

Program IDEI_Proiecte de Cercetare Exploratorie_Competitie 2012
Rezultate finale_Fizica

| Nr. Crt. | Cod Proiect | Domeniu | Nume | Prenume | Institutie | Titlu | Punctaj final |
|----------|--------------------------|---------|-----------|---------------|---|---|---------------|
| 1 | PN-II-ID-PCE-2012-4-0028 | Fizica | Burzo | Emil | BABES-BOLYAI UNIVERSITY | Alkali and silver halides based magnetic tunnel junctions | 98.33 |
| 2 | PN-II-ID-PCE-2012-4-0299 | Fizica | Trache | Livius-Marian | National Research Institute for Physics and Nuclear Engineering "Horia Hulubei" | Nuclear astrophysics studies at IFIN-HH | 97 |
| 3 | PN-II-ID-PCE-2012-4-0342 | Fizica | Tosa | Valer | National Institute for R&D Isotopic and Molecular Technologies | Single attosecond pulse generation by femtosecond waveforms | 96.66 |
| 4 | PN-II-ID-PCE-2012-4-0511 | Fizica | Popa | Lucia | Institute for Space Sciences | Probing the primordial gravitational waves with CMB anisotropies | 92.67 |
| 5 | PN-II-ID-PCE-2012-4-0255 | Fizica | Enculescu | Ionut-Marius | Institutul National de Cercetare Dezvoltare pentru Fizica Materialelor | Charge and spin control in field effect transistors with nanowire channel | 92.66 |
| 6 | PN-II-ID-PCE-2012-4-0078 | Fizica | Jora | Catalina | National Institute of Physics and Nuclear Engineering Horia Hulubei | Topics in non-abelian gauge theories | 92.34 |
| 7 | PN-II-ID-PCE-2012-4-0418 | Fizica | Echim | Marius | National Institute for Lasers, Plasma and Radiation - Institute for Space Sciences | Turbulence, Intermittency and Multiscale transfer of Energy in the Solar-wind and planetary magnetosheaths (TIMESS) | 92 |
| 8 | PN-II-ID-PCE-2012-4-0629 | Fizica | Dinescu | Gheorghe | National Institute for Laser, Plasma and Radiation Physics | Process diagnostic: carbon nanowalls versus carbon nanofibers plasma deposition | 92 |
| 9 | PN-II-ID-PCE-2012-4-0315 | Fizica | Tiusan | Coriolan | Universitatea Tehnica din Cluj-Napoca | Mesoscopic spintronic devices with tailored magneto-transport properties | 91.66 |
| 10 | PN-II-ID-PCE-2012-4-0234 | Fizica | Stancalie | Viorica | National Institute for Laser, Plasma & Radiation Physics | Electron collisions with Fe-peak elements.From high precision atomic data to astrophysical opacities | 89.67 |
| 11 | PN-II-ID-PCE-2012-4-0039 | Fizica | Moca | Pascu Catalin | University of Oradea | Non-equilibrium dynamics, pumping and correlations in tunable mesoscopic systems | 89 |
| 12 | PN-II-ID-PCE-2012-4-0068 | Fizica | Chirita | Stan | UNIVERSITATEA ALEXANDRU IOAN CUZA IASI | THERMOMECHANICAL MODELS AND RELATED PROBLEMS | 89 |
| 13 | PN-II-ID-PCE-2012-4-0546 | Fizica | Filip | Valeriu | University of Bucharest | Study of electron field emission from nanostructured materials with applications to electron sources | 88.66 |
| 14 | PN-II-ID-PCE-2012-4-0645 | Fizica | Baleanu | Dumitru | Institute of Space Sciences, legal branch of National Institute for Laser, Plasma and Radiation Physics | Advanced Fractional Dynamics of Complex Systems: Theoretical Models and Experimental Validation | 88.32 |
| 15 | PN-II-ID-PCE-2012-4-0287 | Fizica | Ticos | Catalin Mihai | National Institute for Laser, Plasma and Radiation Physics | Manipulation of Dusty Plasmas by Electromagnetic Fields and Charged Particle Flows | 88.01 |
| 16 | PN-II-ID-PCE-2012-4-0402 | Fizica | Coca | Cornelia | Horia Hulubei National Institute for Physics and Nuclear Engineering - IFIN HH | Research and optimization of very forward calorimeters for detectors at future e+e- colliders | 88 |
| 17 | PN-II-ID-PCE-2012-4-0113 | Fizica | Nica | Petru-Edward | The Gheorghe Asachi Technical University of Iasi | Controlled laser produced plasma emission using dual nanosecond pulses | 86.67 |

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| 18 | PN-II-ID-PCE-2012-4-0022 | Fizica | TUDORA | Anabella | University of Bucharest, Faculty of Physics | Modeling of the prompt neutron and gamma-ray emission in fission | 85.33 |
| 19 | PN-II-ID-PCE-2012-4-0504 | Fizica | Nistor | Vasile Sergiu | National Institute of Materials Physics | Understanding the structure and interplay at atomic scale of the intrinsic point defects and impurities in semiconductor boron nitride. | 84.66 |
| 20 | PN-II-ID-PCE-2012-4-0473 | Fizica | Girtu | Mihai | Ovidius University of Constanta | Modeling of the high-temperature magnetic ordering in molecular compounds with transition metal ions bridged by cyanocarbon acceptors | 84.33 |
| 21 | PN-II-ID-PCE-2012-4-0126 | Fizica | Negret | Alexandru | Horia Hulubei National Institute for Physics and Nuclear Engineering | High resolution neutron inelastic cross section measurements | 84 |
| 22 | PN-II-ID-PCE-2012-4-0527 | Fizica | Ursescu | Daniel | Institutul National de Cercetare Dezvoltare pentru Fizica Laserilor, Plasmei si Radiatiei | Complex ultrashort laser pulses characterization | 84 |
| 23 | PN-II-ID-PCE-2012-4-0585 | Fizica | Socoliuc | Vlad-Mircea | Romanian Academy - Timisoara Branch | The influence of long range magnetic dipole-dipole interactions on the structure of magnetic fluids | 83.67 |
| 24 | PN-II-ID-PCE-2012-4-0105 | Fizica | Dabu | Razvan | National Institute for Laser, Plasma, and Radiation Physics | Contrast intensity enhancement of high-power femtosecond laser systems | 82 |
| 25 | PN-II-ID-PCE-2012-4-0487 | Fizica | Glodariu | Tudor | Horia Hulubei National Institute of Physics and Nuclear Engineering | Searching for weakly bound resonances just below the neutron binding energy | 81.33 |
| 26 | PN-II-ID-PCE-2012-4-0162 | Fizica | Acatrinei | Ciprian Sorin | INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE PENTRU FIZICA SI INGINERIE NUCLEARA HORIA HULUBEI IFIN HH, BUCURESTI - MAGURELE | A new discretization scheme in classical and quantum field theory and its applications in nonperturbative studies | 81 |
| 27 | PN-II-ID-PCE-2012-4-0341 | Fizica | IXARU | LIVIU | Institutul National de Cercetare Pentru Fizica si Inginerie Nucleara Horia Hulubei IFIN HH din Bucuresti | New numerical methods and codes for the coupled-channel Schrödinger equation | 80.83 |
| 28 | PN-II-ID-PCE-2012-4-0069 | Fizica | Constantin | Florin | "Horia Hulubei" National Institute of Physics and Nuclear Engineering | Positron Annihilation Spectroscopy Studies of Polymers - Membranes and Thin Films | 79.33 |
| 29 | PN-II-ID-PCE-2012-4-0649 | Fizica | Vatasescu | Mihaela | Institute of Space Science | Quantum control and coherent dynamics in ultracold atomic and molecular systems | 79 |
| 30 | PN-II-ID-PCE-2012-4-0283 | Fizica | Miu | Lucica | National Institute of Materials Physics | Vortex dynamics in exotic superconductors | 78.67 |
| 31 | PN-II-ID-PCE-2012-4-0306 | Fizica | Avrigeanu | Vlad | Horia Hulubei National Institute for Physics and Nuclear Engineering | Improved Nuclear Data Requested by Actual Fusion Technology | 78.33 |
| 32 | PN-II-ID-PCE-2012-4-0327 | Fizica | Raduta | Alexandru Horia | National Institute of Physics and Nuclear Engineering - Horia Hulubei | Advanced studies on nuclear multifragmentation, nuclear structure and atomic clusters | 78.33 |
| 33 | PN-II-ID-PCE-2012-4-0447 | Fizica | Benea | Diana | Babes-Bolyai University Cluj-Napoca | New Heusler materials with application in spintronics | 77 |
| 34 | PN-II-ID-PCE-2012-4-0172 | Fizica | Anghel | Sorin Dan | Babes-Bolyai University | New studies on the generation, characterization and applications of atmospheric pressure gas discharges in liquids and on liquids | 76 |

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| 35 | PN-II-ID-PCE-2012-4-0646 | Fizica | Beu | Titus | University Babes-Bolyai | Computational studies of ionic transport and encapsulation / translocation of DNA through voltage-controlled carbon nanotubes | 75 |
| 36** | PN-II-ID-PCE-2012-4-0106** | Fizica | Grigore | Radu-Dan | "Horia Hulubei" National Institute for Physics and Nuclear Engineering | Algebraic and combinatorial methods applied in quantum mechanics and field theory | 74.34** |
| 37** | PN-II-ID-PCE-2012-4-0471** | Fizica | BUICA | Gabriela | Institute for Space Science-National Institute for Laser, Plasma and Radiation Physics | Coherent control of atoms with trains of ultrashort laser pulses under the electromagnetically induced transparency conditions | 74** |
| 38** | PN-II-ID-PCE-2012-4-0348** | Fizica | Stefan | Mariana | National Institute of Materials Physics | Effect of the defect centers on the spectral properties of oxide nanoparticles | 72** |
| 39** | PN-II-ID-PCE-2012-4-0371** | Fizica | Dita | Petre | Horia Hulubei National Institute of Physics and Nuclear Engineering-IFIN-HH | Flavour Physics in Quark and Neutrino Sectors | 72** |
| 40** | PN-II-ID-PCE-2012-4-0538** | Fizica | cojocar | sergiu | Horia Hulubei National Institute for Physics and Nuclear Engineering | Nanoscale inhomogeneity and anomalous properties of high temperature superconductors | 72** |
| 41** | PN-II-ID-PCE-2012-4-0116** | Fizica | Lazanu | Sorina | National Institute of Materials Physics | Energy transfer in the interaction of ions and molecular clusters with solids | 71.67** |
| 42** | PN-II-ID-PCE-2012-4-0607** | Fizica | Stanculescu | Anca | Institutul National de Cercetare-Dezvoltare pentru Fizica Materialelor | NEW FLEXIBLE ALL-ORGANIC WITH NUCLEOBASES INSULATING LAYER FIELD EFFECT TRANSISTOR FOR FUTURE SENSING APPLICATIONS | 71.34** |
| 43** | PN-II-ID-PCE-2012-4-0524** | Fizica | Apostol | Marian | Research and Development National Institute of Physics and Nuclear Engineering - "Horia Hulubei" | Classical and Semi-Classical Interaction of Matter with the Electromagnetic Field | 70.33** |
| 44** | PN-II-ID-PCE-2012-4-0657** | Fizica | Dondera | Mihai | University of Bucharest | Atomic systems in interaction with intense coherent radiation | 69.67** |
| 45** | PN-II-ID-PCE-2012-4-0626** | Fizica | Condurache | Daniel | Universitatea Tehnica "Gheorghe Asachi" | New Approaches to Orbital Mechanics, with Applications to Spacecraft Formation Flying and Distributed Space Systems | 69.01** |
| 46** | PN-II-ID-PCE-2012-4-0220** | Fizica | Dimitriu | Dan-Gheorghe | "Alexandru Ioan Cuza" University of Iasi | Instabilities and chaotic phenomena in low-temperature plasma | 68.67** |
| 47** | PN-II-ID-PCE-2012-4-0140** | Fizica | Bratfalean | Radu | National Institute for Research and Development of Isotopic and Molecular Technologies | Gallium-based thermally-active optical reflectors with high contrast extinction ratio | 67** |
| 48** | PN-II-ID-PCE-2012-4-0390** | Fizica | Petris | Adrian | Institutul National de Cercetare - Dezvoltare pentru Fizica Laserilor, Plasmei si Radiatiei | Exploring and controlling femtosecond excited high-order optical nonlinearities in nano-structured materials | 67** |
| 49** | PN-II-ID-PCE-2012-4-0232** | Fizica | Nedea | Silvia | Politehnica University of Bucharest | Efficient hybrid molecular simulations for temperature control and heat transfer phenomena | 65.34** |
| 50** | PN-II-ID-PCE-2012-4-0154** | Fizica | Pantelica | Dan-Emanoil | Horia Hulubei National Institute of Physics and Nuclear Engineering, IFIN - HH | Spectroscopy of high spin states in nuclei near the N=38 shell gap | 63.33** |
| 51** | PN-II-ID-PCE-2012-4-0127** | Fizica | Logofatu | Petre | Institutul National de Cercetare-Dezvoltare pentru Fizica Laserilor, Plasmei si Radiatiei | Sensitivity-optimized scatterometry by means of a new type of grating anomaly | 62.33** |

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| 52** | PN-II-ID-PCE-2012-4-0134** | Fizica | Coldea | Marin | Babes-Bolyai University, Faculty of Physics | Local magnetic moments in intermetallic compounds based on transition elements | 61.67** |
| 53** | PN-II-ID-PCE-2012-4-0515** | Fizica | Felea | Daniel | Institute of Space Science | Intermittent and resonant type behaviors of the chaotic nuclear billiard | 61** |
| 54** | PN-II-ID-PCE-2012-4-0405** | Fizica | Niculescu | Ecaterina Cornelia | Universitatea Politehnica Bucuresti | Tailoring the optoelectronic properties of laser-driven semiconductor nanostructures by the dielectric confinement effect | 59** |
| 55** | PN-II-ID-PCE-2012-4-0550** | Fizica | BUZEA | Calin | National Institute of Research and Development for Technical Physics | In pursuit of new confinement and acceleration methods for charged particles and neutrals using an original complex magnetic field configuration | 56** |
| 56** | PN-II-ID-PCE-2012-4-0139** | Fizica | Petrescu | Emil | Universitatea Politehnica din București | Investigation of nano-composite materials based on liquid crystals | 55.67** |
| 57** | PN-II-ID-PCE-2012-4-0647** | Fizica | Plugaru | Neculai | INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE PENTRU FIZICA MATERIALELOR | Experiment and ab initio Calculations on Crystal and Magnetic Structures of RMn2O5 Bulk and Film Systems (R= 4f or 5d element) | 55** |
| 58** | PN-II-ID-PCE-2012-4-0108** | Fizica | Vamos | Calin | Academia Romana Filiala Cluj-Napoca | Scale invariance of the superstatistical phenomena with applications in financial markets evolution | 53** |
| 59** | PN-II-ID-PCE-2012-4-0671** | Fizica | Constantinescu | Radu Dan | University of Craiova | NEUROFIN - MODELS OF NONLINEAR DYNAMICS IN NEUROSCIENCES AND FINANCE | 50.67** |
| 60** | PN-II-ID-PCE-2012-4-0438** | Fizica | Culetu | Hristu | Ovidius University of Constanta | Spherical Rindler-type Spacetime with Applications in Dark Energy Stars and Cosmological Black Holes | 43.33** |
| 61** | PN-II-ID-PCE-2012-4-0506** | Fizica | Maricel | Agop | "Gheorghe Asachi" Technical University of Iasi | NONLINEARITY AND CHAOS IN COMPLEX PHYSICAL SYSTEMS AND MACROECONOMIC SYSTEMS. MODELING AND PREDICTABILITY. | 33.01** |

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