7(2): 98-101, 2010.
37. **M.L. Pascu**, I. R. Andrei, M. Ferrari, A. Smarandache, A. Staicu, A. Mahamoud, V. Nastasa, L. Liggieri, Laser beams resonant interaction with micro-droplets which have a controlled content, *COLLOID SURFACE A*, 365(1-3): 83-88, 2010.
38. J. Chevalier, A. Mahamoud, M. Baitiche, E. Adam, M. Viveiros, A. Smarandache, A. Militaru, **M.L. Pascu**, L. Amaral, J.-M. Pagès, Quinazoline derivatives are efficient chemosensitizers of antibiotic activity in *Enterobacter aerogenes*, *Klebsiella pneumoniae* and *Pseudomonas aeruginosa* resistant strains, *INT J ANTIMICROB AG*, 36(2): 164-168, 2010.
39. **M.L. Pascu**, A. Pascu, A. Staicu, I.R. Andrei, V. Nastasa, Tunable lasers at the Laser Spectroscopy Group: short form history from the beginnings to date, *ROM REP PHYS*, 62(3): 455-480, 2010.
40. A. Smarandache, M. Trelles, **M.L. Pascu**, Measurement of the modifications of Polidocanol absorption spectra after exposure to NIR laser radiation *J OPTOELECTRON ADV M*, 12 (9): 1942 – 1945, 2010.
41. V. Nastasa, V. Pradines, I.R. Andrei, M. Boni, **M.L. Pascu**, R. Miller, Studies about the generation and characterisation of microdroplets with a controlled content, *J OPTOELECTRON ADV M-Rapid Communications*, 4(11): 1916b-1919, 2010.
42. I.R. Andrei, C. Ticos, M. Bulinski, **M.L. Pascu**, Chaotic behaviour in the emission of semiconductor lasers optically coupled with an external cavity, *J OPTOELECTRON ADV M*, 12(1): 63-67, 2010.
43. **M.L. Pascu**, A. Smarandache, M. Boni, J. Kristiansen, V. Nastasa, and I. R. Andrei, Spectral properties of molecular solutions, *ROM REP PHYS*, 36: 1267-1284, 2011.
44. J.M. Pagès, **M.L. Pascu**, L. Amaral, B. Luisi, G. Hajós, S. Fanning, P. Henderson, "BM0701: Antibiotic transport and efflux: New strategies to combat bacterial resistance (ATENS)", *LETT DRUG DES DISCOV*, 8(2): 101, 2011.
45. **M.L. Pascu**, Hot Topic Progress in Fighting the Multidrug Resistance of Bacteria to Treatment: Editorial, *LETT DRUG DES DISCOV*, 8(2): 100, 2011.
46. A. Militaru, A. Smarandache, A. Mahamoud, S. Alibert, **M.L. Pascu**, Time stability studies of quinazoline derivative designed to fight drug resistance acquired by bacteria, *LETT DRUG DES DISCOV*, 8(2):124-129, 2011.

47. V. Nastasa, K. Samaras, I.R. Andrei, **M.L. Pascu**, T. Karapantsios, Study of the formation of micro and nano-droplets containing immiscible solutions, *COLLOID SURFACE A*, 382: 246–250, 2011.
48. C.M. Ticos, I.R. Andrei, **M.L. Pascu**, M. Bulinski, Experimental control of power dropouts by current modulation in a semiconductor laser with optical feedback, *PHYS SCR*, 83: 055402, 2011
49. **M.L. Pascu**, V. Nastasa, A. Smarandache, A. Militaru, A. Martins, M. Viveiros, M. Boni, I.R. Andrei, A. Pascu, A. Staicu, J. Molnar, S. Fanning, L. Amaral, Direct Modification of Bioactive Phenothiazines by Exposure to Laser Radiation: RECENT PAT ANTIINFECT DRUG DISCOV, 6(2): 147-157, 2011.
50. **M.L. Pascu**, G.V. Popescu, C.M. Ticos, I.R. Andrei, Unresonant interaction of laser beams with microdroplets, *J EUR OPT SOC-RAPID COM*, 7: 12001, 2012.
51. A. Smarandache, J. Kristiansen, **M.L. Pascu**, Optical Studies of the Spectral Properties of Phenothiazines, *LETT DRUG DES DISCOV*, 9(4):352–360, 2012.
52. M. Boni, A. Smarandache, V. Nastasa, A. Militaru, A. Staicu, I.R. Andrei, **M.L. Pascu**, Laser beams interaction with liquids in optofluidic experiments, *ROM REP PHYS*, 64: 1179–1194, 2012.
53. A. Hunyadi, B. Danko, M. Boni, A. Militaru, T. Alexandru, V. Nastasa, I.R. Andrei, **M.L. Pascu**, L. Amaral, Rapid, Laser-Induced Conversion of 20-Hydroxycodone and its Diacetone - Experimental Set-up of a System for Photochemical Transformation of Bioactive Substances, *ANTICANCER RES*, 32 (4), 1291–1297, 2012.
54. A. Staicu, I. Apostol, A. Pascu, I. Iordache, V. Damian, **M.L. Pascu**, Laser induced breakdown spectroscopy stratigraphic characterization of multilayered painted surfaces, *SPECTROCHIM ACTA B*, 151: 4–75, 2012.
55. G. Keglevich, **M.L. Pascu**, G. Naray-Szabo, A Tribute to a Living Legend, *LETT DRUG DES DISCOV*, 9(7): 643-644, 2012.
56. A. Dinache, M. Boni, **M.L. Pascu**, Phenothiazine derivatives interaction with laser radiation, *ROM REP PHYS*, 65(3):1078-1091, 2013.
57. A. Staicu, A. Pascu, M. Boni, **M.L. Pascu**, M. Enescu, Photophysical study of Zn phthalocyanine in binary solvent mixtures, *J MOL STRUCT*, 1044:188-193, 2013.
58. J. Moreno-Moraga, E. Hernández, J. Royo, J. Alcolea, M.J. Isarría, **M.L. Pascu**, A. Smarandache, M. Trelles, Optimal and safe treatment of spider leg veins measuring less than 1.5 mm on skin type IV patients, using repeated low-fluence Nd: YAG laser pulses after polidocanol injection, *LASER MED SCI*, 28(3): 925-933, 2013.
59. **M.L. Pascu**, B. Danko, A. Martins, N. Jedlinski, T. Alexandru, V. Nastasa, M. Boni, A. Militaru, I.R. Andrei, A. Staicu, A. Hunyadi, S. Fanning, L. Amaral, Exposure of chlorpromazine to 266 nm laser beam generates new species with antibacterial properties: contributions to development of a new process for drug discovery, *PLOS ONE*, 8(2): e55767, 2013.
60. I.R. Andrei, G.V. Popescu, **M.L. Pascu**, Optical spectrum behaviour of a coupled laser system under chaotic synchronization conditions, *J EUR OPT SOC-RAPID COM*, 8:13054, 2013
61. A.M. Armada, T. Alexandru, D. Machado, B. Danko, A. Hunyadi, A. Dinache, V. Nastasa, M. Boni, J. Ramos, M. Viveiros, J. Molnar, **M.L. Pascu**, L. Amaral, The in vitro activity of products formed from exposure of Chlorpromazine to a 266nm laser beam against species of Mycobacteria of human interest, *IN VIVO*, 27(5): 605-610, 2013.
62. A. Simon, T. Alexandru, M. Boni, V. Damian, A. Stoicu, V. Dutschk, **M.L. Pascu**, Interaction of solutions containing phenothiazines exposed to laser radiation with materials surfaces, in view of biomedical applications, *INT J PHARMACEUT*, 475(1–2): 270–281, 2014.
63. V. Nastasa, K. Samaras, **M.L. Pascu**, T.D. Karapantsios, Moderately stable emulsions produced by a double syringe method, *COLLOID SURFACE A*, 460: 321-326, 2014.
64. W.-C. Lai, B. Dankó, J. Csábi, Z. Kele, F.-R. Chang, **M.L. Pascu**, T. Gáti, A. Simon, L. Amaral, G. Tóth, A. Hunyadi, Rapid, laser-induced conversion of 20-hydroxycodone—A follow-up study on the products obtained, *STEROIDS*, 89: 56-62, 2014.
65. J. Moreno-Moraga, A. Smarandache, **M.L. Pascu**, J. Royo, M.A. Trelles, 1064 nm Nd: YAG long pulse laser after polidocanol microfoam injection dramatically improves the result of leg vein treatment: A randomized controlled trial on 517 legs with a three-year follow-up, *PHLEBOLOGY*, 29(10):658-666, 2014.
66. A. Dinache, M. Boni, T. Alexandru, E. Radu, A. Stoicu, I.R. Andrei, A. Staicu, L. Liggieri, V. Nastasa, **M.L. Pascu**, L. Ferrari, Surface properties of Vancomycin after interaction with laser beams; *COLLOID SURFACE A*, 450: 328-335, 2015.
67. T. Alexandru, A. Staicu, A. Pascu, E. Radu, A. Stoicu, V. Nastasa, A. Dinache, M. Boni, L. Amaral, **M.L. Pascu**, Characterization of mixtures of compounds produced in Chlorpromazine aqueous solutions by UV laser irradiation: their applications in antimicrobial assays, *J BIOMED OPT*, 20(5): 051002, 2015.
68. M.C. Morán, T. Tozar, A. Simon, A. Dinache, A. Smarandache, I.R. Andrei, M. Boni, **M.L. Pascu**, F. Cirisano, M. Ferrari, Toxicity study in blood and tumor cells of laser produced medicines for application in fabrics, *COLLOID SURFACE B*, 137: 91-103, 2016.
69. I.R. Andrei, T. Tozar, A. Dinache, M. Boni, V. Nastasa, **M.L. Pascu**, Chlorpromazine transformation by exposure to ultraviolet laser beams in droplet and bulk"; *EUR J PHARM SCI*, 81: 27-35, 2016.
70. M. Boni, V. Nastasa, A. Staicu, I.R. Andrei, **M.L. Pascu**, Characterisation of fluorescent pendant droplets, *ROM REP PHYS*, 67(4):1278-1287, 2015.
71. A. Staicu, A. Pascu, V. Nastasa, **M.L. Pascu**, Photophysics of covalent functionalized single walled carbon nanotubes with a porphyrin-type photosensitizer, *ROM REP PHYS*, 67(4): 1457-1466, 2015.
72. A. Smarandache, A. Staicu, V. Nastasa, J. Moreno-Moraga, J.R. De La Torre, M. Trelles, **M.L. Pascu**, Physical properties of laser irradiated sclerosing foams, *ROM REP PHYS*, 67(4):1480-1490, 2015.
73. **M.L. Pascu**, Meet the Editorial Board Member Prof. Mihail Lucian Pascu, *LETT DRUG DES DISCOV*; 12(5):343-343, 2015.
74. T. Tozar, A. Stoicu, E. Radu, **M.L. Pascu**, Evaluation of thin layer chromatography image analysis method for irradiated chlorpromazine quantification, *ROM REP PHYS*, 67(4): 1608-1615, 2015.
75. V. Nastasa, K. Samaras, Ch. Ampatzidis, T.D. Karapantsios, M.A. Trelles, J. Moreno-Moraga, A. Smarandache, **M.L. Pascu**, Properties of polidocanol foam in view of its use in sclerotherapy, *EUR J PHARM SCI*, 478: 588–596, 2015.
76. M. Boni, V. Nastasa, I. R. Andrei, A. Staicu, **M.L. Pascu**, Enhanced fluorescence emitted by microdroplets containing organic dye emulsions, *BIOMICROFLUIDICS*, 9: 014126, 2015.

77. A. Smarandache, V. Nastasa, M. Boni, A. Staicu, J. Handzlik, K. Kiec-Kononowicz, L. Amaral, **M.L. Pascu**, Laser beam resonant interaction of new hydantoin derivatives droplets for possible biomedical applications; COLLOID SURFACE A; 505: 37–46, 2016.
78. A. Smarandache, A. Pascu, I.R. Andrei, J. Handzlik, K. Kiec-Kononowicz, A. Staicu, **M.L. Pascu**, Study of the optical properties of 2-thiohydantoin derivatives, ROM REP PHYS, 68(2): 673–683, 2016.
79. V. Nastasa, A. Pascu, M. Boni, A. Smarandache, A. Staicu, **M.L. Pascu**, Insights into the photophysics of zinc phthalocyanine and photogenerated singlet oxygen in DMSO-water mixture, COLLOID SURFACE A, 505: 197-203, 2016.
80. T. Alexandru, A. Staicu, A. Pascu, A. Dinache, A. ben Abdeladhim, M. Enescu, A. Khatyr, **M.L. Pascu**, Light cleavage of some potential linkers for drug carriers, ROM REP PHYS, 68(2):684-692, 2016.
81. A. Staicu, I. Apostol, A. Pascu; I. Urzica; **M.L. Pascu**, V. Damian; Minimal invasive control of paintings cleaning by LIBS, OPT LASER TECHNOL, 77:187-192, 2016.
82. B. Sjöberg, S. Foley, A. Staicu, A. Pascu, **M.L. Pascu**, M. Enescu, Protein reactivity with singlet oxygen: Influence of the solvent exposure of the reactive amino acid residues, J PHOTOCH PHOTOBIO B, 159:106-110, 2016.
83. A. Smarandache, M. Boni, I.R. Andrei, J. Handzlik, K. Kiec-Kononowicz, A. Staicu, **M.L. Pascu**, Spectroscopic investigations of novel pharmaceuticals: stability and resonant interaction with laser beam, APPL SURF SCI, 2017, DOI: 10.1016/j.apsusc.2017.01.227.
84. M. Boni, A. Staicu, I.R. Andrei, A. Smarandache, V. Nastasa, M. Comor, Z. Saponjic, **M.L. Pascu**, Studies on laser induced emission of microdroplets containing Rhodamine 6G solutions in water doped with TiO₂ nanoparticles, COLLOID SURFACE A, 519, 238-244, 2017, DOI: 10.1016/j.colsurfa.2016.07.033
85. A. Dinache, A. Smarandache, A. Simon, V. Nastasa, T. Tozar, A. Pascu, M. Enescu, A. Khatyr, F. Sima, M.L. Pascu, A. Staicu, Photosensitized cleavage of some olefins as potential linkers to be used in drug delivery, APPL. SURF. SCI., <http://doi.org/10.1016/j.apsusc.2017.03.177>, 2017.
86. A. Staicu, A. Smarandache, A. Pascu, M.L. Pascu, Photophysics of covalently functionalized single wall carbon nanotubes with verteporfin, APPL. SURF. SCI., <http://doi.org/10.1016/j.apsusc.2017.03.031>, 2017.
87. T.Tozar, A. Smarandache, **M.L.Pascu**, R.A. Pirvulescu, Laser modified phenothiazines and hydantoins: photo-products characterisation and application on animal eyes pseudo-tumours, LETTERS IN DRUG DESIGN & DISCOVERY, 15(6): 687-697 (2018).
88. A. Smarandache, R. Moeller, **M.L. Pascu**, "Uv-Vis and FTIR Spectroscopic Investigations of Gamma-Ray Irradiated Antibiotics", ROM REP PHYS, 70(3), 602, 2018.
89. I. R. Andrei, M. Boni, A. Staicu, **M. L. Pascu**, Lasing of optically pumped large droplets: instant and gradual blueshift, JOSA B, 35, 8, p. 1950-1955, 2018.
90. T. Tozar, I.R. Andrei, R. Costin, R.A. Pirvulescu, **M.L. Pascu**, Case series about ex vivo identification of squamous cell carcinomas by laser induced autofluorescence and Fourier transformed infrared spectroscopy, LASERS IN MEDICAL SCIENCE 33, (4) 861-869, 2018.
91. M. Boni, Angela Staicu, I.R. Andrei, Adriana Smarandache, V. Nastasa, Z. Saponjic, **M.L. Pascu**, TiO₂ nanoparticles influence on Rhodamine 6G droplet emission, Romanian Reports in Physics, Rom. Rep. Phys. 70, 513, 2018.
92. P.C. Logofatu, V. Damian, T. Vasile, **M.L. Pascu**, Two instances of image super-resolution using sensor raster scanning and deconvolution, ROM REP PHYS, 71, 401, 2019.
93. J. Moreno-Moraga, M.L. Pascu, J.M. Alcolea, A. Smarandache, J. Royo, F. David, M.A. Trelles, Effects of 1064-nm Nd: YAG long-pulse laser on polidocanol microfoam injected for varicose vein treatment: a controlled observational study of 404 legs, after 5-year-long treatment, Lasers in Medical Science, 34(7), 1325-1332, 2019. <https://doi.org/10.1007/s10103-019-02736-1>
94. A. Dinache, A. Smarandache, I. R. Andrei, I. Urzica, C. Nichita, M. Boni, V. Nastasa, **M.L. Pascu**, Laser assisted generation of micro/nanosize emulsions, COLLOIDS AND SURFACES: A: Physicochemical and Engineering Aspects, 577, pp. 265-273 (2019).journal homepage: www.elsevier.com/locate/colsurfa.
95. Boni M; Andrei, IR; Pascu, ML; Staicu, A; "Fluorescence and Time-Delayed Lasing during Single Laser Pulse Excitation of a Pendant mm-Sized Dye Droplet", Molecules 24(24), 4464 (2019).
96. C. Onea, P.E. Sterian, I.R. Andrei, M.L. Pascu, High frequency chaotic dynamics in a semiconductor laser with double-reflector selective cavity, University Politehnica of Bucharest Scientific Bulletin-series A-Applied Mathematics and Physics, Vol. 81, iss. 4, pp.261-270 (2019).
97. Tozar, T; Nastasa, V; Stoicu, A; Popa, M; Karmezan, C; Chifiriuc, MC; Pascu ML; "In vitro antimicrobial efficacy of laser exposed chlorpromazine against Gram-positive bacteria in planktonic and biofilm growth state", Microbial Pathogenesis, 129:250-256 (2019).
98. Spectroscopic Characterization of Emulsions Generated with a New Laser-Assisted Device, Andra Dinache, Tatiana Tozar, Adriana Smarandache, Ionut Relu Andrei, Simona Nistorescu, Viorel Nastasa, Angela Staicu, Mihail-Lucian Pascu and Mihaela Oana Romanitan, Molecules 2020, 25(7), 1729; <https://doi.org/10.3390/molecules25071729> - 09 Apr 2020
99. Laser irradiated phenothiazines: New potential treatment for COVID-19 explored by molecular docking, Ana-Maria Udrea, Speranta Avram, Simona Nistorescu, Mihail-Lucian Pascu, Mihaela Oana Romanitan, Journal of Photochemistry and Photobiology B: Biology, Vol. 211, October 2020, 111997; <https://doi.org/10.1016/j.jphotobiol.2020.111997>.
100. Laser induced autofluorescence lifetime to identify larynx squamous cell carcinoma: Short series ex vivo study Tatiana Tozara, Ionut Relu Andrei, Romeo Costin, Mihail Lucian Pascu, Ruxandra Pirvulescu, Journal of Photochemistry and Photobiology B: Biology, Volume 202, January 2020, 111724; <https://doi.org/10.1016/j.jphotobiol.2019.111724>
101. Scattering resonances observed in the lasing emission spectrum of large dye-doped droplets, Ionut-Relu Andrei, Mihai Boni, Angela Staicu, Mihail Lucian Pascu, Optics & Laser Technology 140 (2021) 107088; <https://doi.org/10.1016/j.optlastec.2021.107088>
102. Spectroscopic Characterization of Emulsions Generated with a New Laser-Assisted Device, Andra Dinache, Tatiana Tozar, Adriana Smarandache, Ionut Relu Andrei, Simona Nistorescu, Viorel Nastasa, Angela Staicu, Mihail-Lucian Pascu, Mihaela Oana Romanitan, Molecules 2020, 25, 1729; doi:10.3390/molecules 25071729.
103. Editorial: Trends in Optical/Laser Spectroscopy and Applications Mihail Lucian Pascu, Molecules 2021, 26, 1929; <https://doi.org/10.3390/molecules26071929>.

104. Stability of Antimicrobial Drug Molecules in Different Gravitational and Radiation Conditions in View of Applications during Outer Space Missions, Agota Simon, Adriana Smarandache, Vicentiu Iancu, Mihail Lucian Pascu, *Molecules* 2021, 26, 2221. <https://doi.org/10.3390/molecules26082221>.
105. Ana-Maria Udrea, Speranta Avram, Simona Nistorescu, Mihail-Lucian Pascu, Mihaela Oana Romanitan, Laser irradiated phenothiazines: New potential treatment for COVID-19 explored by molecular docking, *J. Photochem. and Photobiol. B: Biology*, Vol. 211, Oct. 2020, 111997. <https://doi.org/10.1016/j.jphotobiol.2020.111997>.
106. Ágota Simon, Adriana Smarandache, Tatiana Tozar, Ionuț Relu Andrei, Alexandru Stoicu, Jack J.W.A.van Loon, Alan Dowson, Mihail Lucian Pascu, Photoactive chlorpromazine and promazine drugs exposed to hypergravity conditions after interaction with UV laser radiation, *Acta Astronautica*, Vol. 189, Dec. 2021, Pages 260-268 <https://doi.org/10.1016/j.actaastro.2021.08.038>.
107. Andra Dinache, Mihail – Lucian Pascu, Adriana Smarandache, Spectral Properties of Foams and Emulsions, *Molecules* 2021, 26, 7704. <https://doi.org/10.3390/molecules26247704>.
108. Agota Simon, Adriana Smarandache, Vicentiu Iancu, Mihail Lucian Pascu, Stability of Antimicrobial Drug Molecules in Different Gravitational and Radiation Conditions in View of Applications during Outer Space Missions. *Molecules* 2021, 26, 2221. <https://doi.org/10.3390/molecules26082221>.
109. Tatiana Tozar, Mihai Boni, Angela Staicu, Mihail Lucian Pascu, Optical Characterization of Ciprofloxacin Photolytic Degradation by UV-Pulsed Laser Radiation. *Molecules* 2021, 26, 2324. <https://doi.org/10.3390/molecules26082324>
110. Ionut-Relu Andrei, Mihai Boni, Angela Staicu, Mihail Lucian Pascu, Scattering resonances observed in the lasing emission spectrum of large dye-doped droplets, *Optics & Laser Technology* 140 (2021) 107088; <https://doi.org/10.1016/j.optlastec.2021.107088>.
111. Foams and Emulsions, Andra Dinache, Adriana Loredana Smarandache, Mihail Lucian Pascu, "Biopharmaceuticals Technology": Physics, Atomic, Molecular & Chemical, 2022
112. Simon, Á.; Tozar, T.; Smarandache, A.; Boni, M.; Stoicu, A.; Dowson, A.; van Loon, J.J.W.A.; Pascu, M.L. Stability Studies of UV Laser Irradiated Promethazine and Thioridazine after Exposure to Hypergravity Conditions. *Molecules* 2022, 27, 1728. <https://doi.org/10.3390/molecules27051728>.
113. A. Sima, P. C. Logofatu, M. L. Pascu, I. Nicolae, Monitoring droplet evaporation via Real-time digital holographic interferometry using a phase only spatial light modulator, *Rom.Rep.Phys.*, vol.74, 402, 2022.

1.2 Papers published in reviews of the Romanian Academy of Sciences or equivalent (selection):

1. **M.L. Pascu**, The significance and the transformation equations of the Stokes parameters, *ST CERC FIZ*, 24(2): 253-264, 1972.
2. **M.L. Pascu**, Studiul optic al ionilor moleculari in plasma, (abstract of PhD Thesis), *ST CERC FIZ*, 29(4): 363-401, 1977 (Rom. language).
3. **M.L. Pascu**, A. Pascu, A. Constantinescu, G. Dumbraveanu, Comparative characteristic study of several types of nitrogen lasers, *REV ROUM PHYS*, 23(6): 569-578, 1978.
4. **M.L. Pascu**, A. Pascu, A. Constantinescu, G. Dumbraveanu, Time dependence analysis of nitrogen laser pulses, *REV ROUM PHYS*, 23(9): 1041-1048, 1978.
5. **M.L. Pascu**, A. Pascu, A. Constantinescu, G. Dumbraveanu, Time behaviour of nitrogen laser pumped dye laser pulses, *REV ROUM PHYS*, 23(10): 1121-1129, 1978.
6. **M.L. Pascu**, A. Constantinescu, L. Nastase, G. Dumbraveanu, G. Musa, SHG ultraviolet tunable laser driven by a dye laser, *REV ROUM PHYS.*, 27(6-7): 621-624, 1982.
7. Dang Thi Mai, **M.L. Pascu**, G. Dumbraveanu, Rubidium atomic absorption data using tunable dye lasers, *REV ROUM PHYS*, 27(6-7): 659-665, 8, 1982.
8. L. Nastase, **M.L. Pascu**, G. Musa, Nanosecond rise time in a gas filled phototube. The possible use of a gas discharge device to detect ultrafast electromagnetic signals, *REV ROUM PHYS*, 27(9): 982-991, 1982.
9. **M.L. Pascu**, A. Pascu, G. Dumbraveanu, M. Caprini, H. Bozdoc, A. Rusu, D. Cristu, M. Munteanu, The use of tunable dye lasers in spectrophotometry, *ST CERC FIZ*, 37(6-8): 576-587, 1985.
10. I. Schiketank, A. Schiketanz, M. Gheorghiu, **M.L. Pascu**, A. Vasile, A.T. Balaban, Aminoketone and oxazole synthesis. VIII acylaminoacylations using azlactones of fluoro-substituted hippuric acids and 2,5-diaryloxazoles derived therefrom, *REV ROUM CHIM*, 30(11-12): 969-975, 1985.
11. **M.L. Pascu**, A. Pascu, G. Dumbraveanu, M. Enescu, M. Munteanu, Tunable dye laser for spectroscopy applications, *REV ROUM PHYS*, 33(4-6): 787-790, 1988.
12. C. Timus, R. Medianu, **M.L. Pascu**, M. Lazarescu, E. Ivan, Comportarea componentelor optice in laseri de mare putere, *ST CERC FIZ*, 40(6-7): 561-566, 1988 (Rom. language).
13. **M.L. Pascu**, A. Pascu, Unele aplicatii ale laserilor acordabili, *ST CERC FIZ*, 40(6-7): 567-573, 1988 (Romanian language).
14. **M.L. Pascu**, C. Gaucan, V. Vasiliu, M. Enescu, A. Pascu, Echipamente utilizate in biostimularea stomatologica, *ST CERC FIZ*, 40(6-7): 609-612, 1988 (Romanian language).
15. **M.L. Pascu**, I. Caragicu, A. Pascu, G. Dumbraveanu, D. Cristu, M. Enescu, Laser measurements of residual water pollution, *ST CERC FIZ*, 41(6): 633-640, 1989.
16. C. Timus, R. Medianu, **M.L. Pascu**, V. Stancalie, R. Buzelis, A. Dementjev, E. Maldutis, Morphology of 10.6 μm laser induced damages in GaAs, *REV ROUM PHYS*, 34(7-9): 925-930, 1989.
17. **M.L. Pascu**, N. Moise, A. Smarandache, Laser induced fluorescence of oil components in water, *ROM J PHYS*, 43(1-2): 169-180, 1998.
18. A. Staicu, **M.L. Pascu**, L. Voicu, A. Popescu, L. Danaila, R. Ion, FTIR studies on methaloporphyrins used in Photodynamic Therapy, *ROM J BIOPHYS*, 10(3-4): 137-144, 1999.
19. L. Danaila, **M.L. Pascu**, Photodynamic therapy of the cerebral malignant tumors, *ROM JBIOPHYS*, 10(3-4): 145- 152, 1999.
20. **M.L. Pascu**, Trends in medical laser equipment, *ROM J BIOPHYS*, 10(3-4): 101-110, 1999.

21. M. Bulinski, **M.L. Pascu**, A. Mardare, Encoded communications with synchronized semiconductor lasers, ROM REP PHYS, 53(3-4): 489-498, 2001.
22. M. Bulinski, **M.L. Pascu** Chaos in laser diode light emission, ROM J OPTOELECTRONICS, 9(2):1-34, 2001.
23. M. Brezeanu, **M.L. Pascu**, B. Carstocea, D. M. Gazdaru, L. Voicu and A. Smarandache, Studies on activated fluorouracil with optical beams, for use in the eye tumours treatment, ROM REP PHYS, 55(3): 445- 450, 2003.
24. M. Bulinski, **M.L. Pascu** and I. R. Andrei, Phase synchronization and coding chaos with semiconductor lasers, J OPTOELECTRON ADV M, 6(1): 77-86, 2004.
25. I. R. Andrei, **M.L. Pascu**, M. Bulinski, The analysis of data encoding characteristics for chaotic coupling of two multimode laser diodes with external cavity, ROM REP PHYS, 57(3): 425-431, 2005.
26. R.A. Pascu, M. Trifu, M. Dumitrescu, A. Mahamound, A. Staicu, M. Dicu, B. Carstocea, **M.L. Pascu** In vivo studies of the effects of alkyl substituted Benzo[b]pyridinium compounds exposed to optical radiation, AIP CONF PROC, 1142: 8-14, 2009.
27. R. Fumarel, G. Murgoci, P. Albert, A. Hurduc, **M.L. Pascu**, Increase of Cisplatinum therapeutic index through optical irradiation, JOAM – Symposia, AIP CONF PROC, 1142: 1-7, 2009.
28. L. Danaila, **M.L. Pascu**, The neural basis of consciousness, ANNALS OF THE ACADEMY OF ROMANIAN SCIENTISTS, 1(1): 27–60, 2009.
29. **M.L. Pascu**, "The Laser Use in Generating New Species of Medicines with Antitumor and Antibacterial Properties: New Processes in Drug Discovery", BIOCHEM PHARMACOL, 2(1): 1000e111, 2013.
30. I.R. Andrei, G.V. Popescu, C.M. Ticos, **M.L. Pascu**, Optical Spectrum Analysis of Chaotic Synchronization in a Bidirectional Coupled Semiconductor Laser System, CHAOS AND COMPLEX SYSTEMS, 425-429, 2013.
31. T. Alexandru, A. Armada, B. Dankó, A. Hunyadi, A. Militaru, M. Boni, V. Nastasa, A. Martins, M. Viveiros, **M.L. Pascu**, J. Molnár, L. Amaral, Biological evaluation of products formed from the irradiation of chlorpromazine with a 266 nm laser beam, BIOCHEM PHARMACOL, 2(1): 1-4, 2013.
32. J. Moreno-Moraga, A. Smarandache, **M.L. Pascu**, Kombination von Polidocanol und Laser verbessert Outcome bei Teleangiectasien und retikulären Venen deutlich, GEFÄßMEDIZIN SCAN, 2(2):130-131, 2015.
33. L. Danaila, A.G. Vacaru, E. Craciun, **M.L. Pascu**, The division of the mental faculties in unconscious, preconscious (subconscious) and consciousness, and the neurological background of this separation, Proc. Rom. Acad., Series B, 17(3): 215–228, 2015.
34. **M.L. Pascu**, I.R. Andrei, J.-P. Delville, Laser-induced jetting and controlled droplet formation, OPTOFLUIDICS, MICROFLUIDICS AND NANOFLUIDICS, 3(1):44-48, 2016.
35. I.R. Andrei, C. Onea, P.E. Sterian, I. Ionita, **M.L. Pascu**, Control of slave chaotic dynamics by master current modulation in a chaotic coupled laser system, OAM-RC (2018).
36. T. Tozar, **M. L. Pascu**, Time-stability of laser exposed phenothiazines aqueous solutions in view of antimicrobial research, PROC ROMANIAN ACAD, Series A, Vol. 19, Number 4/2018, pp. 537–544, 2018
37. A. Smarandache, A. Staicu, A. Dinache, I. R. Andrei, R. A. Pirvulescu, **M.L. Pascu**, Optical Irradiation of Cytostatics: Photoproducts Characterization And Tests on Rabbit Eye Pseudotumors, PROC ROMANIAN ACAD, Series A, Vol 19, Number 4/2018, pp. 551–558, 2018

1.3 Papers published in University journals/reviews (selection):

1. S. Ioan, S. Constantinescu, **M.L. Pascu**, V. Simion, V. Tiron Studiul unor microprofile ale suprafetelor de mica muscovit recoltate de pe Valea Lotrului, Analele Univ. Bucuresti, Seria Fizica, 8: 58-66, 1968 (Romanian language).
2. **M.L. Pascu**, B. W. Johnson, Display Basic and a class of its applications using HP-2116 computer, ANALELE UNIV. BUCURESTI, Seria Fizica, Anul XXII: 37-56, 1973.
3. **M.L. Pascu**, PhD Thesis, Optical Study of molecular ions in Plasma, 1974, (PhD Thesis, Romanian language).
4. **M.L. Pascu**, A. Vasile, A. M. Dumitras, Peng Bai, A. Pascu, G. Dumbraveanu, Ultraviolet tunable laser, Vol. dedicated to the 25th Anniv. of the first Romanian laser, p.275-280, 1985.
5. **M.L. Pascu**, A. Pascu, I. Banacu, D. Dutu, R. Dabu, D. Stanciu, M. Filip, T. Ionescu, B. Carstocea, Noi directii de terapie cu laseri in oftalmologie, REV.SANITARA MILITARA, 2: 165-176, 1989, (Romanian language).
6. M. Enescu, R. Ionescu, G. Dumbraveanu, **M.L. Pascu**, Phosphorescence lifetime studies of interactions between Bovine Serum Albumin and Sodium Dodecyl Sulphate, LOP IFA LOP-80-1991.
7. I. Gutu, **M.L. Pascu**, New design for high power CO₂ lasers for industrial applications, LOP IFA, LOP 83-1992.
8. **M.L. Pascu**, L. Danaila, L. Voicu, A. Staicu, S. Truica, R.M. Ion, Spectroscopic characteristics of metallo-porphyrins used in photodynamic therapy, OFTALMOLOGIA, Nr. 2, 2003.
9. **M.L. Pascu**, B. Carstocea, M. Brezeanu, D. Gazdaru, L. Voicu, A. Smarandache, Studies on activated cytostatics with optical beams used in the eye tumours treatment, AN. UNIV. BUC, 2003.
10. C. Onea, P.E. Sterian, I.R. Andrei, A. Baleanu, **M.L. Pascu**, Chaotic low-frequency fluctuations of laser diode emission at injection currents above threshold, U.P.B. SCI BULL, accepted, ISSN 1223-7027, 2018.
11. I. R. Andrei, C. Onea, P.E. Sterian, I. Ionita, **M.L. Pascu**, Control of slave chaotic dynamics by master current modulation in a chaotic coupled laser system, OPTOEL & ADV MAT – RAPID COMMUNICATIONS Vol. 13, No. 5-6, p. 284-289, 2019.

1.4 Papers published in PROCEEDINGS of international scientific conferences (selection):

1. **M.L. Pascu**, A.T. Balaban, I. Badilescu, I. Bally, A. Pascu, D. Cristu, O. Hörer, Study of dyes for nitrogen laser pumping, Proc. of Laser and Appl. Int. Conf. and School (LAICS'82), p.295-296, Bucharest, 1982.
2. **M.L. Pascu**, A. Constantinescu, A. Pascu, Pulse time shape of nitrogen pulsed lasers, Proc. of Laser and Applications Int. Conference and School (LAICS'82), p. 297-298, Bucharest, 1982.
3. **M.L. Pascu**, Dang Thi Mai, G. Dumbraveanu, Principal series atomic Rubidium absorption spectroscopy with tunable dye lasers, Proc. of Laser Appl. Int. Conf. and School (LAICS'82), p. 299-300 Bucharest, 1982.

4. **M.L. Pascu**, A. Pascu, G. Dumbraveanu, S. Badilescu, D. Cristu, Tunable dye laser spectroscopy of pollutants, Proc. Laser Appl. Int. Conf. and School (LAICS'82), p.301-302, Bucharest, 1982.
5. **M.L. Pascu**, M. Zugrav, A. Pascu, L. Nastase, G. Musa, A. Constantinescu, D. Cristu, Tunable dye lasers working in ultraviolet and visible spectral ranges, Proc. of Laser Appl. Int. Conf. and School (LAICS'82), p. 303-304, Bucharest, 1982.
6. D. Sporea, N. Miron, **M.L. Pascu**, Solid-state image sensors for laser interferometry applications, Proc. SPIE vol. 1121, Interferometry '89, p.633-645, 1990.
7. **M.L. Pascu**, D. Cristu, A. Vasile, N. Moise, Pesticides monitoring in water using laser-induced fluorescence and absorption techniques, Proc of ROMOPTO'94, SPIE vol. 2461, p.648- 652, Bucharest, 1995.
8. A. Staicu, **M.L. Pascu**, D. Cristu, Differential absorption measurements of the NO₂, SO₂ atmospheric pollutants, Proc of ROMOPTO'94, SPIE vol. 2461, p.663-665, Bucharest, 1995.
9. R. Medianu, **M.L. Pascu**, I. Gutu, Behaviour of a variable-reflectivity mirror while used in industrial C.W. CO₂ laser, Proc of ROMOPTO'94, SPIE vol. 2461, p.74-76, Bucharest, 1995.
10. A.M. Dumitras, **M.L. Pascu**, R. Stoleru, Tunable laser UV-VIS radiation obtained by frequency mixing using nonlinear crystals, Proc ROMOPTO'94, SPIEvol.2461, p.325-328, Bucharest,1995.
11. S. Hogiu, **M.L. Pascu**, L. Tugulea, Study of chlorophyll a (in vitro) fluorescence induced by nitrogen pulsed laser radiation, Proc ROMOPTO'94, SPIE vol.2461, p.344-346, Bucharest, 1995.
12. N. Moise, C. Carp, **M.L. Pascu**, Laser-induced fluorescence of collagen and cholesterol, Proc of ROMOPTO'94, SPIE vol. 2461, p.386-390, Bucharest, 1995.
13. **M.L. Pascu**, St. Suteanu, P. Ignat, S. Pruna, A. Chitu, Semiconductor lasers in rheumatological treatment, Proc of ROMOPTO'94, SPIE vol. 2461, p.398-401, Bucharest, 1995.
14. **M.L. Pascu**, St. Suteanu, Semiconductor laser applications in rheumatology, Proc. of BIOS Europe 1996, SPIE vol. 2630, Effects of Low-Power Light on Biological Systems, p.73-82, Vienna, 1996.
15. **M.L. Pascu**, N. Moise, S. Hogiu, Laser-induced fluorescence studies on collagen, cholesterol and chlorophyll a, Proc. of BIOS Europe 1996, SPIE vol.2630, in Effects of Low-Power Light on Biological Systems, p.120-124, Vienna, 1996.
16. **M.L. Pascu**, N. Moise, S. Hogiu, Laser-induced fluorescence studies on collagen, cholesterol and chlorophyll a, Proc. of BIOS Europe 1996, SPIE vol.2627, Optical Biopsies, p.216-220, Vienna, 1996. *Due to the interest this article raised it was published by the international scientific committee in two different volumes.*
17. M. Roman, **M.L. Pascu**, A. Staicu, Detection of atmospheric pollutants by pulsed laser photoacoustic spectroscopy, Proc. ROMOPTO'97, SPIE vol. 3405 part two, p.1215-1219, Bucharest, 1998.
18. N. Moise, **M.L. Pascu**, C. Carp, C. Volvoreanu, Laser induced fluorescence of atherosclerotic plaques, Proc. of ROMOPTO'97, SPIE vol. 3405, part two, p.717-721, Bucharest, 1998.
19. C. Antipa, M. Nacu, I. V. Bruckner, D. Bunila, M. Vlaiculescu, **M.L. Pascu**, E. Ionescu, Low-power laser efficacy in peripheral nerve lesion treatment, Proc. of ROMOPTO '97, SPIE vol. 3405, part two, p.739-746, Bucharest, 1997.
20. B. Carstocea, O. Gafencu, S. Apostol, M. Ionita, N. Moise, **M.L. Pascu**, G. Popescu, M. Roman, S. Hogiu, Preliminary studies of rabbit corneal structure using laser beams, SPIE vol.2930, p.50-57, "Laser in Ophthalmology IV", BIOS'96, Vienna, 1996.
21. C. Antipa, **M.L. Pascu**, V. Stanculescu, C. Maverzedt, M. Vlaiculescu, E. Ionescu, Low power coherent and noncoherent light in clinical practice, SPIE vol. 2929, p.119-123, in "Effect of Low Power Light on Biological Systems II", BIOS '96, Vienna, 1996.
22. C. Carp, N. Moise, **M.L. Pascu**, C. Volvoreanu, Laser detection of atherosclerotic plaques, Congress of the European Society of Cardiology, 24-28 Aug. 1997, Stockholm, Sweden.
23. **M.L. Pascu**, N. Moise, C. Carp, C. Volvoreanu, In vitro monitoring of atherosclerotic plaques using laser-induced fluorescence, The 5th Symposium on Analytical Sciences (Deauville Conference), Nice, June, 1997.
24. C. Antipa, **M.L. Pascu**, V. Stanculescu, M. Vlaiculescu, E. Ionescu, D. Bordea, Coherent and noncoherent low-power diodes in clinical practice, BIOS EUROPE'97 (EUROPTO'97), SPIE vol. 2981, Coherence Domain Optical Methods in Biomedical Science and Clinical Applications, San Remo, Italy, p.236, 1997.
25. A. Nica, N. Teleki, V. Vasiliu, **M.L. Pascu**, P. Mihailovici, Research concerning the stimulation of low power laser therapy using different kinds of low power laser equipment in physical medicine and rehabilitation, The VIth Int. Congress of the European Medical Laser Association, June 3-5, Bucharest, 1998, published in the EMLA Telematic Journal, No.1, 1998.
26. C. Antipa, M. Coculescu, **M.L. Pascu**, M. Vlaiculescu, E. Ionescu, Treatment of acromegalic arthrosis with low power lasers, The VIth Int. Congress of the European Medical Laser Association, June 3-5, Bucharest, 1998, published in the EMLA Telematic Journal, No.1, 1998.
27. B. Carstocea, O. Gafencu, M. Ionita, **M.L. Pascu**, Present and future in ophthalmic photodynamic therapy, The VIth Int. Congress of the European Medical Laser Association, June 3-5, Bucharest, 1998, published in the EMLA Telematic Journal, No.1, 1998.
28. L. Danaila, **M.L. Pascu**, R. Ion, Fl. Gruia, L. Tugulea, L. Voicu, Spectral study of dyes in brain tumors photodynamic therapy, The VIth Int. Cong. of the European Medical Laser Association, June 3-5, Bucharest, 1998, published in the EMLA Telematic Journal, No.1, 1998.
29. C. Antipa, **M.L. Pascu**, I. V. Bruckner, M. Vlaiculescu, M. Moise, E. Ionescu, Very low laser therapy in medicine, 1st Int. ExpoMeeting Laser Florence '98 – Laser & Computer in Human Science, Oct.29-Nov.1st, Florence, 1998. Published in EMLA Telematic Journal, No.1, 1998.
30. R. M. Ion, **M.L. Pascu**, Porphyrins for photodynamic therapy of cancer, Proc. of the VI-th Conference on optics - ROMOPTO 2000, Bucharest, SPIE vol. 4430, pp.642 - 653.
31. A. Staicu, **M.L. Pascu**, I. Mogos, M. Enescu, S. Truica, L. Voicu, D.M. Gazdaru, A. Radu, S. Gazdaru, Contributions to the spectroscopic study of cytotatics molecules, Proc. of the VI-th Conference on optics - ROMOPTO 2000, Bucharest, SPIE vol. 4430, pp.680 - 683.
32. R.A. Pascu, M. Trifu, M. Dumitrescu, A. Mahamound, A. Staicu, M. Dicu, B. Carstocea, **M.L. Pascu**, In vivo studies of the effects of alkyl substituted Benzo[b]pyridinium compounds exposed to optical radiation, AIP Conf. Proc. (Laser Florence 2009), vol.1142, pg. 8-14, 2009.
33. R. Fumarel, G. Murgoci, P. Albert, A. Hurduc, **M.L. Pascu**, Increase of Cisplatinum therapeutic index through optical irradiation, AIP Conf. Proc. (Laser Florence 2009), vol. 1142, pg. 1-7, 2009.
34. M. O. Romanitan, A. Pascu L. Danaila **M.L. Pascu**, Laser-induced autofluorescence as a diagnostic tool for use in neurosurgery, Lasers in Medical Science, vol.24, Supplement1, S10, Nov.2009.

35. **M.L. Pascu**, I.R. Andrei, V. Pradines, V. Nastasa, R. Miller, The generation of microdroplets as vectors to transport medicines to tissues, *Lasers in Medical Science*, vol.24, Supplement1, S14, 2009.
36. A. Smarandache, R. Pascu, A. Militaru, **M.L. Pascu**, Modifications of the medicines molecular structures by bulk exposure to optical radiation, *Lasers in Medical Science*, vol.24, Supplement1, S16, 2009.
37. I.R. Andrei, A. Smarandache, J.M. Pages, A. Mahamoud, **M.L. Pascu**, Stability of the molecular structures of medicines delivered in microdroplets solutions, *Lasers in Medical Science*, vol.24, Supplement1, S16, 2009.
38. V. Nastasa, **M.L. Pascu**, T. Karapantsios, Generation of micro- and nano-droplets containing immiscible solutions in view of optical studies, *Proceedings of SPIE Vol. 7758, 77580X*, 2010.
39. A. Militaru, A. Smarandache, A. Mahamoud, V. Damian, P. Ganea, S. Alibert, J.-M. Pages, **M.L. Pascu**, Stability characterisation of quinazoline derivative BG1188 by optical method, *Advances in Laserology-Selected papers of Laer Floreenc 2010*, AIP Conf. Proc. 1364, 13-23, 2011. Doi: 10.1063/1.3626907.
40. A. Smarandache, J. Moreno-Moraga, M. Trelles, V. Nastasa, **M.L. Pascu**, Study of commercial grade Aetoxisclerol by optical means, in view of its use in varicose vein treatment, *Advances in Laserology-Selected papers of Laser Florence 2010*, AIP Conf. Proc. 1364, 117 - 124, 2011. Doi: 10.1063/1.3626907.
41. A. Smarandache, A. Militaru, H.n Goker, A. Pascu, **M.L. Pascu**, Laser methods for pharmaceutical pollutants removal", *Proc. SPIE 8411*, 2012.
42. **M.L. Pascu**, "Molecular Modifications of Phenothiazines by Irradiation with Laser Beams", *Analele Academiei Franceze pentru Europa Centrala*, 2012.
43. V. Nastasa, T. Karapantsios, K. Samaras, E. Dafnopatidou, V. Pradines, R. Miller, **M.L. Pascu**, Generation of micro-and nano-droplets containing immiscible solutions in view of optical studies, *Proc. SPIE 7758, PHYSICAL CHEMISTRY OF INTERFACES AND NANOMATERIALS IX, 77580X*, 2010.
44. A. Militaru, A. Smarandache, **M.L. Pascu**, Stability characterization of quinazoline derivative BG1188 by optical methods, *AIP Conf. Proc. 1364(1):13-23*, 2011.
45. V. Nastasa, M. Boni, I.R. Andrei, A. Staicu, L. Amaral, **M.L. Pascu**, Optical investigation of medicine solutions in micro-droplets form at interaction with laser radiation, *PHYSICAL CHEMISTRY OF INTERFACES AND NANOMATERIALS X, Proceedings of SPIE, 8098*, 2011.
46. A. Smarandache, J. Moreno-Moraga, M. Trelles, V. Nastasa, **M.L. Pascu**, Study of commercial grade aetoxisclerol by optical means, in view of its use in varicose vein treatment, *AIP Conference Proceedings 1364*, pp. 117-124, 2011.
47. T. Alexandru, **M.L. Pascu**, B. Danko, V. Nastasa, M. Boni, A. Militaru, I.R. Andrei, A. Staicu, A. Hunyadi, A. Armada, M. Viveiros, L. Amaral, Generation and biological evaluation of the products formed from the exposure of Phenothiazine to a 266nm laser beam, *ROMOPTO International Conference on Micro-to Nano-Photonics III, 88820T-88820T-7*, 2013.
48. A. Smarandache, A. Simon, T. Tozar, V. Nastasa, **M.L. Pascu**, Stability studies on Promethazine unexposed and exposed to UV laser radiation, *Proc. SPIE 9549, PHYSICAL CHEMISTRY OF INTERFACES AND NANOMATERIALS XIV, 954916*, 2015.

1.5 Invited lectures at international conferences (selection):

1. *Lazeri i zascita okhrujaiuschioi sredi*, **M.L. Pascu**, Proc. of the 2nd Int. Conf. of COMECOM, Plovdiv, Bulgaria, 1984 (Russian language).
2. *Tunable lasers in ultraviolet and visible for use in laser spectroscopy*, **M.L. Pascu**, A. Pascu, G. Dumbraveanu, A.M. Dumitras, D. Cristu, L. Tugulea, Proc. of Int. Conf. Trends in Quantum Electronics (TQE '85), Bucharest, p.129-154, 1985.
3. *Laser applications in ophthalmology*, M. Olteanu, B. Carstocea, **M.L. Pascu**, D. Dutu, V. Draganescu, R. Dabu, A. Pascu, Proc. of Int. Conf. Trends in Quantum Electronics (TQE'85), Bucharest, p. 539-550, 1985.
4. *Theoretical and experimental studies on tunable dye lasers*, **M.L. Pascu**, M. Enescu, A. Pascu, G. Dumbraveanu, M. Munteanu, R. Ionescu, Proc. of the Int. Conf. Trends in Quantum Electronics, TQE'88, Bucharest, SPIE vol. 1033, p.122- 132, 1988.
5. *Lasers in Ophthalmic Clinical Applications*, B Carstocea, **M.L. Pascu**, I. Banacu, D. Stanciu, M. Filip, A. Pascu, D. Dutu, R. Dabu, T Ionescu, Proc. of the Int. Conf. Trends in Quantum Electronics, TQE'88, Bucharest, SPIE vol .1033, p.534-541, 1988.
6. *Use of the tunable dye laser and HeNe laser in the treatment of progressive chronic marginal parodontopathy*, C. Gaucan, **M.L. Pascu**, A. Pascu, M. Enescu, R. Ionescu, Proc. of the Int. Conf. Trends in Quantum Electronics, TQE'88, Bucharest, SPIE vol. 1033, p.542- 546, 1988.
7. *Some aspects of the laser network to continuously controle the air pollution in Bucharest*, **M.L. Pascu**, Proc. Int. Workshop "Atmosphere Protection: Accomplishments and perspectives", Bucharest, p.32-41, 1990.
8. *Semiconductor lasers applications in rheumatology*, **M.L. Pascu**, St. Suteanu, P. Ignat, Proc of the Int. Congress on Physical Medicine , Balneology and Medical Rehabilitation, Sinaia, Oct. 1992, *Rev. de Balneofizioterapie*, vol.27, p.397-406, 1992.
9. *Measuring of water and soil contamination with oil components using laser induced fluoescence transmitted through optical fibers*, N. Moise, A. Vasile, **M.L. Pascu**, Proc of ROMOPTO'94, SPIE vol. 2461, p.636-643, Bucharest, 1995.
10. *Studies on tunable lasers as sources for spectroscopy measurements*, F.Bertinetto, **M.L. Pascu**, M.A. Greco, M. Bisi, Proc of ROMOPTO'94, SPIE vol. 2461, p.317-324, Bucharest, 1995.
11. *Caracterisation spectroscopique du collagene et du cholesterol par fluoescence et phosphorescence induites laser*, N. Moise, **M.L. Pascu**, C. Carp, Proc. of The First French-Romanian Workshop "Laser Applications in Biology", Bucharest, (Eds.L.Lindqvist, **M.L. Pascu**), *Rom. J. Biophys.*, vol.5, No.4, p.287-294, 1995(French language).
12. *Effet du solvant sur la structure et la dynamique structurale des albumins seriques par l'etude du declin de leur phosphorescence*, S.Hogiu, M.Enescu, **M.L. Pascu**, Proc. of the First French-Romanian Workshop "Laser Applications in Biology", Bucharest,(Eds.L.Lindqvist, **M.L.Pascu**), *Rom. J. Biophys.*, vol.5, No.4, p.295-300, 1995 (French language).
13. *Systemes lasers de basses puissance pour traitements medicaux*, **M.L. Pascu**, St. Suteanu, Proc. of The First French-Romanian Workshop "Laser Applications in Biology", Bucharest, (Eds. L. Lindqvist, **M.L. Pascu**), *Rom. J. Biophys.*, vol.5, No.4, p.209-218, 1995 (French language).
14. *Low level lasers in the treatment of some medical diseases*, P. Ignat, St.Suteanu, G. Brojbeanu, L. Ponor, **M.L. Pascu**, V.Vasilii, Proc. of The First French-Romanian Workshop "Laser Appl. in Biology", Buch., (Eds.L.Lindqvist, **M.L. Pascu**), *Rom. J. Biophys.*, vol.5, No.4, p.219-228, 1995.

15. *Etude de l'emission stimulee de radiation par solutions de chlorophylle a*, S.Hogiu, **M.L. Pascu**, L.Tugulea, Proc. of The First French-Rom. Workshop "Laser Appl. in Biology", Bucharest, (Eds. L.Lindqvist, M.L.Pascu), Rom. J. Biophys., vol.5, No.4, p.317-324, 1995 (French language).
16. *Comparative effects of various IR low energy diode in the treatment of the rheumatic diseases*, C. Antipa, I. V. Bruckner, **M.L. Pascu**, V. Stanculescu, A. Podoleanu, C. Ghiles, E.Ionescu, M.Vlaiculescu, Int.Laser Congress "Lasers at the dawn of the third Millenium", Athens, Greece, Sept. 24 -27, p.175 - 179, 1996.
17. *Laser induced fluorecence of oil components and pesticides as water pollutants*, N. Moise, **M.L. Pascu**, L. Voicu, 4th Symp. in Analytical Sci. (Deauville Conf.), Brussels, 3-5June, 1996.
18. *Laser induced fluorecence and phosphorescence of collagen and cholesterol*, N. Moise, **M.L. Pascu**, C. Carp, 4thSymp on Analytical Sciences, (Deauville Conf), Brussels,3-5 June 1996.
19. *Laser monitoring of pesticides in water*, **M.L. Pascu**, N. Moise, L. Voicu, T. Negoita, G. Manolescu, A. Smarandache, Proc. of ROMOPTO'97, SPIE vol. 3405 part two, p.1202 - 1214, Bucharest, 1998.
20. *Laser method for corneal structure investigation*, **M.L. Pascu**, B. Carstocea, G. Popescu, O. Gafencu, S.Apostol, N. Moise, M. Roman, C.M. Ticos, Proc. of ROMOPTO '97, SPIE vol. 3405, part two, p.665-672, Bucharest, 1998.
21. *Low power laser equipment for medical applications*, **M.L. Pascu**, B. Carstocea, St. Suteanu, 5th Int.Cong. of the European Medical Laser Association, Florence, 1997.
22. *Inflammatory rheumatisms treated with low energy lasers*, C. Antipa, A.Ianuli, I.V. Bruckner, M. Vlaiculescu, E. Ionescu, C. Antipa, **M.L. Pascu**, 5th Int. Congress of the European Medical Laser Association, Florence, 1997.
23. *New laser method to characterize rabbit eye cornea*, **M.L. Pascu**, B. Carstocea, G. Popescu, 5th Int. Congress of the European Medical Laser Association, Florence, 1997.
24. *Review on laser applications in medicine and biology in Romania*, **M.L. Pascu**, 5th Int. Congress of the European Medical Laser Association, Florence, 1997.
25. *Tunable dye laser spectroscopic methods for molecular analysis*, **M.L. Pascu**, L. Voicu, M. Roman, A. Staicu, N. Moise, The 5th Symp. on Analytical Sciences Deauville Conference), Nice, June, 1997.
26. *Low power laser in clinic medicine - personal experience*, C. Antipa, C. Moldovan, I. V. Bruckner, **M.L. Pascu**, V. Stanculescu, M. Vlaiculescu, E. Ionescu, The VIth Int. Congress of the European Medical Laser Association, Bucharest, June 1998, EMLA Telematic Journal, 1998.
27. *Low-power laser efficacy in peripheral nerve lesion treatment*, C. Antipa, M. Nacu, I. Bruckner, D. Bunila, M. Vlaiculescu, **M.L. Pascu**, E. Ionescu, Proc. SPIE 3405, p. 739 (1998)
28. *The place of laser induced fluorecence in the study of the atherosclerotic plaques structure at human beings*, C. Carp, **M.L. Pascu**, N. Moise, C. Volvoreanu, The VIth Int. Congress of the European Medical Laser Association, Bucharest, June 1998, EMLA Telematic Journal, 1998.
29. *Brief Course on LASER PHYSICS & ENGINEERING*, -Tutorial Course, (8 hours), **M.L. Pascu** (course director), 1st Int. ExpoMeeting Laser Florence '98- Laser & Computer in Human Science, Oct. 1998, Florence, Italy.
30. *Brief Course on Laser Cosmetic Surgery*, (Directors Z. Simunovic, M. Postiglione), "Laser - tissue interaction; lasers used and safety", - Tutorial Course, (**M.L. Pascu**), 1st Int. ExpoMeeting Laser, Florence '98- Laser & Computer in Human Science, Oct. 1998, Florence, Italy.
31. *Brief Course on Phlebology*, (Directors C. Dietrickx, L. Longo), "Laser-tissue interactions and laser safety", - Tutorial Course, (**M.L. Pascu**), 1st Int. Expo Meeting Laser Florence '98- Laser & Computer in Human Science, Oct. 1998, Florence, Italy.
32. *Round Table on Laser Medicine and Surgery: Nursing, "Laser Safety"* ,-Tutorial Course, **M.L. Pascu**, 1st Int. ExpoMeeting Laser Florence '98- Laser & Computer in Human Science, Oct. 1998, Florence, Italy.
33. *Brief Course on LASER PHYSICS & ENGINEERING*, - Tutorial Course, (8 hours), **M.L. Pascu** (course director), 2nd Int. ExpoMeeting Laser Florence '99- Laser & Computer in Human Science, Oct. 1999, Florence, Italy.
34. *Brief Course on Laser Cosmetic Surgery*, (Directors Z. Simunovic, M. Postiglione), "Laser - tissue interaction; lasers used and safety",- Tutorial Course, (**M.L. Pascu**), 2nd Int. ExpoMeeting Laser Florence '99- Laser & Computer in Human Science, Oct. 1999, Florence, Italy.
35. *Brief Course on Phlebology*, (Directors C. Dietrickx, L. Longo), "Laser-tissue interaction; lasers used and safety",- Tutorial Course, (**M.L.Pascu**), 2nd Int. ExpoMeeting Laser Florence '99, Laser & Computer in Human Science, Oct. 1999, Florence, Italy.
36. *Beam power and mode structure studies on laser radiation used in LLLT*, **M.L. Pascu**, C. Antipa, D. Sporea, T.Visan, A.Ivan, Angela Staicu, Progress in Biomedical Optics and Imaging, vol. 4166, pag.76-83, Laser Florence'99, (ISSN 1605-7422), 2000.
37. *Photodynamic therapy studies on brain tumors using nitrogen pulsed lasers*, **M.L. Pascu**, A. Popescu, L. Danaila, N.Carp, R.Ion, Mihaela O Pascu, Progr. in Biomedical Optics and Imaging, vol 1, No. 37, p. 138-148, Proc. Laser Florence'99, SPIE, vol.4166 (ISSN 1605-7422), 2000.
38. *Spectrophotometric characterization of useful dyes in laser photodynamic therapy*, L. Danaila, **M.L. Pascu**, Alina Popescu, Mihaela O. Pascu, R. Ion, "Sixth Symposion on Optoelectronics", 22-24 September 1999, Bucharest, Proc SPIE vol. 4068, p.712, 2000.
39. *Red and IR gas laser beam for therapy*, **M.L. Pascu**, E. Ristici, M. Ristici, M. Tivarus, Progress in Biomedical Optics and Imaging,, vol. 1, No. 37, p. 110-117, Proc. Laser Florence'99, (28-31 Oct. 1999, Florence, Italy.), SPIE, vol. 4166 (ISSN 1605- 7422), p.110, 2000.
40. *Proposal for a new objective method to evaluate low-level laser therapy efficacy in clinical practice*, C. Antipa, A. Nicolescu, **M.L. Pascu**, M. Vlaiculescu, E. Ionescu, Prog. in Biomed. Opt. and Im., vol. 1, No.37, Proc. Laser Florence'99, SPIE vol.4166 (ISSN 1605-7422), p. 72-75, 2000.
41. *Optical properties of cytostatic drugs used in cancer treatment*, **M.L. Pascu**, I. Mogos, A. Staicu, L. Voicu, M. Enescu, S. Truica, M. Pascu, A. Radu, 3rd International Meeting and Hands on Lasers Courses, 15th International Congress Lasers Medicine ICLM, Florence, Oct 18th-22th, 2000. Proc. SPIE, vol 4606, p.66, 2001.
42. *Spectroscopic studies of drugs in the treatment of malignant tumors in ophthalmology*, **M.L. Pascu**, B. Carstocea, Angela Staicu, M.Ionita, S. Truica, R. A. Pascu, 3rd Int. Meet. and Hands on Lasers, 15th Int. Cong. Lasers Medicine, Florence, 2000. Proc. SPIE, vol.4606, p.52, 2001.
43. *Objective methods in evaluating LLLT results*, C. Antipa, **M.L. Pascu**, Ruxandra. A Pascu, Elena Ionescu, 3rd International Meeting and Hands on Lasers Courses, 15th Int. Congress Lasers Medicine ICLM, Florence Oct 18th-22th 2000. Proc. SPIE, vol.4606, p. 138, 2001.

44. *Contributions to the spectroscopic studies of cytostatic molecules*, A. Staicu, **M.L. Pascu**, I. Mogos, M. Enescu, S. Truica, L. Voicu, D. Gazdaru, A. Radu, S. Gazdaru, Proc. ROMOPTO 2000. Proc.SPIE, vol.4430, p.680, 2001.
45. *Metallo-porphyrines and metallo-phthalocianines for photodynamic therapy of cancer*, R. Ion, **M.L. Pascu**, Proc. ROMOPTO 2000, Proc. SPIE, vol. 4430, p.642, 2001.
46. *Brief Course on LASER PHYSICS & ENGINEERING*, - Tutorial Course, (8 hours), **M.L. Pascu** (course director), 3rd Int. ExpoMeeting Laser Florence 2000-Laser & Computer in Human Science, Oct.2000.
47. *Tutorial Course at The Third World Congress of the World Association of Laser Therapy (WALT)*, Athens, May 10-13, 2000.
48. *The Congress Course held by M.L. Pascu* (4 hours): a) Introduction to Laser Therapy; b) Clinical aspects in medicine- using nursing-physiotherapy Parts: Laser physics; Laser systems; LLLT medical applications.
49. *Brief Course on LASER PHYSICS & ENGINEERING*, - Tutorial Course, (8 hours), **M.L. Pascu** (course director), 4th Int. ExpoMeeting Laser Florence 2001 - Laser & Computer in Human Science, Nov.2001.
50. *Studies on cytostatics used as photosensitizing material in photodynamic therapy*, **M.L. Pascu**, L. Danaila, B. Carstocea, A. Staicu, S.Truica, D.M. Gazdaru, Proc. Laser Florence 2001, Florence, Italy, SPIE Series: Prog. in Biomed. Optics and Imaging vol. 4903, 3, No.28, pp. 16-28, 2002.
51. *Spectroscopic characteristics of metalloporphyrins used in photodynamic therapy*, **M.L. Pascu**, L. Danaila, L. Voicu, A. Staicu, S. Truica, R. M. Ion, First WORKSHOP of the Working Group COST D-20-“New molecular systems with therapeutic application in photodynamic therapy of cancer and microbial infections” Bucharest, November 2002,.
52. *The effects of UV irradiation on cytostatics used in cancer therapy*, A. Staicu, **M.L. Pascu**. COST ACTION B16 «Reversal of antibiotic resistance (by inhibition of transmembrane transport) », 6th Management Committee Meeting and Working Groups, November 30th, 2002,
53. *Brief Course on LASER PHYSICS & ENGINEERING*, - Tutorial Course, (8 hours), **M.L. Pascu** (course director), 5th Int. ExpoMeeting Laser Florence 2002-Laser & Computer in Human Science, Oct. 2002.
54. *Brief Course on LASER PHYSICS & ENGINEERING*,-Tutorial Course, (8 hours), **M.L. Pascu** (course director), 6th Int. ExpoMeeting Laser Florence 2003, Laser & Computer in Human Science, Nov. 2003.
55. *Contribution to the spectroscopic studies of the metalloporphyrins used in photodynamic therapy*, Metal Compounds in the Treatment of the Cancer and Viral Diseases Conference, **M.L. Pascu**, L. Danaila, L. Voicu, M. Brezeanu, A. Staicu, A. Smarandache and R.M. Ion, Trieste, 2003.
56. *The modification of spectral characteristics of citostatics by optical beams*, **M.L. Pascu**, M. Brezeanu, B. Carstocea, L. Voicu, A. Staicu, D. M. Gazdaru, A. Smarandache, 7th International Conference on Optics-ROMOPTO 2003, Constanta, Proceedings SPIE 5581, p.690 (2004).
57. *Studies on activated cytostatic fluorouracil as photosensitizer: to use in the eye tumors treatment*, **M.L. Pascu**, B. Carstocea, M. Brezeanu, Letitia Voicu, Angela Staicu, D.M. Gazdaru, Ruxandra A. Pascu, Proceedings SPIE 5610, p.87 (2004).
58. For the period 2001–2008, more than 150 invited presentations about COST, EC-Framework Programmes, at International Conferences, National Conferences, COST days, EC - JRC days in practically all EU countries and most of the COST countries.
59. *Lasers applications in medicine, surgery and biology: The Romanian Chapter*, **M.L. Pascu**, 3rd International Congress On Anti-Aging Medicine, 2-4 May, 2008, Bucharest,
60. *Lasers Applications in medicine, surgery and biology: The Romanian Chapter*, **M.L. Pascu**, 3rd International Congress on Anti-Aging Medicine & 1st International Congress on Lasers in Medicine and surgery, Bucharest, Romania, 2008.
61. *Optical/laser methods to fight resistance to treatment*, **M.L. Pascu**, A. Staicu, R. Pascu, M. Dicu, B. Carstocea, 3rd International Congress on Anti-Aging Medicine & 1st International Congress on Lasers in Medicine and surgery, Bucharest, Romania, 2008.
62. *Multidisciplinarity in Science: Trends in the European Approach*, **M.L. Pascu**, International Summer School & Satellite Workshops on Complexity, July (2008), Bucharest, Romania.
63. *Wetting properties of droplets containing cytostatics drugs*, I.R. Andrei, M. Ferrari, S. Rao, L. Liggieri, **M.L. Pascu**, 17th, International Symposium on Surfactants in Solution, August (2008), Berlin, Germany.
64. *Wetting properties of droplets containing cytostatics drugs*, I.R. Andrei, M. Ferrari, S. Rao, L. Liggieri, R. Pascu, M. Dicu, **M.L. Pascu**, COST P21 WG3-Meeting, September (2008), Erlangen, Germany.
65. *Optical Beams Interactions with Medicines to Fight Resistance to Treatment*, **M.L. Pascu**, J. Barbe, M. Costache, A. Mahamoud, D. Gazdaru, M. Dicu, L. Liggieri, M. Ferrari, R. Pascu, I.R. Andrei, The International Congress Laser Medicine, November (2008), Florence, Italy.
66. *Group presentation: Laser Spectroscopy – Multidisciplinary Research*, **M.L. Pascu**, COST P21 "Physics of Droplets", October (2008), Brussels, Belgium.
67. *Generation of microdroplets containing drugs modified by exposure to optical radiation*, **M.L. Pascu**, 2nd Management Committee and 1st Working Group Meetings, BM0701-ATENS, Action BM0701: Antibiotic Transport and Efflux: New Strategies to combat bacterial resistance (ATENS), November (2008) Brussels, Belgium.
68. *Lasers applications in biomedicines: basic research*, **M.L. Pascu**, First Conference of the International Academic Board of New European Surgery Academy, Berlin, January 2009.
69. *The neural basis of consciousness*, L. Danaila, **M.L. Pascu**, Annual Conference of the COST Network B0605- Consciousness, Berlin, March 2009.
70. *Laser beams interactions with microdroplets*, **M.L. Pascu**, I.R. Andrei, C. Ticos, V. Nastasa, T. Beica, Joint Conference of the 7th MC & WG Meetings. COST ACTION P21 „The physics of droplets”, Bucharest, May 4-6 2009.
71. *Studies of the modifications induced in spectral properties of medicines exposed to laser radiation*, M. Dicu, J.M. Pages, A. Mahamoud, A. Staicu, **M.L. Pascu**, First Annual Conference of the COST Network B0701- ATHENS, Cracow, Poland, May 2009.
72. *Microdroplets behaviour when exposed to laser radiation field*, **M.L. Pascu**, Adriana Smarandache, I.R. Andrei, V. Nastasa, C. Ticos, Micro-to Nano-Photonics II- ROMOPTO 2009, Sibiu-Romania, 2009.
73. *Stability studies performed on quinazoline derivative BG1188*, A. Smarandache, A. Militaru, A. Mahamoud, S. Alibert, **M.L. Pascu**, J.M.Pages, Second Annual Conference of COST Network BM0701 - ATENS "Antibiotic transport and efflux: new strategies to combat bacterial resistance", Dublin, December, 2009.

74. Invited presentation of the cumulative report 2007 – 2009 of the COST Action P21, **M.L. Pascu**, COST Action P21 - Physics of Droplets, Istanbul, COST MPNS Domain Committee meeting, September 2009.
75. *Laser and Optical Techniques Used to Modify Molecular Structures of Medicines*, **M.L. Pascu**, A. Staicu, V. Nastasa, A. Smarandache, A. Militaru, A. Pascu, I.R. Andrei, M. Boni, M. Costache, J.-M. Pages, J. Barbe, S. Alibert, A. Mahamoud, M. Ferrari, S. Rao, L. Liggieri, L. Amaral, Progress in studies on ABC transport inhibition Symposium at Chemical Research Center, Hungarian Academy of Sciences, April 2010, Budapest, Hungary.
76. *IN VITRO studies of cerebral tissues by laser induced autofluorescence*, **M.L. Pascu**, A. Pascu, M.O. Romanitan, L. Danaila, International Student Workshop on Laser Applications, May 2010, Bran, Romania.
77. *Laser Beam Interaction with Beads Containing Medicines Solutions*, **M.L. Pascu**, A. Staicu, V. Nastasa, A. Smarandache, A. Militaru, A. Pascu, I.R. Andrei, M. Boni, A. Mahamoud, S. Alibert, J.M. Pagès, L. Amaral, M. Ferrari, S. Rao, L. Liggieri, R. Miller, COST Action BM0701 – ATENS, July 2010, Bremen, Germany.
78. *Interaction of micro-droplets with laser beams*, V. Nastasa, I. R. Andrei, Andra Militaru, **M.L. Pascu**, COST P21 “Physics of droplets” WG Meeting, Borovets, Bulgaria, July 2010.
79. *Improvement of phenothiazines efficiency on MDR bacteria*, after exposure to laser radiation, **M.L. Pascu**, L. Amaral, V. Nastasa, A. Militaru, A. Smarandache, Laser Florence 2010, Florence Italy.
80. *Modifications of the medicines molecular structures in liquid phase by interaction with laser beams*, **M.L. Pascu**, International Student Workshop on Laser Applications, 31 Mai- 4June, 2011, Bran, Romania.
81. *Photophysical studies on amino acids and proteins oxidation*, A. Staicu, M. Enescu, A. Pascu, S. Foley, M. Boni, **M.L. Pascu**, International Student Workshop on Laser Applications, 31 Mai- 4 Iunie, 2011, Bran, Romania.
82. *Les lasers dans la micro- et nano-fluidique*, **M.L. Pascu**, Sceance de l'Academie Centrale Europeenne des Sciences, des Letters et des Arts, Palais Luxembourg, Paris, Session 14 May 2011, France.
83. *In silico modeling and analysis of EPI activity of laser irradiated drugs*, G. Popescu, A. Smarandache, A.Militaru, **M.L. Pascu**, 6th Management Committee Meeting and WGs meeting COST Action BM0701, 6-7 December, 2011, Bruxelles, Belgium.
84. *Phenothiazines molecular modifications at interaction with modifications at interaction with laser beams*, **M.L. Pascu**, A. Smarandache, J.Kristiansen, A.Militaru, V. Nastasa, L. Amaral, LASER FLORENCE 2011, Florence, 3-6 november 2011, Italy.
85. *Laser Radiation Interaction with Fluorofores In Micro-/Nano-Droplets Of Solutions*, **M.L. Pascu**, I. R. Andrei, V. Nastasa, M. Boni, G. V. Popescu, LASER FLORENCE 2011, Florence, 3-6 november 2011, Italy.
86. *A new way to produce compounds suitable to fight MDR: molecular modifications of medicines by exposure to laser radiation*, **M.L. Pascu**, COST Action BM0701- Antibiotic transport and efflux: new strategies to combat bacterial resistance- Workshop: NovaUCD, University College Dublin, 21st - 22nd November, 2011, Ireland.
87. *ANNUAL REPORT OF WORKING GROUP 4: Production of new molecules (chemosensitizers or inhibitory agents)*, **M.L. Pascu**, 6th Management Committee Meeting and WGs meeting COST Action BM0701, 6-7 December 2011, Bruxelles, Belgium.
88. *Laser beams interaction with pharmaceutical foams: Aethoxysklerol case*, A. Smarandache, M. Trelles, J. Moreno-Moraga, A. Staicu, **M.L. Pascu**, ISCP 2012, Sinaia, Romania, 8-11 mai 2012
89. *Exposure of Chlorpromazine to 266 nm laser beam generates new species with antibacterial properties*, T. Alexandru, **M.L. Pascu**, B. Danko, V. Nastasa, M. Boni, A. Militaru, I. R. Andrei, A. Staicu, A. Hunyadi, S. Fanning, L. Amaral, International Student Conference on Photonics, Sinaia, Romania, mai 2012.
90. *Laser methods used to fight the multiple drug resistance (MDR) developed by bacteria*, **M.L. Pascu**, V. Nastasa, M. Boni, T. Alexandru, A. Smarandache, A. Militaru, Exploratory Workshop 2012 „Emerging Analytical to Investigate Nitro-oxidative Stress, Bucuresti, Romania, iulie 2012
91. *Generation and biological evaluation of the products formed from the exposure of Chlorpromazine to a 266 nm laser beam*, T. Alexandru, **M.L. Pascu**, B. Danko, V. Nastasa, M. Boni, A. Militaru, I. R. Andrei, A. Staicu, A. Hunyadi, A. Armada, M. Viveiros, L. Amaral, International Conference "Micro- to Nano-Photonics III- ROMOPTO 2012, Bucuresti, Romania, septembrie 2012
92. *Molecular Modifications of Phenothiazines by Irradiation with Laser Beams*, **M.L. Pascu**, Sesiunea Anuala Internationala a Academiei Franceze pentru Europa Centrala, Chisinau, Moldova, iunie 2012
93. *Lasers Applications in Fighting Multiple Drug Resistance*, **M.L. Pascu**, The Asian Pacific Association for Laser Medicine & Surgery, Taipei, Taiwan, 23-25 nov. 2012
94. *Laser Methods Used to Fight Multiple Drug Resistance to Treatment*, **M.L. Pascu**, A. Militaru, M. Boni, T. Alexandru, V. Nastasa, I.R. Andrei, Laser Florence 2012, Florenta, Italia, 9-10 November 2012
95. *Laser Spectroscopy Group Presentation*, **M.L. Pascu**, Annual Workshop, COST Action MP1106, Dublin, September, 2012
96. *Combined laser techniques used to fight multiple resistance to drug treatment developed by bacteria*, **M.L. Pascu**, International Conference on Optics "Micro- to Nano-Photonics III- ROMOPTO 2012", 3-6 Septembrie, Bucuresti, Romania
97. *Interaction of laser beams with liquid droplets of medical interest*, **M.L. Pascu**, Biophotonics, 3-5 October 2013, Hersonissos, Crete, Greece.
98. *Laser method in fighting multiple drug resistance*, **M.L. Pascu**, Microbial cell surface determinants of virulence as targets for new therapeutics in Cystic Fibrosis, 10-11 October 2013, Catania, Italy.
99. *Interaction of laser beams with liquid droplets of medical interest*, **M.L. Pascu**, Lecture at 2nd Summer School “Photonics meets Biology”, 30 September - 3 October 2013, Hersonissos, Crete, Greece.
100. *Optofluidic studies on droplets containing medicines exposed to laser radiation*, **M.L. Pascu**, Lecture at the Summer School “A way to smart Europe”, 22–26 aprilie 2013, University of Twente/Enschede, The Netherlands.
101. *Overview on the interaction between medicines exposed to laser radiation and materials of medical interest*, **M.L. Pascu**, A. Simon; V. Dutsch; T. Alexandru, V. Nastasa, M. Boni, A. Dinache, R. A. Pirvulescu, Laser Florence 2013, 9-10 November 2013, Florence, Italy.
102. *Laser irradiation interaction with droplets that contain medicines*, **M.L. Pascu**, T. Alexandru, M. Boni, A. Dinache, V. Nastasa, I. Andrei, Smart and green interface- Cost Action MP 1106 and 5th International Conference on “Heat transfer and fluid flow in microscale”, 22-24 April 2014, Marseille, France.

103. *Photodynamic studies of some molecules of interest in drug carrier systems*, A. Staicu, A. Dinache, T. Alexandru, A. Pascu, A. Smarandache, V. Nastasa, M. Boni, A. Simon, F. Sima, M. Enescu, **M.L. Pascu**, International Student Conference on Photonics (ISCP 2014), 23-26.09.2014, Orastie, Romania.
104. *Modification of surface properties of Vancomycin following exposure to UV laser beam*, **M.L. Pascu**, M. Ferrari, International Student Conference on Photonics (ISCP 2014), 23-26.09.2014, Orastie, Romania.
105. *Application of laser techniques in the treatment of varicose veins with Polidocanol foam Instituto medico Vilafortuny*, **M.L. Pascu**, Tarragona, Barcelona, Spain, 18 February 2014.
106. *Laser beams interactions with single pendant droplets*, **M.L. Pascu**, Advances in Optofluidics: Integration of Optical Control and Photonics with Microfluidics, 23-26 April 2014, Dublin.
107. *New data about the use of Polidocanol foams in the treatment of varicose veins assisted by Nd:YAG lasers*, **M.L. Pascu**, Instituto Medico Madrid, 21 February 2014, Madrid, Spain.
108. *The use of nonantibiotics modified by exposure to laser radiation to fight multiple drug resistance*, **M.L. Pascu**, INDLAS 2014, 19-23 May 2014, Bran, Romania.
109. *Lasing emission by microdroplets of emulsion*, M.Boni, V.Nastasa, I.R.Andrei, A.Staicu, **M.L. Pascu**, Smart and green interfaces-Conference 2015, March 2015, Belgrade, Serbia.
110. *Optically pumped microliter droplets as lasing sources in the visible spectral range*, **M.L. Pascu**, M. Boni, I.R. Andrei, International Conference on Optics "Micro- to Nano-Photonics IV - ROMOPTO 2015, Bucharest, Romania, 1-4 September 2015.
111. *Laser beams interaction with droplets in view of biomedical applications*, **M.L. Pascu**, R. Pirvulescu, M. Boni, I.R. Andrei, 6th Congress of International PhotoTherapy Association, 9-10 July 2015, Nice, France.
112. *Emission of laser/lasing radiation by optically pumped droplets in pendant position*, **M.L. Pascu**, M. Boni, I.R. Andrei, Advances in optofluidics: Integration of optical control and photonics with microfluidics, 7-8 May 2015, Porto, Portugal.
113. *Spectroscopy of very small volume samples: an emerging tool in optofluidics*, **M.L. Pascu**, POLYNANO SUMMER SCHOOL, DTU - Copenhagen, Danemarca (2 hours-summer school), 10 - 28 august 2015.
114. *Modification of wetting properties of phenothiazine water solutions exposed to laser radiation in hypergravity conditions*, **M.L. Pascu**, A. Simon, T. Tozar, A. Stoicu, Smart and Green Interfaces Conference 2016, 4-6 May 2016, Athens, Greece;

1.6 Patents

1. Patent No. 73975 of 24.12.1979, Mechanical system for manipulation I, **M.L. Pascu**, M. Casu.
2. Patent No 73976 of 24.12. 1979, Mechanical system for manipulation II, **M.L. Pascu**, M.Casu.
3. Patent No 73977 of 24.12.1979, Mechanical system for manipulation III, **M.L. Pascu**, M.Casu.
4. Patent No 73978 of 24.12. 1979, Mechanical system for manipulation IV, **M.L. Pascu**, M.Casu.
5. Patent No 73534 of 30.11.1979, Equipment for automate monitoring of elements and substances, **M.L. Pascu**.
6. Patent No 72587 of 29.09.1979, Nitrogen pulsed laser, **M.L. Pascu**, V. Doicaru, G. Dumbraveanu, A. Pascu.
7. Patent No 92080 of 27.11.1986, Procedure to obtain mangano-manganic oxide, V. Draganescu, I. Morjan, **M. L. Pascu**, I. Mihailescu, M. Popescu, V. Jianu.
8. Patent No 92452 of 24.04.1987, Automate equipment for thin layer chromatography analysis, **M.L. Pascu**, I. Costov, A. Pascu, D. Cristu.
9. Patent No 92444 of 27.04.1987, Automate equipment for liquid phase chromatography analysis, **M.L. Pascu**, I. Costov, A. Pascu, D. Cristu.
10. Patent No 95728 of 22.05.1987, Tunable dye laser equipment for ophthalmology, **M.L. Pascu**, M. Olteanu, A. Pascu, B. Carstocea, G. Dumbraveanu, L. Mihalachioiu, M. Munteanu.
11. Urzica, I; Simon, A; Udrea, C; Logofatu, PC; Pascu, ML; Procedure to produce superhydrophobic materials using laser ablation, nr. A/00475/2019
12. Tozar Tatiana, Boni Mihai, Andrei Relu Ionut, Staicu Angela; Pascu Mihai Lucian, PATENT RO136000(A2), 2022-09-30, Procedeu de densitometrie HPTLC pentru analiza solutiilor de tioridazina neiradiate si iradiate bazat pe caracterizarea fluorescentei induse laser si a timpului de viata al fluorescentei. .

1.7 Books

1. Laser Physics, **M.L. Pascu**, *Lasers in Medicine and Dentistry: Basic Science and Up-to-date Clinical Application of Low Energy-Level Laser Therapy LLLT*, Ed. Z. Simunovic, Vitagraf, Rijeka, Croatia, ISBN 953-6059-30-4, 2000.
2. Lasers in Neurosurgery, L. Danaila, **M.L. Pascu**, Ed. Academiei, Bucharest, ISBN 973-27-0802-6, 2001.
3. Laser-induced autofluorescence as a possible diagnostic tool for use in neurosurgery, **M.L. Pascu**, M.O Romanitan, A. Pascu, J. Delgado-García, L. Danaila, *Brain Tumor / Book 4*, InTech - Open Access Publisher, Croatia, ISBN 978-953-307-589-1, 2011.
4. Applications of Polidocanol in varicose vein treatment assisted by exposure to Nd:YAG laser radiation, M.A. Trelles, J. Moreno-Moraga, A. Samaranche, **M.L. Pascu**, *Nd YAG Laser*, In Tech, Croatia, 223 – 254, ISBN 979-954-307-327-8, 2012.
5. Laser in leg veins, M.A. Trelles, J. Moreno-Moraga, J.M. Alcolea, A. Samaranche, **M.L. Pascu**, *Synopsis of Aesthetic Dermatology & Cosmetic Surgery*, Ed. M. L. Elsaie Nova Science Publishers Inc, NY, USA, ISBN: 978-1-61942-966-6, 2012.
6. Contributions to the Understanding of the Neural Bases of the Consciousness, L. Danaila, **M.L. Pascu**, *Clinical Management and Evolving Novel Therapeutic Strategies for Patients with Brain Tumors*, Ed. by Terry Lichtor, InTech, ISBN 978-953-51-1058-3, 2013.
7. Trends in basic research on laser biomedicine, **M.L. Pascu**, A. Militaru, M. Boni, V. Nastasa, T. Alexandru, A. Staicu, I. R. Andrei, *Laser Manual Medical technology*, Ed. L Longo, Officina Editoriale Oltrarno, ISBN: 9788897986133, 2014
8. Laser physics for biomedical applications, **M.L. Pascu**, *Laser Manual Medical technology*, Ed. L. Longo, Officina Editoriale Oltrarno, ISBN: 9788897986133, 2014.
9. Laser Beam interaction with tissues, **M.L. Pascu**, M. Romanitan, M. Burcea, *Laser Manual Medical technology*, Ed. L. Longo, Officina Editoriale Oltrarno, ISBN: 9788897986133, 2014.

10. Laser induced fluorescence in biomedicine, **M.L. Pascu**, R. Pirvulescu, M.O. Romanitan, A. Smarandache, *Laser Manual Medical technology*, Ed. L. Longo, Officina Editoriale Oltrarno, ISBN: 9788897986133, 2014.
11. Introduction, **M.L. Pascu**, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 3-9, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
12. Pendant Droplets – Microfluidic Approach, V. Nastasa, A. Staicu, **M.L. Pascu**, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 11-26, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
13. Pendant Droplets - Optofluidic Approach, **M.L. Pascu**, A. Staicu, M. Boni, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 27-45, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
14. Laser Beam Properties, **M.L. Pascu**, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 143-155, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
15. Unresonant Interaction of Laser Beams with Pendant Droplets, I.R. Andrei, M. Boni, **M.L. Pascu**, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 157-190, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
16. Resonant Interaction of Laser Beams with Pendant Droplets, **M.L. Pascu**, M. Boni, T. Tozar, A. Smarandache, A. Stoicu, I.R. Andrei, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Bentham Science, 191- 226, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
17. Interaction of Laser Beams with Medicine Solutions in Bulk, A. Staicu, A. Smarandache, T. Tozar, A. Stoicu, R. Pirvulescu, **M.L. Pascu**, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 257-302, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
18. Lasers in Foams and Emulsions Studies, V. Nastasa, M. Boni, A. Stoicu, A. Dinache, A. Smarandache, **M.L. Pascu**, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 303-350, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
19. Application of Laser Modified Medicines in Fighting Multiple Drug Resistance Acquired by Microorganisms, T. Tozar, A. Stoicu, V. Nastasa, M. Popa, A. Smarandache, M. Costache, M.C. Chifiriuc, **M.L. Pascu**, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 351-379, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
20. Application of Optically Modified Medicines in Fighting Pseudotumours, R. Pirvulescu, T. Tozar, A. Stoicu, **M.L. Pascu**, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 381-422, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
21. Interaction of Medicines Exposed to Laser Beams with Fabrics of Interest for Biomedical Applications, Á. Simon, **M.L. Pascu**, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 423-444, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
22. Microvolumetric Droplets in Air in Hypergravity Conditions, Á. Simon, A. Stoicu, T. Tozar, I.R. Andrei, S. Simion, J.J.W.A. van Loon, A. Dowson, **M.L. Pascu**, 445-462, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
23. Lasing by Optically Pumped Pendant Droplets, M. Boni, I.R. Andrei, A. Staicu, V. Nastasa, **M.L. Pascu**, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 463-488, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.
24. Spectroscopy of Microdroplets: an Alternative to the Spectroscopy of Bulky Materials, **M.L. Pascu**, A. Smarandache, T. Tozar, I.R. Andrei, *Laser Optofluidics in Fighting Multiple Drug Resistance*, Ed. M.L. Pascu, Bentham Science, 489-499, 2017, DOI: 10.2174/97816810849851170101; eISBN: 978-1-68108-498-5, 2017; ISBN: 978-1-68108-499-2.

1.8 More than 300 oral/poster presentations at national / international conferences.

Examples for 2008 -2019 and 2021.

1. **M.L. Pascu**, *Activation of cytotoxic effect of some cytostatics through exposure at optical radiation*, Simpozionul "Cercetare de excelenta in stiinte de baza si socio-economice", September 2008, Iasi, Romania.
2. M. Bulinski, C.M. Ticos, I.R. Andrei, **M.L. Pascu**, *The control of the chaotic dynamics of the external cavity-semiconductor laser system emission*, 15th National Conference on Physics, September 2008, Bucharest, Romania.
3. M. Bulinski, I.R. Andrei, G. Moagar-Poladin, C. Mardare, *Some aspects of digital holographic recording reconstruction*, 15th National Conference on Physics, September 2008, Bucharest, Romania.
4. I.R. Andrei, M. Ferrari, S. Rao, M. Dicu, A. Mahamoud, **M.L. Pascu**, *Studies about producing droplets containing cytostatics solutions*, 15th National Conference on Physics, September 2008, Bucharest, Romania
5. R. A. Pascu, M. Trifu, M. Dumitrescu, A. Mahamoud, A. Staicu, B. Carstocea, **M.L. Pascu**, *Studies of the effects of pyridinium compounds exposed to optical radiation on pseudotumoural tissues*, Annual Scientific Conference of Faculty of Physics, University of Bucharest, June 2008, Bucharest, Romania.
6. Fumarel, P. Albert, A. Harduc, N. Stafidov, **M.L. Pascu**, *Determination of the Pharmacokinetics of Methotrexate by Scintigraphic Monitoring of [99mTc] Pteridinic Derivatives Biodistribution*, Annual Scientific Conference of Faculty of Physics, University of Bucharest, June 2008, Bucharest, Romania.
7. I.R. Andrei, **M.L. Pascu**, M. Bulinski, *Poli-composite microstructures for light emission*, Annual Scientific Conference of Faculty of Physics, University of Bucharest, June 2008, Bucharest, Romania.
8. I.R. Andrei, M. Ferrari, S. Rao, L. Liggieri, **M.L. Pascu**, *Wetting properties of droplets containing drugs on superhydrophobic surfaces*, Annual Scientific Conference of Faculty of Physics, June 2008, University of Bucharest, Bucharest, Romania.
9. R. Fumarel, G. Murgoci, P. Albert, A. Hurduc, **M.L. Pascu**, *Increase of Cisplatin therapeutical index through optical irradiation: a case study of choroidal metastasis*, Annual Scientific Conference of Faculty of Physics, University of Bucharest, June 2008, Bucharest, Romania.

10. R. A. Pascu, M. Trifu, M. Dumitrescu, A. Mahamoud, A. Staicu, M. Dicu, D. Gazdaru, A. Smarandache, B. Carstocea, **M.L. Pascu**, *Effects of the alkyl substituted benzo [b]pyridinium compounds exposed to optical radiation*, International Conference "Modern Laser Applications", May 2008, Bran, Romania.
11. R. Fumarel, G. Murgoci, P. Albert, A. Hurduc, **M.L. Pascu**, *Increase of Cisplatin therapeutical index through optical irradiation*, International Conference "Modern Laser Applications", May 2008, Bran, Romania.
12. L. Danaila, M.L. Pascu, F. Stefanescu, *Baza neurofiziologica a constiintei*, Sesiunea Stiintifica de Primavara a Academiei Oamenilor de Stiinta din Romania- Stiinta si Religie, May 2008, Bucharest, Romania.
13. I.R. Andrei, M. Ferrari, Silvia Rao, L. Liggieri, **M.L. Pascu**, *Generation of droplets wich contain cytostatics drugs*, COST P21 "The Physics of droplets"- 1st Training School "Physico-chemical and flow behavior of droplets-based systems", May 2008, Capri, Italy.
14. M. Dicu, A. Staicu, D. Gazdaru, J. Barbe, I.R. Andrei, **M.L. Pascu**, *Spectral studies of some alkyphenylpyridinium compounds under UV – VIS irradiation*, Summer School HRSMC-"Photochemistry: Fundamentals and Applications", June 2008, Maastricht, Olanda.
15. R. Fumarel, G. Murgoci, P. Albert, A. Hurduc, **M.L. Pascu**, *Increase of Cisplatin therapeutical index through optical irradiation*, The International Congress Laser Medicine, November 2008, Florence, Italy.
16. R.G. Fumarel, P. Albert, A. Hurduc, N. Stafidov, **M.L. Pascu**, *Determination of the Pharmacokinetics of methotrexate by Scintigraphic Monitoring of [99mTc] Pteridinic Derivatives Biodistribution*, The International Congress Laser Medicine, November 2008, Florence, Italy.
17. R.A. Pascu, A. Mahamoud, D. Gazdaru, A. Staicu, M. Dicu, I.R. Andrei, B. Carstocea, **M.L. Pascu**, J. Barbe, *Effects of the alkyl substituted benzo[b]pyridinium compounds exposed to optical radiation*, The International Congress Laser Medicine, November 2008, Florence, Italy.
18. I. R. Andrei, M. Ferrari, S. Rao, L. Liggieri, A. Mahamoud, M. Dicu, **M.L. Pascu**, *Studies about producing droplets containing cytostatics solution*, The International Congress Laser Medicine, November 2008, Florence, Italy.
19. I.R. Andrei, M. Bulinski, C.M. Ticos, **M.L. Pascu**, *Chaotic properties of the laser beams emitted by semiconductor lasers*, Annual Scientific Conference of Faculty of Physics, University of Bucharest, 5 June 2009, Bucharest, Romania.
20. M. Dicu, A. Staicu, A. Smarandache, I. R. Andrei, M. Ferrari, L. Liggieri, L. Frunza, **M.L. Pascu**, *Spectral studies of medicines to be delivered in microdroplets form*, Joint Conference of the 7th MC & WG Meetings. COST ACTION P21 „The physics of droplets”, 4-6 May 2009, Bucharest, Romania.
21. M. Ferrari, L. Liggieri, F. Ravera, **M.L. Pascu**, M. Dicu, *Wetting of solvents for drug delivery on superhydrophobic surfaces*, Joint Conference of the 7th MC & WG Meetings. COST ACTION P21 „The physics of droplets”, 4-6 May 2009, Bucharest, Romania.
22. S. Kevorkian, A. Manea, A. Dinischiotu, M. Dicu, **M.L. Pascu**, M. Costache, B. Carstocea, *Preliminary study of vancomycin on a normal epithelial retinal cell line*, Joint Conference of the 7th MC & WG Meetings. COST ACTION P21 „The physics of droplets”, 4-6 May 2009, Bucharest, Romania.
23. T. Beica, I. Zgura, L. Frunza, I. R. Andrei, M. Dicu, **M.L. Pascu**, *Surface tension of drug solutions*, Joint Conference of the 7th MC & WG Meetings. COST ACTION P21 „The physics of droplets”, 4-6 May 2009, Bucharest, Romania.
24. I.R. Andrei, M. Ferrari, L. Liggieri, M. Dicu, V. Nastasa, **M.L. Pascu**, *Characterization of microdroplets which contain solutions of medicines*, Joint Conference of the 7th MC & WG Meetings. COST ACTION P21 „The physics of droplets”, 4-6 May 2009, Bucharest, Romania.
25. I. R. Andrei, C. M. Ticos, M. Bulinski, **M.L. Pascu**, *Chaotic behaviour of semiconductor lasers emission when optically coupled with an external cavity*, Micro- to Nano-Photonics II- ROMOPTO 2009, 31 August-3 September 2009, Sibiu, Romania.
26. I.R. Andrei, V. Nastasa, C.M. Ticos, **M.L. Pascu**, *Investigation of the fluorescent compounds solutions in microdroplets form at interaction with laser radiation*, International Workshop Bubble and Drop Interfaces, 23-25 September 2009, Thessaloniki, Greece.
27. V. Nastasa, V. Pradines, **M.L. Pascu**, R. Miller, *Studies about the generation and characterization of microdroplets with a controlled content*, International Workshop Bubble and Drop Interfaces, 23-25 September 2009, Thessaloniki, Greece.
28. I.R. Andrei, A. Smarandache, **M.L. Pascu**, *Water microdroplets behaviour at interaction with laser beams*, International Workshop Bubble and Drop Interfaces, 23-25 September 2009, Thessaloniki, Greece.
29. I. R. Andrei, C.M. Ticos, M. Bulinski, **M.L. Pascu**, *Characterization of chaotic emission of a laser diode for selective and unselective optical feedback produced by external reflectors*, International Student Workshop on Laser Applications 2010 (ISWLA10), 25-28 May 2010, Bran, Romania.
30. V. Nastasa, Andra Militaru, T. Karapantsios, M. Ferrari, K. Samaras, E. Dafnopatidou, I. R. Andrei, L. Ligieri, V. Pradines, R. Miller, **M.L. Pascu**, *Generation of micro and nano-droplets containing immiscible solutions in view of optical studies*, International Student Workshop on Laser Applications 2010 (ISWLA10), 25-28 May 2010, Bran, Romania.
31. M. Trelles, Adriana Smarandache, **M.L. Pascu**, *Studies of the optical properties of the commercial grade Aetoxisclerol*, International Congress Laser Europe 2010, May 2010, Tarragona, Spain.
32. A. Smarandache, M. Trelles, **M.L. Pascu**, *Measurement of the modifications of Polidocanol absorption spectra after exposure to NIR laser radiation*, International Student Workshop on Laser Applications, May 2010, Bran, Romania.
33. A. Militaru, A. Smarandache, A. Mahamoud, V. Damian, S. Alibert, J.-M. Pagès, **M.L. Pascu**, *Time evolution of quinazoline derivative BG1188*, International Student Workshop on Laser Applications, 25-28 May 2010 Bran, Romania.
34. M. Boni, V. Nastasa, I. Jepu, C. Lungu, A. Pascu, A. Staicu, **M. L. Pascu**, *Raman spectra measurements on droplets of water and DMSO*, International Student Workshop on Laser Applications, 25-28 May 2010, Bran, Romania.
35. A. Militaru, A. Smarandache, A. Mahamoud, S. Alibert, J.-M. Pagès, **M.L. Pascu**, *Characterization of stability of BG 1188 compound in ultrapure water and DMSO by spectral studies*, COST Action BM0701 – ATENS, July 2010, Bremen, Germany.
36. V. Nastasa, T. Karapantsios, K. Samaras, E. Dafnopatidou, **M.L. Pascu**, *Studies on the generation of nano droplets of immiscible liquids*, COST Action BM0701 – ATENS, July 2010, Bremen, Germany.
37. A. Militaru, A. Smarandache, A. Mahamoud, V. Damian, N. Popescu-Pogriion, S. Alibert, F. Vasiliu, J. M. Pagès, **M. L. Pascu**, *Wire-like Formations Produced in BG1188 Solutions: Optical and Electron Microscopy Measurements*, 462nd WE Heraeus Seminar: Transport across membranes: Multiple drug resistance, mechanisms and new tools, 462nd WE Heraeus Seminar: Transport across membranes: Multiple drug resistance, mechanisms and new tools, July 2010, Bremen, Germany.

38. V. Nastasa, T. Karapantsios, K. Samaras, E. Dafnopatidou, **M.L. Pascu**, *Studies on the generation of micro/nano droplets of oil in mixtures of Tween 80 surfactant and water*, COST network P21 "Physics of droplets", July 2010, Borovets Bulgaria.
39. V. Nastasa, T. Karapantsios, K. Samaras, E. Dafnopatidou, **M.L. Pascu**, *Generation of micro and nano-droplets containing immiscible solutions and study of their properties in view of optical studies*, SPIE Optics and Photonics conference, August 2010, San Diego, SUA.
40. A. Smarandache, V. Nastasa, M. Trelles, J. Moreno-Moraga, **M.L. Pascu**, *Study of commercial grade Aetoxisclerol by optical means, in view of its use in varicose vein treatment*, Laser Florence 2010, 5-6 November 2010, Florence Italy.
41. A. Militaru, A. Smarandache, V. Nastasa, A. Mahamoud, V. Damian, N. Popescu-Pogrión, S. Alibert, F. Vasiliu, J.M. Pages, **M.L. Pascu**, *Stability characterization of quinazoline derivative BG1188 by optical methods*, Laser Florence 2010, 5-6 November 2010, Florence Italy.
42. I. Zgura, T. Beica, L. Frunza, F. Cotorobai, S. Frunza, I.R. Andrei, **M.L. Pascu**, *Drop shape analysis - a method to characterize drug solutions*, 11th International Balkan Workshop on Applied Physics, 7-9 July 2010, Constanta, Romania.
43. **M.L. Pascu**, R. Fumarel, M. Gherghe, *Interaction of solid malignant tumours with optical beams*, Cancer Genetics and Cytogenetics, Volume 203, Issue 1, November 2010.
44. V. Nastasa, A. Militaru, L. Amaral, **M.L. Pascu**, *Molecular modifications of chlorpromazine prepared as solution in micro-droplets form by exposure to laser radiation*, International Student Workshop on Laser Applications 2011, 31 May-4 June, 2011, Bran, Romania.
45. A. Smarandache, A. Militaru, V. Nastasa, J. Kristiansen, **M.L. Pascu**, *Studies of the spectral properties of Phenothiazines*, International Student Workshop on Laser Applications 2011, 31 May-4 June, 2011, Bran, Romania.
46. M. Boni, V. Nastasa, I.R. Andrei, G.V. Popescu, **M.L. Pascu**, *Optical emission by micro- and nano- droplets*, International Student Workshop on Laser Applications 2011, 31 May-4 June, 2011, Bran, Romania.
47. A. Militaru, A. Smarandache, L. Frunza, J.M. Pagès and **M.L. Pascu**, *Stability properties of medicines solutions: spectral evidence and wire-like formations*, International Student Workshop on Laser Applications 2011, 31 May-4 June, 2011, Bran, Romania.
48. A. Militaru, S. Alibert, A. Mahamoud, V. Damian, M. Filipescu, M. Enculescu, J. M. Pagès, **M.L. Pascu**, *Studies on molecular aggregates in quinazoline derivatives solutions by exploring methods*, International Student Workshop on Laser Applications 2011, 31 May-4 June, 2011, Bran, Romania.
49. I.R. Andrei, C.M. Ticos, M. Bulinski, **M.L. Pascu**, *Experimental control of the low frequency fluctuations by current modulation in a semiconductor laser with optical feedback*, International Student Workshop on Laser Applications 2011, 31 May-4 June, 2011, Bran, Romania.
50. I.R. Andrei, C.M. Ticos, M. Bulinski, G.V. Popescu, **M.L. Pascu**, *Experimental analysis of chaotic coupling of two lasers with external optical feedback*, International Student Workshop on Laser Applications 2011, 31 May- 4 June, 2011, Bran, Romania.
51. V. Nastasa, M. Boni, I.R. Andrei, A. Staicu, L. Amaral, **M.L. Pascu**, *Optical investigation of medicine solutions in micro-droplets form at interaction with laser radiation*, SPIE Optics and Photonics conference, August 2011, San Diego, USA.
52. **M.L. Pascu**, I.R. Andrei, A. Smarandache, C. Ticos, V. Nastasa, *Unresonant interaction of laser beams with microdroplets*, EOSOF 2011, 24-25 May 2011, Muenchen, Germany.
53. **M.L. Pascu**, V. Nastasa, A. Militaru, A. Staicu, A. Smarandache, S. Fanning, L. Amaral, *Fighting Multiple Drug Resistance of bacteria by treatment with Chlorpromazine modified by exposure to laser radiation*, EOSOF 2011, 24-25 May 2011, Muenchen, Germany.
54. M. Boni, V. Nastasa, I.R. Andrei, C.Lungu, **M.L. Pascu**, *Calorimetric measurements on microdroplets*, Central and Eastern European Committee for Thermal Analysis and Calorimetry, 7-10 September 2011, Craiova, Romania.
55. A. Smarandache, M. Trelles, A. Staicu, J. Moreno-Moraga, **M.L. Pascu**, *Laser beams interaction with Polidocanol foam: physical bases*, SELMQ 2011- XIX Congreso Sociedad Espanola de Laser Medico Quirurgico, 8–10 July 2011, Jerez de la Frontera, Spain.
56. A. Staicu, I. Apostol, I. Iordache, A. Pascu, V. Damian, **M.L. Pascu**, A. Neagoe, V. Iordache, *Laser induced break down spectroscopy on heavy metals in soil samples and paintings layers*, EMSLIBS 2011-6th Euro-Mediterranean Symposium on Laser-Induced Breakdown Spectroscopy, Cesme, September 2011, Izmir, Turkey.
57. A. Smarandache, A. Militaru, H. Goker, A. Pascu, **M.L. Pascu**, *Laser Methods for Pharmaceutical Pollutants Removal*, ATOM-N 2012, 23-26 august 2012, Constanta, Romania.
58. A. Smarandache, M. Trelles, J. Moreno-Moraga, A. Staicu, **M.L. Pascu**, *Laser beams interaction with pharmaceutical foams: Aethoxysklerol case*, ISCP 2012, Sinaia, Romania, 8-11 May 2012.
59. T. Alexandru, **M.L. Pascu**, B. Danko, V. Nastasa, M. Boni, A. Militaru, I. R. Andrei, A. Staicu, A. Hunyadi, S. Fanning, L. Amaral, *Exposure of Chlorpromazine to 266 nm laser beam generates new species with antibacterial properties*, ISCP 2012, Sinaia, Romania, 8-11 May 2012.
60. **M.L. Pascu**, V. Nastasa, M. Boni, T. Alexandru, A. Smarandache, A. Militaru, *Laser methods used to fight the multiple drug resistance (MDR) developed by bacteria*, Exploratory Workshop 2012 „Emerging Analytical to Investigate Nitro-oxidative Stress, July 2012, Bucharest, Romania.
61. A. Militaru, S. Fanning, M. Martins, M. McCusker, V. Nastasa, C. Hansen, P. Guiry, **M.L. Pascu**, *Interaction of medicines modified by exposure to laser radiation with bacteria*, Exploratory Workshop 2012 „Emerging Analytical to Investigate Nitro-oxidative Stress, July 2012, Bucharest, Romania.
62. T. Alexandru, **M.L. Pascu**, A. Armada, B. Danko, V. Nastasa, M. Boni, A. Militaru, I.R. Andrei, A. Staicu, A. Hunyadi, M. Viveiros, L. Amaral, *Activity of irradiated Chlorpromazine with a 266 nm laser beam against efflux pumps system*, Exploratory Workshop 2012 „Emerging Analytical to Investigate Nitro-oxidative Stress, July 2012, Bucharest, Romania.
63. T. Alexandru, A. Hunyadi, B. Danko, M. Boni, A. Militaru, V. Nastasa, **M.L. Pascu**, *Molecular Modifications of 20-Hydroxycydysone by Exposure to Laser Beams*, International Conference "Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies", August 2012, Constanta, Romania.
64. T. Alexandru, **M.L. Pascu**, B. Danko, V. Nastasa, M. Boni, A. Militaru, I. R. Andrei, A. Staicu, A. Hunyadi, A. Armada, M. Viveiros, L. Amaral *Generation and biological evaluation of the products formed from the exposure of Chlorpromazine to a 266 nm laser beam*, International Conference "Micro- to Nano-Photonics III- ROMOPTO 2012, September 2012, Bucharest, Romania.
65. A. Militaru (Dinache), M. Martins, M. P. McCusker, T. Alexandru, V. Nastasa, M. Boni, S. Fanning, **M.L. Pascu**, *Laser modified medicines: new alternatives in fighting MDR bacteria*, International Conference on Antimicrobial Research - ICAR2012, November 2012, Lisboa, Portugal.

66. A. Militaru (Dinache), A. Smarandache, S. Alibert, A. Mahamoud, V. Damian, M. Filipescu, L. Frunza, J. M. Pagès, **M.L. Pascu**, Quinazoline derivatives designed as antimicrobials: spectroscopic studies and microscopy evidence of micro-aggregates formation, International Conference on Antimicrobial Research - ICAR2012, November 2012, Lisboa, Portugal.
67. A. Staicu, I. Apostol, I. Iordache, A. Pascu, V. Damian, **M.L. Pascu**, Laser induced breakdown spectroscopy: stratigraphy on painted mock-ups, International Student Conference on Photonics 2012, May 2012, Sinaia, Romania.
68. M. Boni, V. Nastasa, A. Pascu, A. Staicu, **M.L. Pascu**, Measurements of Raman Spectra induced by laser beams on droplets, International Student Conference on Photonics 2012, May 2012, Sinaia, Romania.
69. A. Staicu, A. Pascu, M. Enescu, **M.L. Pascu**, Photophysical study of Zn Phthalocyanine in solvent mixtures, 31st European Congress on Molecular Spectroscopy (EUCMOS 2012), August 2012, Cluj-Napoca, Romania.
70. A. Staicu, A. Pascu, M. Boni, T. Alexandru, M. Enescu, **M.L. Pascu**, Spectroscopical studies of zinc phthalocyanine in binary solvent mixtures, International Conference on Optics "Micro- to Nano-Photonics III- ROMOPTO 2012", September 2012, Bucharest, Romania.
71. V. Nastasa, M. Boni, I.R. Andrei, **M.L. Pascu**, Laser induced modifications on drugs and their use as transport vectors to biological targets, International Conference on Optics "Micro- to Nano-Photonics III- ROMOPTO 2012", September 2012, Bucharest, Romania.
72. **M.L. Pascu**, Molecular Modifications of Phenothiazines by Irradiation with Laser Beams, Sesiunea Anuala Internationala a Academiei Franceze pentru Europa Centrala, June 2012, Chisinau, Moldova.
73. **M.L. Pascu**, V. Nastasa, M. Boni, G.V. Popescu, I.R. Andrei, Studies on the interaction of laser beams with pendant droplets, EOSAM 2012, 25-28 September 2012, Aberdeen, Scotland, UK.
74. **M.L. Pascu**, Lasers Applications in Fighting Multiple Drug Resistance, The Asian Pacific Association for Laser Medicine & Surgery, 23-25 November 2012, Taipei, Taiwan.
75. **M.L. Pascu**, A. Militaru, M. Boni, T. Alexandru, V. Nastasa, I.R. Andrei, Laser Methods Used to Fight Multiple Drug Resistance to Treatment, Laser Florence 2012, 9-10 November 2012, Florence, Italy.
76. M. Boni, V. Nastasa, I.R. Andrei, Angela Staicu, **M.L. Pascu**, Lasing effects in micro droplets, International Conference on Optics "Micro- to Nano-Photonics III- ROMOPTO 2012", 3-6 September, Bucharest, Romania.
77. M. Boni, V. Nastasa, A. Staicu, I.R. Andrei, **M.L. Pascu**, Lasing effects on optically pumped micro-droplets. Seventeenth International School on Quantum Electronics: "Laser Physics and Applications 2012", 24-28 September, Nessebar, Bulgaria.
78. B. Danko, **M.L. Pascu**, Laser-Induced Conversion of ecdysteroids and protoflavones, Cost Action BM 0701-ATENS "Antibiotic Transport and Efflux: New Strategies to Combat Bacterial Resistance" 7th and Final Management Committee Meeting, April 2012, Bucharest, Romania.
79. **M.L. Pascu**, Laser Spectroscopy Group Presentation, Annual Workshop, COST Action MP1106, September 2012, Dublin, Ireland.
80. **M.L. Pascu**, Combined laser techniques used to fight multiple resistance to drug treatment developed by bacteria, International Conference on Optics "Micro- to Nano-Photonics III- ROMOPTO 2012", 3-6 September, Bucharest, Romania.
81. I.R. Andrei, G.V. Popescu, C.M. Ticos, M. Bulinski, **M.L. Pascu**, Analysis of synchronization regimes and optical spectrum of a coupled chaotic laser system, International Conference on Optics "Micro- to Nano-Photonics III- ROMOPTO 2012", 3-6 September, Bucharest, Romania.
82. R. Andrei, G.V. Popescu, C.M. Ticos, **M.L. Pascu**, Optical spectrum analysis of chaotic synchronization regimes of coupled semiconductor lasers, 4th International Interdisciplinary Chaos Symposium on Chaos and Complex Systems"-CCS-2012, 30 Aprilie-2 May 2012, Antalya, Turcia.
83. I.R. Andrei, G.V. Popescu, C.M. Ticos, **M.L. Pascu**, Optical spectrum of a coupled chaotic system, International Student Conference on Photonics (ISCP), 8-11 May 2012, Sinaia, Romania.
84. M. Boni, V. Nastasa, I.R. Andrei, Angela Staicu, **M.L. Pascu**, Laser beams interaction on droplets, International Student Conference on Photonics (ISCP), 8-11 May 2012, Sinaia, Romania.
85. I.R. Andrei, G.V. Popescu, C.M. Ticos, **M.L. Pascu**, Optical Spectrum of a Coupled Laser System under Chaotic Synchronization Conditions, ATOM-N 2012, 23-26 August 2012, Constanta, Romania.
86. I.R. Andrei, T. Alexandru, A. Dinache, M. Boni, V. Nastasa, S. Simion, C. Ticos, **M.L. Pascu**, Interaction of laser beams with microdroplets containing medicines solutions in water, World of Photonics Congress 2013, 2nd EOS Conference on Optofluidics, 13-15 May 2013, Munich, Germany.
87. T. Alexandru, V. Nastasa, A. Staicu, **M.L. Pascu**, FTIR studies of Phenothiazines exposed to laser beam, INDLAS & ISCP, 20-24 May 2013, Bran, Romania.
88. A. Stoicu, E. Radu, V. Nastasa, A. Dinache, T. Alexandru, M. Boni, G. Popescu, A. Staicu, **M.L. Pascu**, Spectrochemical study about the photoreaction products obtained by chlorpromazine exposure to uv laser beam, INDLAS & ISCP, 20-24 May 2013, Bran, Romania.
89. T. Alexandru, A. Staicu, V. Nastasa, A. Pascu, A. Dinache, A. Smarandache, A. Simon, E. Radu, M. Enescu, **M.L. Pascu**, Laser induced cleavage of molecules for application on biological targets, 16th International Graduate summer school - Biophotonics ', 13, 8-15 June 2013, Inslad of Ven, Sweeden.
90. T. Alexandru, A. Armada, V. Nastasa, A. Dinache, E. Radu, A. Stoicu, M. Viveiros, L. Amaral, **M.L. Pascu**, UV photoactivated non-antibiotics in fighting multidrug resistance in Gram-negative bacteria NABATIVI summer school "Targeting Gram-negative bacteria: from drugs discovery to pre-clinical exploitation", 1-3 July 2013, Milan, Italy.
91. T. Alexandru, V. Nastasa, A. Staicu, E. Radu, A. Stoicu, **M.L. Pascu**, Studies of the interaction of UV laser radiation whit non-antibiotics using optical and non-optical techniques, Annual Scientific Conference of Faculty of Physics, 21 June 2013, Magurele, Romania.
92. A. Simon, A. Smarandache, T. Alexandru, V. Nastasa, **M.L. Pascu**, Stability studies of Promethazine hydrochloride exposed to 266 nm laser beam, Annual Scientific Conference, 21-22 June 2013, Bucharest, Romania.
93. A. Simon, A. Smarandache, T. Alexandru, V. Nastasa, **M.L. Pascu**, Studies about the stability of Promethazine hydrochloride exposed to 266 nm laser beam, INDLAS & ISCP, 20-24 May 2013, Bran, Romania.
94. I. R. Andrei, M. Boni, G.V. Popescu, C.M. Ticos, S. Simion, **M.L. Pascu**, Investigation of interaction mechanisms of a water microdroplet with a focused 532nm laser pulse for different irradiation conditions, International Student Conference on Photonics (ISCP) – ISCP&INDLAS 2013, 20-24 May 2013, Bran, Romania.

95. A. Smarandache, A. Pascu, I. Andrei, J. Handzlik, K. Kiec-Kononowicz, A. Staicu, **M. L. Pascu**, Study of the optical properties of 2-Thiohydantoin derivatives, International Student Conference on Photonics (ISCP) – ISCP&INDLAS 2013, Bran, Romania, 20-24 May 2013
96. M. Boni, A. Dinache, I.R. Andrei, V. Nastasa, **M.L. Pascu**, Evaporation measurements of pendant droplets which contain different solutions, International Student Conference on Photonics (ISCP) – ISCP&INDLAS 2013, 20-24 May 2013, Bran, Romania.
97. A. Staicu, I. Apostol, A. Pascu, V. Damian, I. Urzica, M. Bojan, **M.L. Pascu**, Minimal invasive control in art restoration by LIBS, EMSLIBS 2013 - 7th Euro-Mediterranean Symposium on Laser-Induced Breakdown Spectroscopy, 16-20 September 2013, Bari, Italy.
98. **M.L. Pascu**, A. Simon, V. Dutsch, T. Alexandru, V. Nastasa, M. Boni, A. Dinache, R.A. Pirvulescu, Overview on the interaction between medicines exposed to laser radiation and materials of medical interest, Laser Florence 2013, 9-10 November 2013, Florence, Italy.
99. **M.L. Pascu**, I.R. Andrei, A. Smarandache, A. Dinache, T. Alexandru, M. Boni, A. Staicu, R.A. Pirvulescu, Laser methods in generating anti-infective effects of non-antibiotics, Laser Florence 2013, 9-10 November 2013, Florence, Italy.
100. V. Nastasa, K. Samaras, T. Karapantsios, **M.L. Pascu**, Stability measurements of Polidocanol foams in view of their use in sclerotherapy, EUFOAM 2013, Sofia, Bulgaria.
101. V. Nastasa, **M.L. Pascu**, Dynamic surface tension measurements on surface active drugs, INDLAS 2013, Bran Romania.
102. M. Boni, V. Nastasa, I.R. Andrei, A. Dinache, **M.L. Pascu**, Measurements of the volume stability of the pendant droplets which contain different solutions, 1st international workshop on wetting and evaporation: droplets of pure and complex fluids, 17-20 June 2013, Marseilles, France.
103. **M.L. Pascu**, T. Alexandru, M. Boni, A. Dinache, V. Nastasa, I. Andrei, Laser irradiation interaction with droplets that contain medicines, Smart and green interface- Cost Action MP 1106 and 5th International Conference on "Heat transfer and fluid flow in microscale", 22-24 April 2014, Marseille, France.
104. T. Alexandru, A. Staicu, A. Pascu, V. Nastasa, E. Radu, A. Stoicu, **M.L. Pascu**, Laser photodecomposition of phenothiazine derivative, INDLAS 2014, 19-23 May 2014, Bran, Romania.
105. I.R. Andrei, T. Alexandru, M. Boni, A. Dinache, V. Nastasa, **M.L. Pascu**, Resonant effects on medicine solutions irradiated at two different UV laser beams: droplets and bulk experiments, INDLAS 2014, 19-23 May 2014, Bran, Romania.
106. A. Dinache, M. Boni, I. Andrei, T. Alexandru, V. Nastasa, **M.L. Pascu**, Spectroscopic evidence of antibiotic solutions modifications at interaction with laser radiation, INDLAS 2014, 19-23 May 2014, Bran, Romania.
107. A. Simon, T. Alexandru, M. Boni, V. Damian, V. Dutschk, **M.L. Pascu**, Phenothiazines solutions exposed to laser radiation in interaction with special surfaces, in view of biomedical applications, INDLAS 2014, 19-23 May 2014, Bran, Romania.
108. V. Nastasa, M. Boni, T. Alexandru, A. Stoicu, A. Simon, A. Dinache, A. Smarandache, I. R. Andrei, A. Staicu, **M.L. Pascu**, Contributions to medical applications of lasers, 2014 Biophotonics Summer School, University of Illinois at Urbana-Champaign, 19 – 30 May 2014, Urbana, USA.
109. A. Dinache, M. Boni, V. Nastasa, T. Alexandru, A. Stoicu, I. Andrei, E. Radu, **M.L. Pascu**, Mechanisms and photoproducts involved in foam production starting from Vancomycin solutions exposed to laser radiation, 20th International Symposium on Surfactants in Solution, 22-27 June 2014, Coimbra, Portugal.
110. T. Alexandru, A. Staicu, A. Pascu, V. Nastasa, E. Radu, A. Stoicu, **M.L. Pascu**, Photodissociation study of non-antibiotic drug by UV laser irradiation, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
111. T. Alexandru, A. Staicu, A. Pascu, A. Dinache, M. Enescu, A. Khatyr, **M.L. Pascu**, Singlet oxygen interaction with some olefin as potential linkers in targeted drug delivery, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania
112. T. Alexandru, A. Armada, V. Nastasa, M. Boni, A. Dinache, L. Amaral, **M.L. Pascu**, Antimicrobial activity of irradiated CPZ against Gram-Negative and Gram-Positive bacteria, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
113. A. Simon, T. Alexandru, A. Smarandache, A. Dinache, I.R. Andrei, **M.L. Pascu**, Time stability studies of Chlorpromazine and Thioridazine exposed to 266 nm laser beam, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
114. V. Nastasa, A. Smarandache, T. Alexandru, A. Staicu, Z. Saponjic, **M.L. Pascu**, UV treatment of water for drug pollutants removal, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
115. I. R. Andrei, T. Alexandru, M. Boni, A. Dinache, V. Nastasa, **M.L. Pascu**, Characterization of laser radiation interaction with liquid droplets and bulk that contain solution of chlorpromazine in water, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
116. A. Stoicu, T. Alexandru, E. Radu, V. Nastasa, **M.L. Pascu**, Chlorpromazine Vibrational Spectroscopy - A Computational Study, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
117. A. Simon, T. Alexandru, M. Boni, V. Damian, V. Dutschk, **M.L. Pascu**, Interaction of solutions containing phenothiazines exposed to laser radiation with materials surfaces, in view of biomedical applications, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania
118. A. Dinache, M. Boni, A. Staicu, T. Alexandru, E. Radu, V. Nastasa, A. Stoicu, I. Andrei, V. Damian, M. Ferrari, **M.L. Pascu**, Spectral evidence of Vancomycin's modification under exposure to laser radiation, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
119. A. Staicu, A. Dinache, T. Alexandru, A. Pascu, A. Smarandache, V. Nastasa, M. Boni, A. Simon, F. Sima, M. Enescu, **M.L. Pascu**, Photodynamic studies of some molecules of interest in drug carrier systems, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
120. A. Stoicu, T. Alexandru, E. Radu, V. Nastasa, **M.L. Pascu**, Chlorpromazine Vibrational Spectroscopy – A Computational Study, Introduction to Gaussian: Theory and Practice, 28 July–1 August 2014, Ulm University, Ulm, Germany
121. M. Boni, I.R. Andrei, V. Nastasa, A. Staicu, **M.L. Pascu**, Study of the dynamic effects at the laser beam - pendant droplet interaction, INDLAS 2014, 19-23 May 2014, Bran, Romania
122. M. Boni, I.R. Andrei, A. Staicu, **M.L. Pascu**, Lasing emission by pending micro-droplets that contain laser dye, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.

123. M. Boni, A. Dinache, V. Nastasa, I. R. Andrei, A. Staicu, **M.L. Pascu**, Enhance fluorescence in micro droplets containing emulsions, 20th International Symposium on Surfactants in Solution, 22-27 June 2014, Coimbra, Portugal.
124. V. Nastasa, K. Samaras, T. Karapantsios, **M.L. Pascu**, Foam stability study in view of endovenous sclerosant therapy, INDLAS 2014, 19-23 May 2014, Bran, Romania.
125. V. Nastasa, A. Smarandache, K. Samaras, T. D. Karapantsios, **M.L. Pascu**, Study of colloidal systems properties in view of their use in medical treatments, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
126. S. A. Baleanu, I. R. Andrei, **M.L. Pascu**, Characterization of the LFF chaotic regime of an ECSL system working at and over laser threshold current, 5th International Student Conference on Photonics (ISCP), 23-26 September 2014, Orastie, Romania.
127. A. Smarandache, V. Nastasa, J. Handzlik, K. Kiec-Kononowicz, G.G. James, **M.L. Pascu**, Spectroscopic Studies Of Unexplored Imidazolidines In View Of Their Dna Binding Affinity Characterization, INDLAS 2014, 19-23 May 2014, Bran, Romania.
128. A. Smarandache, V. Nastasa, J. Handzlik, K. Kiec-Kononowicz, J. G. Grote, **M.L. Pascu**, Characterization and DNA binding studies of new hydantoin derivatives by electronic spectroscopy, 5th International Student Conference on Photonics (ISCP), 23-26 September 2014 Orastie, Romania.
129. A. Smarandache, V. Nastasa, A. Stoicu, J. Handzlik, K. Kiec-Kononowicz, **M.L. Pascu**, Spectroscopic and DFT studies of a new hydantoin derivative molecular structure, 5th International Student Conference on Photonics (ISCP), 23-26 September 2014, Orastie, Romania.
130. A. Smarandache, V. Nastasa, A. Stoicu, J. Handzlik, K. Kiec-Kononowicz, **M.L. Pascu**, Spectroscopic Study And Molecular Structure Modeling Of New Hydantoin Derivatives, Annual Scientific Conference (Bucharest University Faculty of Physics 2014 Meeting), 20 June 2014, Bucharest, Romania.
131. A. Dinache, V. Nastasa, S. Alibert, J. M. Pagès, **M.L. Pascu**, Stability studies of quinazoline derivatives designed as EPI's, 5th edition of International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
132. A. Smarandache, A. Dinache, A. Pascu, I. Andrei, J. Handzlik, K. Kiec-Kononowicz, A. Staicu, **M.L. Pascu**, Spectroscopic investigations of new anticancer drugs and their behavior at the incidence with laser radiation, SPEC 2014 Shedding New Light on Disease, 17-22 August 2014, Krakow, Poland.
133. M. Boni, V. Nastasa, I.R. Andrei, A. Staicu, **M.L. Pascu**, Enhanced fluorescence in pending micro-droplets that contain emulsions, 5th edition of International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
134. Stoicu, A. Dinache, **M.L. Pascu**, Analogy of Vancomycin experimental and model spectra, 5th edition of International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
135. M. Boni, A. Dinache, V. Nastasa, **M.L. Pascu**, Optical studies of Vancomycin modification during foam generation at interaction with laser beams, COST Actions MP1106 and CM1101 Joint Training School Particles at Liquid Interfaces: Fundamentals and Applications, 2-5 April 2014, Bonassola, Italy.
136. M. Boni, I.R.Andrei, A. Staicu, **M.L. Pascu**, Tunable lasers with pendant micro-droplets active media, The 2014 Scientific Communications Session of Physics Faculty, University of Bucharest, 20 June 2014, Bucharest, Romania,.
137. M. Boni, I.R. Andrei; V. Nastasa, **M.L. Pascu**, Interaction of laser beams with pendant droplets containing laser dyes, Smart and Green Interfaces Conference, 22-24 April 2014, Marseille, France,.
138. V. Nastasa, K. Samaras, M. Trelles, J. Moreno-Moraga T. Karapantsios, **M.L. Pascu**, Polidocanol foam study in view of varicose vein treatment, COST Actions MP1106 and CM1101 Joint Training School Particles at Liquid Interfaces: Fundamentals and Applications, 2-5 April 2014, Bonassola, Italy.
139. A. Stoicu, T. Alexandru, E. Radu, V. Nastasa, **M.L. Pascu**, Chlorpromazine Vibrational Spectroscopy - A Computational Study, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
140. **M.L. Pascu**, M. Ferrari, Modification of surface properties of Vancomycin following exposure to UV laser beam, International Student Conference on Photonics (ISCP 2014), 23-26 September 2014, Orastie, Romania.
141. **M.L. Pascu**, Application of laser techniques in the treatment of varicose vanes with Polidocanol foam Instituto medico Vilafortuny, 18 February 2014, Tarragona, Barcelona, Spain.
142. **M.L. Pascu**, Laser beams interactions with single pendat droplets, Advances in Optofluidics: Integration of Optical Control and Photonics with Microfluidics, 23-26 april Dublin, Ireland.
143. **M.L. Pascu**, New date about the use of Polidocanol foams in the treatment of varicose vanes asisted by Nd:YAG lasers, Instituto Medico Madrid, 21 February 2014, Madrid, Spain.
144. **M.L. Pascu**, The use of nonantibiotics modified by exposure to laser radiation to fight multiple drug resistance, INDLAS 2014, 19-23 May 2014, Bran, Romania.
145. V. Nastasa, M. Boni, I.R. Andrei, A. Staicu, **M.L. Pascu**, *Enhanced fluorescence emission of pendant micro-droplets containing emulsions*, Bubble and Drop 2015, 6-10 July 2015. Potsdam, Gemany.
146. V. Nastasa, A. Smarandache, K. Samaras, T. D. Karapantsios, **M.L. Pascu**, *Assessment of colloidal systems stability in view of their use in medical treatments*, Micro- to Nano-Photonics IV- Romopto 2015, 1-4 September 2015, Bucharest, Romania.
147. T. Tozar, A. Stoicu, V. Nastasa, M. Popa, I. R. Andrei, C. M. Chifiriuc, **M.L. Pascu**, *Generation of photo-products with antimicrobial properties by exposing Phenothiazines to UV laser radiation*, 6th Congress of International PhotoTherapy Association, 9-10 July 2015, Nice, France.
148. T. Tozar, A. Dinache, V. Nastasa, M. Boni, Á. Simon, **M.L. Pascu**, *Antimicrobial activity of UV photogenerated non-antibiotic drug in fighting multidrug resistance bacteria*, "New frontiers in regenerative medicine and surgery. Interdisciplinarity, research and clinical applications" International Congress, 12, 15- 16 May 2015, Bucharest, Romania.
149. T. Tozar, M. C. Morán, A. Dinache, A. Smarandache, I. R. Andrei, A.Simon, M. Boni, F. Cirisano, M. Ferrari, **M.L. Pascu**, *Spectroscopic and analytical studies of Thioridazine exposed to UV laser radiation and susceptibility of bacteria to the mixture of photo-products assay*, 11th International Conference "Micro- to Nano-Photonics IV- ROMOPTO 2015", 1-4 September 2015, Bucharest, Romania.
150. T. Tozar, A. Stoicu, V. Nastasa, M. Popa, I. R. Andrei, C. M. Chifiriuc, **M.L. Pascu**, *Cytotoxicity assay of four Phenothiazines exposed to 266 nm laser radiation for application in biomedical fibers*, 11th International Conference "Micro- to Nano-Photonics IV- ROMOPTO 2015", 1-4 September 2015, Bucharest, Romania.

151. T. Tozar, A. Stoicu, V. Nastasa, M. Popa, I. R. Andrei, M. C. Chifiriu, **M.L. Pascu**, *Testing the susceptibility of bacteria in planktonic and biofilms forms to fenothiazines exposed to a 266 nm laser beam emitted by a Nd:YAG laser*, Annual Scientific Conference of Faculty of Physics, 19 June 2015, Magurele, Romania.
152. M. Boni, V. Nastasa, I.R. Andrei, A. Staicu, **M.L. Pascu**, *Emission spectra of pendant droplets containing dye solutions and emulsions*, 116th Annual Meeting of DGaO, 27 - 29 May 2015, Brno, Czech Republic.
153. M. Boni, V. Nastasa, I.R. Andrei, A. Staicu, **M.L. Pascu**, *Resonant interaction of laser beams with pendant droplets of emulsions*, 3rd EOS Conference on Optofluidics (EOSOF 2015), 21-24 June 2015, Munchen, Germany.
154. M. Boni, V. Nastasa, I.R. Andrei, A. Staicu, **M.L. Pascu**, *Comparison between emission spectra of pendant droplets containing dye solutions and emulsions*, Annual Scientific Conference of Faculty of Physics, University of Bucharest, 19 June 2015, Magurele, Romania.
155. **M.L. Pascu**, I.R. Andrei, M. Boni, V. Nastasa, R. Pirvulescu, *Interaction of laser beams with single droplets in pendant position*, 3rd EOS Conference on Optofluidics (EOSOF 2015)", 21-24 June 2015, Munchen, Germania,
156. V. Nastasa, M. Boni, A. Smarandache, T. Alexandru, A. Staicu, I.R. Andrei, A. Dinache, Z. Saponjic, **M.L. Pascu**, *Laser photocatalytic effect of TiO₂ nanoparticles for water pollutants removal*, Smart and green interfaces- Conference 2015, March 2015, Belgrade, Serbia.
157. M. Boni, V. Nastasa, I.R. Andrei, A. Staicu, **M.L. Pascu**, *Lasing emission by microdroplets of emulsion*, Smart and green interfaces-Conference 2015, March 2015, Belgrade, Serbia.
158. A. Staicu, A. Dinache, A. Smarandache, T. Tozar, A. Pascu, V. Nastasa, M. Boni, A. Simon , I. R. Andrei , M. Enescu , **M.L. Pascu**, *Photophysical studies of some compounds of interest in targeted drug delivery*, Micro- to Nano-Photonics IV-ROMOPTO 2015, 1-4 September 2015, Bucharest, Romania.
159. A. Smarandache, A. Staicu, V. Nastasa, J. Moreno-Moraga, J. Royo de la Torre , M. Trelles, **M.L. Pascu**, *Physical properties of laser irradiated sclerosing foams*, Micro- to Nano-Photonics IV-ROMOPTO 2015, 1-4 September 2015, Bucharest, Romania.
160. I.R. Andrei, M. Boni, A. Staicu, **M.L. Pascu**, *Lasing emission by side-pumped dye-doped droplets in pendant positions: modal structure*, 11th International Conference Micro- to Nano-Photonics IV - ROMOPTO, 1-4 September 2015, Bucharest, Romania.
161. M. Boni, V. Nastasa, I.R. Andrei , A. Staicu, **M.L. Pascu**, *Comparison of lasing emission of pendant droplets containing dye solutions and emulsions*, 11th International Conference Micro- to Nano-Photonics IV - ROMOPTO, 1-4 September 2015, Bucharest, Romania
162. A. Dinache, T. Tozar, M. Boni, A. Staicu, V. Nastasa, A. Stoicu, I.R. Andrei, V. Damian, E. Radu, M. Ferrari, **M.L. Pascu**, *Study of Vancomycin photoproducts, precursors of foam generation*, Smart and green interfaces-Conference 2015, 31 March- 1 April 2015, Belgrade, Serbia.
163. A. Smarandache, A. Staicu, V. Nastasa, J. Moreno-Moraga, J. Royo de la Torre, M. Trelles, **M.L. Pascu**, *Laser irradiated Polidocanol foam for sclerotherapy*, "New frontiers in regenerative medicine and surgery. Interdisciplinarity, research and clinical applications" International Congress, 12, 15-16 May 2015, Bucharest, Romania.
164. A. Smarandache, A. Pascu, M. Boni, I. Andrei, J. Handzlik, K. Kiec-Kononowicz, A. Staicu, **M.L. Pascu**, *Spectroscopic investigations of new hydantoin derivatives and their behavior under laser beam exposure for further biomedical applications*, 6th Congress of International PhotoTherapy Association, 9-10 July 2015, Nisa, France.
165. M. Boni, I.R. Andrei, V. Nastasa , A. Staicu , **M.L. Pascu**, *Lasing Emission by Side-pumped Emulsion Droplets in Pendant Positions*, Progress In Electromagnetics Research Symposium (PIERS 2015), 6-9 July 2015, Prague, Czech Republic.
166. I.R. Andrei, A. Baleanu, **M.L. Pascu**, *Chaotic low-frequency fluctuations of the laser radiation emitted by a diode laser working at currents above the laser threshold*, Progress In Electromagnetics Research Symposium (PIERS 2015), 6-9 July 2015, Prague, Czech Republic.
167. A. Smarandache, M. Boni, V. Nastasa, I. R. Andrei, J. Handzlik, K. Kiec-Kononowicz, L. Amaral, **M.L. Pascu**; *Laser beam resonant interaction of new hydantoin derivatives droplets for biomedical applications*; B&D 2015, 6-10 July 2015, Potsdam, Germany.
168. A. Smarandache, M. Boni, V. Nastasa, I.R. Andrei, J. Handzlik, K. Kiec-Kononowicz, L. Amaral, **M.L. Pascu**; *Investigations on the interaction of unexplored hydantoin derivatives solutions with optical beams*; Annual Scientific Conference of Faculty of Physics, 19 June 2015, Magurele, Romania.
169. A. Smarandache, A. Simon, A. Dinache, T. Tozar, M. Boni, I.R. Andrei, M.C. Morán, F. Cirisano, M. Ferrarl, **M.L. Pascu**; *Stability of new laser produced medicines in view of their application on biomedical fabrics*; Annual Scientific Conference of Faculty of Physics, 19 June 2015, Magurele, Romania.
170. A. Smarandache, V. Nastasa, M. Boni, J. Handzlik, K. Kiec-Kononowicz, L. Amaral, **M.L. Pascu**; *Light exposure influence on the wetting properties of new imidazolidine derivatives solutions*; 5th International Colloids Conference 2015 "Colloid and Interface Sciences for a Brighter Future", 21-24 June 2015, Amsterdam, Olanda.
171. S. Alexandru, S. Adriana, N. Viorel, H. Jadwiga, Kiec-Kononowicz K., **M.L. Pascu**, *Experimental and model IR spectra of new hydantoin derivatives*, "Micro- to Nano-Photonics IV- ROMOPTO 2015", 1-4 September 2015, Bucharest, Romania.
172. M. Boni, A. Staicu, I.R. Andrei, A. Smarandache, V. Nastasa, Z. Saponjic, **M.L. Pascu**, *Studies on the laser induced emission of microdroplets containing Rhodamine 6G solutions in water doped with TiO₂ nanoparticles*, Smart and green interfaces: Fundamentals and diagnostics (SGI-FunD), 29-31 October 2015, Sofia, Bulgaria.
173. **M.L. Pascu**, M. Boni, I.R. Andrei, *Optically pumped microliter droplets as lasing sources in the visible spectral range*, 11th International Conference "Micro- to Nano-Photonics IV- ROMOPTO 2015", 1-4 September 2015, Bucharest, Romania.
174. I.R. Andrei, A. Baleanu, **M.L. Pascu**, *Chaotic low-frequency fluctuations of the radiation emitted by a semiconductor laser working at currents above the laser threshold*, Annual Scientific Conference of Faculty of Physics, University of Bucharest, June 19, 2015, Bucharest, Romania.
175. A. Simon, T. Tozar, M. Boni, V. Damian, V. Dutschk, **M.L. Pascu**, *Biomedical applications of non-antibiotics exposed to uv laser radiation and their interaction with fabric surfaces*, "New frontiers in regenerative medicine and surgery. Interdisciplinarity, research and clinical applications" International Congress, 12, 15- 16 May 2015, Bucharest, Romania.
176. A. Simon, T. Alexandru, M. Boni, V. Damian, A. Stoicu, V. Dutschk, **M.L. Pascu**, *Phenothiazines exposed to 266 nm laser beam in interaction with fabric surfaces, in view of biomedical applications*, 116th Annual Meeting of DGaO, 27-29 May 2015, Brno, Czech Republic.

177. A. Simon, T. Tozar, A. Stoicu, M. Boni, V. Damian, **M.L. Pascu**, *Biomedical applications of laser exposed medicines containing solutions in interaction with target surfaces: ESA "Spin Your Thesis!" programme*, Annual Scientific Conference of Faculty of Physics, 19 June 2015, Măgurele, Romania.
178. A. Simon, T. Tozar, A. Stoicu, M. Boni, V. Damian, **M.L. Pascu**, *Interaction of laser exposed non-antibiotic solutions with target surfaces, in view of biomedical applications: ESA "Spin Your Thesis!" campaign*, 11th International Conference "Micro- to Nano-Photonics IV- ROMOPTO 2015", 1-4 September 2015, Bucharest, Romania.
179. A.Simon, A. Smarandache, T. Tozar, V. Nastasa, R. Pivulescu, **M.L. Pascu**, *Stability studies on Promethazine unexposed and exposed to UV laser radiation*, Optics+Photonics, 8-12 August 2015, San Diego, USA.
180. A. Simon, A. Stoicu, T. Tozar, I.R. Andrei, V. Damian, **M.L. Pascu**, *Direct modification of photosensitive non-antibiotics by exposure to UV laser radiation and their interaction with target surfaces: New process for drug discovery and delivery in view of space mission applications*, Antibiotic resistance and antibiotic alternatives: Looking towards the future, 3-5 November 2015, London, UK.
181. M. Boni, V. Nastasa, I.R. Andrei, A. Staicu, **M.L. Pascu**, *Laser induced emission of dye emulsion droplets*, Smart and green interfaces: Fundamentals and diagnostics (SGI-FunD), 29-31 October 2015, Sofia, Bulgaria.
182. **M.L. Pascu**, R. Pivulescu, T. Tozar, *Laser methods in fighting multiple drug resistance*, "New frontiers in regenerative medicine and surgery. Interdisciplinarity, research and clinical applications" ISRMS Congress, 12 & 15- 16 May 2015, Bucharest, Romania.
183. **M.L. Pascu**, R. Pivulescu, M. Boni, I.R. Andrei, *Laser beams interaction with droplets in view of biomedical applications*, 6th Congress of International PhotoTherapy Association, 9-10 July 2015, Nice, France.
184. M.H. Kaleshtari, I. Ciobanu, D.C. Tranca, A. Palacean, A. Ghita, R. Pivulescu, C. Pivulescu, **M.L. Pascu**, M. Berteanu, *Experimental equipment for treatment with uncoherent light emitted in UV and visible*, 6th Congress of International PhotoTherapy Association, 9-10 July 2015, Nice, France.
185. **M.L. Pascu**, M. Boni, I.R. Andrei, *Emission of laser/lasing radiation by optically pumped droplets in pendant position*, "Advances in optofluidics: Integration of optical control and photonics with microfluidics" COST Action MP1205 Conference and MC meeting, 7-8 May 2015, Porto, Portugal
186. A. Simon, A. Stoicu, I.R. Andrei, T. Alexandru, A. Staicu, A. Smarandache, **M.L. Pascu**, *Wetting properties of medicines solutions exposed to laser beams and treated in hypergravity conditions*, "Smart and green interfaces: Fundamentals and diagnostics" (SGI-FunD) Symposium, 29-31 October 2015, Sofia, Bulgaria.
187. A. Simon, A. Stoicu, T. Tozar, **M.L. Pascu**, *Interaction of laser exposed Non-antibiotic solutions with target surfaces in hypergravity conditions: ESA "Spin Your Thesis!" campaign*, 1st Symposium on Space Educational Activities, 9-12 December 2015, Padova, Italy
188. A. Simon, A. Stoicu, T. Tozar, I.R. Andrei, **M.L. Pascu**, *UV laser modified medicine solutions in interaction with target surfaces under hypergravity conditions*; International OSA Network of Students, 20-22 May 2016, Québec, Canada
189. A. Simon, A. Stoicu, T. Tozar, J.J.W.A van Loon, A. Dowson, **M.L. Pascu**, *Laser treated Chlorpromazine in interaction with target surfaces of biomedical interest: revelation of results obtained within ESA's "Spin Your Thesis!" programme*; Annual Scientific Conference University of Bucharest, Faculty of Physics 2016 Meeting, 17 June 2016, Măgurele, Romania
190. A. Simon, I.R. Andrei, V. Damian, **M.L. Pascu**, *Laser exposed medicine impregnated target surfaces subjected to simulated hypergravity condition, in view of space medicine applications*; Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies (ATOM-N) Conference, 25-28 August 2016, Constanța, Romania
191. T. Tozar, A. Stoicu, V. Nastasa, M. Popa, C. Chifiriuc, I.R. Andrei, **M.L. Pascu**, *Susceptibility of bacteria to photo-chemically generated agents from phenothiazine derivatives*, ICPEPA10, 29 August-2 September 2016, Brasov, Romania.
192. A. Smarandache; A. Pascu; M. Boni; I. Andrei; J. Handzlik; K. Kiec-Kononowicz; A. Staicu; **M.L. Pascu**; *Spectroscopic investigations of novel pharmaceuticals: stability and laser beam resonant interaction*; ICPEPA10, 29 August-2 September 2016, Brasov, Romania.
193. A. Dinache; A. Smarandache; T. Alexandru; A. Pascu; V. Nastasa; A. Simon; M. Enescu; A. Khatyr; F. Sima; **M.L. Pascu**; A. Staicu; *Photosensitized cleavage of some olefins as potential linkers to be used in drug delivery*, ICPEPA10, 29 August-2 September 2016, Brasov, Romania.
194. A. Staicu; A. Pascu; A. Smarandache; T. Alexandru; **M.L. Pascu**; *Photophysics of single wall carbon nanotubes covalently functionalised with porphyrin photosensitizers*; ICPEPA10, ICPEPA10, 29 August-2 September 2016, Brasov, Romania.
195. A. Staicu; M. Boni; I. R. Andrei; A. Smarandache; V. Nastasa; Z. Saponjic; **M.L. Pascu**; *Studies on the laser induced emission of pendant droplets of dye water solutions containing TiO2 nanoparticles*; Smart and Green Interfaces Conference 2016, 4-6 May 2016, Athens, Greece;
196. M. Boni, I.R. Andrei, A. Staicu, **M.L. Pascu**, *Lasing effects in microvolumetric droplets pumped by laser beams*, EMN Meeting On Droplets 10-13 May 2016, Donostia-San Sebastián, Spain;
197. M. Boni, I.R. Andrei, A. Staicu, **M.L. Pascu**, *Time deconvolution of lasing emission of microvolumetric droplets pumped by laser beams*, Annual Scientific Conference University of Bucharest, Faculty of Physics, 17 June 2016, Măgurele, Romania
198. A. Stoicu, T. Tozar, **M.L. Pascu**, *Modeling of molecular electronic structures of medicines used to fight MDR acquired by bacteria*, SPIE Optics+Photonics 2016, 28 August-2 September 2016, San Diego, USA.
199. I.R. Andrei, M. Boni, A. Staicu, **M.L. Pascu**; *Fluorescence emission structure of a side-pumped Rh6G dye-doped micro-droplet*; ICPEPA10, 29 August-2 September 2016, Brasov, Romania.
200. V.Nastasa, K. Samaras, Ch. Ampatzidis, T.D. Karapantsios, M. A. Trelles, J. Moreno-Moraga, A. Smarandache, **M.L. Pascu**; *Sclerosing foams assessment in view of their use in sclerotherapy*, Smart and Green Interfaces Conference 2016, 4-6 May 2016, Athens, Greece.
201. V.Nastasa, K. Samaras, Ch. Ampatzidis, T.D. Karapantsios, M. A. Trelles, J. Moreno-Moraga, A. Smarandache, **M.L. Pascu**, *Optical properties of sclerosing foams in view of their use in sclerotherapy*, Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies (ATOM-N) Conference, 25-28 August 2016, Constanța, Romania.
202. A. Smarandache, M. Boni, J. Handzlik, K. Kiec-Kononowicz, A. Staicu, and M.-L. Pascu, „Laser Induced Colloidal Structures in Drugs Solutions”, European Colloid and Interface Society (ECIS) Conference, Ljubljana, Slovenia, 2 - 7 September 2018; Poster presentation PP2.31, ISBN 978-961-6756-90-7

203. A. Dinache, I.R. Andrei, T. Tozar, A. Smarandache, I. Iordache, M. Boni, A. Staicu and M.L. Pascu, "Laser assisted device for micro/nano-emulsion production", European Colloid and Interface Society (ECIS) Conference, Ljubljana, Slovenia, 2 - 7 September 2018; Oral presentation OP1.29. ISBN 978-961-6756-90-7
204. A. Smarandache, M. Boni, **M.L. Pascu**, „Spectroscopic Investigations on Fast Laser Photoinduced Molecular Modifications in Droplets Containing New Hydantoins”, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018 (ISCP-INDLAS 2018) Alba Iulia, Romania, September 3-7, 2018; Poster presentation pag. 119, ISBN 978-606-16-1001-3.
205. A. Dinache, I.R. Andrei, T. Tozar, I. Iordache, A. Smarandache, M. Boni, A. Staicu, **M.L. Pascu**, „Laser Assisted Generation of Nano-Emulsions”, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018 (ISCP-INDLAS 2018) Alba Iulia, Romania, September 3-7, 2018; Poster presentation, pag. 85, ISBN 978-606-16-1001-3
206. A. Staicu, A. Smarandache, A. Pascu, **M.L. Pascu**, "Photophysics of Porphyrins Containing Nanocomplexes for Targeted Drug Delivery", Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018 (ISCP-INDLAS 2018) Alba Iulia, Romania, September 3-7, 2018; Poster presentation pag. 123, ISBN 978-606-16-1001-3.
207. A. Simon, A. Stoicu, T. Tozar, I. R. Andrei, S. Simion, J.J.W.A.S. van Loon, JJWA, A. Dowson, **M.L. Pascu**, Impact dynamics of laser modified medicine droplets on target surfaces under hypergravity conditions " ", Hypergravity Workshop, 25-26 January 2018, ESA-ESTEC, Noordwijk, The Netherlands.
208. A. Simon, J.J.W.A. van Loon, **M.L. Pascu**, Wetting of Laser Modified Medicine Droplets under Hypergravity Conditions " ", Surface Wettability Effects on Phase Change Phenomena (SWEP) Workshop, 17-18 May 2018, Brighton, UK.
209. Dinache, A; Pascu, ML; Spectral studies of quinazoline derivatives designed as EPI's, Annual Scientific Conference University of Bucharest, Faculty of Physics 2018 Meeting, 21-22 June 2018, Magurele, Romania.
210. M. Boni, I.R. Andrei, A. Staicu, **M.L. Pascu**, Lasing of optically pumped large droplets, Annual Scientific Conference University of Bucharest, Faculty of Physics 2018 Meeting, 21-22 June 2018, Magurele, Romania
211. I.R. Andrei, C. Onea, P.E. Sterian, **M.L. Pascu**, Experimental control of low-frequency fluctuations by current modulation in a laser diode chaotic coupled system, Annual Scientific Conference University of Bucharest, Faculty of Physics 2018 Meeting, June 2018, Magurele
212. A. Smarandache, M. Boni, J. Handzlik, K. Kiec-Kononowicz, A. Staicu, **M.L. Pascu**, Laser Induced Colloidal Structures in Drugs Solutions, European Colloid and Interface Society (ECIS) Conference, 2- 7 September 2018, Ljubljana, Slovenia
213. A. Dinache, I.R. Andrei, T. Tozar, A. Smarandache, I. Iordache, M. Boni, A. Staicu, **M.L. Pascu**, Laser assisted device for micro/nano-emulsion production, European Colloid and Interface Society (ECIS) Conference, 2- 7 September 2018, Ljubljana, Slovenia;
214. A. Dinache, I.R. Andrei, M. Boni, T. Tozar, **M.L. Pascu**, Laser foaming of medicine solutions, European Colloid and Interface Society (ECIS) Conference, 2- 7 September 2018, Ljubljana, Slovenia;
215. M. Boni, I.R. Andrei, A. Staicu, **M.L. Pascu**, Resonant and unresonant interaction of laser beams with pendant droplets having different contents, International Conference "Advanced Topics in Optoelectronics, Microelectronics and Nanotechnologies" ATOM-N 2018, 23 - 26 August 2018, Constanta, Romania.
216. **M. L. Pascu**, I. R. Andrei, M. Boni, Laser Sources for Optofluidics, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018, ISCP-INDLAS 2018, 3-7 septembrie 2018, Alba Iulia, Romania.
217. A. Simon, B. S. Calin, D. C. Tranca, M. Boni, I. R. Andrei, S. Simion, M. Bojan, I. S. Stroescu, **M. L. Pascu**; Interaction of Laser Exposed Phenothiazine Droplets with Target Surfaces Approached in View of Microgravity Applications, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018, ISCP-INDLAS 2018, 3-7 septembrie 2018, Alba Iulia, Romania.
218. T. Tozar, V. Nastasa, M. Boni, M. C. Chifiriuc, **M. L. Pascu**, Generation and Identification of Antimicrobial Species from Medicines Exposed to Laser Radiation in view of Fighting Multiple Drug Resistance Acquired by Bacteria, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018, ISCP-INDLAS 2018, 3-7 septembrie 2018, Alba Iulia, Romania.
219. I. R. Andrei, C. Onea, P. E. Sterian, I. Ionita, **M. L. Pascu**, Experimental Control of Slave Chaotic Dynamics by Master Current Modulation in a Chaotic Coupled Laser System, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018, ISCP-INDLAS 2018, 3-7 septembrie 2018, Alba Iulia, Romania.
220. I. R. Andrei, V. Nastasa, G. Popescu, **M. L. Pascu**, White light diffraction phase microscope for tissue analysis, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018, ISCP-INDLAS 2018, 3-7 septembrie 2018, Alba Iulia, Romania.
221. M. Boni, I.R. Andrei, A. Staicu, **M.L. Pascu**, Resonant and Unresonant Interaction of Laser Beams with Pendant Droplets Containing Different Solutions, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018, ISCP-INDLAS 2018, 3-7 septembrie 2018, Alba Iulia, Romania.
222. A. Dinache, I.R. Andrei, T. Tozar, I. Iordache, A. Smarandache, M. Boni, A. Staicu, **M.L. Pascu**, Laser Assisted Generation of Nano-Emulsions, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018, ISCP-INDLAS 2018, 3-7 septembrie 2018, Alba Iulia, Romania.
223. A. Smarandache. M. Boni, **M.L. Pascu**, Spectroscopic Investigations on Fast Laser Photoinduced Molecular Modifications in Droplets Containing New Hydantoins, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018, ISCP-INDLAS 2018, 3-7 septembrie 2018, Alba Iulia, Romania.
224. A. Staicu, A. Smarandache, A. Pascu, **M.L. Pascu**, Photophysics of Porphyrins Containing Nanocomplexes for Targeted Drug Delivery, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018, ISCP-INDLAS 2018, 3-7 septembrie 2018, Alba Iulia, Romania.
225. I. Urzica, A. Simon, V. Damian, **M. Pascu**, Making Fingerprint Systems for Polymeric Materials by Laser Nano-Processing, Joint International Student Conference on Photonics and Modern Laser Applications Conference 2018, ISCP-INDLAS 2018, 3-7 septembrie 2018, Alba Iulia, Romania.
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226. C. Onea, I.R. Andrei, P.E. Sterian, M.L. Pascu, M. Bulinski, Numerical simulation of chaotic multimode dynamics of a semiconductor laser optical coupled with two external cavities, Conferinta Facultatii de Fizica, Universitatea Bucuresti, iunie 2021.
227. A. Sima, P.C. Logofătu, M.L. Pascu, Ionuț Nicolae, Monitorization of the droplet evaporation via real-time digital holographic interferometry using a phase only SLM, Conferinta Facultatii de Fizica, Universitatea Bucuresti, iunie 2021.

228. A.-M. Udrea, S. Stroescu, M. Boni, M. L.Pascu, A. Staicu, Mechanism of action prediction of TPPS4 photosensitiser in melanoma treatment using Molecular Docking, Conferinta Facultatii de Fizica, Universitatea Bucuresti, iunie 2021.

ANNEX 5

WORKING STAGES ABROAD

1972 – 1974: Physics Faculty, University of Texas at Dallas, TX, USA.
1978: Institute of Physics, Beijing, Chinese Academy of Sciences.
Institute of Atomic Physics, Beijing, China.
Faculty of Physics, University of Nanjing, China.
Faculty of Physics, University of Canton, China.
1982, 1985: Institute of Experimental Physics, Szeged University, Hungary.
1986: Institute of Physics, Vilnius, Lithuanian Academy of Sciences, Lithuania.
1986: Institute of General Physics, Moscow, USSR Academy of Sciences, USSR.
1992: Centro Informazioni Studi Esperienze (CISE), Milano, Italy.
1993: PECO stage (3 months), Istituto di Metrologia "Gustavo Colonnetti", Torino, Italy.
1994, 1995, 1998: Laboratoire de Photophysique Moleculaire, Universite Paris Sud, Orsay, France.
1997: NATO stage (4 months), Istituto di Metrologia "Gustavo Colonnetti", Torino, Italy.
1997: Laboratoire pour l'Utilisation de la Radiation Electromagnetique (LURE), Universite Paris Sud, Orsay, France.
1999: Laboratoire pour l'Utilisation de la Radiation Electromagnetique (LURE), Universite Paris Sud, Orsay, France
2000: Laboratoire pour l'Utilisation de la Radiation Electromagnetique (LURE), Universite Paris Sud, Orsay, France.
2001 – 2004, COST Secretariat, European Commission, DG-RTD, Brussels.
2004 – 2006, EUROPEAN SCIENCE FOUNDATION – COST Office, Brussels
2009, Laboratoire de Chimie Physique et Rayonnement Alain Chambaudet UMR EA, Université de Franche-Comté, Besancon

ANNEX 6

ACADEMIC RESPONSIBILITIES

1973: Assistant Professor, Chair "Optics and Spectroscopy", Physics Faculty, University of Bucharest.
1975-to date: head of 76 students master thesis at the Physics Faculty, University of Bucharest.
1985-1990: Member of the Scientific Council of the Physics Faculty, University of Bucharest.
1994-to date: Professor, "Optics, Spectroscopy, Plasma and Lasers" Chair, Physics Faculty, University of Bucharest.
1994-to date: PhD head, field "Optics, Spectroscopy and Laser Physics", appointed by the Romanian Ministry of Education at the Physics Faculty of the Bucharest University.
18 PhD theses of my PhD students publicly defended in Romania, France, Germany, USA.

ANNEX 7

HEAD OF NATIONAL AND INTERNATIONAL PROJECTS OR EQUIVALENT

1. National Project Coordinator, United Nations Development Program; title of the project: "Development of CO₂ technological lasers" (ROM -87-010), 1987-1993.
2. Coordinator from the Romanian side of the French-Romanian network "Laser Applications in Biology", 1993-1995.
3. Co-chairman and co-organizer of the French-Romanian Workshop "Laser Applications in Biology", Bucharest, 1995.
4. Editor of the Proceedings of the French-Romanian Workshop "Laser Applications in Biology", Romanian Journal of Biophysics, vol.5, No.4, 1995.
5. Coordinator from the Romanian side of the French-Romanian network "Laser Applications in Environment Protection", 1997-2001.
6. Chairman and Organizer of the VI-th International Congress of the European Medical Laser Association, Bucharest, 1998.
7. Vice-President of the European Medical Laser Association (EMLA), 1998 – 2000.
8. Chairman and Organizer of the III-rd National Conference on Laser Applications in Medicine and Biology, Bucharest, November 1999.
9. Editor of the Proceedings of the III-rd National Conference on Laser Applications in Medicine and Biology, Bucharest, Rom. Journal of Biophysics, vol.10, No. 3- 4, 2000.
10. Co-chairman of the 14th International Congress on Laser Medicine (ICLM), 1999, Florence.
11. Chairman and Organizer of the IV-th National Conference on Laser Applications in Medicine and Biology, Bucharest , September 2000; this conference was satellite of the EPS - International Congress on Optics ROMOPTO 2000, Bucharest.
12. Co-editor/main editor of the LASER FLORENCE 1999 Proceedings, SPIE vol. 4166, ISBN 9780819438225, 2000.
13. Co-chairman of the 15th International Congress on Laser Medicine (ICLM), 2000, Florence.
14. Co-editor/main editor of the LASER FLORENCE 2000 Proceedings, SPIE vol. 4606, ISBN 9780819443458, 2001.
15. European Commission Expert-Evaluator; reference nr. EE 19981A21335.
16. Contribution in Romania as member of the experts group (I was the only expert currently working outside Romania) to elaborate the National Strategy for RTD for the period 2007- 2013.
17. Head of more than 250 national projects and 15 national programs/national programs chapters / sections in Romania.
A selection of projects, on domains is given below:
 - 17.1 Development of nitrogen pulsed lasers and nitrogen pulsed laser pumped tunable dye lasers: 1975–1987.
 - 17.2 Basic research about the time structure of ultrashort laser light pulses emitted by tunable dye lasers: 1977 – 1980.
 - 17.3 Development of laser/optical/physical methods to monitor traces of pollutants in environment: air, water, soil, biosphere: 1976 – to date.

- 17.4 Basic research about laser beam interactions with tissues and laser biomolecular spectroscopy: 1982 - to date.
 - 17.5 Development of laser infrared optical components for high power technological lasers: 1985 – 1994.
 - 17.6 Basic research on biological structures as new laser active media: 1994–to date.
 - 17.7 Development of laser medical equipment: 1982 – 2000.
 - 17.8 Development of optical systems to monitor variations of heavy water concentrations in natural water at traces levels for nuclear power plants: 1984 – 1989.
 - 17.9 Basic research about chaos in laser systems: 2002 - to date.
 - 17.10 Development of new optical methods to fight resistance to antibiotics and medicine treatment: 2003 – to date. This new research field is currently defined as photochemotherapy.
- A selection of national programs I was responsible (from the program construction to the program follow-up stage) is given below:
- 17.I National Programme of Lasers, Laser Active Media and Applications:1984–1990.
 - 17.II National Programme of Cold Plasma: 1983 – 1990.
 - 17.III National Programme for Particle Beam Accelerators: 1983 - 1989.
 - 17.IV National Programme for Physical Methods in Environment Protection:1991–2001.
 - 17.V National Programme on Biophotonics: 1995 – 2003.
18. Evaluation expert of the Romanian: CNCSIS and ANCS- PNCD.
 19. Co-chairman of the 16th Int. Congress on Laser Medicine (ICLM), 2001, Florence.
 20. Co-editor/main editor of the LASER FLORENCE 2001 Proceedings; SPIE vol. 4903, No.28, ISBN 9780819446909, 2002.
 21. Co-chairman of the 17th Int. Congress on Laser Medicine (ICLM), 2002, Florence.
 22. Co-editor / main editor of the LASER FLORENCE 2002 Proceedings SPIE, vol. 5610, ISBN 9780819451880, 2003
 23. Co-chairman of the 18th Int. Congress on Laser Medicine (ICLM), 2003, Florence.
 24. Co-editor / main editor of the LASER FLORENCE 2003 Proceedings; SPIE vol.5610, ISBN 9780819455635, 2004.
 25. Co-chairman of the 19th Int. Congress on Laser Medicine (ICLM), 2004, Florence.
 26. Co-editor / main editor of the LASER FLORENCE 2004 Proceedings, SPIE vol. 5968, ISBN 9780819459862, 2005.
 27. Co-chairman of the 20th Int. Congress on Laser Medicine (ICLM), 2005, Florence.
 28. Co-chairman of the 21st Int. Congress on Laser Medicine (ICLM), 2006, Florence.
 29. Projects VIASAN – 5 projects in the time interval 2001 – 2005.
 30. Projects CEEX- 2 projects in the time interval 2005 – 2007.
 31. Project CNMP PALIRT, 2007 – 2010.
 32. Project CNMP SENSO, 2007 – 2010.
 33. Project CNMP LSCEM, 2008 – 2011.
 34. EUROPEAN NETWORK: European Institute for Biomedical Imaging Research (INFLPR among EIBIR Member Institutions of excellence (ENCITE – FP7 European Network for Cell Imaging and Tracking Expertise).
 35. ESA project on droplets behavior in hyper- and micro-gravity, 2018 – 2021

ANNEX 8

HONORS AND AWARDS:

1. "SCIENTIFIC MERIT", Romanian medal, 1985.
2. Romanian Academy Award "DRAGOMIR HURMUZESCU", 1986; for a group of papers on "Tunable dye lasers and their spectroscopic applications". Awarded in 1990.
3. "Excellence Award" for the "Laser Physics" chapter within the book LASER IN MEDICINE AND DENTISTRY, Ed. Z. Simunovic, Vitagraf.d.o.o., Croatia, 2000; awarded by the Romanian Agency for Science, Technology and Innovation in 2000.
4. Romanian Academy Award "Gheorghe Marinescu", 2003; for the book, "Lasers in Neurosurgery", L. Danaila, **M.L. Pascu**, Ed. Academiei, Bucharest, ISBN 973 -27-0802-6, 2001.
5. "IFA Excellence Award and Medal Award"; awarded by Institute for Atomic Physics for the scientific and management achievements, for the contributions to the development of laser physics and for their applications at national and international level, 2017.
6. Doctor Honoris Causa, University of Medicine and Pharmacy Carol Davila, Bucuresti, 2018.

ANNEX 9

SELECTED LIST OF COST ACTIONS, ACTIVITIES AND TECHNICAL COMMITTEES FOR WHICH I WAS RESPONSIBLE SCIENCE OFFICER

1. COST B8: "ODONTOGENESIS":
* 12th Management Committee Meeting, Egmond aan Zee, NL; 13 Oct. 2001; FINAL MEETING
2. COST B10:"BRAIN DAMAGE REPAIR"
* 9th Management Committee Meeting, Cascais/Lisboa, Portugal; 8 December 2001.
* 10th Management Committee Meeting, Carmona/Sevilla, Spain; 1st June 2002.
* 11th Management Committee Meeting, Dublin, Ireland; 19th October 2002
* 12th Management Committee Meeting, Uppsala, Sweden; 28th June 2003
* 13th Management Committee Meeting, Warsaw, Poland; 6th December 2004
* 14th Management Committee Meeting (FINAL), Lisbon, Portugal; 10th July 2004
3. COST B11: "QUANTITATION OF MAGNETIC RESONANCE IMAGE TEXTURE"
* 8th Management Committee Meeting, Angers, France; 20 October 2001

- * 9th Management Committee Meeting, Bergen, Norway; 4 May 2002-FINAL MEETING
4. COST B12: "RADIOTRACERS FOR IN VIVO ASSESSMENT OF BIOLOGICAL FUNCTION"
- * 7th Management Committee Meeting, Vienna, Austria; 17th November 2001
 - * 8th Management Committee Meeting, Dresden, Germany; 7th March 2002
 - * 9th Management Committee Meeting, Lisbon, Portugal; 16th November 2002
 - * 10th Management Committee Meeting, Pisa, Italy; 8th November 2003
 - * 11th Management Committee Meeting, Lisbon, 22nd May, 2004
 - * 12th Management Committee Meeting, Ljubljana; 12th -13th November, 2004
 - * COST B12 final Conference preparatory meeting, Brussels, 19th March, 2005
 - * 13th MANAGEMENT COMMITTEE and WGs MEETING, (FINAL MEETING), Warsaw, 22 - 23 April 2005
5. COST B13: "LOW BACK PAIN : GUIDELINES FOR ITS MANAGEMENT"
- * 5th Management Committee Meeting, Liège, Belgium; 15 December, 2001
 - * 6th Management Committee Meeting, Palma de Majorca, Spain; 28 April, 2002
 - * 7th Management Committee Meeting, Ferrara, Italy; 20 September, 2003
 - * 8th Management Committee Meeting, Amsterdam, NL; 6 March 2004.
 - * 9th Management Committee meeting, Palma de Majorca, Spain (FINAL MEETING), Oct. 2004
6. COST B14: "HYPERBARIC OXYGEN THERAPY "
- * 7th Management Committee Meeting + WG's, Ljubljana (Portoroz), Slovenia; 13-15 Dec. 2001
 - * 8th Management Committee Meeting+WG's, Thessaloniki, Greece; 18-20 April 2002
 - * 9th Management Committee Meeting+WG's, Prague, Czech Republic; 17th-19th October 2002
 - * 10th Management Committee Meeting, Barcelona, Spain; September 18-20th, 2003
 - * 11th Management Committee Meeting, Turku, Finland; May 8th, 2004
 - * 12th Management Committee Meeting, Lille, France (FINAL MEETING); December 2004
7. COST B15: "MODELLING IN DRUG DEVELOPMENT"
- * 13th MANAGEMENT COMMITTEE MEETING, Brussels, 1st – 2nd April 2004
 - * 14th Management Committee Meeting (FINAL MEETING), Geneva, July 2004
8. COST B16: "REVERSAL OF ANTIBIOTIC RESISTANCE (BY INHIBITION OF TRANS-MEMBRANE TRANSPORT)"
- * 4th Management Committee Meeting, Marseille, France ; 1st December 2001
 - * 5th Management Committee Meeting, Warsaw, Poland; 29th June 2002
 - * 6th Management Committee Meeting, Berlin, Germany ; 30th November 2002
 - * 7th Management Committee Meeting, Rhodes, Greece; 19th October 2003
 - * 8th Management Committee Meeting, Sønderborg, Denmark; 29th November 2003
 - * 9th Management Committee Meeting, Gent, Belgium; 29 May 2004
 - * 10th Management Committee Meeting, Corfu, Greece, 29 October 2004
 - * 11th Manag Com and WG1, WG2, WG3, WG4 Meetings, Antalya, Turkey, 13 – 14 May, 2005
 - * 12th Manag Com and WG1, WG2, WG3, WG4 Meetings, Novara, Italy, 14-15th October, 2005
9. COST B17: "INSULIN RESISTANCE, OBESITY AND DIABETES MELLITUS IN THE ELDERLY"
- * 4th Management Committee Meeting, Prague, Czech Republic; 16 February 2001
 - * 5th Management Committee Meeting, Glasgow, United Kingdom; 9 September 2001
 - * 6th Management Committee Meeting, Bari, Italy; 17 November 2002
 - * 7th Management management Committee Meeting, Gentofte, Denmark; 14 September 2002
 - * 8th Management Committee Meeting, Madrid, Spain; 30 May 2004
 - * 9th Management Committee Meeting, Krakow, Poland; 12 December 2004.
 - * 2nd Int. Conf. on Molecular Basis of Metabolic Regulation in conjunction with COST ACTION B17 "INSULIN RESISTANCE, OBESITY AND DIABETES MELLITUS IN THE ELDERLY", 10TH MC and Joint Meetings of WGs 2, 3, and 4, Bari , Italy, June 24 – 25, 2005
 - * 11th MC and Joint WG meetings, in conjunction with Obesity, Diabetes and Ageing: From Insulin Secretion to Insulin Action–FINAL MEETING, Geneva, Switzerland, Oct 28 – 30, 2005.
10. COST B18: "CORPUS CAVERNOSUM EMG IN ERECTILE DYSFUNCTION "
- * 2nd Management Committee Meeting, Nijmegen, the Netherlands; 3 November 2001
 - * 3rd Management Committee Meeting, Brussels, Belgium; 8 June 2002
 - * 4th Management Committee Meeting; Copenhagen, Denmark; 23 November 2002
 - * 5th Management Committee Meeting, Vienna, Austria; 13 December 2003.
 - * 6th Management Committee Meeting, Amsterdam, NL; 12 June 2004.
 - * 7th Management Committee Meeting, Amsterdam, NL – FINAL CONFERENCE, 18 Oct 2005.
11. COST B19: "MOLECULAR CYTOGENETICS OF SOLID TUMORS"
- * 3rd Management Committee Meeting, Intra-Verbania, Italy; 22 September, 2001
 - * 4th Management Committee Meeting, Sesimbra / Lisboa, Portugal; 16 March, 2002
 - * 5th Management Committee Meeting, Barcelona, Spain; 14 September 2002
 - * 6th Management Committee Meeting, Gdansk, Poland; 5 July 2003
 - * 7th Management Committee Meeting, Odense, Denmark, 1st May 2004
 - * 8th Management Committee Meeting, Brno, Czech Republic, 18 September, 2004

- * 10th Management Committee Meeting, Brussels, Belgium, 15 July 2005,
 - * JOINT MEETING EUROPEAN CONCERTED ACTION COST B19 11th MC AND WORKING GROUPS MEETINGS - CANCERPOLE PACA, Nice, France, Oct21–22, 2005
 - * 12th Management Committee Meeting, FINAL joint meeting with the 10th EUROPEAN WORKSHOP ON MOLECULAR CYTOGENETICS IN HUMAN SOLID TUMORS, La Grande Motte – Le Ponant, France, June 8 - 11, 2006.
12. COST B20: "MAMMARY DEVELOPMENT, FUNCTION AND CANCER"
- * 2nd Management Committee Meeting, Ayr, Scotland, UK; 7-8 December 2001
 - * 3rd Management Committee Meeting, Utrecht, The Netherlands; 10-11 May, 2002
 - * 4th Management Committee Meeting, Gent, The Netherlands; 13-14 September 2002
 - * 5th Management Committee Meeting, Montpellier, France; 4 July 2003
 - * 6th Management Committee Meeting, Treviso, Italy; 25 October 2003
 - * 7th Management Committee Meeting, Warsaw; 19 June 2004
 - * 8th Management Committee Meeting, Utrecht; 20 November 2004
 - * 9th Management Committee COST B20 meeting, WG 1, WG3 meetings
 "Proteins and signaling pathways controlling mammary epithelial cell function", Frankfurt am Main, Germany, June 3 – 4, 2005
 - * Joint meeting WG 1, 2, 4 and 5, 10th MC COST B20 meeting and III International Workshop on Mammary Gland Biotechnology: Nutrition, Genomics and Breast Cancer, Barcelona, Spain, 29 September – 1 October 2005
 - * 11th MC Meeting joint with EMBO Conference on Common Molecular Mechanisms of Mammary Gland Development and Breast Cancer Progression, Dublin, Ireland, 6 – 8 June, 2006.
13. COST B21: "PHYSIOLOGICAL MODELLING OF MR IMAGE FORMATION"
- * 1st Management Committee Meeting, Brussels, Belgium; 15 December 2003
 - * 2nd Management Committee Meeting, Dundee, GB; 3th March 2004
 - * 3rd Management Committee Meeting, Cyprus; 2nd October 2004
 - * WG3 and WORKING GROUP ON TEXTURE TEXTBOOK (WGTT) MEETINGS, Brussels, Belgium, 17th January, 2005
 - * 4th MC and WG1, WG2, WG3, WG4 meetings, Łódź, Poland, 6th – 8th October, 2005
 - * 5th MC and WGs meetings, Alghero, Sardinia, Italy, 31 March – 1 April, 2006
14. COST B22: "DRUG DEVELOPMENT FOR PARASITIC DISEASES"
- * 1ST Management Committee Meeting, Brussels, Belgium; 24 November, 2003
 - * 2nd Management Committee Meeting, Brussels, Belgium; 5 March, 2004
 - * 3rd Management Committee Meeting, Anvers, Belgium; November 2004
 - * 4th Management Committee and WG meetings, GRANADA, SPAIN, 9 – 10 June 2005
 - * 2nd ANNUAL MEETING and 5th MC meeting, SIENA, Sept 29 – Oct 01, 2005
15. COST B23: "ORAL FACIAL DEVELOPMENT AND REGENERATION"
- * 1ST Management Committee Meeting, Brussels, Belgium; 8 December 2003
 - * 2nd Management Committee Meeting, Gent, Belgium; 21 March 2004
 - * 3rd Management Committee Meeting, York; 22 July 2004
 - * 2nd joint meeting of WG2 and WG4 meeting, Debrecen, Hungary; 29 – 30 October 2004
 - * GROUPS 2 and 4 joint meeting with the 8th INTERNATIONAL CONFERENCE ON THE CHEMISTRY AND BIOLOGY OF MINERALIZED TISSUES, Alberta, Canada; October 18-22, 2004
 - * GENES, CELLS AND BIOMATERIALS FOR ORAL-FACIAL REGENERATION, JOINT MEETING of the 4TH MANAGEMENT COMMITTEE and Working Groups 1, 2, 3, and 4, Barcelona, Spain, 12, 13, 14 and 15 MAY 2005
 - * Phenotype and genotype, Working group 3, Strasbourg, France, Friday 14th and Saturday 15th October 2005
 - * 5th Management Committee meeting, Athens, Greece, 4 – 6 November 2005
 - * 6th Management Committee and WGs Meeting Helsinki, Finland, 7–8 May, 2006.
16. COST B24: LABORATORY ANIMAL SCIENCE AND WELFARE
- * 1st Management Committee Meeting, Brussels, Belgium; 26th April 2004
 - * 2nd Management Committee Meeting, Nantes, France; 17 June 2004
 - * 3rd Management Committee Meeting, Stockholm, Sweden; November 14, 2004
 - * 4th Management Committee and WG1, WG2 and WG3 Meeting, Roma, Italy, June 5-6th, 2005
 - * 5th Management Committee and WG1, WG2, WG3 and WG4 Meetings, Elche, Alicante, Spain, October 5th - 7th, 2005
 - * 5th MC and WG3 and WG4 Meetings, Brussels, Belgium, March 27th - 28th, 2006
17. COST B25 "PHYSIOLOGICALLY BASED PHARMACOKINETICS AND DYNAMICS"
- * 1st Management Committee Meeting, Brussels, Belgium; 25th May 2005
 - * 2nd Management Committee Meeting, Brussels, Belgium; 20th October, 2005
 - * 3rd Management Committee and WG1/2/3 Meetings, Brussels, Belgium, 20-21 April 2006
18. COST B26 "OBSTRUCTIVE SLEEP APNEA"
- * 1st Management Committee Meeting, Brussels, Belgium; 26th April 2004
 - * 2nd Management Committee Meeting, Milan, Italy; 28th -30th October, 2005
19. COST B27 "ELECTRIC NEURONAL OSCILLATIONS AND COGNITION (ENOC)"
- * 1st Management Committee Meeting, Brussels, Belgium; 26th April 2004

- * 2nd Management Committee Meeting, Istanbul, Turkey; 2nd – 4th September, 2005
- * 3rd Management Committee and WG1, WG2, WG3 Joint Meetings, Skopje, FYROM, 12 - 15 May, 2006

20. COST B28 “ARRAY TECHNOLOGIES FOR BSL 3 AND BSL 4 PATHOGENS”

- * 1st Management Committee Meeting, Brussels, Belgium; 26th April 2004
- * 2nd Management Committee Meeting, Bratislava, Slovakia; 20th -23rd November, 2005

21. COST B29 “FOR A BETTER UNDERSTANDING OF CHRONIC OBSTRUCTIVE PULMONARY DISEASE (COPD) EXACERBATIONS”

- * 1st Management Committee Meeting, Brussels, Belgium; 23 January 2006

22. COST B35 “LIPID PEROXIDATION ASSOCIATED DISORDERS- LPO”

- * 1st Management Committee Meeting, Brussels, Belgium, 2 June 2006

OTHER COST ACTIONS:

1. COST P07: “X- RAY AND NEUTRON OPTICS”- COST ACTION within the field: PHYSICS
2. COST 845: “BRUCELLOSIS IN ANIMALS AND MAN”- COST ACTION assigned from the field AGRI-BIO.

TECHNICAL COMMITTEES

1. Technical Committee MEDICINE & HEALTH: 12 meetings
2. AD HOC GROUP on BIOMATERIALS: 2 meetings
3. Domain Committee BIOMEDICINE AND MOLECULAR BIOSCIENCES, 2 meetings.

STRATEGIC MEETINGS

1. COST – ESF STRATEGIC MEETING on ENVIRONMENT AND HEALTH, 16 – 18 February 2005, Brussels – responsible person.
2. COST –ESF STRATEGIC MEETING on FOOD AND HEALTH, 1 – 3 February, 2006 – responsible person.
3. COST-NATO STRATEGIC MEETING on HEALTH, SIMULATION AND SECURITY, October 2006.

LIAISON EXPERT

1. COST Biomedicine and Biomolecular Sciences Domain Committee to ESF - Physical and Engineering Sciences Domain Committee.
2. I participated at two PESC meetings, in 2007 and 2008.

Ebruary 2024

Mihail Lucian Pascu