

**Curriculum Vitae *****INFORMAȚII PERSONALE AGOP MARICEL**✉ **m.agop@yahoo.com**

Naționalitatea: română

LOCUL DE MUNCA Universitatea Tehnică „Gheorghe Asachi” din Iași/Profesor univ.dr.fiz.**EXPERIENȚA
PROFESIONALĂ**

- 1997 –prezent - Profesor univ. dr. fiz., Universitatea Tehnică “Gheorghe Asachi” din Iași
- 2002 –prezent -Profesor asociat și conducător de doctorat în domeniul Fizică, Universitatea “Al. I. Cuza” din Iași
- 2011 – prezent -Profesor asociat, Universitatea „Vasile Alecsandri” Bacău.
- 2013 - prezent - Membru al Școlii Doctorale, Universitatea „Vasile Alecsandri” Bacău.
- 1993 – 1997 -Conferențiar dr. fiz., Universitatea Tehnică “Gheorghe Asachi” din Iași.
- 1990 – 1993 -Lector dr. fiz., Institutul Politehnic Iași.
- 1987 – 1990 -Asistent dr. fiz., Institutul Politehnic Iași.
- 1980 – 1983 - Fizician, Institutul de Reactori Nucleari Energetici Pitești.
- 1984 – 1987 - Fizician, Laboratorul de Inventică al Academiei Române – Filiala Iași.

EDUCAȚIE ȘI FORMARE

- 2013 -Titlul de doctor „ HONORIS CAUSA” Universitatea „Vasile Alecsandri” Bacău, 2013
- 1983- Doctor în Fizică, Facultatea de Fizică Universitatea “Al. I. Cuza” Iași.
- 1979 – 1980 -Facultatea de Fizică, Universitatea “Al. I. Cuza” Iași – specializarea „Corp Solid pentru Institute de Cercetare” (student);
- 1975 – 1979 - Facultatea de Fizică, Universitatea “Al. I. Cuza” Iași (student -șef de promoție pe țară cu media 9.98).
- 1970 – 1974 - Liceul Teoretic George Bacovia Bacău (elev).
- 1962 – 1970 - Școala generală nr. 5 Bacău (elev).

Directii de cercetare: Utilizarea dinamicii neliniare în teoria câmpurilor, in diferite procese fizice (fizica plasmei, fizica stării condensate, fizica fluidului, teoria particulelor elementare, mecanica cuantică, etc.)



COMPETENTE PERSONALE

Limba(i) maternă(e) română

Alte limbi străine cunoscute	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
Limba engleză	Foarte bine	Foarte bine	Foarte bine	Foarte bine	Foarte bine bine
Limba franceză	bine	Foarte bine	bine	bine	bine

Competențe de comunicare

- Foarte bune competențe de comunicare dobândite prin experiența proprie de cadru didactic
- aptitudini de dialog social
- posibilitatea de a lucra în echipă
- coordonator de programe de cercetare
- participare la parteneriate educative între diferite facultati
- capacitatea de a lucra cu instituțiile statului.

Competențe organizaționale/manageriale

- leadership in cadrul programelor nationale ca Director grant

Competențe dobândite la locul de muncă

1. investigarea științifică structurată, în principal experimentală, a unor fenomene fizice, perceptibile;
2. Explicarea științifică a unor fenomene fizice și a unor aplicații tehnice ale acestora;
3. Interpretarea unor date și informații, obținute experimental sau din alte surse, privind fenomene fizice și aplicații tehnice ale acestora

Competențe digitale

AUTOEVALUARE				
Procesarea informației	Comunicare	Creare de conținut	Securitate	Rezolvarea de probleme
Foarte bine	Foarte bine	Foarte bine	Foarte bine	Foarte bine

Niveluri: Utilizator independent
-o bună cunoaștere a instrumentelor Microsoft Office

Permis de conducere categoria B

INFORMATII SUPLIMENTARE

Membri in organisme stiintifice internationale/societati profesionale:

1. *European Physical Society, Geneva, 1984-prezent*
2. *The Japan Institute of Metals, Japonia, 1995 - 1999*



3. Societatea Română de Fizică, România, 1990 – prezent

4. Membru corespondent al Academiei Oamenilor de Stiinta (din 2018-prezent)

Membru in Colegiul de redactie (inclusiv referent) al unei reviste

1. *Journal of Mathematical Physics*, AIP Publishing LLC, ISSN: 0022-2488, IF: 1.234, apariție lunară, (referent)
2. *International Journal of Nonlinear Science*, World Academic Press, ISSN: 1749-3889, IF: -, apariție bilunară (referent)
3. *General Relativity and Gravitation*, Springer Publishers, ISSN: 0001-7701, IF: 1.668, apariție lunară (referent)
4. *Chaos, Solitons and Fractals*, Pergamon-Elsevier Science Ltd., ISSN: 0960-0779, IF: 1.611, apariție lunară (referent)
5. *Physics Letters A*, Elsevier Science BV, ISSN: 0375-9601, IF: 1.677, apariție săptămânală (referent)
6. *Physica Scripta*, IOP Publishing Ltd, ISSN: 0031-8949, IF: 1.194, apariție bilunară (referent)
7. *Nonlinearity*, IOP Publishing Ltd, ISSN:0951-7715, IF: 1.289, apariție lunară (referent)
8. *Buletinul Institutului Politehnic Iași*, Secția Matematică, Mecanică și Fizică, Universitatea Tehnică „Gheorghe Asachi” din Iași, ISSN: 1224-7863, IF: -, aparitie trimestrială (editor șef)
9. *Journal of Engineering Studies and Research*, Universitatea „Vasile Alecsandri” Bacău, ISSN: 2068-7559, IF: - (membru în comitetul de redacție)
10. Editor șef al revistei *International Journal of Physics* (2008-2012)

Referent stiintific la reviste internaționale:

- *Journal of Mathematical Physics*
- *International Journal of Nonlinear Science*
- *General Relativity and Gravitation*
- *Chaos, Solitons and Fractals*
- *Physics Letters A*
- *Physica Scripta*
- *Nonlinearity*
- *Non-linear dynamics*
- *Complexity*

Editor invitat al revistei *Complexity* pentru numărul special intitulat: „*Fractal-Type Dynamical Behaviors of Complex Systems*”

Brevete de invenție:

- procedee de obținere a unei baterii activabile cu apă de mare, Sandu I., Vicol O., Agop M., Lupuțiu M., No. 102.105/1990;
- materiale heterojuncționale semiconductoare obținute prin coprecipitare secvențială, Sandu I., Bălan T., Agop M., Furnica E., Anghel I.;

Profesor invitat pentru prelegeri la universitati de prestigiu din strainatate:

- Universitatea Lille I, Departamentul de Fizică, Franța (poziție permanentă din 2009)
- Universitatea din Atena, Grecia, Departamentul de Fizică (1999-2010)
- Universitatea din Innsbruck, Institutul de Ioni și Fizică Aplicată, Austria (2011-prezent)
- Universitatea din Reykjavik, Departamentul de Fizică, Island (2011)
- Universitatea din Hyogo, Laboratorul de Științe Avansate și Tehnologie pentru Industrie, Japonia (2008)

Premii si distinctii internationale:

- „Honorable Mention” acordat de Societatea americană Gravity Research Foundation, Massachusetts, în 1986, pentru Awards for Essays on Gravitation (o lucrare de fizică teoretică)
 - Medalia de aur, Brussels Eureka 94, pentru invenția *Materiaux heterojonctionnelles semiconductereous obtenus par coprecipitation sequentielees*, Sandu I., Balan T., Agop M., Furnica E., Anghel I.
- Medalia de aur, Brussels Eureka 94, pentru *Pilesactivables a leau*, Sandu I., Gulea A., Agop M., Lupuțiu M., Popa L.

**Premii si distinctii nationale:**

- **Premiul de excelență acordat de Uniunea Armenilor din România pentru întreaga activitate (1995)**
- **Doctor Honoris Causa al Universității „Vasile Alecsandri” din Bacău (2013);**
- **Membru corespondent al Academiei Oamenilor de Stiinta din Romania (din 2018-prezent)**
- **Premiile ACADEMIEI ROMANE:**
 - **1. Secțiunea Științe Fizice**, Premiul ȘERBAN ȚIȚEICA, Nicolae MAZILU, Maricel AGOP, Ioan MERCHEȘ pentru lucrarea *The Mathematical Principles of Scale Relativity Physics. The Concept of Interpretation*, Editura CRC Press, 2020;
 - **2. Secțiunea Știința și Tehnologia Informației**, Premiul CORNELIU PENESCU, Călin BUZEA, Viorel-Puiu PĂUN, Lucian EVA, Maricel AGOP, Ionel Daniel COJOCARU, Roxana Irina IANCU, Dragoș Teodor IANCU pentru lucrarea *Radiomica. Fundamente și aplicații*, Editura Academiei Române, 2020;
- **Premiul pentru cea mai buna carte in domeniu pe anul 2020 („Atomicity through Fractal Measure Theory”**
 - Alina Gavriluț, Ioan Mercheș, Maricel Agop, Ed.SPRINGER) **si a 58-a din istoria Editurii SPRINGER;**
- Invitație în cadrul Parlamentului European de la Bruxelles, unde a avut loc lansarea volumului **„Towards the multifractal brain by means of informational paradigm”**, realizată de Prof. univ. dr. Maricel Agop, Lector univ. dr. Alina Gavriluț, Manager Dr. Lucian Eva și Dr. Gabriel Crumpei,
- Un nr. de 45 de doctoranzi confirmati si 5 doctoranzi in stagiul de formare
- O carieră academică bogată datorită publicațiilor realizate: 360 articole în jurnale ISI și 80 articole în jurnale indexate BDI;
- 31 de cărți publicate la edituri din străinătate
- 65 de cărți publicate în țară, la edituri recunoscute CNCSIS (sau CNCS)
- H-index=31 (Web of Science)

Lista de lucrări în domeniul de studii universitare de licență

Numele și prenumele: AGOP MARICEL

A. Teza de doctorat.

Utilizarea funcțiilor eliptice în studiul unor interacțiuni, în special eliptice și gravitaționale

B. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în străinătate.

1. M. Agop, C. Gh. Buzea, A. Zacharias, E. Marinakis, A. Alegris, "Fundamentals of Space-Time Theory", Athens University Press, Greece, 1997, 106 pag.
2. "Nonlinearities Phenomena in Materials Science", Ed. M. Agop, N. Răzlescu, G. Kalogirou (ed.), Athens University Press, Greece, 1999, 120 pag.
3. "Non-linearities in Materials Science", Ed. M. Agop, E. Zerikiotis (Athens University Press, 2002), 241 pag.
4. "Particles and Fields", Ed. M. Agop, P.D. Ioannou (Athens University Press, 2005), 323 pag.
5. M. Agop, P.D. Ioannou, P. Vizureanu, "Self-structuring in Nature", Athens University Press, Greece, 2006, 311 pag.
6. "The fractal and its implications in the material science", Ed. M. Agop, P.D. Ioannou, P.N. Edward, V. Păun (Athens University Press, 2008), 213 pag.
7. M. Agop, R. Eugen, M. Gârțu, R. Stana, Unified Superconductivity through a Fractal Space-time Theory "Magnetic Mechanism of Superconductivity in Cooper Oxide", Ed. Tanmoy Das (Nova Publishing, New York, 2011) p. 197-235
8. P. Vizureanu, M. Agop, On the Transport Phenomena in Composite Materials using the Fractal Space-Time Theory "Advances in Composite Materials for Medicine and Nanotechnology" Ed. Brahim Attaf (Intech Publishing Croația, 2011) p. 477-495
9. M. Agop, I. C. Botez, R.S. Luciu, M. Gârțu, Heat Transfer in Nanostructures using the Fractal Approximation of Motion "Two phase flow, phase change and Numerical Modeling" Ed. Amiml Ahsan (Intech Publishing Croația, 2011) p. 451-485
10. M. Agop, The Fractal Space-Time Theory and its Implications "Horizons in World Physics" (vol.: 273) Ed. A. Reirnu (Nova Publishing, New York, 2011) p. 133-171
11. M. Agop, D. Magop, New Considerations in Fractal Space-Time Theory "Clasification and Application of Fractals: New research" Eds. E. W. Mitchell, S. R. Murray (Nova Publishing New York, 2012) p. 131-161
12. M. Agop, D. Magop, S. Bacaita, Fractal Hydrodynamic Model and its Implications "New Developments in hydrodynamics research" Eds. M. I. Ibrajmov, M.A. Anisimov (Nova Publishing New York, 2012) p. 159-211
13. N. Mazilu, M. Agop "Skyrmions. A Great Finishing Touch to Classical Newtonian Phylosophy" Nova Publishing New York, 2012, 230 pag.
14. C.Gh. Buzea, M. Agop, C. Nejneru, Correspondences of Scale Relativity Theory with Quantum Mechanics "Theoretical Concepts of Quantum Mechanics" Ed. M. R. Pahlavani (Intech Publishing Croația, 2012) p. 409-445
15. M. Agop, C. Gh. Buzea, S. Băcăiță, A. Stroe, Quantum Effects through a Fractal Theory of Motion "Advances in Quantum Mechanics" Ed. P. Bracken (Intech Publishing Croația, 2013) p. 723-779
16. M. Agop, N. Teodorescu, Quantum Effect through Non-differentiability of Movements Curves "Contemporary Research in Quantum Systems" Ed. Zoheir Ezziane (Nova Publishing New York, 2014), p. 181-199
17. M. Agop, A. Gavriluț, D. Vasincu, D. Timofte, G. Crumpei, L. Burlea, Possible Correlations among Physical Frame and Quantum Mechanics on Wave-Information-Triad and Cellular Neural Networks via Non-Differentiability "Horizons in World Physics" Ed. Albert Reimer (Nova Publishing New York, 2015), p. 167-205
18. M. Agop, A. Gavriluț, C. Buzea, L. Ochiuz, N. D. Tesloianu, G. Crumpei, C. Popa, Implications of Quantum Informational Entropy in Some Fundamental Physical and Biophysical Models "Selected Topics in Applications of Quantum Mechanics" Ed. M. R. Pahlavani (Intech Publishing Croația, 2015), pp. 311-345
19. N. D. Tesloianu, V. Ghizdovăț, M. Agop, "Flow Dynamics via Non-Differentiability and Cardiovascular Disease. A Proposal for an Interdisciplinary Approach between Non-Differentiable Physics and Cardiovascular Morphopathology" Scholars Press, Saabruken, Germany, 2015
20. I. Mercheș, M. Agop, "Differentiability and Fractality in Dynamics of Physical Systems" World Scientific, 2016, 299 pages, ISBN: 978-981-4678-39-1;
21. Dan Gh. Dimitriu, M. Agop, Chaos in Plasma Physics "Handbook of Applications of Chaos Theory" Ed. C. H. Skiadas, C. Skiadas (CRC Press Taylor and Francis Group, 2016), p. 321-403;
22. M. Agop, L. Ochiuz, D. Tesloianu, C. G. Buzea and S.A. Irimiciuc, "Non-Differentiable Dynamics in Complex Systems", Nova Science Publisher, ISBN: 978-1-53613-137-6, 2018
23. Nicolae Mazilu, Maricel Agop, Ioan Merches, The Mathematical Principles of Scale Relativity Physics: The Concept of Interpretation, CRC Press, 12 sept. 2019 - 252 pagini;
24. Gavriluț, Alina, Mercheș, Ioan, Agop, Maricel

Atomicity through Fractal Measure Theory, Mathematical and Physical Fundamentals with Applications, ISBN 978-3-030-29593-6, 184 pages, Springer International Publishing, 2019;

25. Operational Procedures Describing Physical Systems;

Marciel Agop, Ioan Merches; ISBN 9780367570972

224 Pages; Published June 30, 2020 by CRC Press

26. N. Mazilu, M. Agop, I. Merches, "The Mathematical Principles of Scale Relativity Physics. The Concept of Interpretation" CRC Press Taylor & Francis Group, Boca Raton, London New York, 2020;

27. Ioan Merches, Marichel Agop, Nicolae Mazilu

Scale Transitions as Foundations of Physics

World Scientific Publishing Co.Pte.Ltd., 2021, 399 pages

28. Buzea, C. G., Eva, L., Prelipceanu, M., Cazacu, M. M., Garofalide, S., & Agop, M. (2021). Coronavirus disease COVID-19 tracking the global outbreak. SEIR compartmental model applied to SARS-CoV-2 epidemic in Romania. Biomedical Engineering Tools for Management for Patients with COVID-19, 87–102, Capitolul 5, <https://doi.org/10.1016/B978-0-12-824473-9.00002-1>

29. Mireștean, C. C., Agop, M., Buzea, C. G., Cazacu, M. M., Prelipceanu, M., Iancu, R. I., & Iancu, D. T. (2021). Radiotherapy challenges in COVID era. Biomedical Engineering Tools for Management for Patients with COVID-19, 41–72, Capitolul 3, <https://doi.org/10.1016/B978-0-12-824473-9.00009-4>

30. Mireștean, C. C., Agop M., Buzea C. G., Cazacu M. M., Prelipceanu M., Iancu R. I., Iancu D. T. (2022). Radiotherapy for pelvic malignancies in a COVID-19 pandemic scenario: Focus on rectal and cervical cancers, Biomedical Engineering Applications for People with Disabilities and the Elderly in the COVID-19 Pandemic and Beyond, 131 – 143, Capitolul 14, <https://doi.org/10.1016/B978-0-323-85174-9.00006-6>

31. Marichel Agop and Ștefan Andrei Irimiciuc (2022), A Holographic Implementation for Understanding Nanostructure Dynamics, Series on the Foundations of Natural Science and Technology: Volume 15

Topics in Nanoscience, Part II: Quantized Structures, Nanoelectronics, Thin Films, <https://doi.org/10.1142/12419-vol2> | February 2022, Pages: 408, Edited By: Wolfram Schommers);

32. Ștefan Andrei Irimiciuc, Marichel Agop, and Ioan Merches; Insight on Multifractal Dynamics of ns-Laser Produced Plasmas; <https://doi.org/10.1142/13259> | September 2023, ISBN: 978-981-12-7066-6 (hardcover), Pages: 232;

C. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate în țară, la edituri recunoscute CNCSIS (sau CNCS).

1. M. Agop, N. Mazilu "Fundamente ale fizicii moderne" Editura Junimea Iași, 1989, 179 pag.

2. M. Agop "Probleme de invarianță și haos în teoria mișcării" Editura Gh. Asachi Iași, 1992, 146 pag.

3. M. Agop, N. Mazilu "Fizica procesului de măsură" Editura Ștefan Procopiu, Iași, 1994, 80 pag.

4. M. Agop "Gravitația. Pledoarie pentru o nouă teorie a spațiului și timpului" Editura Graphix, Iași, 1992, 162 pag.

5. C. Cotae, M. Agop, B. Ciobanu "Fizica, vol. 1 – Mecanica și termodinamica clasică" Editura Ștefan Procopiu Iași, 1999, 357 pag.

6. B. Ciobanu, M. Agop, C. Cotae "Fizica, vol. 2 – Optică și electromagnetism" Editura Ștefan Procopiu Iași, 1999, 300 pag.

7. C. Buzea, C. Gh. Buzea, P.D. Ioannou, N. Rezlescu, M. Agop "Fizică pentru ingineri. Supraconducibilitate de înaltă temperatură critică" Editura Ștefan Procopiu Iași, 2001, 294 pag.

8. S. Toma, M. Agop, V. Enache "Tehnici moderne de studiu a interfețelor ca aplicații în stomatologie" Editura Ars Longa Iași, 2006, 242 pag.

9. M. Agop, C. Murguleț "Dinamică neliniară, fulgere globulare și structuri cosmice" Editura Ars Longa Iași, 2006, 136 pag.

10. M. Agop, M. P. Jarcău "Fractalitate și Gravitație" Editura Ars Longa Iași, 2006, 138 pag.

11. M. Agop, C. Rusu, P. Nica, V. Enache "Auto-organizarea interfeței solid-lichid și implicații" Editura Ars Longa Iași, 2007, 179 pag.

12. M. Agop, S. Băcăiță "Spațiul-timp fractalic și straturi duble în plasmă de descărcare" Editura Ars Longa Iași, 2007, 210 pag.

13. Gh. Maftei, M. Buzdugan, M. Agop, I. Mazilu "Gaura neagră între început și sfârșit" Editura Ars Longa Iași, 2007, 176 pag.

14. M. Agop, L.E. Chicoș, "Contribuții la studiul interacțiunii plasmei cu câmpurile fizice" Editura Ars Longa Iași, 2007, 151 pag.

15. S. D. Abăcioaie, M. Agop "Elemente de dinamică neliniară și aplicații" Editura Ars Longa Iași, 2008, 224 pag.

16. M. Buzdugan, S. Rusu, M. Agop "Interacțiuni ale câmpurilor fizice cu materia" Editura Ars Longa Iași, 2008, 200 pag.

17. Z. Borsos, I. Simaciu, M. Hotinceanu, M. Agop "Sisteme stocastice clasice și cuantice" Editura Ars Longa Iași, 2008, 162 pag.

18. V. Enache, M. Agop "Teorii dependente de scală și interacția câmp-materie" Editura Ars Longa Iași, 2008, 166 pag.

19. M. Agop, P. Crăciun "Microfractalitate, macrofractalitate și gravitație" Editura Ars Longa Iași, 2008, 188 pag.
20. M. Agop, A. Stroe "Spațiu-timp fractalic și gravitație" Editura Ars Longa Iași, 2008, 171 pag.
21. V. P. Păun, L. Munteanu, M. Agop Transport phenomena at nanometer scale "Research Trends in Mechanics" Eds. D. Popa, V. Chiroiu, L. Munteanu (Editura Academiei Române, București, 2009) p. 335-354
22. "Haoticitate, Fractalitate și Câmpuri" Editori M. Agop, M. Colotin, V. P. Păun (Editura Ars Longa Iași, 2009) 197 pag.
23. A. Antici, C. Marin, M. Agop "Haos prin stocasticizare" Editura Ars Longa Iași, 2009, 189 pag.
24. S. D. Abăcioaie, M. Agop "Dinamici neliniare și gravitație" Editura Ars Longa Iași, 2009, 171 pag.
25. C. Popa, M. Agop "Gravitația ca teorie gauge și ruperea spontană de simetrie" Editura Ars Longa Iași, 2009, 182 pag.
26. M. B. Răuț, L. Chicoș, R. A. Stana, M. Agop "Predictibilitate și haoticitate în sisteme gravitaționale" Editura Ars Longa Iași, 2009, 138 pag.
27. M. C. Perju, G. Gălușcă, C. Nejneru, M. Agop "Straturi subțiri: descărcări în impuls" Editura Ars Longa Iași, 2010, 339 pag.
28. N. Cimpoeșu, R. Cimpoeșu, I. Ionașcu, M. Agop "Inteligența materiei din perspectiva aliajelor cu memoria formei" Editura Ars Longa Iași, 2010, 301 pag.
29. M. Buzdugan, M. Gârțu, M. Agop "Interacțiunea câmpului electromagnetic cu alte câmpuri fizice" Editura Ars Longa Iași, 2010, 181 pag.
30. N. Mazilu, M. Agop "La răscrucea teoriilor. Între Newton și Einstein. Universul Barbilian" Editura Ars Longa Iași, 2010, 185 pag.
31. A. Harabagiu, D. Magop, M. Agop "Fractalitate și mecanică cuantică" Editura Ars Longa Iași, 2010, 154 pag.
32. G. V. Muncelleanu, D. Magop, C. Marin, M. Agop "Modele fractale în fizica polimerilor" Editura Ars Longa Iași, 2010, 301 pag.
33. M. Agop "Complemente de dinamică neliniară cu aplicații în fizică și inginerie" Editura Universității Petrol și Gaze Ploiești, 2011, 113 pag.
34. T. Dandu Bibire, D. Magop, C. Marin, M. Agop "Dezordine și regularitate în sisteme gravitaționale" Editura Ars Longa Iași, 2011, 219 pag.
35. O. Niculescu, A. Stroe, C. Marin, M. Agop "Neliniaritate și autoorganizare în plasmă" Editura Ars Longa Iași, 2011, 348 pag.
36. M. B. Răuț, A. Stroe, M. Buzdugan, M. Agop "Probleme actuale ale teoriei gravitației" Editura Ars Longa Iași, 2011, 133 pag.
37. D. Magop, O. Niculescu, A. Stroe, C. Marin, M. Agop "Implicații ale nediferențiabilității în mecanica cuantică" Editura Ars Longa Iași, 2012, 210 pag.
38. A. Costan, M. Agop, N. Forna "Studii avansate privind unele proprietăți ale implanturilor dentare din aliaje de titan" Editura Ars Longa Iași, 2012, 264 pag.
39. M. B. Răuț, C. Musteață, A. Stroe, C. Marin, M. Agop "Aplicații ale metodei funcției Green în Fizică" Editura Ars Longa Iași, 2012, 121 pag.
40. M. Agop, R. S. Luciu, C. Buzea, P. Nica "Utilizarea dinamicii neliniare în modelarea unor procese fizice" Editura Ars Longa Iași, 2012, 138 pag.
41. A. Timofte, M. Agop "Diferențiabilitate și fractalitate în dinamica fluidelor" Editura Ars Longa Iași, 2012, 190 pag.
42. R. I. Lițoiu, D. G. Gălușcă, N. Cimpoeșu, M. Agop "Proprietăți fizice și structurale ale unor polimeri reînforțați cu nanotuburi" Editura Ars Longa Iași, 2012, 198 pag.
43. A. Aluculesei, C. Baciuc, M. Agop "Biopolimeri nanostructurați. Proprietăți și aplicații" Editura Ars Longa Iași, 2012, 232 pag.
44. A. Gavriluț, M. Agop "O abordare matematică în dinamica sistemelor complexe" Editura Ars Longa Iași, 2013, 130 pag.
45. V. R. Radu, M. Agop "Sisteme complexe" Editura Ars Longa Iași, 2013, 169 pag.
46. E. Poll, M. Agop "Efecte neliniare în plasmă de descărcare și ablație" Editura Ars Longa Iași, 2013, 141 pag.
47. M. B. Răuț, V. Radu, C. Marin, M. Agop "Știința noastră cea de toate zilele" (vol. 1) Editura Ars Longa Iași, 2013, 159 pag.
48. M. Agop, P. Vizureanu, C. Buzea, C. Marin "Pseudo-AND-ul materialelor inteligente" Editura Ars Longa Iași, 2014, 252 pag.
49. R. A. Stana, B. A. Stana, P. E. Nica, M. Agop "Dinamici fractale în nanostructuri" Editura Ars Longa Iași, 2014, 166 pag.
50. D. Mihăileanu, M. Agop "Neliniaritate în sisteme fizice complexe" Editura Ars Longa Iași, 2015, 118 pag.
51. M. Boicu, M. Agop "Haos și autostructurare în sistemele fizice dependente de scală" Editura Ars Longa Iași, 2015, 105 pag.
52. M. B. Răuț, A. Răuț, M. Agop "Știința noastră cea de toate zilele" (vol. 2), Ed. Ars Longa Iași, 2015, 122 pag.
53. L. Marin, V. D. Mereuță, M. Agop "Efecte neliniare în sisteme complexe" Ed. Ars Longa Iași, 2015, 135 pag.
54. I. Lăzărescu, C. Nejneru, D. G. Gălușcă, M. Agop, M. C. Perju, D. Lăzărescu "Tratarea suprafețelor metalice utilizând o nouă tehnologie duplex" Editura Tehnopress, Iași, 2015, 271 pag.

55. A. Gavriluț, M. Agop "An introduction to the mathematical world of atomicity through a physical approach" Editura Ars Longa Iași, 2016, 169 pag.
56. M. B. Răuț, M. Agop "Știința noastră cea de toate zilele" (vol. 3) Editura Ars Longa Iași, 2016, 174 pag.
57. G. Crumpei, A. Gavriluț, I. Crumpei Tănasă, M. Agop "New Paradigms on Information, Reality and Mind. A Transdisciplinary perspective" Editura Junimea Iași, 2016, 223 pag.
58. Marcel Agop, Viorel Puiu Paun - On the new perspective of fractal theory. Fundaments and applications, Ed. Academiei Romane, 2017, 182 pag.
59. Maricel Agop, Alina Gavriluț, Călin Buzea, Lăcrămioara Ochiuz, Dan Tesloianu, Gabriel Crumpei and Cristina Popa „Implications of Quantum Informational Entropy in Some Fundamental Physical and Biophysical Models” InTech, 2018
60. Maricel Agop, Ioan Merches” Operational Procedures Describing Physical Systems 1st Edition” Ed. Taylor&Francis Group, CRC Press, 2018, 224 pag.;
61. M. Agop, A. Gavriluț, Crumpei G., L. Eva , Towards the multifractal brain by means of paradigm. Fundaments and applications, , Ed. Ars Longa Iasi, 2019;
62. C. Buzea, V.P. Paun, L. Eva, M. Agop, I. D. Cojocaru, R. I. Iancu, D. T. Iancu, "Radiomica. Fundamente și Aplicații" Ed. Academiei Romane, 2020, București;

D. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe plan local; anexa V.3

1. Maricel Agop, Nicolae Mazilu
Fundamente ale fizicii moderne-, Editura: Junimea, 1989, 179 pg., ISBN/Cod: 973-37-0026-6;
2. Maricel Agop, Mihaela Pitu Jarcau
Fractalitate și gravitație -, Ars Longa, ISBN: 987- 973-8912-40-3, 2006, 137 Pag.;
3. Viviana Rodica Radu, Maricel Agop
SISTEME COMPLEXE, Editura: ARS LONGA , 180 pagini, 2013
4. Maricel Agop, Petrică Vizureanu, Călin Buzea, Corina Marin
PSEUDO-ADN-UL MATERIALELOR INTELIGENTE, ISBN 978-973-148-165-4, 254 p., 2014, Ed. Ars Longa;
5. Alina Gavriluț, Maricel Agop
O ABORDARE MATEMATICĂ ÎN DINAMICA SISTEMELOR COMPLEXE, ISBN 978-973-148-152-4, 132 p., 2013, Ed. Ars Longa;
6. Mugur Bogdan Răuț, Viviana Radu, Corina Marin, Maricel Agop
ȘTIINȚA NOASTRĂ CEA DE TOATE ZILELE (Vademecum) ISBN: 987- 973-148-140-1, vol. I, ISBN 987-973-148-141-8, 160 p., 2013, Ed. Ars Longa;
7. Maricel Agop, Cristian Murguleț –
DINAMICĂ NELINIARĂ, FULGERE GLOBULARE ȘI STRUCTURI COSMICE, ISBN: 978-973-8912- 53-3, 2006, Ed. Ars Longa;
8. Iuliana Toma, Maricel Agop, Vlăduț Enache
TEHNICI MODERNE DE STUDIU A INTERFEȚELOR CU APLICAȚII ÎN STOMATOLOGIE, ISBN: 978-973-8912-47-2, 2006, Ed. Ars Longa;
9. Maricel Agop, Liliana-Elena Chicoș
CONTRIBUȚII LA STUDIUL INTERACȚIUNII PLASMEI CU CÂMPURILE FIZICE, ISBN: 9780973-8912-78-6, apărut 2007, Ed. Ars Longa;
10. Gheorghe Maftai, Mihaela Buzdugan, Maricel Agop, Irina Mazilu
GAURA NEAGRĂ - între început și sfârșit, ISBN: 978-973-8912-46-5, apărut 2007, Ed. Ars Longa;
11. Maricel Agop, Simona Băcăiță –
SPAȚIU-TIMP FRACTALIC ȘI STRATURI DUBLE ÎN PLASME DE DESCĂRCARE, ISBN: 978-973- 8912-58-8, 2007, Ed. Ars Longa;
12. Maricel Agop, Cristina Radu, Petru Nica, Vlăduț Enache
AUTO-ORGANIZAREA INTERFEȚEI SOLID-LICHID ȘI APLIACȚII, ISBN: 978-973- 8912-56-4, 2007, Ed. Ars Longa;
13. Anca Harabagiu, Daniela Magop, Maricel Agop
FRACTALITATE ȘI MECANICĂ CUANTICĂ, ISBN: 978-073-148-059-6, 2010, Ed. Ars Longa;
14. Maricel Agop, Petrică Crăciun,
MICROFRACTALITATE, MACROFRACTALITATE ȘI GRAVITAȚIE, ISBN 978-973-8912-99-1, 2008, Ed. Ars Longa;
15. Michael Buzdugan, Ștefan Rusu, Maricel Agop,
INTERACȚIUNI ALE CÂMPURILOR FIZICE CU MATERIA, ISBN 978-973-148-004-6, 2008, Ed. Ars Longa;
16. Zoltan Borsos, Ion Simaciu, Mihai Hotinceanu, Maricel Agop,
SISTEME STOCASTICE CLASICE ȘI CUANTICE, ISBN 978-973-148-014-5, 2008, Ed. Ars Longa;

17. Vlăduț Enache, Maricel Agop,
TEORII DEPENDENTE DE SCALĂ ȘI INTERACȚIA CÂMP-MATERIE, ISBN 978-973-148-012-1, 2008, Ed.Ars Longa;
18. Sergiu-Dan Abăcioaie, Maricel Agop,
ELEMENTE DE DINAMICĂ NELINIARĂ ȘI APLICAȚII, ISBN 978-973-148-011-4, 2008, Ed.Ars Longa;
19. Adina Antici, Corina Marin, Maricel Agop,
HAOS PRIN STOCASTICIZARE, ISBN 978-973-148-040-4, 2009, Ed.Ars Longa;
20. Camelia Popa, Maricel Agop,
GRAVITAȚIA CA TEORIE GAUGE ȘI RUPEREA SPONTANĂ DE SIMETRIE, ISBN 978-973-148-018-3, 2009, Ed.Ars Longa;
21. M. Agop, M. Colotin, V. P. Păun,
HAOTICITATE, FRACTALITATE ȘI CÂMPURI, ISBN 978-973-148-034-3, 2009, Ed.Ars Longa;
22. Sergiu-Dan Abăcioaie, Maricel Agop,
DINAMICĂ NELINIARĂ ȘI GRAVITAȚIE, ISBN 978-973-148-027-5, 2009, Ed.Ars Longa;
23. Manuela Cristina Perju, Gelu-Dan Gălușcă, Carmen Nejneru, Maricel Agop,
STRATURI SUBȚIRI: DESCĂRCĂRI ÎN IMPULS, ISBN 978-973-148-049-7, 2010, Ed.Ars Longa;
24. Nicolae Mazilu, Maricel Agop,
LA RĂSCRUCEA TEORIILOR. ÎNTRE NEWTON ȘI EINSTEIN-UNIVERSUL BARBILIAN, ISBN 978-973-148-035-0, 2010, Ed.Ars Longa;
25. Nicanor Cimpoeșu, Ramona Cimpoeșu, Ion Ionașcu, Maricel Agop,
"INTELIGENȚA" MATERIEI DIN PERSPECTIVA ALIAJELOR CU MEMORIA FORMEI, ISBN 978-973-148-044-2, 2010, Ed.Ars Longa;
26. Mazilu, Nicolae, Agop, Maricel - Fizica procesului de măsură, (monografie), Editura Ștefan Procopiu, Iași, 1994, ISBN 973-95852-5-6, 80 p.;
27. Marcel Agop,
PROBLEME DE INVARIANTA SI HAOS IN TEORIA MISCARII, Ed. "Ghe Asachi" Iasi, ISBN 9739565034, 1992;

E. Cărți (manuale, monografii, tratate, îndrumare etc.) publicate pe web.

-

F. Lucrări științifice publicate în reviste cotate ISI sau indexate în baze de date internaționale.

1. Ștefana Agop, Dumitru Filipeanu, Claudiu-Gabriel Țigănaș, Claudia-Elena Grigoraș-Ichim, Lucia Moroșan-Dănilă, Alina Gavriliuț, Maricel Agop and Gavril Ștefan
Towards a Holographic-Type Perspective in the Analysis of Complex-System Dynamics
Symmetry 2023, 15(3), 681; <https://doi.org/10.3390/sym15030681>;
2. Fractal and Spectral Analysis of Recent Wildfire Scars in Greece
Rosu, IA ; Grillakis, M; Papadopoulos, A; Agop, M ; Voulgarakis,
FIRE TECHNOLOGY, Oct.2023
3. Towards Multifractality through an Ernst-Type Potential in Complex Systems Dynamics
Ghizdovat, V; Rusu, O; Frasila, M; Rusu, CM; Agop, M ; Vasincu, D
Aug 2023 | ENTROPY 25 (8);
4. Turbulence Removal in Atmospheric Dynamics through Laminar Channels
Rosu, IA; Nedeff, F; Nedeff, V; Ancela, JLC; Nica, DC; Frasila, M; Agop, M ; Vasincu, D
Aug 2023 | FRACTAL AND FRACTIONAL, 7 (8);
5. Coherences in the Dynamics of Physical Systems from a Multifractal Perspective of Motion
Vasincu, D; Bruma, AB; Rusu, O; Rusu, CM; Ghizdovat, V; Agop, M
Aug 2023 | Entropy, 25 (8);
6. Theoretical and Experimental Aspects of Sodium Diclofenac Salt Release from Chitosan-Based Hydrogels and Possible Applications
Himinius, LM; Socolov, R; Nica, I; Agop, M; Volovat, C; Ochiuz, L; Vasincu, D; Rotundu, AM; Rosu, IA; Ghizdovat, V; Volovat, SR
May 17 2023 | GELS, 9 (5);
7. The Cracking Behavior of Two Dental Composite Materials Validated through Multifractal Analyses
Nica, I; Nedeff, F; Nedeff, V; Popa, C; Toma, SL; Agop, M; Vasincu, D
INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES, Volume24, Issue7, 2023;
8. Towards a Holographic-Type Perspective in the Analysis of Complex-System Dynamics
Agop, S; Filipeanu, D ; Tiganas, CG; Grigoras-Ichim, CE; Morosan-Danila, L; Gavriliuț, A; Agop, M; Ștefan, G
Mar 2023 | SYMMETRY-BASEL, 15 (3);

- 9.** Drug Release from Nanoparticles (Polymeric Nanocapsules and Liposomes) Mimed through a Multifractal Tunnelling-Type Effect
 Bacaita, ES; Rata, DM ; Cadinoiu, AN; Ghizdovat, V; Agop, M; Luca, AC
 Feb 2023 | POLYMERS, 15 (4);
- 10.** Theoretical and Experimental Designs on Several Mechanical Properties of Cu-Al-Zn Shape Memory Alloys Used in the Processing Industry
 Placinta, C; Stanciu, S; Panainte-Lehadus, M; Mosnegutu, E; Nedeff, F; Nedeff, V; Tomozei, C ; Petrescu, TC; Agop, M;
 Feb 2023 | MATERIALS, 16 (4);
- 11.** FROM GENERAL RELATIVITY TO SCALE RELATIVITY THEORY THROUGH GROUP INVARIANCES OF $SL(2,R)$ TYPE
 Ababei, RV; Paun, MA; Frasila, M; Rusu, CM; Paun, VA; Agop, M; Paun, VP
 2023 | UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS, 85 (3) , pp.93-104;
- 12.** SOME PHYSICAL IMPLICATIONS OF ABSOLUTE GEOMETRIES IN THE DESCRIPTION OF COMPLEX SYSTEMS DYNAMICS
 Frasila, M; Paun, MA; Dumitras, C; Ghizdovat, V; Rusu, CM ; Paun, VA; Agop, M; Paun, VP,
 UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS, Volume 85, Issue2, pages 125-138;
- 13.** ON A SPECIAL SYMMETRY IN THE DYNAMICS OF COMPLEX SYSTEMS IN A HOLOGRAPHIC-TYPE PERSPECTIVE
 Agop, S; Paun, MA; Dumitras, C; Frasila, M; Paun, VA; Agop, M; Paun, VP ; Stefan, G ;
 2023 | UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS, 85 (2) , pp.125-138;
- 14.** Multi-fractal modeling of curcumin release mechanism from polymeric nanomicelles
 Iurciuc, CE; Popa, M; ; Atanase, LI; Popa, O ; Ochiuz, L; Postolache, P; Ghizdovat, V; Irimiciuc, SA ; Agop, M ; Volovat, C ; Volovat, S
 Dec 31 2022 | DRUG DELIVERY 29 (1) , pp.2883-2896;
- 15.** Drug-Loaded Polymeric Particulated Systems for Ophthalmic Drugs Release
 Mihailovici, R; Croitoriu, A; Croitoriu, A; Nedeff, F ; Nedeff, V; Ochiuz, L; Vasincu, D ; Popa, O ; Agop, M; Moraru, A ; Costin, D; Costuleanu, M; Verestiuc, L
 Jul 2022 | MOLECULES 27 (14);
- 16.** Analytical Study Regarding the Seismic Response of a Moment-Resisting (MR) Reinforced Concrete (RC) Frame System with Reduced Cross Sections of the RC Beams
 Sococol, I; Mihai, P; (...); Agop, M
 Jul 2022 | BUILDINGS 12 (7);
- 17.** Update on the Use of Nanocarriers and Drug Delivery Systems and Future Directions in Cervical Cancer
 Himiniuc, LM ; Toma, BF; Popovici, R ; Grigore, AM; Hamod, A ; Volovat, C; Volovat, S ; Nica, I ; Vasincu, D ; Agop, M ; Tirnovanu, M ; Ochiuz, L; Negura, A ; Grigore, M;
 May 4 2022 | JOURNAL OF IMMUNOLOGY RESEARCH 2022
- 18.** Infectious Inflammatory Processes and the Role of Bioactive Agent Released from Imino-Chitosan Derivatives Experimental and Theoretical Aspects
 Himiniuc, L ; Socolov, R; Ghizdovat, V; Agop, M; Anton, E; Toma, B; Ochiuz, L; Vasincu, D ; Popa, O ; Onofrei, V
 May 2022 | POLYMERS 14 (9);
- 19.** Boundary Layer via Multifractal Mass Conductivity through Remote Sensing Data in Atmospheric Dynamics
 Nica, DC; Cazacu, MM; (...); Agop, M
 May 2022 | FRACTAL AND FRACTIONAL 6 (5);
- 20.** Implications and Consequences of $SL(2R)$ as Invariance Group in the Description of Complex Systems Dynamics from a Multifractal Perspective of Motion
 Dobreci, L; Rusu, O; (...); Agop, M
 Apr 2022 | ENTROPY 24 (4);
- 21.** Impact of the Liquid Crystal Order of Poly(azomethine-sulfone)s on the Semiconducting Properties
 Dumbrava, O; Popovici, D; Vasincu, D; Popa, O; Ochiuz, L ; Irimiciuc, SA; Agop, M; Negura, A
 Apr 2022 | POLYMERS 14 (7);
- 22.** Langmuir Probe Perturbations during In Situ Monitoring of Pulsed Laser Deposition Plasmas
 Irimiciuc, SA; Chertopalov, S; (...); Agop, M
 Apr 2022 | MATERIALS 15 (8);
- 23.** Statistical Analysis and Machine Learning Used in the Case of Two Behavioral Tests Applied in Zebrafish Exposed to Mycotoxins
 Mandalian, TL; Pasca, AS; Toma, LM; Agop, M; Toma, BF; Vasilescu, AM; Lupascu-Ursulescu, C
 Mar 2022 | APPLIED SCIENCES-BASEL 12 (6);

- 24.** Multifractality via Stochasticity in Atmospheric Dynamics Description Validated through Remote Sensing Data
Nica, DC; Voiculescu, M; (...); [Agop, M](#)
Mar 2022 | MATHEMATICS 10 (6);
- 25.** The Landscape of Nanovectors for Modulation in Cancer Immunotherapy
Volovat, SR; Ursulescu, CL; Moisii, LG (Moisii, Liliana Gheorghe) [2] ; Volovat, C (Volovat, Constantin) [1] , [3] ; Boboc, D ; Scripcariu, D ; Amurariti, F ; Stefanescu, C ; Stolniceanu, CR ; [Agop, M](#) ; Lungulescu, C ; Volovat, CC
Feb 2022 | PHARMACEUTICS 14 (2);
- 26.** Cellular Self-Structuring and Turbulent Behaviors in Atmospheric Laminar Channels
Rosu, IA; Nica, DC; (...); [Agop, M](#)
Jan 21 2022 | FRONTIERS IN EARTH SCIENCE 9;
- 27.** ON BENDING CREEP BEHAVIOUR OF A POWDER METALLURGY FeMnSiCrNi SHAPE MEMORY ALLOY
Ciurca, L; Pricop, B; [Agop, M](#); Bujoreanu, LG
2022 | ARCHIVES OF METALLURGY AND MATERIALS 67 (3) , pp.901-908;
- 28.** CONDUCTIVE-TYPE BEHAVIORS IN THE DYNAMICS OF COMPLEX SYSTEMS THROUGH SCALE RELATIVITY THEORY
Dragan, VS; Paun, MA; Paun, MA ; Jarcau, M; Dumitras, C ; Placinta, C ; Paun, VA ; [Agop, M](#) ; Paun, VP; Rosu, IA
2022 | UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS 84 (2) , pp.203-212;
- 29.** Complex Behavior in the Dynamics of a Polymeric Biocomposite Material-"Liquid Wood". Experimental and Theoretical Aspects
Petrescu, TC; Mihai, P; (...); [Agop, M](#)
Jan 2022 | POLYMERS 14 (1);
- 30.** SELF-STRUCTURING OF CELLULAR AND CHANNEL TYPE IN COMPLEX SYSTEM DYNAMICS IN THE FRAMEWORK OF SCALE RELATIVITY THEORY
Petrescu, TC; Paun, MA; (...); [Agop, M](#)
2022 | UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS 84 (1) , pp.175-190;
- 31.** The Search for Atmospheric Laminar Channels: Experimental Results and Method Dissemination
Rosu, IA; Nica, DC; (...); [Agop, M](#)
Jan 2022 | SENSORS 22 (1)
- 32.** Sococol, I ; Mihai, P ; Petrescu, TC ; Nedeff, F ; Nedeff, V ; Agop, M ; Luca, BI.; Numerical Study Regarding the Seismic Response of a Moment-Resisting (MR) Reinforced Concrete (RC) Frame Structure with Reduced Cross-Sections of the RC Slabs, BUILDINGS, 10, 2022;
- 33.** Rosu, IA ; Paun, MA ; Barhalescu, M ; Saviuc, AI ; Jarcau, M ; Dumitras, C ; Placinta, C ; Paun, VA ; Agop, M ; Paun, VP; BISTABLE-TYPE INTERACTIONS OF COMPLEX SYSTEMS IN A FRACTAL PARADIGM OF MOTION, UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS, 84(3), 2022.
- 34.** Multifractal Model for Transient Phenomena Analysis in Laser Produced Plasmas,
Irimiciuc, SA and Agop, M
Oct 2021 | SYMMETRY-BASEL 13 (10);
- 35.** "Holographic Implementations" in the Complex Fluid Dynamics through a Fractal Paradigm
Saviuc, A; Girtu, M; Topliceanu, L; Petrescu, TC ; [Agop, M](#)
Sep 2021 | MATHEMATICS 9 (18);
- 36.** Towards Possible Laminar Channels through Turbulent Atmospheres in a Multifractal Paradigm
Rosu, IA ;Nica, DC ;Cazacu, MM ;[Agop, M](#)
ATMOSPHERE, 12(8), 2021;
- 37.** Novel Approach for EEG Signal Analysis in a Multifractal Paradigm of Motions. Epileptic and Eclamptic Seizures as Scale Transitions
Irimiciuc, SA; Zala, A;Dimitriu,D; Himiniuc, LM; [Agop, M](#);Toma, BF; Gavril, LG ; Vasincu, D;Eva, L;
SYMMETRY-BASEL, Volume13, Issue 6,IUN 2021;
- 38.** Toward Complex Systems Dynamics through Flow Regimes of Multifractal Fluids
[Agop, M](#);Petrescu, TC; Filipeanu,D; Grigoras-Ichim, CE;Voda, AI;Zala, A;Dobreci, L;Baciu,C ;Vasincu, D
SYMMETRY-BASEL, Volume13, Issue5, PublishedMAY 2021;
- 39.** A Theoretical Model for Release Dynamics of an Antifungal Agent Covalently Bonded to the Chitosan
Marin, L ;Popa, M ;Anisie, A ;Irimiciuc, SA ;[Agop, M](#);Petrescu, TC; Vasincu, D ;Himiniuc, L;
MOLECULES, Volume26, Issue7, Published APR 2021;
- 40.** Multifractality through Non-Markovian Stochastic Processes in the Scale Relativity Theory. Acute Arterial Occlusions as Scale Transitions

- Tesloianu,ND;Dobreci,L;Ghizdovat,V;Zala, A;Cotirlet, AV;Gavrilut, A; Agop, M;Vasincu, D;Nedelciuc, I;Rusu, CM; ENTROPY, Volume23, Issue4, Published APR 2021;
- 41.**Novel Approach for EKG Signals Analysis Based on Markovian and Non-Markovian Fractalization Type in Scale Relativity Theory
Agop, M; Irimiciuc, S ;Dimitriu, D;Rusu, CM;Zala, A;Dobreci, L;Cotirlet, AV ;Petrescu, TC ;Ghizdovat, V ;Eva, L ;Vasincu, D;
SYMMETRY-BASEL, Volume13, Issue3, Published MAR 2021;
- 42.**The Role of Information in Managing Interactions from a Multifractal Perspective
Agop, M;Irimiciuc, SA; Ghenadi, A; Bibire, L; Toma, S; Petrescu, TC; Vaideanu, D;
ENTROPY, Volume23, Issue2, Published FEB 2021;
- 43.**Multifractal Model of Atmospheric Turbulence Applied to Elastic Lidar Data
Rosu, IA; Cazacu, MM and Agop, M;
ATMOSPHERE, Volume12, Issue2, Published FEB 2021;
- 44.**IMPLICIT CHAOS IN COMPLEX SYSTEMS IN THE FORM OF PERIOD DOUBLING THROUGH HARMONIC MAPPINGS
Agop, S ;Paun, VA ;Stefan, G ;Petrescu, TC ;Agop, M ;Paun, VP;
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS, Volume83, Issue3, Page239-248, Published 2021;
- 45.**Theoretical model for the diclofenac release from PEGylated chitosan hydrogels
Ailincai, D ;Agop, M ;Marinas, IC ;Zala, A ;Irimiciuc, SA ;Dobreci, L ;Petrescu, TC ; Volovat, C;
DRUG DELIVERY, Volume28, Issue1, Page261-271, Published JAN 1 2021;
- 46.**TOWARDS INTERACTIONS THROUGH DIFFERENTIABLE-NON-DIFFERENTIABLE SCALE TRANSITIONS IN SCALE RELATIVITY THEORY
Dobreci, L;Saviuc, A;Petrescu, TC;Paun, MA ;Frasila, M;Nedeff, F;Paun, VA;Dumitrascu, C;Paun, VP ;Agop, M;
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS, Volume83, Issue2, Page239-252, Published 2021;
- 47.**Evaluating atrial fibrillations through strange attractors dynamics
Zala, A;Dimitriu, D ;Agop, M;Tesloianu, DN;Cobzeanu, ML;Cobzeanu, BM ;Rusu, MC ;Ghizdovat, V;
GENERAL PHYSIOLOGY AND BIOPHYSICS, Volume40, Issue5, Page377-386, Published2021
- 48.**A Drug Release Mechanism Controlled by Hydrophobic/Hydrophilic Balance of the Matrix. Theoretical and Experimental Perspectives
Himiniuc, L ; Agop, M ; Ghizdovat, V ; Paun, MA; Paun, VA ; Baciuc, C ; Paun, VP ; Toma, B
MATERIALE PLASTICE Volume: 57 Issue: 4 Pages: 155-165 Published: DEC 2020
- 49.**Dynamic Evaluation of Traffic Noise through Standard and Multifractal Models
Petrovici, A; Cueto, JL; Nedeff, V ; Nava, E; Nedeff, F ; Hernandez, R ; Bujoreanu, C ; Irimiciuc, SA ; Agop, M
SYMMETRY-BASEL Volume: 12 Issue: 11 Article Number: 1857 Published: NOV 2020
- 50.**Toward Interactions through Information in a Multifractal Paradigm
By: Agop, M; Gavrilut, A; Grigoras-Ichim, C; Toma, S; Petrescu, TC ; Irimiciuc, SA
ENTROPY Volume: 22 Issue: 9 Article Number: 987 Published: SEP 2020
- 51.**5-Fluorouracil Release from Chitosan-Based Matrix. Experimental and Theoretical Aspects
By: Iancu, R; Irimiciuc, SA; Agop, M; Frasila, M ; Paun, MA; Paun, VA; Paun, VP; Stratulat, S
MATERIALE PLASTICE Volume: 57 Issue: 3 Pages: 180-188 Published: SEP 2020
- 52.**Non-Linear Behaviors of Transient Periodic Plasma Dynamics in a Multifractal Paradigm
By: Irimiciuc, SA; Saviuc, A ; Tudose-Sandu-Ville, F; Toma, S ; Nedeff, F ; Rusu, CM ; Agop, M
SYMMETRY-BASEL Volume: 12 Issue: 8 Article Number: 1356 Published: AUG 2020
- 53.**Space-and time-resolved optical investigations on ns-laser produced plasmas on various geological samples
By: Irimiciuc, S ; Enescu, F; Bedeleian, H; Gurlui, S; Agop M.
SPECTROCHIMICA ACTA PART B-ATOMIC SPECTROSCOPY Volume: 170 Article Number: 105904
Published: AUG 2020
- 54.**On a Multifractal Approach of Turbulent Atmosphere Dynamics
By: Rosu, IA ; Cazacu, MM ; Ghenadi, AS ; Bibire, L ; Agop, M
FRONTIERS IN EARTH SCIENCE Volume: 8 Article Number: 216 Published: JUN 25 2020
- 55.**A Theoretical Multifractal Model for Assessing Urea Release from Chitosan Based Formulations
By: Iftime, MM ; Irimiciuc, SA ; Agop, M; Angheloiu, M; Ochiuz, L; Vasincu, D
POLYMERS Volume: 12 Issue: 6 Article Number: 1264 Published: JUN 2020
- 56.**Poly (vinyl alcohol boric acid)-Diclofenac Sodium Salt Drug Delivery Systems: Experimental and Theoretical Studies
By: Ailincai, D; Dorobantu, AM; Dima, B ; Irimiciuc, SA; Lupascu, C ; Agop, M ; Olguta, O
JOURNAL OF IMMUNOLOGY RESEARCH Volume: 2020 Article Number: 3124304 Published: MAY 31 2020

- 57.** Target properties - Plasma dynamics relationship in laser ablation of metals: Common trends for fs, and ns irradiation regimes
By: Irniciuc, SA ; Nica, PE; Agop, M; Focsa, C
APPLIED SURFACE SCIENCE Volume: 506 Article Number: 144926 Published: MAR 15 2020
- 58.** Polymer Dynamics Through Group Invariance of SL(2R) - Type in a Fractal Paradigm
By: Placinta, C; Petrescu, TC; Ghizdovat, V; Irniciuc, SA ; Vasincu, D ; Agop, M ; Paun, VP
MATERIALE PLASTICE Volume: 57 Issue: 1 Pages: 167-174 Published: MAR 2020
- 59.** Charged Particle Oscillations in Transient Plasmas Generated by Nanosecond Laser Ablation on Mg Target
By: Agop, M ; Mihaila, I; Nedeff, F ; Irniciuc, SA
SYMMETRY-BASEL Volume: 12 Issue: 2 Article Number: 292 Published: FEB 2020
- 60.** Towards Stochasticity through Joint Invariant Functions of Two Isomorphic Lie Algebras of SL(2R) Type
By: Agop, Maricel; Craus, Mitica
SYMMETRY-BASEL Volume: 12 Issue: 2 Article Number: 226 Published: FEB 2020
- 61.** On the Chameleonic Behaviour of Cholesterol through a Fractal/Multifractal Model
By: Tesloianu, ND; Ghizdovat, V; Agop, M; Rusu, C ; Cardoneanu, A
Computational And Mathematical Methods In Medicine Volume: 2020 Article Number: 6217691 Published: JAN 6 2020
- 62.** Released Diclofenac Sodium Salt From Chitosan Embedding In A Hydrogel Matrix. A Theoretical And Experimental Study
By: Agop, M; Ghizdovat, V; Petrescu, T ; Oprea, I; Paun, MA ; Paun, VA ; Paun, VP ; Volovat, S
University Politehnica Of Bucharest Scientific Bulletin-Series A-Applied Mathematics And Physics Volume: 82 Issue: 4 Pages: 201-212 Published: 2020
- 63.** Experimental And Theoretical Insight Into Formulations Based On Poly(Vinyl Alcohol Boric Acid) And Diclofenac Sodium Salt
By: Irniciuc, SA; Ianus, G ; Agop, M; Crumpei Tanasa, I ; Paun, MA ; Mandalian, TL; Crumpei, J; Paun, VA ; Paun, VP
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS Volume: 82 Issue: 3 Pages: 219-230 Published: 2020
- 64.** A theoretical mathematical model for assessing diclofenac release from chitosan-based formulations
By: Iftime, MM; Dobreci, DL; Irniciuc, SA ; Agop, M ; Petrescu, T; Doroftei, B
DRUG DELIVERY Volume: 27 Issue: 1 Pages: 1125-1133 Published: JAN 1 2020
- 65.** On The Heat Transfer Of Holographic Type In Nanostructures
By: Petrescu, Tc ; Paun, Ma ; Mihai, P; Irniciuc, Sa ; Paun, Va ; Agop, M
University Politehnica Of Bucharest Scientific Bulletin-Series A-Applied Mathematics And Physics Volume: 82 Issue: 2 Pages: 251-262 Published: 2020
- 66.** Investigations of Transient Plasma Generated by Laser Ablation of Hydroxyapatite during the Pulsed Laser Deposition Process
By: Agop, M ; Cimpoesu, N ; Gurlui, S; Irniciuc, SA
SYMMETRY-BASEL Volume: 12 Issue: 1 Article Number: 132 Published: JAN 2020
- 67.** In-Situ Plasma Monitoring during the Pulsed Laser Deposition of Ni60Ti40 Thin Films
By: Cimpoesu, N; Gurlui, S; Bulai, G; Cimpoesu, R ; Paun, VP ; Irniciuc, SA; Agop, M
SYMMETRY-BASEL Volume: 12 Issue: 1 Article Number: 109 Published: JAN 2020
- 68.** Complex System Dynamics Through A Fractal Paradigm
By: Vaideanu, D ; Paun, Ma ; Agop, M; Paun, Va; Petrescu, Tc ; Placinta, C; Vasincu, D
University Politehnica Of Bucharest Scientific Bulletin-Series A-Applied Mathematics And Physics Volume: 82 Issue: 1 Pages: 317-326 Published: 2020
- 69.** Accelerating the Bone Healing Process by the Intervention of the Platelet Growth Factors Impregnated in Collagen An experimental and theoretical mathematical model
By: Susanu, S; Popescu, M; Caba, B; Plamadeala, P; Moraru, A; Costin, D; Gavrilut, G; Agop, M; Cioca, G
MATERIALE PLASTICE Volume: 56 Issue: 4 Pages: 973-979 Published: DEC 2019
- 70.** Investigations of Laser Produced Plasmas Generated by Laser Ablation on Geomaterials. Experimental and Theoretical Aspects
By: Enescu, F; Irniciuc, SA; Cimpoesu, N; Bedelea, H; Bulai, G; Gurlui, S; Agop, M
SYMMETRY-BASEL Volume: 11 Issue: 11 Article Number: 1391 Published: NOV 2019
- 71.** Tissue Engineering - Collagen Matrix Based Flaps - a Simple Construct Experimental and Theoretical Aspects
By: Susanu, S; Moraru, A ; Costin, D; Rusu, CM; Agop, M ; Cioca, G
REVISTA DE CHIMIE Volume: 70 Issue: 10 Pages: 3694-3699 Published: OCT 2019
- 72.** Particle distribution in transient plasmas generated by ns-laser ablation on ternary metallic alloys
By: Irniciuc, Stefan Andrei; Gurlui, Silviu; Agop, Maricel
APPLIED PHYSICS B-LASERS AND OPTICS Volume: 125 Issue: 10 Article Number: 190 Published: OCT 2019

- 73.** Lorenz Type Behaviors in the Dynamics of Laser Produced Plasma
By: Irimiciuc, SA; Enescu, F ; Agop, A ; Agop, M
SYMMETRY-BASEL Volume: 11 Issue: 9 Article Number: 1135 Published: SEP 2019
- 74.** Theoretical Modelling of Long-Time Drug Release from Nitrosalicyl-Imine-Chitosan Hydrogels through Multifractal Logistic Type Laws
AM ; Barhalescu, ML ; Agop, M; Ochiuz, L
COMPUTATIONAL AND MATHEMATICAL METHODS IN MEDICINE Volume: 2019 Article Number: 4091464 Published: AUG 14 2019
- 75.** Lorenz Type Behaviors Associated To Fractal-Non-Fractal Transition In The Dynamics of
- 76.** The Complex Systems
Rusu, CM; Tudose, F; Paun, MA; Frasila, M; Barhalescu, M; Ireviciuc, SA; Paun, VA; Agop, M
University Politehnica Of Bucharest Scientific Bulletin-Series A-Applied Mathematics And Physics Volume: 81 Issue: 4 Pages: 301-310 Published: 2019
- 77.** Fractal Analysis And Related Forms Of Complexity Of Embryo Development. Is There A New Tool For Human Embryo Selection?
Buzea, C; Paun, Ma; Agop, M ; Paun, Va; Doroftei, B
University Politehnica Of Bucharest Scientific Bulletin-Series A-Applied Mathematics And Physics Volume: 81 Issue: 3 Pages: 229-240 Published: 2019
- 78.** Classification Of Good And Bad Responders In Locally Advanced Rectal Cancer After Neoadjuvant Radio-Chemotherapy Using Radiomics Signature
By: Buzea, Cg; Mirestean, Cc; Agop, M ; Paun, Vp ; Iancu, Dt
University Politehnica Of Bucharest Scientific Bulletin-Series A-Applied Mathematics And Physics Volume: 81 Issue: 2 Pages: 265-278 Published: 2019
- 79.** A Turbulence-Oriented Approach to Retrieve Various Atmospheric Parameters Using Advanced Lidar Data Processing Techniques
Rosu, IA ; Cazacu, MM ; Prelipceanu, OS; Agop, M
ATMOSPHERE Volume: 10 Issue: 1 Article Number: 38 Published: JAN 2019
- 80.** Extended Minimal Atomicity through Nondifferentiability: A Mathematical-Physical Approach
Gavrilit, Gabriel; Gavrilit, Alina; Agop, Maricel
Advances In Mathematical Physics Volume: 2019 Article Number: 8298691 Published: 2019
- 81.** Oscillatory regimes of Langmuir probe current in femtosecond laser-produced plasmas: Experimental and theoretical investigations
Nica, P.; Gurlui, S.; Agop, M.; Focsa, C
Applied Surface Science, Volume: 481 Pages: 125-132
- 82.** Operational Procedures in the Theory of the Drug Release from Chitosan Hydrogels
Craciun, AM.; Serban, G. ; Crumpei, I.; Agop, M. Cioca, G
MATERIALE PLASTICE, Volume: 55 Issue: 4 Pages: 590-594
- 83.** On the separation of particle flow during pulse laser deposition of heterogeneous materials - A multi-fractal approach
Irimiciuc, Stefan Andrei; Bulai, Georgiana; Gurlui, Silviu; Agop, Maricel, et al.
POWDER TECHNOLOGY Volume: 339 Pages: 273-280 Published: NOV 2018
- 84.** Aspects Regarding the Pharmaceutical Waste Management in Romania
Bungau, Simona; Tit, Delia Mirela; Fodor, Katalin; Agop, Maricel et al.
SUSTAINABILITY Volume: 10 Issue: 8 Article Number: 2788 Published: AUG 2018
- 85.** A fractal approach of the sound absorption behaviour of materials. Theoretical and experimental aspects
Bujoreanu, Carmen; Irimiciuc, Stefan; Benchea, Marcelin; Agop, Maricel et al.
INTERNATIONAL JOURNAL OF NON-LINEAR MECHANICS Volume: 103 Pages: 128-137 Published: JUL 2018
- 86.** Reducing the Risk in Controlled Drug Release by Using Tannic Acid in Liposomal Formulations
Cioca, Gabriela; Agop, Maricel; Popa, Marcel; et al.
REVISTA DE CHIMIE Volume: 68 Issue: 12 Pages: 2925-2928 Published: DEC 2017
- 87.** Experimental and theoretical considerations on sound absorption performance of waste materials including the effect of backing plates
Bujoreanu, Carmen; Nedeff, Florin; Benchea, Marcelin; Agop, Maricel et al.
APPLIED ACOUSTICS Volume: 119 Pages: 88-93 Published: APR 2017
- 88.** Plume splitting and oscillatory behavior in transient plasmas generated by high-fluence laser ablation in vacuum
Focsa, C.; Gurlui, S.; Nica, P.; Agop M., et.al APPLIED SURFACE SCIENCE Volume: 424 Special Issue: SI Pages: 299-309 Part: 3 Published: DEC 1 2017

- 89.** Investigation of femtosecond laser-produced plasma from various metallic targets using the Langmuir probe characteristic
Nica, P.; Gurlui, S.; Osiac, M.; Agop M. et al.
PHYSICS OF PLASMAS Volume: 24 Issue: 10 Article Number: 103119 , (2017);
- 90.** A fractal physics explanation for acute thrombotic occlusion in an apparently healthy coronary artery
Tesloianu, Nicolae Dan; Nedelciuc, Igor; Ghizdovat, Vlad; Agop, Marcel, et al.
ANATOLIAN JOURNAL OF CARDIOLOGY Volume: 18 Issue: 2, Pages: 155-157, (2017);
- 91.** Reducing the Risk in Controlled Drug Release by Using Tannic Acid in Liposomal Formulations
Cioca, Gabriela; Agop, Maricel; Popa, Marcel; et al.
REVISTA DE CHIMIE Volume: 68 Issue: 12 Pages: 2925-2928, (2017) ;
- 92.** Pairs Generating as a Consequence of the Fractal Entropy: Theory and Applications
Grigorovici, Alexandru; Bacaita, Elena Simona; Paun, Viorel Puiu; Agop, Maricel, et al.
ENTROPY Volume: 19 Issue: 3 Article Number: 128, (2017);
- 93.** A compact non-differential approach for modeling laser ablation plasma dynamics
Irimiciuc, S. A.; Gurlui, S.; Nica, P.; Agop, M., et al.
JOURNAL OF APPLIED PHYSICS Volume: 121 Issue: 8 Article Number: 083301, (2017);
- 94.** Anisotropy Influences on the Drug Delivery Mechanisms by Means of Joint Invariant Functions
Cioca, G.; Bacaita, E. S.; Agop, M.; et al.
COMPUTATIONAL AND MATHEMATICAL METHODS IN MEDICINE Article Number: 5748273, (2017);
- 95.** Atomicity via regularity for non-additive set multifunctions
Pap, Endre; Gavrilut, Alina; Agop, Maricel
SOFT COMPUTING Volume: 20 Issue: 12 Special Issue: SI Pages: 4761-4766, (2016);
- 96.** A multiscale mechanism of drug release from polymeric matrices: confirmation through a nonlinear theoretical model
Bacaita, E. S.; Agop, M.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 18 Issue: 31 Pages: 21809-21816, (2016);
- 97.** New mechanisms of vesicles migration
Aursulesei, Viviana; Vasincu, Decebal; Timofte, Daniel; Agop, Maricel, et al.
GENERAL PHYSIOLOGY AND BIOPHYSICS Volume: 35 Issue: 3 Pages: 287-298, (2016);
- 98.** Fractal analysis and related forms of complexity of embryo development. Is there a new tool for human embryo selection?
Doroftei, B.; Buzea, C.; Simionescu, G.; Agop, Maricel et al.
HUMAN REPRODUCTION Volume: 31 Supplement: 1 Pages: 217-217 Meeting Abstract: P-204 (2016);
- 99.** The Classical Theory of Light Colors: a Paradigm for Description of Particle Interactions
Mazilu, Nicolae; Agop, Maricel; Gatu, Irina; et al.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 55 Issue: 6 Pages: 2773-2793, (2016);
- 100.** From Kepler problem to skyrmions
Mazilu, Nicolae; Agop, Maricel; Gatu, Irina; et al.
MODERN PHYSICS LETTERS B Volume: 30 Issue: 13 Article Number: 1650153, (2016);
- 101.** Role of surface gauging in extended particle interactions: The case for spin
Mazilu, Nicolae; Ghizdovat, Vlad; Agop, Maricel
EUROPEAN PHYSICAL JOURNAL PLUS Volume: 131 Issue: 5 Article Number: 139, (2016);
- 102.** Fractal Information by Means of Harmonic Mappings and Some Physical Implications
Agop, Maricel; Gavrilut, Alina; Paun, Viorel Puiu; et al.
ENTROPY Volume: 18 Issue: 5 Article Number: 160, (2016);
- 103.** Improving the HA deposition process on Ti-based advanced alloy through sandblasting
Zegan, G.; Cimpoesu, R.; Agop, M.; et al.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS Volume: 10 Issue: 3-4 Pages: 279-284 Published: MAR-APR 2016
- 104.** Analyse of Ti-based Alloy for Medical Instruments after Chemical, Mechanical and Physical Processing
Burlea, Stefan Lucian; Leata, Razvan; Agop, Maricel; et al.
REVISTA DE CHIMIE Volume: 67 Issue: 2 Pages: 260-262 ,(2016) ;
- 105.** CHAOS AND SELF-STRUCTURING BEHAVIORS IN LUNG AIRWAYS

- Postolache, Paraschiva; Duceac, Letitia Doina; Vasincu, Elena Geanina; Agop, Maricel et al.
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS
AND PHYSICS Volume: 78 Issue: 1 Pages: 291-298, (2016);
- 106.**On the interaction between two fireballs in low-temperature plasma
Dimitriu, D. G.; Irimiciuc, S. A.; Popescu, S.; Agop, Maricel et al.
PHYSICS OF PLASMAS Volume: 22 Issue: 11 Article Number: 113511, (2015);
- 107.**Solid components separation from heterogeneous mixtures through turbulence control
Nedeff, Valentin; Lazar, Gabriel; Agop, Maricel; et al.
POWDER TECHNOLOGY Volume: 284 Pages: 170-186, (2015);
- 108.**SOME GENERALIZED PHYSICAL MODELS THROUGH HOMOGRAPHIC GROUP
Agop, Maricel; Gavrilut, Alina
REPORTS ON MATHEMATICAL PHYSICS Volume: 76 Issue: 2 Pages: 231-246, (2015);
- 109.**Implications of Non-Differentiable Entropy on a Space-Time Manifold
Agop, Maricel; Gavrilut, Alina; Stefan, Gavril; et al.
ENTROPY Volume: 17 Issue: 4 Pages: 2184-2197, (2015) ;
- 110.**Implications of Onicescu's informational energy in some fundamental physical models
Agop, Maricel; Gavrilut, Alina; Rezus, Elena
INTERNATIONAL JOURNAL OF MODERN PHYSICS B Volume: 29 Issue: 7 Article
Number: 1550045 Published: MAR 20 2015
- 111.**Solvent Influence on the Electronic Absorption Spectra of B-3 Vitamin in Ternary Solutions
Paun, Viorel-Puiu; Rusu, Cristina Marcela; Agop, Maricel
MATERIALE PLASTICE Volume: 52 Issue: 1 Pages: 4-8, (2015) ;
- 112.**The concept of physical surface in nuclear matter
Mazilu, Nicolae; Agop, Maricel
MODERN PHYSICS LETTERS A Volume: 30 Issue: 6 Article Number: 1550026, (2015);
- 113.**SI(2, R) Invariance of The Kepler Type Motions And Shannon Informational Entropy. Uncertainty Relations
Through the Constant Value of The Onicescu Informational Energy
Agop, Maricel; Gavril, Stefan; Gavrilut, Alina
REPORTS ON MATHEMATICAL PHYSICS Volume: 75 Issue: 1 Pages: 101-112, (2015);
- 114.**Approximation Theorems For Fuzzy Set Multifunctions In Vietoris Topology. Physical Implications of Regularity
Gavrilut, A.; Agop, M.
IRANIAN JOURNAL OF FUZZY SYSTEMS Volume: 12 Issue: 1 Pages: 27-42, (2015);
- 115.**On the Implications Of The Biological Systems Fractal Morpho-Functional Structure
Nemes, Roxana Maria; Duceac, Letitia Doina; Vasincu, Elena Geanina; Agop, Maricel et al.
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS
AND PHYSICS Volume: 77 Issue: 4 Pages: 263-272 Published: 2015;
- 116.**Measuring the Electrical Properties of MWNT-PA6 Reinforced Nanocomposites
Calin, Monica Alina; Manea, Liliana Rozemarie; Schacher, Laurence; Agop, Maricel et al.
JOURNAL OF NANOMATERIALS Article Number: 514501 Published: 2015;
- 117.**Non-linear behaviours in complex fluid dynamics via non-differentiability. Separation control of the solid
components from heterogeneous mixtures
Nedeff, Valentin; Lazar, Gabriel; Agop, Maricel; et al.
POWDER TECHNOLOGY Volume: 269 Pages: 452-460, (2015);
- 118.**TRAVELLING WAVES AND SHAPIRO STEPS IN A TUMOR-GROWTH MODEL
Vasincu, Decebal; Buzea, Calin Gheorghe; Agop, Maricel; et al.
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS
AND PHYSICS Volume: 76 Issue: 4 Pages: 209-220, (2014);
- 119.**Phases in the temporal multiscale evolution of the drug release mechanism in IPN-type chitosan based on
hydrogels
Bacaita, E. S.; Ciobanu, B. C.; Popa, M.; Agop, Maricel et al.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 16 Issue: 47 Pages: 25896-25905,(2014);
- 120.**Order to Chaos Transition in Plasma via Non-Differentiability: Experimental and Theoretical Investigations
Agop, Maricel; Dimitriu, Dan Gheorghe; Vrajitoriu, Lucia; et al.
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 83 Issue: 5 Article Number: 054501, (2014);
- 121.**A gauge theory of nucleonic interactions by contact
Mazilu, Nicolae; Ioannou, Pavlos D.; Agop, Maricel
MODERN PHYSICS LETTERS A Volume: 29 Issue: 14 Article Number: 14500734, (2014);

- 122.**Computational properties of a fractal medium
Birlescu, Vlad Sergiu; [Agop, Maricel](#); Craus, Mitica
INTERNATIONAL JOURNAL OF QUANTUM INFORMATION Volume: 12 Issue: 4 Article
Number: 1450022,(2014);
- 123.**Experimental and theoretical aspects of a laser produced plasma
Irimiciuc, S. A.; Mihaila, I.; [Agop, M.](#)
PHYSICS OF PLASMAS Volume: 21 Issue: 9 Article Number: 093509, (2014);
- 124.**Some Aspects Concerning the "Memorization Effect" in Complex Fluid
[Agop, M.](#); Ochiuz, L.; Timofte, D.; et al.
ACTA PHYSICA POLONICA A Volume: 126 Issue: 3 Pages: 663-669, (2014);
- 125.**Stopper Effects in Network Type Polymers
Paun, Viorel-Puiu; Nedeff, Valentin; Scurtu, Dan; [Agop, Maricel](#) et al.
MATERIALE PLASTICE Volume: 51 Issue: 3 Pages: 225-229, (2014);
- 126.**Informational Non-Differentiable Entropy and Uncertainty Relations in Complex Systems
[Agop, Maricel](#); Gavrilit, Alina; Crumpei, Gabriel; et al.
ENTROPY Volume: 16 Issue: 11 Pages: 6042-6058, (2014);
- 127.**Dispersive effects in laser ablation plasmas
Irimiciuc, Stefan Andrei; [Agop, Maricel](#); Nica, Petru; et al.
JAPANESE JOURNAL OF APPLIED PHYSICS Volume: 53 Issue: 11 Article Number: 116202 , (2014)
- 128.**Intermolecular Interactions in Ternary Solutions of B-6 Vitamin
Paun, Viorel-Puiu; Rusu, Cristina Marcela; [Agop, Maricel](#)
REVISTA DE CHIMIE Volume: 65 Issue: 12 Pages: 1448-1452, (2014) ;
- 129.**Chemical properties of hydroxyapatite deposited through electrophoretic process on different sandblasted samples
Gradinaru, Irina; Stirbu, Ioan; Gheorghe, Cristina Angela; [Agop, Maricel](#) et al.
MATERIALS SCIENCE-POLAND Volume: 32 Issue: 4 Pages: 578-582, (2014);
- 130.**Some Aspects Concerning the "Memorization Effect" in Complex Fluid
[Agop, M.](#); Ochiuz, L.; Timofte, D.; et al.
ACTA PHYSICA POLONICA A Volume: 126 Issue: 3 Pages: 663-669 Published: SEP 2014
- 131.**Phases in the temporal multiscale evolution of the drug release mechanism in IPN-type chitosan based on hydrogels
Bacaita, E. S.; Ciobanu, B. C.; Popa, M.; [Agop, Maricel](#) et al.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 16 Issue: 47 Pages: 25896-25905, (2014);
- 132.**FLOW DYNAMICS REGIMES VIA NON-DIFFERENTIABILITY IN COMPLEX FLUIDS
Axinte, Ciprian Iulian; Baci, Constantin; Volovat, Simona; [Agop, Maricel](#) et al.
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS
AND PHYSICS Volume: 76 Issue: 2 Pages: 233-242, (2014);
- 133.**A QUARK-INDEPENDENT DESCRIPTION OF CONFINEMENT
Mazilu, Nicolae; Ioannou, Pavlos D.; Diakonos, Fotios K.; [Agop, Maricel](#) et al.
MODERN PHYSICS LETTERS A Volume: 28 Issue: 30 Article Number: 1350126, (2013);
- 134.**Experimental and theoretical investigations of plasma multiple double layers and their evolution to chaos
Dimitriu, D. G.; Aflori, M.; Ivan, L. M.; [Agop, Maricel](#) et al.
PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 22 Issue: 3 Article Number: 035007, (2013)
- 135.**Experimental and theoretical evidence for the chaotic dynamics of complex structures
[Agop, M.](#); Dimitriu, D. G.; Niculescu, O.; et al.
PHYSICA SCRIPTA Volume: 87 Issue: 4 Article Number: 045501, (2013);
- 136.**Generalized lift force for complex fluid
Nedeff, Valentin; Bejenariu, Constantin; Lazar, Gabriel; [Agop, Maricel](#) et al.
POWDER TECHNOLOGY Volume: 235 Pages: 685-695, (2013);
- 137.**MATHEMATICAL MODELLING OF THE RELEASE PROFILE OF ANTHRAQUINONE-DERIVED DRUGS
ENCAPSULATED ON MAGNETITE NANOPARTICLES
Durdureanu-Angheluta, Anamaria; Bacaita, Simona; Radu, Viviana; [Agop, Maricel](#) et al.
REVUE ROUMAINE DE CHIMIE Volume: 58 Issue: 2-3 Pages: 217-221, (2013);
- 138.**Dynamics Control of the Complex Systems via Nondifferentiability
Nejneru, Carmen; Nicuta, Anca; Constantin, Boris; [Agop, Maricel](#) et al.
JOURNAL OF APPLIED MATHEMATICS Article Number: 137056, (2013);
- 139.**RESEARCH ON THIN ALUMINIUM FILM DEPOSITS USING THE C-CVD METHOD
Surdu, Irina Elena; Nejneru, Carmen; Galusca, Dan Gelu; [Agop, Maricel](#) et al.
METALURGIA INTERNATIONAL Volume: 18 Special Issue: 4 Pages: 5-11,(2013);
- 140.**BEHAVIOURS OF FLUIDIZED BEDS THROUGH FLOW REGIMES OF A COMPLEX FLUID

- Surdu, Irina-Elena; Nejneru, Carmen; Galusca, Gelu; Agop, Maricel et al.
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS
AND PHYSICS Volume: 75 Issue: 1 Pages: 181-192, (2013);
- 141.** Experimental Investigations on The Plasma Nitriding Process Control Using Ionic Triode
Axinte, Mihai; Nejneru, Carmen; Stroe, Aurelia; Agop, Maricel et al.
METALURGIA INTERNATIONAL Volume: 18 Issue: 1 Pages: 26-31, (2013);
- 142.** Morphological Properties of Polyamide 6-Cnt Nanofibers Obtained by Electrospinning Method
Calin, Monica Alina; Curteza, Antonela; Toma, Stefan; Agop, Maricel et al.
METALURGIA INTERNATIONAL Volume: 18 Issue: 1 Pages: 19-22, (2013);
- 143.** Electrical Properties of Pa6-Cnt Nanofibers Obtained By Electrospinning Method
Calin, Monica Alina; Agop, Maricel
METALURGIA INTERNATIONAL Volume: 18 Issue: 1 Pages: 23-25, (2013);
- 144.** A UNITARY THEORY TO THE HOLLOW CATHODE EFFECT WITH IMPLICATIONS IN IONIC NITRIDING
Axinte, Mihai; Nejneru, Carmen; Stroe, Aurelia; Agop, Maricel et al.
METALURGIA INTERNATIONAL Volume: 18 Issue: 1 Pages: 32-39 Published: 2013
- 145.** Surface Morphology Influence In Structural Colours Displayed By Spin-Coated Thin Film
Teodorescu, Mirela; Khenoussi, Naby; Schacher, Laurence; Agop, Maricel et al.
METALURGIA INTERNATIONAL Volume: 18 Issue: 2 Pages: 27-29 Published: 2013
- 146.** ELECTRICAL PROPERTIES OF PA6-CNT NANOFIBERS OBTAINED BY ELECTROSPINNING METHOD)
Calin, Monica Alina; Curteza, Antonela; Khenoussi, Naby; Agop, Maricel et al.
METALURGIA INTERNATIONAL Volume: 18 Issue: 2, (2013);
- 147.** CHAOS VIA FRACTALITY IN GRAVITATIONAL SYSTEMS DYNAMICS. A NEW APPROACH (I)
Agop, M.; Paun, V. P.; Dandu-Bibire, T.
INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS Volume: 22 Issue: 12 Article
Number: 1250299, (2012);
- 148.** Characterization of Aluminum Laser Produced Plasma by Target Current Measurements
Nica, Petru-Edward; Agop, Maricel; Gurlui, Silviu; et al.
JAPANESE JOURNAL OF APPLIED PHYSICS , Volume: 51 Issue: 10 Article Number: 106102
Part: 1, (2012);
- 149.** Morphological and Optical Properties of Polyamide Thin Films Obtained by Spin-coating Method
Teodorescu, Mirela; Curteza, Antonela; Agop, Maricel
MATERIALE PLASTICE Volume: 49 Issue: 3 Pages: 219-221, (2012) ;
- 150.** Non-differentiability at Mesoscopic Scale in Drug Release Processes from Polymer Microparticles
Magop, Daniela; Bacaita, Simona; Peptu, Catalina; Agop, Maricel et al.
MATERIALE PLASTICE Volume: 49 Issue: 2 Pages: 101-105, (2012) ;
- 151.** Experimental and Theoretical Investigations of the Negative Differential Resistance in a Discharge Plasma
Agop, Maricel; Nica, Petru; Niculescu, Oana; et al.
JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 81 Issue: 6 Article Number: 064502, (2012);
- 152.** Dynamics in the boundary layer of a flat particle
Nedeff, Valentin; Mosnegutu, Emilian; Panainte, Mirela; Agop, Maricel et al.
POWDER TECHNOLOGY Volume: 221 Special Issue: SI Pages: 312-317, (2012);
- 153.** Study on The Polarized Grid Effect To The Parts Cathodic Sputtering On Plasma Nitriding
Axinte, Mihai; Nejneru, Carmen; Agop, Marcel
METALURGIA INTERNATIONAL Volume: 17 Issue: 12 Pages: 87-92, (2012)
- 154.** Nonlinearities in Drug Release Process from Polymeric Microparticles: Long-Time-Scale Behaviour
Bacaita, Elena Simona; Bejinariu, Costica; Zoltan, Borsos; Agop, Maricel et al.
JOURNAL OF APPLIED MATHEMATICS Article Number: 653720, (2012);
- 155.** New Model for Heat Transfer in Nanostructures
Stana, R.; Botez, I. Casian; Paun, V. P.; Agop, Maricel et al.
JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE Volume: 9 Issue: 1
Pages: 55-66, (2012);
- 156.** EXPERIMENTAL STRUCTURAL, PHYSICAL AND MECHANICAL CHARACTERISTICS OF THE
MAGNETISABLE COMPOSITE YARNS
Grosu, Marian-Catalin; Hossu, Ioan; Avram, Dorin; Agop, Maricel et al.
METALURGIA INTERNATIONAL Volume: 17 Issue: 1 Pages: 28-34, (2012);
- 157.** Hydroxyapatite and PMMA Thin Films Synthesized by Pulsed Laser Deposition on Titanium Based Metallic
Substrates
Costan, Alina; Cimpoesu, Ramona Hanu; Ionita, Iulian; Agop, Maricel et al.
MATERIALE PLASTICE Volume: 48 Issue: 4 Pages: 299-302, (2011);
- 158.** Experimental and Modeling Results on Multiple Double Layers in Low-Temperature Discharge Plasma

- Dimitriu, Dan G.; Aflori, Magdalena; Ivan, Liliana M.; Agop, Maricel et al.
IEEE TRANSACTIONS ON PLASMA SCIENCE Volume: 39 Issue: 11 Special Issue: SI
Pages: 2316-2317 Part: 1, (2011);
- 159.**The chaotic atom model via a fractal approximation of motion
Agop, M.; Nica, P.; Gurlui, S.; et al.
PHYSICA SCRIPTA Volume: 84 Issue: 4 Article Number: 045017, (2011);
- 160.**Preliminary testing of corrosion characteristics of NiTi alloy coated with various polymers
Cimpoesu, R. Hanu; Mareci, D.; Aelenei, N.; Agop, Maricel et al.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 13 Issue: 9-10 Pages: 1305-1308, (2011)
- 161.**Biodegradable hydroxyapatite layer obtained on Ti-6Al-4V alloy dental implant material
Costan, A.; Forna, N.; Dima, A.; Agop, Maricel et al.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 13 Issue: 9-10 Pages: 1338-1341, (2011);
- 162.**Some implications of Scale Relativity theory in avascular stages of growth of solid tumors in the presence of an immune system response
Buzea, C. Gh.; Agop, M.; Moraru, Evelina; et al.
JOURNAL OF THEORETICAL BIOLOGY Volume: 282 Issue: 1 Pages: 52-64, (2011);
- 163.**System Dynamics Control through the Fractal Potential
Timofte, A.; Botez, I. Casian; Scurtu, D.; Agop, Maricel et al.
ACTA PHYSICA POLONICA A Volume: 119 Issue: 3 Pages: 304-311, (2011);
- 164.**The Microscopic-Macroscopic Scale Transformation Through A Chaos Scenario In The Fractal Space-Time Theory
Munceleanu, G. V.; Paun, V. -P.; Casian-Botez, I.; Agop, Maricel et al.
INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS Volume: 21 Issue: 2
Pages: 603-618 , (2011);
- 165.**Experimental Magnetic Characteristics of The Composite Yarns
Grosu, Marian-Catalin; Hossu, Ioan; Avram, Dorin; Agop, Maricel et al.
METALURGIA INTERNATIONAL Volume: 16 Issue: 12 Pages: 58-62, (2011);
- 166.**Charged Particle Beam Production Via Laser Ablation for Traceability Marking
Rusu, Stefan; Galusca, Dan-Gelu; Rusu, Ioan; Agop, Maricel et al.
METALURGIA INTERNATIONAL Volume: 16 Issue: 10 Pages: 11-18, (2011);
- 167.**Pulsed Laser Deposition Of Ni Thin Films On Metallic Substrate
Largeanu, Anca; Pompilian, G. O.; Galusca, D. G.; Agop, Maricel et al.
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS Volume: 73 Issue: 3 Pages: 195-202, (2011);
- 168.**A New Possible Material Marking Technique Via Laser Beam - Uniform Magnetic Field
Rusu, Stefan; Galusca, Dan-Gelu; Rusu, Ioan; Agop, Maricel et al.
METALURGIA INTERNATIONAL Volume: 16 Issue: 9 Pages: 53-62, (2011);
- 169.**Gun-Type Effects In A Generalized Maxwell Field
Dandu-Bibire, Luminita; Borsos, Zoltan; Matasar, Daniel; Agop, Maricel et al.
UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS Volume: 73 Issue: 2 Pages: 175-184, (2011);
- 170.**Modifications In the Schumann Frequency Spectrum Induced by Seismic Waves
St Ghenadi, A.; Buzdugan, M.; Bostan, D. -C.; Agop, Maricel et al.
JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY Volume: 12 Issue: 3A
Pages: 1280-1287, (2011);
- 171.**Possible Influences of Aerosols on The Schumann Frequency Spectrum
Bibire, L.; Ghenadi, A. S.; Timofte, A.; Agop, Maricel et al.
JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY Volume: 12 Issue: 3A
Pages: 1288-1294, (2011);
- 172.**'ANOMALIES' OF THE SCHUMANN RESONANCE INDUCED BY ENVIRONMENT
Buzdugan, M.; Timofte, A.; Bibire, L.; Agop, Maricel et al.
JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY Volume: 12 Issue: 3A
Pages: 1295-1300 Published: 2011
- 173.**Thermal properties of a Ti-6Al-4V alloy used as dental implant material
Costan, A.; Dima, A.; Ionita, I.; Agop, Maricel et al.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS
Volume: 5 Issue: 1-2 Pages: 92-95 ,(2011);
- 174.**Study on the Heat Transfer in Carbon Nanotube Composites with Polymer Matrix
Litoiu, Razvan; Eden, Mamut; Bacu, Camelia; Agop, Maricel et al.

MATERIALE PLASTICE Volume: 47 Issue: 4 Pages: 478-480, (2010);
175.Pulsed laser deposition of poly (L-Lactide) acid on nitinol substrate
Cimpoesu, R. H.; Pompilian, G. O.; Baciuc, C.; Agop, Maricel et al.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS Volume: 4
Issue: 12 Pages: 2148-2153 , (2010);
176.Multi-peak structure of the ion current in laser produced plasma
Nica, P.; Agop, M.; Miyamoto, S.; et al.
EUROPEAN PHYSICAL JOURNAL D Volume: 60 Issue: 2 Pages: 317-323, (2010) ;
177.Conductive and Convective Types Behaviors at Nano-Time Scales
Casian-Botez, I.; Agop, M.; Nica, P.; et al.
JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE Volume: 7 Issue: 11
Pages: 2271-2280, (2010);
178.Al₂O₃ ceramics under high-fluence irradiation: plasma plume dynamics through space- and time-resolved
optical emission spectroscopy
Ursu, C.; Pompilian, O. G.; Gurlui, S.; Agop, Maricel et al.
APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 101 Issue: 1
Pages: 153-159, (2010);
179.Casimir Type Effect in Scale Relativity Theory
Buzea, C. Gh.; Agop, M.; Stoica, Cristina Maria; et al.
International Journal of Nonlinear Sciences And Numerical Simulation Volume: 11 Issue: 10
Pages: 785-802, (2010);
180.Non-Differentiable Mechanical Model and Its Implications
Agop, M.; Niculescu, O.; Timofte, A.; et al.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 49 Issue: 7 Pages: 1489-1506, (2010);
181.Static and free time-dependent fractal systems through an extended hydrodynamic model of the scale relativity
theory
Agop, M.; Munceleanu, G. V.; Niculescu, O.; et al.
PHYSICA SCRIPTA Volume: 82 Issue: 1 Article Number: 015010, (2010);
182.The time dependent Ginzburg-Landau equation in fractal space-time
Buzea, C. Gh.; Rusu, I.; Bulancea, V.; Agop, Maricel et al.
PHYSICS LETTERS A Volume: 374 Issue: 27 Pages: 2757-2765 , (2010) ;
183.On the Energy Dissipation Capacity and the Shape Memory. A Comparative Study between Polymer
Composites and Alloys
Paun, Viorel-Puiu; Cimpoesu, Nicanor; Cimpoesu, Ramona Hanu; Agop, Maricel et al.
MATERIALE PLASTICE Volume: 47 Issue: 2 Pages: 158-163 , (2010);
184.Internal Friction Phenomena at Polymeric and Metallic Shape Memory Materials. Experimental and Theoretical
Results
Paun, Maria-Alexandra; Hanu, Ramona Cimpoesu; Cimpoesu, Nicanor; Agop, Maricel et al.
MATERIALE PLASTICE Volume: 47 Issue: 2 Pages: 209-214, (2010) ;
185.Ricci flat black holes in higher dimensional SU(2) Einstein-Yang-Mills theory with negative cosmological
constant
Agop, Maricel; Radu, Eugen
PHYSICS LETTERS B Volume: 688 Issue: 1 Pages: 88-95, (2010) ;
186.Experimental and theoretical investigations of a plasma fireball dynamics
Niculescu, O.; Dimitriu, D. G.; Paun, V. P.; Agop, Maricel et al.
PHYSICS OF PLASMAS Volume: 17 Issue: 4 Article Number: 042305, (2010);
187.Oscillatory Langmuir probe ion current in laser-produced plasma expansion
Nica, P.; Agop, M.; Gurlui, S.; et al.
EPL Volume: 89 Issue: 6 Article Number: 65001 , (2010);
188.Implications of an extended fractal hydrodynamic model
Agop, M.; Nica, P. E.; Gurlui, S.; et al.
EUROPEAN PHYSICAL JOURNAL D Volume: 56 Issue: 3 Pages: 405-419, (2010);
189.Mass Transfer for Titan and Tungsten Electrode Coating Using Impulse Discharge Method
Vizureanu, Petrica; Perju, Manuela Cristina; Galusca, Dan-Gelu; Agop, Maricel et al.
METALURGIA INTERNATIONAL Volume: 15 Issue: 12 Pages: 59-64 , (2010);
190.Motion of free particles in fractal space-time
Buzea, C. Gh.; Bejinariu, C.; Boris, C.; Agop, Maricel et al.
INTERNATIONAL JOURNAL OF NONLINEAR SCIENCES AND NUMERICAL SIMULATION Volume: 10,
Issue: 11-12, Pages: 1399-1414 , (2009);
191.Fractal Transport Phenomena through the Scale Relativity Model
Colotin, M.; Pompilian, G. O.; Nica, P.; Agop, Maricel et al.

- ACTA PHYSICA POLONICA A Volume: 116 Issue: 2 Pages: 157-164, (2009);
- 192.** Stochastic resonance and vibrational resonance in an excitable system: The golden mean barrier
Stan, Cristina; Cristescu, C. P.; Alexandroaei, D.; Agop, Maricel et al.
- 193.** CHAOS SOLITONS & FRACTALS Volume: 41 Issue: 2 Pages: 727-734, (2009) ;
- 194.** Experimental and Theoretical Aspects of Aluminum Expanding Laser Plasma
Nica, Petru; Vizureanu, Petrica; Agop, Maricel; et al.
Japanese Journal of Applied Physics Volume: 48 Issue: 6 Article Number: 066001, (2009);
- 195.** Transport phenomena in nanostructures and non-differentiable space-time
Agop, M.; Chicos, Liliana; Nica, P.
CHAOS SOLITONS & FRACTALS Volume: 40 Issue: 2 Pages: 803-814, (2009) ;
- 196.** Games with Cantor's dust
Gottlieb, I.; Agop, M.; Enache, V.
CHAOS SOLITONS & FRACTALS Volume: 40 Issue: 2 Pages: 940-945, (2009);
- 197.** Feigenbaum scenario in the dynamics of a metal-oxide semiconductor heterostructure under harmonic perturbation. Golden mean criticality
Cristescu, C. P.; Mereu, B.; Stan, Cristina; Agop, Maricel et al.
CHAOS SOLITONS & FRACTALS Volume: 40 Issue: 2 Pages: 975-980, (2009) ;
- 198.** The Issue of Primitive Indefinite-Integral In The Theory Of Fractal Space-Time
Gottlieb, I.; Mociutchi, C.; Ciobanu, G.; Agop, Maricel et al.
ROMANIAN REPORTS IN PHYSICS Volume: 61 Issue: 3 Pages: 375-385, (2009);
- 199.** FRACTAL FLUIDS OF CONDUCTIVE TYPE BEHAVIOR THROUGH SCALE RELATIVITY THEORY
Colotin, M.; Niculescu, O.; Bibire, T. Dandu; Agop, Maricel et al.
ROMANIAN REPORTS IN PHYSICS Volume: 61 Issue: 3 Pages: 387-394, (2009);
- 200.** PARTICLE IN A BOX BY MEANS OF A FRACTAL HYDRODYNAMIC MODEL
Harabagiu, A.; Niculescu, O.; Colotin, M.; Agop, Maricel et al.
ROMANIAN REPORTS IN PHYSICS Volume: 61 Issue: 3 Pages: 395-400, (2009);
- 201.** El Naschie's epsilon((infinity)) space-time and scale relativity theory in the topological dimension $D=3$
Agop, M.; Radu, Cristina; Bontas, T.
CHAOS SOLITONS & FRACTALS Volume: 38 Issue: 5 Pages: 1243-1253, (2008) ;
- 202.** Wave-particle duality through an extended model of the scale relativity theory
Ioannou, P. D.; Nica, P.; Paun, V.; Agop, Maricel et al.
PHYSICA SCRIPTA Volume: 78 Issue: 6 Article Number: 065101, (2008);
- 203.** Gauge Gravitational Field in a Fractal Space-Time
Agop, M.; Popa, Camelia; Harabagiu, Anca
COMMUNICATIONS IN THEORETICAL PHYSICS Volume: 50 Issue: 5 Pages: 1197-1204, (2008);
- 204.** Reissner-Nordstrom-de-Sitter-type solution by a gauge theory of gravity
Enache, V.; Popa, Camelia; Paun, V.; Agop, Maricel et al.
CHINESE PHYSICS LETTERS Volume: 25 Issue: 10 Pages: 3570-3573, (2008);
- 205.** Structural Conductivity of Carbon Nanotubes
Borsos, Zoltan; Paun, Viorel-Puiu; Botez, Irinel Casian; Agop, Maricel et al.
REVISTA DE CHIMIE Volume: 59 Issue: 10 Pages: 1169-1171, (2008) ;
- 206.** El Naschie's epsilon((infinity)) theory and effects of nanoparticle clustering on the heat transport in nanofluids
Agop, M.; Paun, V.; Harabagiu, Anca
CHAOS SOLITONS & FRACTALS Volume: 37 Issue: 5 Pages: 1269-1278, (2008)
- 207.** Fractal model of the atom and some properties of the matter through an extended model of scale relativity
Agop, M.; Nica, P. E.; Ioannou, P. D.; et al.
EUROPEAN PHYSICAL JOURNAL D Volume: 49 Issue: 2 Pages: 239-248, (2008) ;
- 208.** Experimental and theoretical investigations of a laser-produced aluminum plasma
Gurlui, S.; Agop, M.; Nica, P.; et al.
PHYSICAL REVIEW E Volume: 78 Issue: 2 Article Number: 026405 Part: 2, (2008);
- 209.** A Theoretical Approach of the Electrical Conductance in Nanostructures
Abacioaie, Dan; Paun, Maria-Alexandra; Forna, Norina; Agop, Maricel et al.
REVISTA DE CHIMIE Volume: 59 Issue: 8 Pages: 930-933, (2008) ;
- 210.** Wave-particle duality through a hydrodynamic model of the fractal space-time theory
Agop, M.; Harabagiu, A.; Nica, P.
ACTA PHYSICA POLONICA A Volume: 113 Issue: 6 Pages: 1571-1588, (2008);
- 211.** Fractal space-time and ball lightning as a self-organizing process in laser produced plasma
Agop, M.; Nica, P.; Gurlui, S.; et al.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 10
Issue: 6 Pages: 1526-1529, (2008)
- 212.** New theoretical approach of the physical processes in nanostructures

Lucrări științifice publicate în reviste din străinătate.

1. On the separation of particle flow during pulse laser deposition of heterogeneous materials - A multi-fractal approach
Irimiciuc, Stefan Andrei; Bulai, Georgiana; Gurlui, Silviu; Agop, Maricel, et al.
POWDER TECHNOLOGY Volume: 339 Pages: 273-280, (2018);
2. Aspects Regarding the Pharmaceutical Waste Management in Romania
Bungau, Simona; Tit, Delia Mirela; Fodor, Katalin; Agop, Maricel et al.
SUSTAINABILITY Volume: 10 Issue: 8 Article Number: 2788, (2018);
3. A fractal approach of the sound absorption behaviour of materials. Theoretical and experimental aspects
Bujoreanu, Carmen; Irimiciuc, Stefan; Benchea, Marcelin; Agop, Maricel et al.
INTERNATIONAL JOURNAL OF NON-LINEAR MECHANICS Volume: 103 Pages: 128-137, (2018)
4. Experimental and theoretical considerations on sound absorption performance of waste materials including the effect of backing plates
Bujoreanu, Carmen; Nedeff, Florin; Benchea, Marcelin; Agop, Maricel et al.
APPLIED ACOUSTICS Volume: 119 Pages: 88-93, (2017);
5. Plume splitting and oscillatory behavior in transient plasmas generated by high-fluence laser ablation in vacuum
Focsa, C.; Gurlui, S.; Nica, P.; Agop M., et al.
APPLIED SURFACE SCIENCE Volume: 424, Special Issue: SI Pages: 299-309, Part:3, (2017);
6. Investigation of femtosecond laser-produced plasma from various metallic targets using the Langmuir probe characteristic
Nica, P.; Gurlui, S.; Osiac, M.; Agop M. et al.
PHYSICS OF PLASMAS Volume: 24 Issue: 10 Article Number: 103119, (2017);
7. A fractal physics explanation for acute thrombotic occlusion in an apparently healthy coronary artery
Tesloianu, Nicolae Dan; Nedelciuc, Igor; Ghizdovat, Vlad; Agop, Marcel, et al.
ANATOLIAN JOURNAL OF CARDIOLOGY Volume: 18 Issue: 2 Pages: 155-157, (2017);
8. Pairs Generating as a Consequence of the Fractal Entropy: Theory and Applications
Grigorovici, Alexandru; Bacaita, Elena Simona; Paun, Viorel Puiu; Agop, Maricel, et al.
ENTROPY Volume: 19 Issue: 3 Article Number: 128, (2017);
9. A compact non-differential approach for modeling laser ablation plasma dynamics
Irimiciuc, S. A.; Gurlui, S.; Nica, P.; Agop, M., et al.
JOURNAL OF APPLIED PHYSICS Volume: 121 Issue: 8 Article Number: 083301, (2017);
10. Anisotropy Influences on the Drug Delivery Mechanisms by Means of Joint Invariant Functions
Cioca, G.; Bacaita, E. S.; Agop, M.; et al.
COMPUTATIONAL AND MATHEMATICAL METHODS IN MEDICINE Article Number: 5748273, (2017)
11. Atomicity via regularity for non-additive set multifunctions
Pap, Endre; Gavrilut, Alina; Agop, Maricel
SOFT COMPUTING Volume: 20 Issue: 12 Special Issue: SI Pages: 4761-4766, (2016);
12. A multiscale mechanism of drug release from polymeric matrices: confirmation through a nonlinear theoretical model
Bacaita, E. S.; Agop, M.
PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 18 Issue: 31 Pages: 21809-21816, (2016);
13. New mechanisms of vesicles migration
Aursulesei, Viviana; Vasincu, Decebal; Timofte, Daniel; Agop, Maricel, et al.
GENERAL PHYSIOLOGY AND BIOPHYSICS Volume: 35 Issue: 3 Pages: 287-298, (2016);
14. Fractal analysis and related forms of complexity of embryo development. Is there a new tool for human embryo selection?
Doroftei, B.; Buzea, C.; Simionescu, G.; Agop, Maricel et al.
HUMAN REPRODUCTION Volume: 31 Supplement: 1 Pages: 217-217 Meeting Abstract: P-204, (2016);
15. The Classical Theory of Light Colors: a Paradigm for Description of Particle Interactions
Mazilu, Nicolae; Agop, Maricel; Gatu, Irina; et al.
INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 55 Issue: 6 Pages: 2773-2793, (2016);
16. From Kepler problem to skyrmions
Mazilu, Nicolae; Agop, Maricel; Gatu, Irina; et al.

- MODERN PHYSICS LETTERS B Volume: 30 Issue: 13 Article Number: 1650153 Published: MAY 20 2016;
- 17.** Role of surface gauging in extended particle interactions: The case for spin
Mazilu, Nicolae; Ghizdovat, Vlad; [Agop, Maricel](#)
- EUROPEAN PHYSICAL JOURNAL PLUS Volume: 131 Issue: 5 Article Number: 139, (2016);
- 18.** Fractal Information by Means of Harmonic Mappings and Some Physical Implications
[Agop, Maricel](#); Gavrilut, Alina; Paun, Viorel Puiu; et al.
- ENTROPY Volume: 18 Issue: 5 Article Number: 160, (2016);
- 19.** Improving the HA deposition process on Ti-based advanced alloy through sandblasting
Zegan, G.; Cimpoesu, R.; [Agop, M.](#); et al.
- OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS Volume: 10 Issue: 3-4 Pages: 279-284, (2016);
- 20.** On the interaction between two fireballs in low-temperature plasma
Dimitriu, D. G.; Irimiciuc, S. A.; Popescu, S.; [Agop, Maricel](#) et al.
- PHYSICS OF PLASMAS Volume: 22 Issue: 11 Article Number: 113511, (2015);
- 21.** Solid components separation from heterogeneous mixtures through turbulence control
Nedeff, Valentin; Lazar, Gabriel; [Agop, Maricel](#); et al.
- POWDER TECHNOLOGY Volume: 284 Pages: 170-186, (2015);
- 22.** SOME GENERALIZED PHYSICAL MODELS THROUGH HOMOGRAPHIC GROUP
[Agop, Maricel](#); Gavrilut, Alina
- REPORTS ON MATHEMATICAL PHYSICS Volume: 76 Issue: 2 Pages: 231-246, (2015);
- 23.** Implications of Non-Differentiable Entropy on a Space-Time Manifold
[Agop, Maricel](#); Gavrilut, Alina; Stefan, Gavril; et al.
- ENTROPY Volume: 17 Issue: 4 Pages: 2184-2197, (2015);
- 24.** Implications of Onicescu's informational energy in some fundamental physical models
[Agop, Maricel](#); Gavrilut, Alina; Rezus, Elena
- INTERNATIONAL JOURNAL OF MODERN PHYSICS B Volume: 29 Issue: 7 Article Number: 1550045, (2015);
- 25.** The concept of physical surface in nuclear matter
Mazilu, Nicolae; [Agop, Maricel](#)
- MODERN PHYSICS LETTERS A Volume: 30 Issue: 6 Article Number: 1550026, (2015);
- 26.** $SL(2, R)$ INVARIANCE OF THE KEPLER TYPE MOTIONS AND SHANNON INFORMATIONAL ENTROPY. UNCERTAINTY RELATIONS THROUGH THE CONSTANT VALUE OF THE ONICESCU INFORMATIONAL ENERGY
[Agop, Maricel](#); Gavril, Stefan; Gavrilut, Alina
- REPORTS ON MATHEMATICAL PHYSICS Volume: 75 Issue: 1 Pages: 101-112, FEB 2015;
- 27.** APPROXIMATION THEOREMS FOR FUZZY SET MULTIFUNCTIONS IN VIETORIS TOPOLOGY. PHYSICAL IMPLICATIONS OF REGULARITY
Gavrilut, A.; [Agop, M.](#)
- IRANIAN JOURNAL OF FUZZY SYSTEMS Volume: 12 Issue: 1 Pages: 27-42, 2015;
- 28.** Measuring the Electrical Properties of MWNT-PA6 Reinforced Nanocomposites
Calin, Monica Alina; Manea, Liliana Rozemarie; Schacher, Laurence; [Agop, Maricel](#) et al.
- JOURNAL OF NANOMATERIALS Article Number: 514501, (2015);
- 29.** Non-linear behaviours in complex fluid dynamics via non-differentiability. Separation control of the solid components from heterogeneous mixtures
Nedeff, Valentin; Lazar, Gabriel; [Agop, Maricel](#); et al.
- POWDER TECHNOLOGY Volume: 269 Pages: 452-460, (2015);
- 29.** Phases in the temporal multiscale evolution of the drug release mechanism in IPN-type chitosan based on hydrogels
Bacaita, E. S.; Ciobanu, B. C.; Popa, M.; [Agop, Maricel](#) et al.
- PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 16 Issue: 47 Pg: 25896-25905, (2014);
- 30.** Order to Chaos Transition in Plasma via Non-Differentiability: Experimental and Theoretical Investigations
[Agop, Maricel](#); Dimitriu, Dan Gheorghe; Vrajitoriu, Lucia; et al.
- JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 83 Issue: 5 Article Number: 054501 (2014);
- 31.** A gauge theory of nucleonic interactions by contact
Mazilu, Nicolae; Ioannou, Pavlos D.; [Agop, Maricel](#)
- MODERN PHYSICS LETTERS A Volume: 29 Issue: 14 Article Number: 14500734 Published: MAY 10, 2014;
- 32.** Computational properties of a fractal medium
Birlescu, Vlad Sergiu; [Agop, Maricel](#); Craus, Mitica

33. Experimental and theoretical aspects of a laser produced plasma

Irimiciuc, S. A.; Mihaila, I.; [Agop, M.](#)

PHYSICS OF PLASMAS Volume: 21 Issue: 9 Article Number: 093509 Published: SEP 2014;

34. Some Aspects Concerning the "Memorization Effect" in Complex Fluid

[Agop, M.](#); Ochiuz, L.; Timofte, D.; et al.

ACTA PHYSICA POLONICA A Volume: 126 Issue: 3 Pages: 663-669, (2014);

35. Informational Non-Differentiable Entropy and Uncertainty Relations in Complex Systems

[Agop, Maricel](#); Gavrilut, Alina; Crumpei, Gabriel; et al.

ENTROPY Volume: 16 Issue: 11 Pages: 6042-6058, (2014);

36. Dispersive effects in laser ablation plasmas

Irimiciuc, Stefan Andrei; [Agop, Maricel](#); Nica, Petru; et al.

JAPANESE JOURNAL OF APPLIED PHYSICS Volume: 53 Issue: 11 Article Number: 116202, (2014);

37. Chemical properties of hydroxyapatite deposited through electrophoretic process on different sandblasted samples

Gradinaru, Irina; Stirbu, Ioan; Gheorghe, Cristina Angela; [Agop, Maricel](#) et al.

MATERIALS SCIENCE-POLAND Volume: 32 Issue: 4 Pages: 578-582, (2014);

38. Some Aspects Concerning the "Memorization Effect" in Complex Fluid

[Agop, M.](#); Ochiuz, L.; Timofte, D.; et al.

ACTA PHYSICA POLONICA A Volume: 126 Issue: 3 Pages: 663-669, (2014)

39. Phases in the temporal multiscale evolution of the drug release mechanism in IPN-type chitosan based on hydrogels

Bacaita, E. S.; Ciobanu, B. C.; Popa, M.; [Agop, Maricel](#) et al.

PHYSICAL CHEMISTRY CHEMICAL PHYSICS Volume: 16 Issue: 47 Pages: 25896-25905, (2014);

40. A QUARK-INDEPENDENT DESCRIPTION OF CONFINEMENT

Mazilu, Nicolae; Ioannou, Pavlos D.; Diakonou, Fotios K.; [Agop, Maricel](#) et al.

MODERN PHYSICS LETTERS A Volume: 28 Issue: 30 Article Number: 1350126 Published: SEP 28 2013

41. Experimental and theoretical investigations of plasma multiple double layers and their evolution to chaos

Dimitriu, D. G.; Aflori, M.; Ivan, L. M.; [Agop, Maricel](#) et al.

PLASMA SOURCES SCIENCE & TECHNOLOGY Volume: 22 Issue: 3 Article Number: 035007, (2013);

42. Experimental and theoretical evidence for the chaotic dynamics of complex structures

[Agop, M.](#); Dimitriu, D. G.; Niculescu, O.; et al.

PHYSICA SCRIPTA Volume: 87 Issue: 4 Article Number: 045501, (2013);

43. Generalized lift force for complex fluid

Nedeff, Valentin; Bejenariu, Constantin; Lazar, Gabriel; [Agop, Maricel](#) et al.

POWDER TECHNOLOGY Volume: 235 Pages: 685-695, (2013);

44. Dynamics Control of the Complex Systems via Nondifferentiability

Nejneru, Carmen; Nicuta, Anca; Constantin, Boris; [Agop, Maricel](#) et al.

JOURNAL OF APPLIED MATHEMATICS Article Number: 137056 Published: 2013

45. CHAOS VIA FRACTALITY IN GRAVITATIONAL SYSTEMS DYNAMICS. A NEW APPROACH (I)

[Agop, M.](#); Paun, V. P.; Dandu-Bibire, T.

INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS Volume: 22 Issue: 12 Article
Number: 1250299, (2012);

46. Characterization of Aluminum Laser Produced Plasma by Target Current Measurements

Nica, Petru-Edward; [Agop, Maricel](#); Gurlui, Silviu; et al.

JAPANESE JOURNAL OF APPLIED PHYSICS Volume: 51 Issue: 10 Article
Number: 106102 Part: 1 Published: OCT 2012

47. Morphological and Optical Properties of Polyamide Thin Films Obtained by Spin-coating Method

Teodorescu, Mirela; Curteza, Antonela; [Agop, Maricel](#)

MATERIALE PLASTICE Volume: 49 Issue: 3 Pages: 219-221, (2012)

48. Experimental and Theoretical Investigations of the Negative Differential Resistance in a Discharge Plasma

[Agop, Maricel](#); Nica, Petru; Niculescu, Oana; et al.

JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN Volume: 81 Issue: 6 Article Number: 064502, (2012);

49. Dynamics in the boundary layer of a flat particle

Nedeff, Valentin; Mosnegutu, Emilian; Panainte, Mirela; [Agop, Maricel](#) et al.

POWDER TECHNOLOGY Volume: 221 Special Issue: SI Pages: 312-317, (2012);

50. Nonlinearities in Drug Release Process from Polymeric Microparticles: Long-Time-Scale Behaviour

Bacaita, Elena Simona; Bejenariu, Costica; Zoltan, Borsos; [Agop, Maricel](#) et al.

JOURNAL OF APPLIED MATHEMATICS Article Number: 653720, (2012);

51. New Model for Heat Transfer in Nanostructures

Stana, R.; Botez, I. Casian; Paun, V. P.; [Agop, Maricel](#) et al.

- JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE Volume: 9 Issue: 1 Pages: 55-66 Published: JAN 2012
- 52.** EXPERIMENTAL STRUCTURAL, PHYSICAL AND MECHANICAL CHARACTERISTICS OF THE MAGNETISABLE COMPOSITE YARNS
Grosu, Marian-Catalin; Hossu, Ioan; Avram, Dorin; Agop, Maricel et al.
METALURGIA INTERNATIONAL Volume: 17 Issue: 1 Pages: 28-34 Published: 2012
- 53.** Experimental and Modeling Results on Multiple Double Layers in Low-Temperature Discharge Plasma
Dimitriu, Dan G.; Aflori, Magdalena; Ivan, Liliana M.; Agop, Maricel et al.
IEEE TRANSACTIONS ON PLASMA SCIENCE Volume: 39 Issue: 11 Special Issue: SI
Pages: 2316-2317 Part: 1, (2011)
- 54.** The chaotic atom model via a fractal approximation of motion
Agop, M.; Nica, P.; Gurlui, S.; et al.
PHYSICA SCRIPTA Volume: 84 Issue: 4 Article Number: 045017, (2011);
- 55.** Preliminary testing of corrosion characteristics of NiTi alloy coated with various polymers
Cimpoesu, R. Hanu; Mareci, D.; Aelenei, N.; Agop, Maricel et al.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 13 Issue: 9-10 Pages: 1305-1308, (2011);
- 56.** Biodegradable hydroxyapatite layer obtained on Ti-6Al-4V alloy dental implant material
Costan, A.; Forna, N.; Dima, A.; Agop, Maricel et al.
JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 13 Issue: 9-10 Pages: 1338-1341, (2011);
- 57.** Some implications of Scale Relativity theory in avascular stages of growth of solid tumors in the presence of an immune system response
Buzea, C. Gh.; Agop, M.; Moraru, Evelina; et al.
JOURNAL OF THEORETICAL BIOLOGY Volume: 282 Issue: 1 Pages: 52-64, (2011);
- 58.** System Dynamics Control through the Fractal Potential
Timofte, A.; Botez, I. Casian; Scurtu, D.; Agop, Maricel et al.
ACTA PHYSICA POLONICA A Volume: 119 Issue: 3 Pages: 304-311, (2011);
- 59.** THE MICROSCOPIC-MACROSCOPIC SCALE TRANSFORMATION THROUGH A CHAOS SCENARIO IN THE FRACTAL SPACE-TIME THEORY
Munceleanu, G. V.; Paun, V. -P.; Casian-Botez, I.; Agop, Maricel et al.
INTERNATIONAL JOURNAL OF BIFURCATION AND CHAOS Volume: 21 Issue: 2
Pages: 603-618, (2011);
- 60.** MODIFICATIONS IN THE SCHUMANN FREQUENCY SPECTRUM INDUCED BY SEISMIC WAVES
St Ghenadi, A.; Buzdugan, M.; Bostan, D. -C.; Agop, Maricel et al.
JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY Volume: 12 Issue: 3A
Pages: 1280-1287, (2011);
- 61.** POSSIBLE INFLUENCES OF AEROSOLS ON THE SCHUMANN FREQUENCY SPECTRUM
Bibire, L.; Ghenadi, A. S.; Timofte, A.; Agop, Maricel et al.
JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY Volume: 12 Issue: 3A
Pages: 1288-1294, (2011);
- 62.** 'ANOMALIES' OF THE SCHUMANN RESONANCE INDUCED BY ENVIRONMENT
Buzdugan, M.; Timofte, A.; Bibire, L.; Agop, Maricel et al.
JOURNAL OF ENVIRONMENTAL PROTECTION AND ECOLOGY Volume: 12 Issue: 3A
Pages: 1295-1300, (2011);
- 63.** Thermal properties of a Ti-6Al-4V alloy used as dental implant material
Costan, A.; Dima, A.; Ionita, I.; Agop, Maricel et al.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS Volume: 5
Issue: 1-2 Pages: 92-95 Published: JAN 2011
- 64.** Pulsed laser deposition of poly (L-Lactide) acid on nitinol substrate
Cimpoesu, R. H.; Pompilian, G. O.; Baciu, C.; Agop, Maricel et al.
OPTOELECTRONICS AND ADVANCED MATERIALS-RAPID COMMUNICATIONS Volume: 4
Issue: 12 Pages: 2148-2153, (2010);
- 65.** Multi-peak structure of the ion current in laser produced plasma
Nica, P.; Agop, M.; Miyamoto, S.; et al.
EUROPEAN PHYSICAL JOURNAL D Volume: 60 Issue: 2 Pages: 317-323, (2010);
- 66.** Conductive and Convective Types Behaviors at Nano-Time Scales
Casian-Botez, I.; Agop, M.; Nica, P.; et al.
JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE Volume: 7 Issue: 11
Pages: 2271-2280, (2010);
- 67.** Al₂O₃ ceramics under high-fluence irradiation: plasma plume dynamics through space- and time-resolved optical emission spectroscopy

Ursu, C.; Pompilian, O. G.; Gurlui, S.; Agop, Maricel et al.
 APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING Volume: 101 Issue: 1
 Pages: 153-159, (2010);

68. Casimir Type Effect in Scale Relativity Theory
 Buzea, C. Gh.; Agop, M.; Stoica, Cristina Maria; et al.
 INTERNATIONAL JOURNAL OF NONLINEAR SCIENCES AND NUMERICAL SIMULATION
 Volume: 11 Issue: 10 Pages: 785-802, (2010);

69. Non-Differentiable Mechanical Model and Its Implications
Agop, M.; Niculescu, O.; Timofte, A.; et al.
 INTERNATIONAL JOURNAL OF THEORETICAL PHYSICS Volume: 49 Issue: 7 Pages: 1489-1506 Published: JUL 2010

70. Static and free time-dependent fractal systems through an extended hydrodynamic model of the scale relativity theory
Agop, M.; Muncelleanu, G. V.; Niculescu, O.; et al.
 PHYSICA SCRIPTA Volume: 82 Issue: 1 Article Number: 015010, (2010);

71. The time dependent Ginzburg-Landau equation in fractal space-time
 Buzea, C. Gh.; Rusu, I.; Bulancea, V.; Agop, Maricel et al.
 PHYSICS LETTERS A Volume: 374 Issue: 27 Pages: 2757-2765, (2010);

72. Ricci flat black holes in higher dimensional SU(2) Einstein-Yang-Mills theory with negative cosmological constant
Agop, Maricel; Radu, Eugen
 PHYSICS LETTERS B Volume: 688 Issue: 1 Pages: 88-95, (2010);

73. Experimental and theoretical investigations of a plasma fireball dynamics
 Niculescu, O.; Dimitriu, D. G.; Paun, V. P.; Agop, Maricel et al.
 PHYSICS OF PLASMAS Volume: 17 Issue: 4 Article Number: 042305 Published: APR 2010

74. Oscillatory Langmuir probe ion current in laser-produced plasma expansion
 Nica, P.; Agop, M.; Gurlui, S.; et al.
 EPL Volume: 89 Issue: 6 Article Number: 65001 Published: MAR 2010

75. Implications of an extended fractal hydrodynamic model
Agop, M.; Nica, P. E.; Gurlui, S.; et al.
 EUROPEAN PHYSICAL JOURNAL D Volume: 56 Issue: 3 Pages: 405-419, (2010);

76. Motion of free particles in fractal space-time
 Buzea, C. Gh.; Bejinariu, C.; Boris, C.; Agop, Maricel et al.
 INTERNATIONAL JOURNAL OF NONLINEAR SCIENCES AND NUMERICAL SIMULATION Volume: 10 Issue: 11-12 Pages: 1399-1414 Published: NOV-DEC 2009

77. Fractal Transport Phenomena through the Scale Relativity Model
 Colotin, M.; Pompilian, G. O.; Nica, P.; Agop, Maricel et al.
 ACTA PHYSICA POLONICA A Volume: 116 Issue: 2 Pages: 157-164, (2009);

78. Stochastic resonance and vibrational resonance in an excitable system: The golden mean barrier
 Stan, Cristina; Cristescu, C. P.; Alexandroaei, D.; Agop, Maricel et al.
 CHAOS SOLITONS & FRACTALS Volume: 41 Issue: 2 Pages: 727-734, (2009);

79. Experimental and Theoretical Aspects of Aluminum Expanding Laser Plasma
 Nica, Petru; Vizureanu, Petrica; Agop, Maricel; et al.
 JAPANESE JOURNAL OF APPLIED PHYSICS Volume: 48 Issue: 6 Article Number: 066001, (2009);

80. Transport phenomena in nanostructures and non-differentiable space-time
Agop, M.; Chicos, Liliana; Nica, P.
 CHAOS SOLITONS & FRACTALS Volume: 40 Issue: 2 Pages: 803-814, (2009)

81. Games with Cantor's dust
 Gottlieb, I.; Agop, M.; Enache, V.
 CHAOS SOLITONS & FRACTALS Volume: 40 Issue: 2 Pages: 940-945, (2009);

82. Feigenbaum scenario in the dynamics of a metal-oxide semiconductor heterostructure under harmonic perturbation. Golden mean criticality
 Cristescu, C. P.; Mereu, B.; Stan, Cristina; Agop, Maricel et al.
 CHAOS SOLITONS & FRACTALS Volume: 40 Issue: 2 Pages: 975-980, (2009);

83. El Naschie's epsilon((infinity)) space-time and scale relativity theory in the topological dimension D=3
Agop, M.; Radu, Cristina; Bontas, T.
 CHAOS SOLITONS & FRACTALS Volume: 38 Issue: 5 Pages: 1243-1253, (2008);

84. Wave-particle duality through an extended model of the scale relativity theory
 Ioannou, P. D.; Nica, P.; Paun, V.; Agop, Maricel et al.
 PHYSICA SCRIPTA Volume: 78 Issue: 6 Article Number: 065101, (2008)

85. Gauge Gravitational Field in a Fractal Space-Time
Agop, M.; Popa, Camelia; Harabagiu, Anca

COMMUNICATIONS IN THEORETICAL PHYSICS Volume: 50 Issue: 5 Pages: 1197-1204 ,(2008);
86.Reissner-Nordstrom-de-Sitter-type solution by a gauge theory of gravity
 Enache, V.; Popa, Camelia; Paun, V.; Agop, Maricel et al.
 CHINESE PHYSICS LETTERS Volume: 25 Issue: 10 Pages: 3570-3573, (2008);
87.EI Naschie's epsilon((infinity)) theory and effects of nanoparticle clustering on the heat transport in nanofluids
Agop, M.; Paun, V.; Harabagiu, Anca
 CHAOS SOLITONS & FRACTALS Volume: 37 Issue: 5 Pages: 1269-1278, (2008) ;
88.Fractal model of the atom and some properties of the matter through an extended model of scale relativity
Agop, M.; Nica, P. E.; Ioannou, P. D.; et al.
 EUROPEAN PHYSICAL JOURNAL D Volume: 49 Issue: 2 Pages: 239-248, (2008);
89.Experimental and theoretical investigations of a laser-produced aluminum plasma
 Gurlui, S.; Agop, M.; Nica, P.; et al.
 PHYSICAL REVIEW E Volume: 78 Issue: 2 Article Number: 026405 Part: 2,(2008);
90.Wave-particle duality through a hydrodynamic model of the fractal space-time theory
Agop, M.; Harabagiu, A.; Nica, P.
 ACTA PHYSICA POLONICA A Volume: 113 Issue: 6 Pages: 1571-1588 Published: JUN 2008
91.Fractal space-time and ball lightning as a self-organizing process in laser produced plasma
Agop, M.; Nica, P.; Gurlui, S.; et al.
 JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS Volume: 10
 Issue: 6 Pages: 1526-1529, (2008);
92.New theoretical approach of the physical processes in nanostructures
Agop, M.; Forna, N.; Casian-Botez, I.; et al.
 JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE Volume: 5 Issue: 4
 Pages: 483-489 , (2008).

Lucrări științifice publicate în reviste recunoscute CNCSIS.

1.Antici, Adina; Paun, Viorel-Puiu; Nica, Petru; Agop, Maricel et al.
 Fractal model of the atom in the hydrodynamic approach of scale relativity theory
 REVISTA DE CHIMIE Volume: 59 Issue: 4 Pages: 472-477, (2008) ;
2.Girtu, Manuela; Agop, Maricel; Bejinariu, Constantin; Agop, Maricel et al.
 Effects of nanoparticle clustering on the heat transport in nanofluids through fractal theories
 REVISTA DE CHIMIE Volume: 59 Issue: 2 Pages: 195-198 ,(2008) ;
3.P. Vizureanu, M. Agop, I.C. Botez, P.D. Ioannou, M. Vasilica
 Dendritic morphogenesis through the fractal theory *Metalurgia International* **13**, 79-83 (2008)
4.M. Agop, P.Nica, S. Gurlui, G. Strat, M. Strat
 Fractal space-time and ball lightning as a self-organizing process in laser produced plasma *Journal of Optoelectronics and Advanced Materials* **10**, 1526-1529 (2008)
5.I. Gottlieb, P. Nica, M. Agop
 Scale relativity theory for an arbitrary fractal dimension
Romanian Reports in Physics **60**, 443-451 (2008)
6.P.D. Ioannou, P.Nica, M. Agop
 The increase of the electrical conductance in nanostructures: a theoretical approach
University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics And Physics **70**, 67-74 (2008)
7.M. Girtu, M. Agop, C. Bejinariu, A. Harabagiu, C. Popa
 Effects of nanoparticle clustering on the heat transport in nanofluids through fractal theories
Revista de Chimie **59**, 195-198 (2008)
8.M. Agop, C. Bejinariu, D. Abacioaie
 The heat transport in nanofluids: a theoretical approach through the fractal theories
Materiale Plastice **45**, 102-105 (2008)
9.A. Antici, V.P. Păun, P. Nica, M. Agop
 Fractal model of the atom in the hydrodynamic approach of scale relativity theory
Revista de Chimie **59**, 472-477 (2008)
10.D.Abacioaie, M.A. Păun, N. Forna, C. Bejinariu, M. Agop
 A theoretical approach of the electrical conductance in nanostructures
Revista de Chimie **59**, 930-933 (2008)
11.Z. Borsos, V.P. Păun, I.C. Botez, C.M. Stoica, P. Vizureanu, M. Agop
 Structural conductivity of carbon nanotubes
Revista de Chimie **59**, 1169-1171 (2008)
12.I. Gottlieb, C. Mociutchi, G. Ciobanu, M. Gârțu, V. Gârțu, M. Colotin, M. Agop

The issue of primitive indefinite-integral in the theory of fractal space-time

Romanian Reports in Physics **61**, 375-385 (2009)

13.M. Colotin, O. Niculescu, T.D. Bibere, I. Gottlieb, P. Nica, M. Agop

Fractal fluids of conductive type behavior through scale relativity theory

Romanian Reports in Physics **61**, 387-394 (2009)

14.A. Harabagiu, O. Niculescu, M. Colotin, T.D. Bibere, I. Gottlieb, M. Agop

Particle in a box by means of a fractal hydrodynamic model

Romanian Reports in Physics **61**, 395-400 (2009)

15.P. Vizureanu, M.C. Perju, D.G. Gălușcă, C. Nejneru, M. Agop

Mass transfer for titan and tungsten electrode coating using impulse discharge method

Metalurgia International **15**, 59-64 (2010)

16.V.P. Păun, N. Cimpoeșu, R.H. Cimpoeșu, G.V. Muncelleanu, N. Forna, M. Agop

On the energy dissipation capacity and the shape memory. a comparative study between polymer composites and alloys

Materiale Plastice **47**, 158-163 (2010)

17.M.A. Păun, R.C. Hanu, N. Cimpoeșu, M. Agop, C. Baci, S. Statulat, C. Nejneru

Internal friction phenomena at polymeric and metallic shape memory materials. experimental and theoretical results

Materiale Plastice **47**, 209-214 (2010)

18.R.H. Cimpoeșu, G.O. Pompilian, C. Baci, N. Cimpoeșu, C. Nejneru, M. Agop, S. Gurlui, C. Focșă

Pulsed laser deposition of poly (L-Lactide) acid on nitinol substrate

Optoelectronics and Advanced Materials-Rapid Communications **4**, 2148-2153 (2010)

19.R. Litoiu, M. Eden, C. Bacu, D.G. Galușcă, M. Agop

Study on the heat transfer in carbon nanotube composites with polymer matrix

Materiale Plastice **47**, 478-480 (2010)

20.A. Costan, A. Dima, I. Ioniță, N. Forma, M.C. Perju, M. Agop

Thermal properties of a Ti-6Al-4V alloy used as dental implant material

Optoelectronics and Advanced Materials-Rapid Communications **5**, 92-95 (2011)

21.L. Dandu-Bibire, Z. Borsos, D. Matăsar, I. Casian-Botez, A. Niculescu, M. Agop

Gun-type effects in a generalized maxwell field

University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics and Physics **73**, 175-184 (2011)

22.S. Rusu, D.G. Gălușcă, I. Rusu, I. Ioniță, Z. Borsos, M. Agop

A new possible material marking technique via laser beam - uniform magnetic field

Metalurgia International **16**, 53-62 (2011)

23.A. Lărgeanu, G.O. Pompilian, D.G. Gălușcă, M. Agop, S. Gurlui

Pulsed laser deposition of Ni thin films on metallic substrate

University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics and Physics **73**, 195-202 (2011)

24.S. Rusu, D.G. Gălușcă, I. Rusu, I. Ioniță, M. Agop, D.I. Dana

Charged particle beam production via laser ablation for traceability marking

Metalurgia International **16**, 11-18 (2011)

25.M.C. Grosu, I. Hossu, D. Avram, M. Agop

Experimental magnetic characteristics of the composite yarns

Metalurgia International **16**, 58-62 (2011)

26.R.H. Cimpoeșu, D. Mareci, N. Aelenei, G. Bolat, C. Baci, T. Constantin, M. Agop

Preliminary testing of corrosion characteristics of NiTi alloy coated with various polymers

Journal of Optoelectronics and Advanced Materials **13**, 1305-1308 (2011)

27.A. Costan, N. Forna, A. Dima, M. Andronache, C. Roman, V. Manole, L. Stratulat, M. Agop

Biodegradable hydroxyapatite layer obtained on Ti-6Al-4V alloy dental implant material

Journal of Optoelectronics and Advanced Materials **13**, 1338-1341 (2011)

28.A. Costan, R.H. Cimpoeșu, I. Ioniță, A. Dima, N. Forna, P. Nica, M. Agop

Hydroxyapatite and pmma thin films synthesized by pulsed laser deposition on titanium based metallic substrates

Materiale Plastice **48**, 299-302 (2011)

29.M.C. Grosu, I. Hossu, D. Avram, M. Agop

Experimental structural, physical and mechanical characteristics of the magnetisable composite yarns

Metalurgia International **17**, 28-34 (2012)

30.M. Axinte, C. Nejneru, M. Agop

Study on the polarized grid effect to the parts cathodic sputtering on plasma nitriding

Metalurgia International **17**, 87-92 (2012)

31.D. Magop, S. Băcăiță, C. Peptu, M. Popa, M. Agop

Non-differentiability at mesoscopic scale in drug release processes from polymer microparticles

- Materiale Plastice **49**, 101-105 (2012)
- 32.**M. Teodorescu, A. Curteza, M. Agop
Morphological and optical properties of polyamide thin films obtained by spin-coating method
Materiale Plastice **49**, 219-221 (2012)
- 33.**M.A. Călin, A. Curteza, N. Khenoussi, S. Almuhammed, L. Schacher, M. Agop, D.C: Adolphe
Electrical properties of PA6-CNT nanofibers obtained by electrospinning method
Metalurgia International **18**, 23 (2013)
- 34.**M. Teodorescu, N. Khenoussi, L. Schacher, D.C. Adolphe, M. Agop, S. Toma
Surface morphology influence in structural colours displayed by spin-coated thin film
Metalurgia International **18**, 27-29 (2013)
- 35.**M. A. Călin, A. Curteza, S. Toma, M. Agop
Morphological properties of polyamide 6-CNT nanofibers obtained by electrospinning method
Metalurgia International **18**, 19-22 (2013)
- 36.**M.A. Călin, M. Agop
Electrical properties of PA6-CNT nanofibers obtained by electrospinning method
Metalurgia International **18**, 23-25 (2013)
- 37.**M. Axinte, C. Nejneru, A. Stroe, M. Agop
Experimental investigations on the plasma nitriding process control using ionic triode
Metalurgia International **18**, 26-31 (2013)
- 38.**M. Axinte, C. Nejneru, A. Stroe, E. Poll, M. Agop
A unitary theory to the hollow cathode effect with implications in ionic nitriding
Metalurgia International **18**, 32-39 (2013)
- 39.**I.E. Surdu, C. Nejneru, D.G. Gălușcă, M. Agop
Research on thin aluminium film deposits using the C-CVD method
Metalurgia International **18**, 5-11 (2013)
- 40.**I.E. Surdu, C. Nejneru, D.G. Gălușcă, M. Agop
Behaviours of fluidized beds through flow regimes of a complex fluid
University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics and Physics **75**, 181-192 (2013)
- 41.**A. Durdureanu Angheluță, S. Băcăiță, V. Radu, M. Agop, L. Ignat, C.M: Uritu, S.S. Maier, M. Pinteală
Mathematical modelling of the release profile of anthraquinone-derived drugs encapsulated on magnetite nanoparticles
Revue Roumaine de Chimie **58**, 217-221 (2013)
- 42.**C.I. Axinte, C. Baci, S. Volovăț, D. Tesloianu, Z. Borsos, A. Baci, M. Agop
Flow dynamics regimes via non-differentiability in complex fluids
University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics and Physics **76**, 233-242 (2014)
- 43.**D. Vasincu, C. G. Buzea, M. Agop, D. Timofte
Travelling waves and shapiro steps in a tumor-growth model
University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics and Physics **76**, 209-220 (2014)
- 44.**V.P. Păun, V. Nedeff, D. Scurtu, G. Lazăr, V. Ghizdovăț, M. Agop, L.G. Solovăstru, R.F. Popa
Stopper effects in network type polymers
Materiale Plastice **51**, 3, 225-229 (2014)
- 45.**V. P. Păun, C.M. Rusu, M. Agop
Intermolecular interactions in ternary solutions of B-6 vitamin
Revista de Chimie **65**, 1448-1452 (2014)
- 46.**R. M. Nemeș, L. D. Duceac, E. G. Vasincu, M. Agop, P. Postolache
On the implications of the biological systems fractal morpho-functional structure
University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics and Physics **77**, 263-272 (2015)
- 47.**V. P. Păun, C. Ștefănescu, V. Ghizdovăț, D. Sabău-Popa, M. Agop
On the non-linear dynamics in biological structures. Complementary mathematical aspects
University Politehnica of Bucharest Scientific Bulletin-Series A-Applied Mathematics and Physics **77**, 307-318 (2015)
- 48.**V. P. Păun, C. M. Rusu, M. Agop
Solvent influence on the electronic absorption spectra of B-3 vitamin in ternary solutions
Materiale Plastice **52**, 4-8 (2015)
- 49.**S.L. Burlea, R. Leața, M. Agop, N. Cimpoeșu
Analyse of Ti-based alloy for medical instruments after chemical, mechanical and physical processing
Revista de Chimie **67**, 260-262 (2016)
- 50.**G. Zegan, R. Cimpoeșu, M. Agop, I. Știrbu, D.L. Chicet, B. Istrate, A. Alexandru, B.A. Priscariu

- Improving the HA deposition process on Ti-based advanced alloy through sandblasting *Optoelectronics and Advanced Materials-Rapid Communications* **10**, 279-284 (2016)
51. Experimental and theoretical considerations on sound absorption performance of waste materials including the effect of backing plates Bujoreanu, Carmen; Nedeff, Florin; Benchea, Marcelin; Agop, Maricel *APPLIED ACOUSTICS* 2017 **119** 10.1016/j.apacoust.2016.12.010
52. Plume splitting and oscillatory behavior in transient plasmas generated by high-fluence laser ablation in vacuum Focsa, C.; Gurlui, S.; Nica, P.; Agop, M.; Ziskind, M. *APPLIED SURFACE SCIENCE* 2017 **424** SI 10.1016/j.apsusc.2017.03.273
53. Langmuir probe investigation of transient plasmas generated by femtosecond laser ablation of several metals: Influence of the target physical properties on the plume dynamics Irimiciuc, S. A.; Gurlui, S.; Bulai, G.; Nica, P.; Agop, M.; Focsa, C. *APPLIED SURFACE SCIENCE* 2017 **417** SI 10.1016/j.apsusc.2017.03.055
54. A compact non-differential approach for modeling laser ablation plasma dynamics Irimiciuc, S. A.; Gurlui, S.; Nica, P.; Focsa, C.; Agop, M. *JOURNAL OF APPLIED PHYSICS* 2017 **121** 8330110.1063/1.4977010
55. Investigation of femtosecond laser-produced plasma from various metallic targets using the Langmuir probe characteristic Nica, P.; Gurlui, S.; Osiac, M.; Agop, M.; Ziskind, M.; Focsa, C. *PHYSICS OF PLASMAS* 2017 **24** 1010311910.1063/1.5006076
56. Anisotropy Influences on the Drug Delivery Mechanisms by Means of Joint Invariant Functions Cioca, G.; Bacaita, E. S.; Agop, M.; Ursulescu, C. Lupascu *COMPUTATIONAL AND MATHEMATICAL METHODS IN MEDICINE* 2017 **2017** 574827310.1155/2017/5748273
57. A fractal physics explanation for acute thrombotic occlusion in an apparently healthy coronary artery Tesloianu, Nicolae Dan; Nedelciuc, Igor; Ghizdovat, Vlad; Agop, Maricel; Lupascu-Ursulescu, Corina *ANATOLIAN JOURNAL OF CARDIOLOGY* 2017 **18** 210.14744/AnatolJCardiol.2017.7825
58. Pairs Generating as a Consequence of the Fractal Entropy: Theory and Applications Grigorovici, Alexandru; Bacaita, Elena Simona; Paun, Viorel Puiu; Grecea, Constantin; Butuc, Irina; Agop, Maricel; Popa, Ovidiu *ENTROPY* 2017 **19** 312810.3390/e19030128
59. Reducing the Risk in Controlled Drug Release by Using Tannic Acid in Liposomal Formulations Cioca, Gabriela; Agop, Maricel; Popa, Marcel; Bungau, Simona; Butuc, Irina *REVISTA DE CHIMIE* 2017 **68** 12
60. New Mathematical Procedures in the Investigation of Biological Nanostructure Dynamics Nica, Irina; Nica, Petru-Edward; Ghizdovat, Vlad; Agop, Maricel 2017 IEEE INTERNATIONAL CONFERENCE ON E-HEALTH AND BIOENGINEERING CONFERENCE (EHB) 2017
61. Intergranular degradation of stainless steel tubular components used for kerosene transportation. Metallographic analysis Palamarciuc, Ion; Galusca, Dan Gelu; Ratoi, Monica; Mellor, Brian; Dumitras, Catalin Gabriel; Agop, Maricel 8TH INTERNATIONAL CONFERENCE ON MANUFACTURING SCIENCE AND EDUCATION (MSE 2017) - TRENDS IN NEW INDUSTRIAL REVOLUTION 2017 **121** 9007 10.1051/mateconf/201712109007
62. Bacaita, Elena Simona; Stan, Corneliu Sergiu; Agop, Maricel; et al., Spectral Properties of HEMA/poly(HEMA) as Ligand in Luminescent Europium Based Complexes Through Computational Investigation , *REVISTA DE CHIMIE* Volume: 69 Issue: 9 Pages: 2430-2434 Published: SEP 2018
63. On the separation of particle flow during pulse laser deposition of heterogeneous materials - A multi-fractal approach" Irimiciuc, Stefan Andrei; Bulai, Georgiana; Gurlui, Silviu; et al. *POWDER TECHNOLOGY* Volume: 339 Pages: 273-280 Published: NOV 2018
64. Aspects Regarding the Pharmaceutical Waste Management in Romania" Bungau, Simona; Tit, Delia Mirela; Fodor, Katalin; et al. *SUSTAINABILITY* Volume: 10, Issue: 8 Article Number: 2788, Published: AUG 2018
65. A fractal approach of the sound absorption behaviour of materials. Theoretical and experimental aspects" Bujoreanu, Carmen; Irimiciuc, Stefan; Benchea, Marcelin; Agop, M., et al. *INTERNATIONAL JOURNAL OF NON-LINEAR MECHANICS* Volume: 103 Published: JUL 2018; Oscillatory regimes of Langmuir probe current in femtosecond laser-produced plasmas: Experimental and theoretical investigations Nica, P.; Gurlui, S.; Agop, M.; Focsa, C *Applied Surface Science* Volume: 481 Pages: 125-132, 2019
66. A Turbulence-Oriented Approach to Retrieve Various Atmospheric Parameters Using Advanced Lidar Data Processing Techniques Rosu, I.A.; Cazacu, M.M. ; Prelipceanu, O.S. ; Agop, M. *ATMOSPHERE* Volume: 10 Issue: 1 Article Number: 38 Published: JAN 2019;
67. Investigations of Laser Produced Plasmas Generated by Laser Ablation on Geomaterials. Experimental and Theoretical Aspects Enescu, Florin; Irimiciuc, Stefan Andrei; Cimpoesu, Nicanor; Bedeleian, H ; Bulai, G; Gurlui, S ; Agop, M *SYMMETRY-BASEL* Volume: 11 Issue: 11 Article Number: 1391 Published: NOV 2019;
- 68.. Particle distribution in transient plasmas generated by ns-laser ablation on ternary metallic alloy

Irimiciuc, Stefan Andrei; Gurlui, Silviu; Agop, Maricel
APPLIED PHYSICS B-LASERS AND OPTICS Volume: 125 Issue: 10 Article Number: 190 Published: OCT 2019;

69. Extended Minimal Atomicity through Nondifferentiability: A Mathematical-Physical Approach
Gavrilut, Gabriel; Gavrilut, Alina; Agop, Maricel
Advances In Mathematical Physics Volume: 2019 Article Number: 8298691, 2019

70. Lorenz Type Behaviors in the Dynamics of Laser Produced Plasma
Irimiciuc, Stefan Andrei; Enescu, Florin; Agop, Andrei; et al.
SYMMETRY-BASEL Volume: 11 Issue: 9 Article Number: 1135 Published: SEP 2019;

71. Investigations of Laser Produced Plasmas Generated by Laser Ablation on Geomaterials. Experimental and Theoretical Aspects
Enescu, F; Irimiciuc, SA; Cimpoesu, N; Bedeleian, H; Bulai, G; Gurlui, S; Agop, M
SYMMETRY-BASEL Volume: 11 Issue: 11 Article Number: 1391 Published: NOV 2019

72. Theoretical Modeling of Long-Time Drug Release from Nitrosalicyl-Imine-Chitosan Hydrogels through Multifractal Logistic Type Laws”
Craciun, Anda-Mihaela; Barhalescu, Mihaela Luminita; Agop, Maricel; et al.
COMPUTATIONAL AND MATHEMATICAL METHODS IN MEDICINE Volume: 2019 Article Number: 4091464
Published: AUG 14 2019;

73. Extended Minimal Atomicity through Nondifferentiability: A Mathematical-Physical Approach”
Gavrilut, G.; Gavrilut, A.; Agop, M.
ADVANCES IN MATHEMATICAL PHYSICS Article Number: 8298691, 2019;

74. Petrovici, Alina; Cueto, Jose Luis; Nedeff, Valentin; Nava, E; Hernandez, R; Bujoreanu, C; Irimiciuc, SA; Agop, M. Petrovici A.
Dynamic Evaluation of Traffic Noise through Standard and Multifractal Models
SYMMETRY-BASEL, ISSN 2073-8994; Volume: 12 Issue: 11; 2020; DOI: 10.3390/sym12111857

75. Agop, M ; Gavrilut, A ; Grigoras-Ichim, C; Toma, S ; Petrescu, TC ; Irimiciuc, SA
Toward Interactions through Information in a Multifractal Paradigm
ENTROPY, ISSN 1099-4300; Volume: 22 Issue: 9 2020; DOI:10.3390/e22090987

76. Irimiciuc, Stefan-Andrei; Saviuc, Alexandra; Tudose-Sandu-Ville, Florin; Toma, S; Nedeff, F; Rusu, CM; Agop, Non-Linear Behaviors of Transient Periodic Plasma Dynamics in a Multifractal Paradigm
SYMMETRY-BASEL, ISSN 2073-8994; Volume: 12 Issue: 8 2020; DOI:10.3390/sym12081356

77. Irimiciuc, Stefan; Enescu, Florin; Bedeleian, Horea; Gurlui, S; Agop, M
Space-and time-resolved optical investigations on ns-laser produced plasmas on various geological samples
SPECTROCHIMICA ACTA PART B-ATOMIC SPECTROSCOPY, ISSN 0584-8547; Volume: 170 2020; DOI: 10.1016/j.sab.2020.105904

78. Rosu, Iulian Alin; Cazacu, Marius Mihai; Ghenadi Bibire, L; Agop, M
On a Multifractal Approach of Turbulent Atmosphere Dynamics
FRONTIERS IN EARTH SCIENCE, ISSN 2296-6463 Volume: 8 2020; DOI: 10.3389/feart.2020.00216

79. Iftime, Manuela Maria; Irimiciuc, Stefan Andrei; Agop, Maricel; Angheloiu, M; Ochiuz, L; Vasincu, D
A Theoretical Multifractal Model for Assessing Urea Release from Chitosan Based Formulations
POLYMERS, ISSN 2073-4360; Volume: 12 Issue: 6 2020; DOI: 10.3390/polym12061264

80. Irimiciuc, Stefan Andrei; Nica, Petru-Edward; Agop, Maricel; Focsa, C
Target properties - Plasma dynamics relationship in laser ablation of metals: Common trends for fs, ps and ns irradiation regimes
APPLIED SURFACE SCIENCE Volume: 506 2020

81. Agop, Maricel; Mihaila, Ilarion; Nedeff, Florin; Irimiciuc, SA
Charged Particle Oscillations in Transient Plasmas Generated by Nanosecond Laser Ablation on Mg Target
SYMMETRY-BASEL, ISSN 2073-8994; Volume: 12 Issue: 2 2020; DOI: 10.3390/sym12020292

82. Agop, Maricel; Craus, Mitica M. Agop
Towards Stochasticity through Joint Invariant Functions of Two Isomorphic Lie Algebras of SL(2R) Type
SYMMETRY-BASEL, ISSN 2073-8994 Volume: 12 Issue: 2 2020; DOI: 10.3390/sym12020226

83. Iftime, MM ; Dobreci, DL; Irimiciuc, SA ; Agop, M ; Petrescu, T ; Doroftei, B
A theoretical mathematical model for assessing diclofenac release from chitosan-based formulations
DRUG DELIVERY, ISSN 1071-7544 Volume: 27 Issue: 1 2020; DOI:10.1080/10717544.2020.1797242

84. Agop, M ; Cimpoesu, N ; Gurlui, S; Irimiciuc, SA
Investigations of Transient Plasma Generated by Laser Ablation of Hydroxyapatite during the Pulsed Laser Deposition Process
SYMMETRY-BASEL, ISSN 2073-8994 Volume: 12 Issue: 1 2020; DOI: 10.3390/sym12010132

85. Theoretical model for the diclofenac release from PEGylated chitosan hydrogels
Ailincai, Daniela; Agop, Maricel; Marinas, Ioana Cristina; Zala, Andrei; Irimiciuc, Stefan Andrei; Dobreci, Lucian; Petrescu, Tudor-Cristian; Volovat, Constantin
DRUG DELIVERY 2021; 28(1) 10.1080/10717544.2021.1876181

- 86.**Hydrogels Based on Alginates and Carboxymethyl Cellulose with Modulated Drug Release-An Experimental and Theoretical Study
Peptu, Catalina Anisoara; a, Elena Simona; Savin (Logigan), Corina-Lenuta; Lutcanu, Marian; Agop, Maricel
POLYMERS202113(24) DOI 10.3390/polym13244461
- 87.**Holographic Implementations in the Complex Fluid Dynamics through a Fractal Paradigm
Saviuc, Alexandra; Girtu, Manuela; Topliceanu, Liliana; Petrescu, Tudor-Cristian; Agop, Maricel
MATHEMATICS20219(18) DOI 10.3390/math9182273
- 88.**A Theoretical Model for Release Dynamics of an Antifungal Agent Covalently Bonded to the Chitosan
Marin, Luminita; Popa, Marcel; Anisie, Alexandru; Irimiciuc, Stefan-Andrei; Agop, Maricel; Petrescu, Tudor-Cristian; Vasincu, Decebal; Himiniuc, Loredana
MOLECULES202126(7); DOI 10.3390/molecules26072089
- 89.**Multifractal Model of Atmospheric Turbulence Applied to Elastic Lidar Data
Rosu, Iulian Alin; Cazacu, Marius Mihai; Agop, Maricel
ATMOSPHERE202112(2); DOI 10.3390/atmos12020226
- 90.**Prospects and Challenges of the Drug Delivery Systems in Endometriosis Pain Management: Experimental and Theoretical Aspects
Toma, Bogdan Florin; Socolov, Razvan; Popa, Ovidiu; Socolov, Demetra; Nica, Irina; Agop, Maricel; Vasincu, Decebal; Grigore, Mihaela; Ochiuz, Lacramioara
JOURNAL OF IMMUNOLOGY RESEARCH 2021(2021);DOI 10.1155/2021/2727174
- 91.**Towards Possible Laminar Channels through Turbulent Atmospheres in a Multifractal Paradigm
Rosu, Iulian-Alin; Nica, Dragos-Constantin; Cazacu, Marius Mihai; Agop, Maricel
ATMOSPHERE202112(8); DOI 10.3390/atmos12081038
- 92.**Novel Approach for EEG Signal Analysis in a Multifractal Paradigm of Motions. Epileptic and Eclamptic Seizures as Scale Transitions
Irimiciuc, Stefan Andrei; Zala, Andrei; Dimitriu, Dan; Himiniuc, Loredana Maria; Agop, Maricel; Toma, Bogdan Florin; Gavril, Laura Gabriela; Vasincu, Decebal; Eva, Lucian
SYMMETRY-BASEL202113(6); DOI 10.3390/sym13061024
- 93.**Manifest/Non-Manifest Drug Release Patterns from Polysaccharide Based Hydrogels-Case Study on Cyclodextrin- κ Carrageenan Crosslinked Hydrogels
Bacaita, Elena Simona; Peptu, Catalina Anisoara; Savin, Corina-Lenuta (Logigan); Lutcanu, Marian; Agop, Maricel
POLYMERS 202113(23) DOI 10.3390/polym13234147
- 94.**Assessment of Complex System Dynamics via Harmonic Mapping in a Multifractal Paradigm
Gavrilut, Gabriel; Topliceanu, Liliana; Girtu, Manuela; Rotundu, Ana Maria; Irimiciuc, Stefan Andrei; Agop, Maricel
MATHEMATICS20219(24); DOI 10.3390/math9243298
- 95.**Novel Approach for EKG Signals Analysis Based on Markovian and Non-Markovian Fractalization Type in Scale Relativity Theory
Agop, Maricel; Irimiciuc, Stefan; Dimitriu, Dan; Rusu, Cristina Marcela; Zala, Andrei; Dobreci, Lucian; Cotirlet, Valentin Adrian; Petrescu, Tudor-Cristian; Ghizdovat, Vlad; Eva, Lucian; Vasincu, Decebal
SYMMETRY-BASEL202113(3); DOI 10.3390/sym13030456
- 96.**Multifractal Model for Transient Phenomena Analysis in Laser Produced Plasmas
Irimiciuc, Stefan Andrei; Agop, Maricel
SYMMETRY-BASEL202113(10); DOI 10.3390/sym13101968
- 97.**Evaluating atrial fibrillations through strange attractors dynamics
Zala, Andrei; Dimitriu, Dan; Agop, Maricel; Tesloianu, Dan N.; Cobzeanu, Maria L.; Cobzeanu, Bogdan M.; Rusu, Marcela C.; Ghizdovat, Vlad
GENERAL PHYSIOLOGY AND BIOPHYSICS2021, 40(5); 10.4149/gpb_2021016
- 98.**Toward Complex Systems Dynamics through Flow Regimes of Multifractal Fluids
Agop, Maricel; Petrescu, Tudor-Cristian; Filipeanu, Dumitru; Grigoras-Ichim, Claudia Elena; Voda, Ana Iolanda; Zala, Andrei; Dobreci, Lucian; Baciu, Constantin; Vasincu, Decebal
SYMMETRY-BASEL202113(5); 10.3390/sym13050754
- 99.**Multifractality through Non-Markovian Stochastic Processes in the Scale Relativity Theory. Acute Arterial Occlusions as Scale Transitions
Tesloianu, Nicolae Dan; Dobreci, Lucian; Ghizdovat, Vlad; Zala, Andrei; Cotirlet, Adrian Valentin; Gavrilut, Alina; Agop, Maricel; Vasincu, Decebal; Nedelciuc, Igor; Rusu, Cristina Marcela; Costache, Irina Iuliana
ENTROPY202123(4) DOI 10.3390/e23040444
- 100.**The Role of Information in Managing Interactions from a Multifractal Perspective
Agop, Maricel; Irimiciuc, Stefan Andrei; Ghenadi, Adrian; Bibire, Luminita; Toma, Stefan; Petrescu, Tudor-Cristian; Vaideanu, Dorin; Rusu, Cristina Marcela; Gavrilut, Alina; Vasincu, Decebal
ENTROPY 202123(2) DOI 10.3390/e23020148
- 101.**Theoretical and Experimental Designs of the Planetary Boundary Layer Dynamics through a Multifractal Theory of Motion
Cazacu, Marius Mihai; Rosu, Iulian-Alin; Bibire, Luminita; Vasincu, Decebal; Rotundu, Ana Maria; Agop, Maricel
FRACTAL AND FRACTIONAL20226(12);DOI 10.3390/fractalfract6120747
- 102.**Update on the Use of Nanocarriers and Drug Delivery Systems and Future Directions in Cervical Cancer

Himiniuc, Loredana Maria; Toma, Bogdan Florin; Popovici, Razvan; Grigore, Ana Maria; Hamod, Alexandru; Volovat, Constantin; Volovat, Simona; Nica, Irina; Vasincu, Decebal; Agop, Maricel; Tirnovanu, Mihaela; Ochiuz, Lacramioara; Negura, Anca; Grigore, Mihaela JOURNAL OF IMMUNOLOGY RESEARCH 2022 2022 1636908
10.1155/2022/1636908

103. Boundary Layer via Multifractal Mass Conductivity through Remote Sensing Data in Atmospheric Dynamics Nica, Dragos-Constantin; Cazacu, Marius-Mihai; Constantin, Daniel-Eduard; Nedeff, Valentin; Nedeff, Florin; Vasincu, Decebal; Rosu, Iulian-Alin; Agop, Maricel FRACTAL AND FRACTIONAL 2022 26525010.3390/fractalfract6050250

104. Numerical Study Regarding the Seismic Response of a Moment-Resisting (MR) Reinforced Concrete (RC) Frame Structure with Reduced Cross-Sections of the RC Slabs Sococol, Ion; Mihai, Petru; Petrescu, Tudor-Cristian; Nedeff, Florin; Nedeff, Valentin; Agop, Maricel; Luca, Bogdan-Ionel BUILDINGS 2022 12101525
10.3390/buildings12101525

105. Drug-Loaded Polymeric Particulated Systems for Ophthalmic Drugs Release Mihailovici, Ruxandra; Croitoriu, Alexandra; Nedeff, Florin; Nedeff, Valentin; Ochiuz, Lacramioara; Vasincu, Decebal; Popa, Ovidiu; Agop, Maricel; Moraru, Andreea; Costin, Danut; Costuleanu, Marcel; Verestiuc, Liliana MOLECULES 2022 27144512
10.3390/molecules27144512

106. Statistical Analysis and Machine Learning Used in the Case of Two Behavioral Tests Applied in Zebrafish Exposed to Mycotoxins Mandalian, Tigran-Lucian; Pasca, Aurelian Sorin; Toma, Loredana Maria; Agop, Maricel; Toma, Bogdan Florin; Vasilescu, Alin Mihai; Lupascu-Ursulescu, Corina APPLIED SCIENCES-BASEL 2022 1262908
10.3390/app12062908

107. Complex Behavior in the Dynamics of a Polymeric Biocomposite Material-Liquid Wood. Experimental and Theoretical Aspects Petrescu, Tudor-Cristian; Mihai, Petru; Voordijk, Johannes Theodorus; Nedeff, Valentin; Vaideanu, Dorin; Nedeff, Florin; Babor, Traian-Danut; Vasincu, Decebal; Agop, Maricel POLYMERS 2022 14164
10.3390/polym14010064

108. The Search for Atmospheric Lamina Channels: Experimental Results and Method Dissemination Rosu, Iulian-Alin; Nica, Dragos-Constantin; Dumitras, Catalin; Chitariu, Dragos; Bibire, Luminita; Ghenadi, Adrian Stelian; Dragan, Valentin-Stelian; Agop, Maricel SENSORS 2022 22(1) 10.3390/s22010158

109. Multi-fractal modeling of curcumin release mechanism from polymeric nanomicelles Iurciuc (Tincu), Camelia E.; Popa, Marcel; Atanase, Leonard I.; Popa, Ovidiu; Ochiuz, Lacramioara; Postolache, Paraschiva; Ghizdovat, Vlad; Irimiciuc, Stefan A.; Agop, Maricel; Volovat, Constantin; Volovat, Simona DRUG DELIVERY 2022 29(1) DOI 10.1080/10717544.2022.2118402

110. Infectious Inflammatory Processes and the Role of Bioactive Agent Released from Imino-Chitosan Derivatives Experimental and Theoretical Aspects Himiniuc, Loredana; Socolov, Razvan; Ghizdovat, Vlad; Agop, Maricel; Anton, Emil; Toma, Bogdan; Ochiuz, Lacramioara; Vasincu, Decebal; Popa, Ovidiu; Onofrei, Viviana POLYMERS 2022 14(9); DOI 10.3390/polym14091848

111. Implications and Consequences of SL(2R) as Invariance Group in the Description of Complex Systems Dynamics from a Multifractal Perspective of Motion Dobreci, Lucian; Rusu, Oana; Vasincu, Decebal; Jarcau, Mihaela; Rusu, Cristina Marcela; Gurlui, Silviu; Ghizdovat, Vlad; Gavrilut, Alina; Agop, Maricel ENTROPY 2022 24(4); DOI 10.3390/e24040484

112. Impact of the Liquid Crystal Order of Poly(azomethine-sulfone)s on the Semiconducting Properties Dumbrava, Oana; Popovici, Dumitru; Vasincu, Decebal; Popa, Ovidiu; Ochiuz, Lacramioara; Irimiciuc, Stefan-Andrei; Agop, Maricel; Negura, Anca POLYMERS 2022 14 (7) DOI 10.3390/polym14071487

113. Langmuir Probe Perturbations during In Situ Monitoring of Pulsed Laser Deposition Plasmas Irimiciuc, Stefan-Andrei; Chertopalov, Sergii; Novotny, Michal; Craciun, Valentin; Lancok, Jan; Agop, Maricel MATERIALS 2022 15(8) DOI 10.3390/ma15082769

114. Multifractality via Stochasticity in Atmospheric Dynamics Description Validated through Remote Sensing Data Nica, Dragos-Constantin; Voiculescu, Mirela; Constantin, Daniel-Eduard; Girtu, Manuela; Topliceanu, Liliana; Vasincu, Decebal; Rosu, Iulian-Alin; Agop, Maricel MATHEMATICS 2022 10(6); DOI 10.3390/math10061004

115. ON BENDING CREEP BEHAVIOUR OF A POWDER METALLURGY FeMnSiCrNi SHAPE MEMORY ALLOY Ciurca, L.; Pricop, B.; Agop, M.; Bujoreanu, L-GARCHIVES OF METALLURGY AND MATERIALS 2022 267(3) DOI 10.24425/amm.2022.139681

116. Theoretical model for the diclofenac release from PEGylated chitosan hydrogels Ailincai, Daniela; Agop, Maricel; Marinas, Ioana Cristina; Zala, Andrei; Irimiciuc, Stefan Andrei; Dobreci, Lucian; Petrescu, Tudor-Cristian; Volovat, Constantin Iurciuc, CE ; Popa, M; Atanase, LI ; Popa, O; Ochiuz, L ; Postolache, P ; Ghizdovat, V; Irimiciuc, SA; Agop, M; Volovat, C; Volovat, S Multi-fractal modeling of curcumin release mechanism from polymeric nanomicelles DRUG DELIVERY, ISBN 1071-754429, 2022/Ppg.2883-2896; DOI 10.1080/10717544.2022.2118402

117. Sococol, I ; Mihai, P ; Petrescu, TC ; Nedeff, F ; Nedeff, V ; Agop, M ; Luca, BI

Numerical Study Regarding the Seismic Response of a Moment-Resisting (MR) Reinforced Concrete (RC) Frame Structure with Reduced Cross-Sections of the RC Slabs
 BUILDINGS, ISSN 2075-530910; Dec2022; DOI 10.3390/buildings12101525
118. Mihailovici, R; Croitoriu, A ; Nedeff, F ; Nedeff, V ; Ochiuz, L ; Vasincu, D; Popa, O; Agop, M; Moraru, A ; Costin, D ; Costuleanu, M ; Verestiuc, L
 Drug-Loaded Polymeric Particulated Systems for Ophthalmic Drugs Release
 MOLECULES, ISSN 1420-304927/1420224.92710.3390/molecules27144512
 DRUG DELIVERY202128(1)10.1080/10717544.2021.1876181
119. Ghizdovat, V; Rusu, O ; Frasila, M ; Rusu, CM ; Agop, M.; Vasincu, D
 Towards Multifractality through an Ernst-Type Potential in Complex Systems Dynamics
 ENTROPY 1099-4300, Volume 25, Issue 8, 2023, 3390/e25081149
120. Vasincu, D; Bruma, AB; Rusu, O ; Rusu, CM; Ghizdovat, V ; Agop, M
 Coherences in the Dynamics of Physical Systems from a Multifractal Perspective of Motion
 ENTROPY, 1099-4300, Volume 25, Issue 8, 2023, 10.3390/e25081143
121. Rosu, IA; Grillakis, M; Papadopoulos, A; Agop, M; Voulgarakis, A
 Fractal and Spectral Analysis of Recent Wildfire Scars in Greece
 FIRE TECHNOLOGY, 0015-2684, 2023, 10.1007/s10694-023-01497-2
122. Himiniuc, LM; Socolov, R; Nica, I; Agop, M ; Volovat, C ; Ochiuz, L ; Vasincu, D ; Rotundu, AM ; Rosu, IA ; Ghizdovat, V; Volovat, SR
 Theoretical and Experimental Aspects of Sodium Diclofenac Salt Release from Chitosan-Based Hydrogels and Possible Applications
 GELS, 2310-2861, 10.3390/gels9050422, vol 9, issue 5, 2023
123. Nica, I; Nedeff, F ; Nedeff, V ; Popa, C ; Toma, SL ; Agop, M ; Vasincu, D
 The Cracking Behavior of Two Dental Composite Materials Validated through Multifractal Analyzes
 INTERNATIONAL JOURNAL OF MOLECULAR SCIENCES
 ISBN 1422-0067, 10.3390/ijms24076493, VOL.24 Issue 7, 2023
 124. Agop, S ; Filipeanu, D ; Tiganas, CG ; Grigoras-Ichim, CE ; Morosan-Danila, L ; Gavrilut, A ; Agop, M ; Stefan, G
 Towards a Holographic-Type Perspective in the Analysis of Complex-System Dynamics
 SYMMETRY-BASEL, ISBN 2073-8994, 10.3390/sym15030681, VOL.15 Issue 3, 2023
125. Bacaita, ES; Rata, DM ; Cadinoiu, AN ; Ghizdovat, V ; Agop, M ; Luca, AC
 Drug Release from Nanoparticles (Polymeric Nanocapsules and Liposomes) Mimed through a Multifractal Tunnelling-Type Effect
 POLYMERS, 2073-4360, 10.3390/polym15041018, VOL.15 Issue 4, 2023
126. Placinta, C; Stanciu, S ; Panainte-Lehadus, M ; Mosnegutu, E ; Nedeff, F ; Nedeff, V ; Tomozei, C ; Petrescu, TC; Agop, M
 Theoretical and Experimental Designs on Several Mechanical Properties of Cu-Al-Zn Shape Memory Alloys Used in the Processing Industry
 MATERIALS, 1996-1944, 10.3390/ma16041441, VOL.16 ISSUE 4, 2023

Lucrări științifice publicate în volumele conferințelor.

1. S.H. Mohorianu, *M. Agop*

A theoretical approach of the heat transfer in nanofluids

3rd International Workshop on Amorphous and Nanocomposite Magnetic Materials

Journal of Optoelectronics and Advanced Materials **8**, 1741-1743 (2006);

2. *M. Agop*, C. Stan, M. Toma, I. Rusu

Fractal space-time theory and some applications in advanced materials

Proceedings of the Romanian Academy Series A-Mathematics Physics Technical Sciences Information Science **8**, 121-129, Editura Acad Romane, Bucuresti, Romania, (2007);

3. I. Gottlieb, *M. Agop*, R. Murdzek, C. Bejenariu,

Suggestions for classifying the fractals and their connections with the Cantor's cardinal numbers

ISND 2007: Proceedings of the 2007 International Symposium on Nonlinear Dynamics **96**, 012142 (2008)

Edited by: J. He, Book Series: Journal of Physics Conference Series Iop Publishing Ltd, Dirac House, England

4. R. Murdzek, A. Harabagiu, M. Girtu, *M. Agop*

Towards a self-organizing Universe

ISND 2007: Proceedings of the 2007 International Symposium on Nonlinear Dynamics **96**, 012141 (2008); Edited by: J. He, Book Series: Journal of Physics Conference Series Iop Publishing Ltd, Dirac House, England

5. *M. Agop*, V. Enache, M. Buzdugan

Fractal space-time theory and superconductivity

National Conference on Applied Physics, Galați, 2006

Romanian Journal of Physics **53**, 23-28 (2008), Ed. Academiei Române, București, România
6.M. Agop, M. Buzdugan, V. Enache
 Fractal space-time theory and time dependent Ginzburg-Landau model in superconductivity
 National Conference on Applied Physics, Galați, 2006
 Romanian Journal of Physics **53**, 241-247 (2008), Ed. Academiei Române, București, România
7.M. Agop, P. Nica, S. Gurlui, C. Focșa
 Fractal hydrodynamic model of high-fluence laser ablation plasma expansion
 AIP Conference Proceedings of the International Symposium on High Power Laser Ablation 2010 **1278**, 612-622
 (2010)
 Edited by: C.R. Phipps, Book Series:AIP Conference Proceedings
 Amer Inst Physics, USA
8.N. Forna, N. Cimpoeșu, M. Agop, C. Iordache, D. Dorna, C. Mocanu
 Thermal Properties of Two Titanium Alloy Dental Implants - Linear Behaviour and Calorimetric Analysis
 Proceedings Paper at 2011 E-health and bioengineering conference (EHB), (2011)
 D.A. Ursanu, S. Stanciu, R. Cimpoeșu, I. Ioniță, M. Ratoi, T. Constantin, I. Cimpoeșu, M. Agop
 The corrosion resistance of NiTi-active element before and after thermo-mechanical solicitation
 Proceedins paper of 17th International Conference on Innovative Manufacturing Engineering, Iasi, Romania
 Book Series: Applied Mechanics and Materials **371**, 353-357 (2013)
 Edited by:O.D. DesPerrieres, S. Mazuru, L. Slătineanu
9.M. Agop, M. B. Răuț, M. Pricop
 Morphogenesis of Gravitational Structures through a Non-differentiable Approach
 TIM 2013 Physics Conference, Book Series: AIP Conference Proceedings 1634, 64-69 (2014)
 Edited by: O. M. Bunoiu, N. Avram, A. Popescu
 D. Timofte, L. Ochiuz, L. Eva, E. Moraru, B. Stana, M. Agop, D. Vasincu
 Hysteretic type behaviors of the complex fluids via non-differentiability
 Proceedings of the Romanian Academy Series A-Mathematics Physics technical sciences information science **15**,
 331-337 (2014) Editura Acad Romane, Bucuresti, Romania
10.I. Grădinaru, C. G. Buzea, B.A. Stana, L. Eva, D. Tesloianu, M. Agop, L. Ochiuz, L. Gheuca-Solovăstru, G. L.
 Baroi, R.F. Popa
 Malignant invasion model with a small amount of diffusion in the framework of the non-standard scale relativity
 theory. Part I - evolution equations
 Proceedings of the Romanian Academy Series A-Mathematics Physics technical sciences information science **17**,
 24-30 (2016)
 Editura Acad Romane, Bucuresti, Romania
11.R.F. Popa, G. L. Baroi, L. Ochiuz, L. Gheuca-Solovăstru, D. Tesloianu, L. Eva, C. G. Buzea, B.A. Stana, M.
Agop, I. Grădinaru
 Malignant invasion model with a small amount of diffusion in the framework of the non-standard scale relativity
 theory. Analytical solutions (II)
 Proceedings of the Romanian Academy Series A-Mathematics Physics technical sciences information science **17**,
 117-125 (2016) Editura Acad Romane, Bucuresti, Romania
12. Ion Palamarciuc, Dan Gelu Galusca, Monica Ratoi, Brian Mellor, Cătălin Gabriel Dumitraș, Maricel Agop
 „Intergranular degradation of stainless steel tubular components used for kerosene transportation. Metallographic
 analysis”
 8TH INTERNATIONAL CONFERENCE ON MANUFACTURING SCIENCE AND EDUCATION (MSE 2017) -
 TRENDS IN NEW INDUSTRIAL REVOLUTION Book Series: MATEC Web of
 Conferences Volume: 121 Article Number: UNSP 09007 Published: 2017
13.Irina Nica ; Petru-Edward Nica ; Vlad Ghizdovăț ; Maricel Agop
 „New Mathematical Procedures in the Investigation of Biological Nanostructure Dynamics”
 2017 IEEE INTERNATIONAL CONFERENCE ON E-HEALTH AND BIOENGINEERING CONFERENCE
 (EHB) Book Series: E-Health and Bioengineering Conference Pages: 97-100 Published: 2017
14.Irimiciuc, S.; Bulai, G.; Agop, M.;
 „Influence of laser-produced plasma parameters on the deposition process: in situ space- and time-resolved
 optical emission spectroscopy and fractal modeling approach” APPLIED PHYSICS A-MATERIALS SCIENCE &
 PROCESSING Volume: 124 Issue: 9 Article Number: 615
 Published: SEP 2018

2.Invenții.

- Procedee de obținere a unei baterii activabile cu apă de mare, Sandu I., Vicol O., Agop M., Lupuțiu M., No. 102.105/1990;
- Materiale heterojuncționale semiconductoare obținute prin coprecipitare secvențială, Sandu I., Bălan T., Agop M., Furnica E., Anghel I.;

➤ Aerogel polimeric fotoluminescent cu conținut de nanostructuri de carbon utilizabil în surse de lumina./2023/C.S. Stan, P. Horlescu, M. Agop, C.A. Peptu, S. E. Bacaita

3. Contracte de cercetare/granturi.

1. Pachet de programe bazat pe algoritmi genetici și rețele neuronale cu aplicații în fizica supraconductorilor ceramic/CERES-57 /2002 / MEC
2. Sisteme avansate de reconstrucție a formei și de determinare a parametrilor fizico-mecanici a obiectelor 2D și 3D în materiale compozite multistrat utilizând tehnici de ultrasunete; aplicații/CERES-2661P /2003 / MEC
3. Metoda fluctuațiilor și teoria descărcării corona. Aplicație la scăderea energiei specifice a generatoarelor de ozon/RELANSIN 1916P/2004/MEC
4. Modelarea proceselor fizico-chimice în elaborarea unei metode noi, ecologice, de obținere a titanului/CNCSIS 78GR/2006/ MEC
5. Proiecte PN III Proiect experimental demonstrativ

„O NOUA ABORDARE A DISPOZITIVELOR DE ILUMINAT EFICIENTE ENERGETIC, BAZATA PE AEROGELURI SI CARBON DOTS” Cod proiect PN-III-P2-2.1-PED-2016-0760 Contract finantare: 77PED/2017, Proiect finantat în cadrul PN-III-P2-2.1-PED-2016 de către UEFISCDI

4. Premii, distincții.

Premii și distincții internaționale:

➤ „Honorable Mention” acordat de Societatea americană Gravity Research Foundation, Massachusetts, în 1986, pentru Awards for Essays on Gravitation (o lucrare de fizică teoretică)

➤ Medalia de aur, Brussels Eureka 94, pentru invenția Materiaux heterojonctionneles semiconductereous obtenus par coprecipitation sequentielle, Sandu I., Balan T., Agop M., Furnica E., Anghel I.

➤ Medalia de aur, Brussels Eureka 94, pentru Piles activables a leau, Sandu I., Gulea A., Agop M., Lupuțiu M., Popa L.

Premii și distincții naționale:

➤ **Premiul de excelență acordat de Uniunea Armenilor din România pentru întreaga activitate (1995)**

➤ **Doctor Honoris Causa al Universității „Vasile Alecsandri” din Bacău (2013);**

➤ **Membru corespondent al Academiei Oamenilor de Știință din România (din 2018-prezent)**

➤ **Premiile ACADEMIEI ROMANE:**

1. Secțiunea Științe Fizice, Premiul ȘERBAN ȚIȚICA, Nicolae MAZILU, Maricel AGOP, Ioan MERCHEȘ pentru lucrarea *The Mathematical Principles of Scale Relativity Physics. The Concept of Interpretation*, Editura CRC Press, 2020;

2. Secțiunea Știința și Tehnologia Informației, Premiul CORNELIU PENESCU, Călin BUZEA, Viorel-Puiu PĂUN, Lucian EVA, Maricel AGOP, Ionel Daniel COJOCARU, Roxana Irina IANCU, Dragoș Teodor IANCU pentru lucrarea *Radiomica. Fundamente și aplicații*, Editura Academiei Române, 2020;

➤ **Premiul pentru cea mai bună carte în domeniu pe anul 2020 („Atomicity through Fractal Measure Theory”**

• Alina Gavriluț, Ioan Mercheș, Maricel Agop, Ed. SPRINGER) și a **58-a din istoria Editurii SPRINGER;**

- Invitație în cadrul Parlamentului European de la Bruxelles, unde a avut loc lansarea volumului „**Towards the multifractal brain by means of informational paradigm**”, realizată de Prof. univ. dr. Maricel Agop, Lector univ. dr. Alina Gavriluț, Manager Dr. Lucian Eva și Dr. Gabriel Crumpei;
- Un nr. de 45 de doctoranzi confirmați și 8 doctoranzi în stagiul de formare
- O carieră academică bogată datorită publicațiilor realizate: 360 articole în jurnale ISI și 80 articole în jurnale indexate BDI;
- 31 de cărți publicate la edituri din străinătate
- 65 de cărți publicate în țară, la edituri recunoscute CNCSIS (sau CNCS)
- H-index=31 (Web of Science), H=32 Google Scholar

