

Listă de lucrări (ISI), Nica Petru-Edward, Domeniul Fizică



	Autori	Titlu	Revistă	An	Vol	Nr	Pag	Nr. Art.	
1	Nica, PE; Ursu, C	Formation mechanisms of carbon dimer in excimer laser produced plasma	EUROPEAN PHYSICAL JOURNAL D	2020	74	10		207	https://doi.org/10.1140/epjd/e2020-10362-6
2	Irimiciuc, SA; Nica, PE; Agop, M; Focsa, C	Target properties - Plasma dynamics relationship in laser ablation of metals: Common trends for fs, ps and ns irradiation regimes	APPLIED SURFACE SCIENCE	2020	506			144926	https://doi.org/10.1016/j.apsusc.2019.144926
3	Ursu, C; Nica, P; Rusu, BG; Focsa, C	V-shape plasma generated by excimer laser ablation of graphite in argon: Spectroscopic investigations	SPECTROCHIMICA ACTA PART B- ATOMIC SPECTROSCOPY	2020	163			105743	https://doi.org/10.1016/j.sab.2019.105743
4	Nica, P; Gurlui, S; Agop, M; Focsa, C	Oscillatory regimes of Langmuir probe current in femtosecond laser-produced plasmas: Experimental and theoretical investigations	APPLIED SURFACE SCIENCE	2019	481		125 132		https://doi.org/10.1016/j.apsusc.2019.03.098
5	Ursu, C; Nica, P; Focsa, C	Excimer laser ablation of graphite: The enhancement of carbon dimer formation	APPLIED SURFACE SCIENCE	2018	456		717 725		https://doi.org/10.1016/j.apsusc.2018.06.217
6	Ursu, C; Nica, P; Focsa, C; Agop, M	Fractal Method for Modeling the Peculiar Dynamics of Transient Carbon Plasma Generated by Excimer Laser Ablation in Vacuum	COMPLEXITY	2018				1814082	https://doi.org/10.1155/2018/1814082
7	Focsa, C; Gurlui, S; Nica, P; Agop, M; Ziskind, M	Plume splitting and oscillatory behavior in transient plasmas generated by high-fluence laser ablation in vacuum	APPLIED SURFACE SCIENCE	2017	424		299 309		https://doi.org/10.1016/j.apsusc.2017.03.273
8	Nica, P; Gurlui, S; Osiac, M; Agop, M; Ziskind, M; Focsa, C	Investigation of femtosecond laser-produced plasma from various metallic targets using the Langmuir probe characteristic	PHYSICS OF PLASMAS	2017	24	10		103119	https://doi.org/10.1063/1.5006076
9	Irimiciuc, SA; Gurlui, S; Bulai, G; Nica, P; Agop, M; Focsa, C	Langmuir probe investigation of transient plasmas generated by femtosecond laser ablation of several metals: Influence of the target physical properties on the plume dynamics	APPLIED SURFACE SCIENCE	2017	417		108 118		https://doi.org/10.1016/j.apsusc.2017.03.055

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10	Irimiciuc, SA; Gurlui, S; Nica, P ; Focsa, C; Agop, M	A compact non-differential approach for modeling laser ablation plasma dynamics	JOURNAL OF APPLIED PHYSICS	2017	121	8		83301	https://doi.org/10.1063/1.4977010
11	Nica, I; Nica, PE ; Ghizdovat, V; Agop, M	New Mathematical Procedures in the Investigation of Biological Nanostructure Dynamics	2017 IEEE INTERNATIONAL CONFERENCE ON E-HEALTH AND BIOENGINEERING CONFERENCE (EHB)	2017			97 100		https://ieeexplore.ieee.org/document/7995370
12	Andrian, S; Munteanu, B; Taraboanata, I; Negraia, D; Nica, PE; Stoleriu, S; Nica, I	Surface Roughness after Finishing and Polishing of a Restorative NanoComposite Material	2017 IEEE INTERNATIONAL CONFERENCE ON E-HEALTH AND BIOENGINEERING CONFERENCE (EHB)	2017			101 104		https://ieeexplore.ieee.org/document/7995371
13	Irimiciuc, SA; Agop, M; Nica, P ; Gurlui, S; Mihaileanu, D; Toma, S; Focsa, C	Dispersive effects in laser ablation plasmas	JAPANESE JOURNAL OF APPLIED PHYSICS	2014	53	11		116202	https://doi.org/10.7567/JJAP.53.116202
14	Nica, PE ; Rusu, GB; Dragos, OG; Ursu, C	Effect of Excimer Laser Beam Spot Size on Carbon Laser-Produced Plasma Dynamics	IEEE TRANSACTIONS ON PLASMA SCIENCE	2014	42	10	2694 2695		https://doi.org/10.1109/TPS.2014.2350532
15	Ursu, C; Nica, PE	Diagnosis of carbon laser produced plasma by using an electrostatic energy analyzer	JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS	2013	15	1-2	42 45		https://joam.inoe.ro/articles/diagnosis-of-carbon-laser-produced-plasma-by-using-an-electrostatic-energy-analyzer/
16	Nica, PE ; Agop, M; Gurlui, S; Bejinariu, C; Focsa, C	Characterization of Aluminum Laser Produced Plasma by Target Current Measurements	JAPANESE JOURNAL OF APPLIED PHYSICS	2012	51	10		106102	https://doi.org/10.1143/JJAP.51.106102
17	Agop, M; Nica, P ; Niculescu, O; Dimitriu, DG	Experimental and Theoretical Investigations of the Negative Differential Resistance in a Discharge Plasma	JOURNAL OF THE PHYSICAL SOCIETY OF JAPAN	2012	81	6		64502	https://doi.org/10.1143/JPSJ.81.064502

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18	Costan, A; Cimpoesu, RH; Ionita, I; Dima, A; Forna, N; Nica, P ; Agop, M	Hydroxyapatite and PMMA Thin Films Synthesized by Pulsed Laser Deposition on Titanium Based Metallic Substrates	MATERIALE PLASTICE	2011	48	4	299	302		https://www.revmaterialeplastice.ro/Articles.asp?ID=3172
19	Agop, M; Nica, P ; Gurlui, S; Focsa, C; Magop, D; Borsos, Z	The chaotic atom model via a fractal approximation of motion	PHYSICA SCRIPTA	2011	84	4			45017	https://doi.org/10.1088/0031-8949/84/04/045017
20	Nica, P ; Agop, M; Miyamoto, S; Amano, S; Nagano, A; Inoue, T; Poll, E; Mochizuki, T	Multi-peak structure of the ion current in laser produced plasma	EUROPEAN PHYSICAL JOURNAL D	2010	60	2	317	323		https://doi.org/10.1140/epjd/e2010-00217-2
21	Casian-Botez, I; Agop, M; Nica, P ; Paun, V; Munceleanu, GV	Conductive and Convective Types Behaviors at Nano-Time Scales	JOURNAL OF COMPUTATIONAL AND THEORETICAL NANOSCIENCE	2010	7	11	2271	2280		https://doi.org/10.1166/jctn.2010.1608
22	Ursu, C; Pompilian, O; Gurlui, S; Nica, P ; Agop, M; Dudeck, M; Focsa, C	Al ₂ O ₃ ceramics under high-fluence irradiation: plasma plume dynamics through space- and time-resolved optical emission spectroscopy	APPLIED PHYSICS A-MATERIALS SCIENCE & PROCESSING	2010	101	1	153	159		https://doi.org/10.1007/s00339-010-5775-0
23	Nica, P ; Agop, M; Gurlui, S; Focsa, C	Oscillatory Langmuir probe ion current in laser-produced plasma expansion	EPL	2010	89	6			65001	https://doi.org/10.1209/0295-5075/89/65001
24	Agop, M; Nica, PE ; Gurlui, S; Focsa, C; Paun, VP; Colotin, M	Implications of an extended fractal hydrodynamic model	EUROPEAN PHYSICAL JOURNAL D	2010	56	3	405	419		https://doi.org/10.1140/epjd/e2009-00304-5

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25	Agop, M; Nica, P ; Gurlui, S; Focsa, C	Fractal hydrodynamic model of high-fluence laser ablation plasma expansion	INTERNATIONAL SYMPOSIUM ON HIGH POWER LASER ABLATION 2010	2010	1278		612	+		https://doi.org/10.1063/1.3507153
26	Niculescu, O; Nica, P ; Gurlui, S; Forna, N; Casian-Botez, I; Ionita, I; Constantin, B; Badarau, G	Experimental Investigations of Polymer Plasma Laser Ablation	MATERIALE PLASTICE	2009	46	3	336	338		https://www.revmaterialeplastice.ro/Articles.asp?ID=2308
27	Colotin, M; Pompilian, GO; Nica, P ; Gurlui, S; Paun, V; Agop, M	Fractal Transport Phenomena through the Scale Relativity Model	ACTA PHYSICA POLONICA A	2009	116	2	157	164		https://doi.org/10.12693/APhysPolA.116.157
28	Nica, P ; Vizureanu, P; Agop, M; Gurlui, S; Focsa, C; Forna, N; Ioannou, PD; Borsos, Z	Experimental and Theoretical Aspects of Aluminum Expanding Laser Plasma	JAPANESE JOURNAL OF APPLIED PHYSICS	2009	48	6			66001	https://doi.org/10.1143/JJAP.48.066001
29	Agop, M; Chicos, L; Nica, P	Transport phenomena in nanostructures and non-differentiable space-time	CHAOS SOLITONS & FRACTALS	2009	40	2	803	814		https://doi.org/10.1016/j.chaos.2007.08.055
30	Colotin, M; Niculescu, O; Bibire, TD; Gottlieb, I; Nica, P ; Agop, M	FRactal Fluids of Conductive Type Behavior through Scale Relativity Theory	ROMANIAN REPORTS IN PHYSICS	2009	61	3	387	394		http://www.rrp.infim.ro/2009_61_3/art03Colotin.pdf
31	Ioannou, PD; Nica, P ; Paun, V; Vizureanu, P; Agop, M	Wave-particle duality through an extended model of the scale relativity theory	PHYSICA SCRIPTA	2008	78	6			65101	https://doi.org/10.1088/0031-8949/78/06/065101

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32	Agop, M; Nica, PE; Ioannou, PD; Antici, A; Paun, VP	Fractal model of the atom and some properties of the matter through an extended model of scale relativity	EUROPEAN PHYSICAL JOURNAL D	2008	49	2	239	248		https://doi.org/10.1140/epjd/e2008-00161-8
33	Gurlui, S; Agop, M; Nica, P; Ziskind, M; Focsa, C	Experimental and theoretical investigations of a laser-produced aluminum plasma	PHYSICAL REVIEW E	2008	78	2			26405	https://doi.org/10.1103/PhysRevE.78.026405
34	Agop, M; Harabagiu, A; Nica, P	Wave-particle duality through a hydrodynamic model of the fractal space-time theory	ACTA PHYSICA POLONICA A	2008	113	6	1571	1588		https://doi.org/10.12693/APhysPolA.113.1571
35	Agop, M; Nica, P; Gurlui, S; Strat, G; Strat, M	Fractal space-time and ball lightning as a self-organizing process in laser produced plasma	JOURNAL OF OPTOELECTRONICS AND ADVANCED MATERIALS	2008	10	6	1526	1529		
36	Antici, A; Paun, VP; Nica, P; Agop, M	Fractal model of the atom in the hydrodynamic approach of scale relativity theory	REVISTA DE CHIMIE	2008	59	4	472	477		
37	Agop, M; Nica, P; Girtu, M	On the vacuum status in Weyl-Dirac theory	GENERAL RELATIVITY AND GRAVITATION	2008	40	1	35	55		https://doi.org/10.1007/s10714-007-0519-y
38	Gottlieb, I; Nica, P; Agop, M	Scale relativity theory for an arbitrary fractal dimension	ROMANIAN REPORTS IN PHYSICS	2008	60	3	443	451		
39	Ioannou, PD; Nica, P; Agop, M	THE INCREASE OF THE ELECTRICAL CONDUCTANCE IN NANOSTRUCTURES: A THEORETICAL APPROACH	UNIVERSITY POLITEHNICA OF BUCHAREST SCIENTIFIC BULLETIN-SERIES A-APPLIED MATHEMATICS AND PHYSICS	2008	70	4	67	74		
40	Agop, M; Nica, P; Ioannou, PD; Malandraki, O; Gavanas-Pahomi, I	El Naschie's epsilon((infinity)) space-time, hydrodynamic model of scale relativity theory and some applications	CHAOS SOLITONS & FRACTALS	2007	34	5	1704	1723		https://doi.org/10.1016/j.chaos.2006.05.014

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41	Nica, P; Miyamoto, S; Amano, S; Inoue, T; Shimoura, A; Mochizuki, T	Space-resolved soft X-ray emission from laser produced lithium plasma	PHYSICS LETTERS A	2007	370	2	154	157		https://doi.org/10.1016/j.physleta.2007.05.105
42	Inoue, T; Okino, H; Nica, PE; Amano, S; Miyamoto, S; Mochizuki, T	Xe capillary target for laser-plasma extreme ultraviolet source	REVIEW OF SCIENTIFIC INSTRUMENTS	2007	78	10			105105	https://doi.org/10.1063/1.2800768
43	Nagano, A; Inoue, T; Nica, PE; Amano, S; Miyamoto, S; Mochizuki, T	Extreme ultraviolet source using a forced recombination process in lithium plasma generated by a pulsed laser	APPLIED PHYSICS LETTERS	2007	90	15			151502	https://doi.org/10.1063/1.2719672
44	Agop, M; Vizureanu, P; Nica, P; Mamut, E; Ioannou, PD	Hydrodynamic model of scale relativity theory for nanomaterials. (II) the anomaly of the heat transfer in nanofluids by means of a differential negative thermal conductance	METALURGIA INTERNATIONAL	2007	12	3	24	29		
45	Nica, PE; Miyamoto, S; Amano, S; Inoue, T; Shimoura, A; Kaku, K; Mochizuki, T	Soft x-ray spectra from laser heated lithium targets	APPLIED PHYSICS LETTERS	2006	89	4			41501	https://doi.org/10.1063/1.2235956
46	Inoue, T; Nica, PE; Kaku, K; Shimoura, A; Amano, S; Miyamoto, S; Mochizuki, T	Studies on cryogenic Xe capillary jet target for laser-produced plasma EUV-light source	EMERGING LITHOGRAPHIC TECHNOLOGIES X, PTS 1 AND 2	2006	6151		U151 6	U152 4	61513U	https://doi.org/10.1117/12.656096
47	Miyamoto, S; Amano, S; Inoue, T; Nica, PE; Shimoura, A; Kaku, K; Sekioka, T; Mochizuki, T	EUV source developments on laser-produced plasmas using cryogenic Xe and lithium new scheme target	EMERGING LITHOGRAPHIC TECHNOLOGIES X, PTS 1 AND 2	2006	6151		U150 1	U151 0	61513S	https://doi.org/10.1117/12.656458

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48	Agop, M; Ioannou, PD; Nica, P	Superconductivity by means of the subquantum medium coherence	JOURNAL OF MATHEMATICAL PHYSICS	2005	46	6			62110	https://doi.org/10.1063/1.1904163
49	Agop, M; Ioannou, PD; Nica, P; Galusca, G; Stefan, M	El Naschie's coherence on the subquantum medium	CHAOS SOLITONS & FRACTALS	2005	23	5	1497	1509		https://doi.org/10.1016/j.chaos.2004.07.012
50	Agop, M; Ioannou, PD; Luchian, D; Nica, P; Radu, C; Condurache, D	El Naschie's cantor strings and dendritic morphogenesis	CHAOS SOLITONS & FRACTALS	2004	21	3	515	536		https://doi.org/10.1016/j.chaos.2003.12.053
51	Agop, M; Ioannou, P; Luchian, D; Nica, P; Radu, C	Dendritic morphogenesis by means of a fractal	MATERIALS TRANSACTIONS	2004	45	5	1528	1534		https://doi.org/10.2320/matertrans.45.1528
52	Agop, M; Ioannou, PD; Nica, P	El Naschie's cantor strings and duality in Weyl-Dirac theory	CHAOS SOLITONS & FRACTALS	2004	19	5	1057	1070		https://doi.org/10.1016/S0960-0779(03)00274-1
53	Agop, M; Ioannou, P; Nica, P; Radu, C; Alexandru, A; Vizureanu, P	Fractal characteristics of the solidification process	MATERIALS TRANSACTIONS	2004	45	3	972	975		https://doi.org/10.2320/matertrans.45.972
54	Agop, M; Ioannou, PD; Nica, P; Buzea, CG; Jarcau, M	epsilon((infinity)) Cantorian space-time, polarization gravitational field and van der Waals-type forces	CHAOS SOLITONS & FRACTALS	2003	18	1	1	16		https://doi.org/10.1016/S0960-0779(02)00633-1
55	Agop, M; Ioannou, PD; Nica, P	On the Weyl-Dirac duality by means of a Cantorian fractal string	PHYSICS LETTERS A	2003	314	1-2	131	139		https://doi.org/10.1016/S0375-9601(03)00881-8
56	Agop, M; Ioannou, PD; Buzea, CG; Nica, P	Hydrodynamic formulation of scale relativity theory and unified superconductivity by means of a fractal string	PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS	2003	390	1	37	55		https://doi.org/10.1016/S0921-4534(02)02805-8

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57	Agop, M; Ioannou, PD; Buzea, C; Nica, P	Cantorian epsilon((infinity)) space-time, a hydrodynamical model and unified superconductivity	CHAOS SOLITONS & FRACTALS	2003	16	2	321	338		https://doi.org/10.1016/S0960-0779(02)00413-7
58	Agop, M; Strat, M; Strat, G; Nica, P	Cantorian epsilon((infinity)) structures in discharge plasma double layers. Theoretical and experimental aspects of basic processes	CHAOS SOLITONS & FRACTALS	2002	13	7	1541	1569		https://doi.org/10.1016/S0960-0779(01)00162-X
59	Agop, M; Ioannou, PD; Coman, P; Ciobanu, B; Nica, P	Cantorian E-(infinity) space-time and generalized superconductivity	CHAOS SOLITONS & FRACTALS	2001	12	11	1947	1982		https://doi.org/10.1016/S0960-0779(00)00161-2
60	Agop, M; Buzea, CG; Nica, P	Cantorian E-(infinity) space-time, de Broglie and the pair-breaking time of high-temperature superconductors	CHAOS SOLITONS & FRACTALS	2001	12	3	571	577		https://doi.org/10.1016/S0960-0779(00)00004-7
61	Agop, M; Buzea, CG; Nica, P	Cantorian E(infinity) space-time and the energy gap of high temperature superconductors	CHAOS SOLITONS & FRACTALS	2001	12	4	735	740		https://doi.org/10.1016/S0960-0779(00)00033-3
62	Agop, M; Nica, P; Carcea, I	Thermal oscillation modes of the solid-liquid interface solidification and melting	MATERIALS TRANSACTIONS JIM	2001	42	2	197	206		https://doi.org/10.2320/matertrans.42.197
63	Agop, M; Buzea, CG; Nica, P	The Cantorian structure of the background magnetic field and high temperature superconductors	CHAOS SOLITONS & FRACTALS	2000	11	15	2561	2569		https://doi.org/10.1016/S0960-0779(99)00167-8
64	Agop, M; Buzea, CG; Nica, P	Local gravitoelectromagnetic effects on a superconductor	PHYSICA C-SUPERCONDUCTIVITY AND ITS APPLICATIONS	2000	339	2	120	128		https://doi.org/10.1016/S0921-4534(00)00340-3
65	Agop, M; Nica, P	The wave-particle duality in the Weyl-Dirac theory	CLASSICAL AND QUANTUM GRAVITY	2000	17	18	3627	3644		https://doi.org/10.1088/0264-9381/17/18/303
66	Agop, M; Buzea, CG; Nica, P	Ginzburg-Landau equation and the temperature dependence of the superconducting state parameters	PHYSICA C	2000	336	1-2	123	130		https://doi.org/10.1016/S0921-4534(00)00268-9
67	Agop, M; Nica, P	Some physical implications of the Weyl-Dirac theory	CLASSICAL AND QUANTUM GRAVITY	1999	16	10	3367	3380		https://doi.org/10.1088/0264-9381/16/10/324
68	Agop, M; Nica, P	On the Cantorian structure of time in relativity	CHAOS SOLITONS & FRACTALS	1999	10	8	1295	1302		https://doi.org/10.1016/S0960-0779(98)00127-1