

LISTA

lucrărilor științifice în domeniul disciplinelor din postul didactic

A. Teza de doctorat

Titlu: Calculation of total and differential ionization cross sections for fast ion impact

An susținere: 2007

B. Cărți si capitole în cărți publicate în ultimii 10 anii

1. Lázár Zsolt, Lázár József, Járai-Szabó Ferenc, Numerikus módszerek, Presa Universitara Clujeana, ISBN 978-973-610-763-4, 978-973-610-756-6
2. Néda Árpád, Sárközi Zsuzsa, Járai-Szabó Ferenc, Deák Róbert, Mechanika és hőtan laboratóriumi jegyzet (Laboratory workbook of mechanics and thermodynamics), Presa Universitara, Cluj-Napoca, ISBN 973-610-420-6, 2006
3. Járai-Szabó Ferenc (ed.), Országos Tudományos Diákköri konferencia: Fizika, Földtudományok és Matematika Szekciójának Kivonatkötete, Presa Universitară Clujeană, ISBN 978-973-595-834-3, 2015

C. Lucrări indexate ISI/BDI publicate în ultimii 10 anii

1. Ciobanu Andreea-Cosmina, Petcu L.C., Jarai-Szabo Ferenc, Balint Zoltan, Validation of a 3D printed bolus for radiotherapy: a proof-of-concept study, BIOMEDICAL PHYSICS & ENGINEERING EXPRESS, 11, 2, 39899900, 2025
2. Ciobanu Andreea-Cosmina, Petcu L.C., Jarai-Szabo Ferenc, Balint Zoltan, Exploring the impact of filament density on the responsiveness of 3D Printed bolus materials for high-energy photon radiotherapy, PHYSICA MEDICA-EUROPEAN JOURNAL OF MEDICAL PHYSICS, 127, 104849, 2024
3. A Gergely, TS Biró, F Járai-Szabó, Z Néda, Statistics of earthquakes based on the extended LGGR model, Physica A: Statistical Mechanics and its Applications 650, 129983, 2024
4. A Kuki, S Lipcsei, I Gere, F Járai-Szabó, A Gergely, D Ugi, PD Ispánovity ..., Statistical analogies between earthquakes, micro-quakes in metals and avalanches in the 1D Burridge-Knopoff model, Geofizika 40 (1), 1-27, 2023
5. I Tóth, ZI Lázár, L Varga, F Járai-Szabó, I Papp, RV Florian ..., Mitigating ageing bias in article level metrics using citation network analysis, Journal of Informetrics 15 (1), 101105, 2021
6. L Nagy, F Járai-Szabó, S Borbély, K Tőkési, Projectile coherence effects analyzed using impact parameters determined by classical trajectory Monte Carlo calculations, Journal of Physics: Conference Series 1412 (15), 152032, 2020
7. M Schulz, A Hasan, B Lamichhane, T Arthanayaka, M Dhital, S Bastola, ..., Projectile Coherence Effects in Simple Atomic Systems, Journal of Physics: Conference Series 1412 (6), 062007, 2020
8. Zs Sárközi, S Borbély, F Járai-Szabó, Deepening secondary students understanding of physics through escape games, AIP Conference Proceedings 2071 (1), 050001, 2019
9. L Nagy, F Járai-Szabó, S Borbély, T Arthanayaka, BR Lamichhane, ..., Wave packet scattering in intermediate-energy p-He collisions, State-of-the-Art Reviews on Energetic Ion-Atom and Ion-Molecule Collisions, 2019
10. Nagy Ladislau, Jarai-Szabo Ferenc, Borbely Sandor, The effect of projectile wave packet width on the fully differential ionization cross-sections, Volum Nr: 51, Număr identificare articol: 144005, An: 2018, JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS
11. Lazar Zsolt-Iosif, PAPP Istvan, VARGA Levente, Jarai-Szabo Ferenc, Deritei David, Ercsey-Ravasz Maria Magdolna, Stochastic graph Voronoi tessellation reveals community structure, Volum Nr: 95/2:022306, Pagina: 1 - 13, An: 2017, PHYSICAL REVIEW E
12. Neda Zoltan, Jarai-Szabo Ferenc, Boda Szilard, Cell-size distribution and scaling in a one-dimensional Kolmogorov-Johnson-Mehl-Avrami lattice model with continuous nucleation, Volum Nr: 96, Pagina: 421451 - 421458, An: 2017, PHYSICAL REVIEW E

13. Arthanayaka T, Borbely Sandor, Jarai-Szabo Ferenc, Nagy Ladislau, Lamichhane B. R., Hasan A, Gurung S, Remolina J., Schulz Michael, Fully differential study of wave packet scattering in ionization of helium by proton impact, Volum Nr: 49, Pagina: 1 - 4, An: 2016, JOURNAL OF PHYSICS B-ATOMIC MOLECULAR AND OPTICAL PHYSICS
14. Jarai-Szabo Ferenc, Nagy Ladislau, Theoretical investigations on the projectile coherence effects in fully differential ionization cross sections, Volum Nr: 69, 4, Pagina: 1 - 5, An: 2015, EUROPEAN PHYSICAL JOURNAL D

D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)

D1. În reviste

1. Ciobanu Andreea-Cosmina, Dumitru M, Rebegea L. , Jarai-Szabo Ferenc, Balint Zoltan, The Effect of Filament Density on the Build-Up Region Responsiveness of 3D Printed Boluses in High-Energy Photon Radiotherapy, INTERNATIONAL JOURNAL OF RADIATION ONCOLOGY BIOLOGY PHYSICS, 117, 2, e657, 3440, 2023

D2. Selecție cu maximum 20 lucrări în volume de conferințe

1. Nagy Ladislau, Jarai-Szabo Ferenc, Projectile coherence effects investigated for the ionization of helium, Pagina: 82011 - 82011, An: 2014, Conferință: Journal of Physics Conference Series – ICPEAC
2. Jarai-Szabo Ferenc, Borbely Sandor, Nagy Ladislau, Projectile coherence effects studied by ab initio calculations, Pagina: 22037 - 22037, An: 2015, Conferință: Journal of Physics Conference Series - ICPEAC 2015
3. Nagy Ladislau, Borbely Sandor, Jarai-Szabo Ferenc, Theoretical study on projectile coherence effects in fully differential ionization cross sections, Pagina: 92009 - 92009, An: 2017 Volum: Journal of Physics: Conference series 875, Conferință: ICPEAC
4. Nagy Ladislau, Jarai-Szabo Ferenc, Projectile coherence - the transition between the semiclassical and the quantum method, Pagina: 78 - 78, An: 2015, Conferință: International symposium on (e,2e), double photo-ionization, polarization and correlation
5. Jarai-Szabo Ferenc, Nagy Ladislau, Theoretical Investigations on Projectile Coherence Effects in Fast Ion-Atom Collisions, Pagina: 229 - 229, An: 2016, Conferință: 12th European Conference on Atoms Molecules and Photons (ECAMP12)
6. VARGA Levente, Kapusi Aron, Jarai-Szabo Ferenc, Self-organization in entangled materials, Pagina: 342 - 342, An: 2016, Conferință: Conference on Complex Systems 2016
7. VARGA Levente, Deritei David, PAPP Istvan, Jarai-Szabo Ferenc, Lazar Zsolt-Iosif, Razvan Florian, Ercsey-Ravasz Maria Magdolna, Genetic-like algorithm applied on citation networks for evaluating scientific publications, Pagina: 343 - 343, An: 2016, Conferință: Conference on Complex Systems 2016
8. Jarai-Szabo Ferenc, On the KJMA lattice model with continuous nucleation, Pagina: 34 - 34, An: 2018, Conferință: 12th Joint Conference on Mathematics and Computer Science
9. VARGA Levente, Deritei David, Ercsey-Ravasz Maria Magdolna, Razvan Florian, Lazar Zsolt-Iosif, PAPP Istvan, Jarai-Szabo Ferenc, Normalizing Scientometric Indicators of Individual Publications Using Local Cluster Detection Methods on Citation Networks, Pagina: 1189 - 1198, An: 2018, Volum: International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering, Conferință: ICCSIB 2018 : 20th International Conference on Cybermetrics Scientometrics Informetrics and Bibliometrics
10. Jarai-Szabo Ferenc, Invited speaker, 3rd International Conference on Materials Genome - ICMG-III, SRM University AP, Andhra Pradesh, India, 2024
11. Jarai-Szabo Ferenc, On the KJMA lattice model with continuous nucleation, 2018, 12th Joint Conference on Mathematics and Computer Science, Universitatea Babeș-Bolyai
12. Varga Levente, Deritei David, Ercsey-Ravasz Maria Magdolna, Razvan Florian, Lazar Zsolt-Iosif, PAPP ISTVÁN, Jarai-Szabo Ferenc, Normalizing Scientometric Indicators of Individual Publications Using Local Cluster Detection Methods on Citation Networks, 2018, ICCSIB 2018 :

20th International Conference on Cybermetrics Scientometrics Informetrics and Bibliometrics,
World Academy of Science

13. Balint Zoltan, Ciobanu Andreea-Cosmina, Jarai-Szabo Ferenc, 3D Printed Personalized Supports for Radiation Therapy, 2024, 18TH NATIONAL CONFERENCE OF BIOPHYSICS with International Participation
14. Balint Zoltan, Ciobanu Andreea-Cosmina, Jarai-Szabo Ferenc, Exploring properties of 3D-Printed Bolus materials for radiation therapy, ESTRO 2024, Elsevier

E. Brevete obtinute în întreaga activitate

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