

**Program IDEI\_Proiecte de Cercetare Exploratorie\_Competitie 2012**  
**Rezultate finale\_Stiinte Inginesti**

Nr. Crt.	Cod Proiect	Domeniu	Nume	Prenume	Institutie	Titlu	Punctaj final
1	PN-II-ID-PCE-2012-4-0033	Stiinte ingineresti	BUJOREANU	Leandru-Gheorghe	Gheorghe Asachi Technical University of Iasi	Novel method for improving shape memory properties by atomic migration controlling	90
2	PN-II-ID-PCE-2012-4-0634	Stiinte ingineresti	SUSAN-RESIGA	Romeo Florin	"Politehnica" University of Timisoara	Self-induced instabilities of the swirling flow in hydraulic turbines far from the best efficiency regime	89.67
3	PN-II-ID-PCE-2012-4-0654	Stiinte ingineresti	Banciu	Marian Gabriel	National Institute of Materials Physics	Investigations on advanced dielectric materials and structures in Terahertz and millimeter waves	88.33
4	PN-II-ID-PCE-2012-4-0437	Stiinte ingineresti	Grimberg	Raimond	National Institute of Research and Development for Technical Physics	Metallic strip gratings in sub-wavelength regime: application to electromagnetic non-destructive evaluation and sensors design	87.34
5	PN-II-ID-PCE-2012-4-0632	Stiinte ingineresti	Chicinas	Ionel	Technical University of Cluj-Napoca	Soft magnetic nanocrystalline/nanostructured powders and compacts obtained by mechanosynthesis and spark plasma sintering	87.34
6	PN-II-ID-PCE-2012-4-0104	Stiinte ingineresti	Utu	Ion-Dragos	"Politehnica" University of Timisoara	Improvement of the titanium wear resistance by electron beam remelting of the pre-deposited thermal sprayed coatings	87
7	PN-II-ID-PCE-2012-4-0370	Stiinte ingineresti	BENEA	Lidia	Dunarea de Jos University of Galati	New hybrid (inorganic-organic) functionalization of biomaterials (metals alloys) surfaces with functional molecules by electrochemical techniques	87
8	PN-II-ID-PCE-2012-4-0023	Stiinte ingineresti	Munteanu	Ligia	Institute of Solid Mechanics of Romanian Academy	Locally Resonant Sonic Composites with Applications to Mechanics	86.34
9	PN-II-ID-PCE-2012-4-0245	Stiinte ingineresti	Balan	Corneliu	Universitatea Politehnica din Bucuresti	Rheometry of complex fluids in presence of patterned surfaces	85.67
10	PN-II-ID-PCE-2012-4-0239	Stiinte ingineresti	Buiu	Catalin	Universitatea Politehnica din Bucuresti	Bioinspired techniques for robotic swarms security	84.66
11	PN-II-ID-PCE-2012-4-0292	Stiinte ingineresti	Gyorgy	Eniko	Institutul National de Cercetare Dezvoltare pentru Fizica Laserilor, Plasmei si Radiatiei	Processing and immobilization by laser techniques of carbon based nanocomposite materials for high performance optoelectronic devices	84.34
12	PN-II-ID-PCE-2012-4-0222	Stiinte ingineresti	Cristea	Vasile-Mircea	Universitatea Babes-Bolyai	Reducing greenhouse gas (GHG) emissions from urban Wastewater Treatment Systems by means of model based control and optimization	83.33
13	PN-II-ID-PCE-2012-4-0483	Stiinte ingineresti	Bildea	Costin Sorin	University "Politehnica" of Bucharest	Novel reactor concepts for coupling endothermic and exothermic reactions	83.33
14	PN-II-ID-PCE-2012-4-0397	Stiinte ingineresti	Raducanu	Doina	University Politehnica of Bucharest	Ultra-strength controlling mechanisms by Strain Engineering in $\beta$ -Ti alloys	82
15	PN-II-ID-PCE-2012-4-0051	Stiinte ingineresti	RUSU	Eugen Victor Cristian	Universitatea Dunarea de Jos din Galati	REMARC - Renewable Energy in MARine environment and the impact of its extraction in the Romanian Coastal zones	81.67

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16	PN-II-ID-PCE-2012-4-0358	Stiinte ingineresti	Herisanu	Nicolae	Politehnica University of Timisoara	Analytical approaches to nonlinear vibrations in mechanical systems	81.67
17	PN-II-ID-PCE-2012-4-0097	Stiinte ingineresti	Chiper	Doru Florin	Technical University Gh.Asachi Iasi	A New Design Approach for VLSI Algorithms and Architectures for Key Multimedia Blocks	81.66
18	PN-II-ID-PCE-2012-4-0163	Stiinte ingineresti	Branzoi	Ioan Viorel	University Politehnica of Bucharest	Innovative design for new types of batteries based on Na ion for the possible replacement of Li-ion batteries	81.34
19	PN-II-ID-PCE-2012-4-0474	Stiinte ingineresti	Duma	Virgil-Florin	Aurel Vlaicu University of Arad	Optomechatronic devices and systems for the modulation of light with applications in Optical Coherence Tomography (OCT)	81.33
20	PN-II-ID-PCE-2012-4-0529	Stiinte ingineresti	Kusko	Mihaela	The National Institute for Research and Development in Microtechnologies -IMT Bucharest	Hybrid nano-architectures based on silicon for light energy conversion	81.33
21	PN-II-ID-PCE-2012-4-0541	Stiinte ingineresti	Kusko	Cristian	The National Institute for Research and Development in Microtechnologies -IMT Bucharest	Plasmon waveguides and devices based on conductive transparent materials	81.33
22	PN-II-ID-PCE-2012-4-0024	Stiinte ingineresti	Chiroiu	Veturia	Institute of Solid Mechanics of Romanian Academy	Theoretical and experimental evaluation of the acoustic cloaking theory	80.34
23	PN-II-ID-PCE-2012-4-0297	Stiinte ingineresti	Lavric	Vasile	University Politehnica of Bucharest	Adaptive strategy for optimal control of integrated water using and wastewater treatment networks through dynamic behavior analysis	80.33
24	PN-II-ID-PCE-2012-4-0460	Stiinte ingineresti	Coltuc	Dinu	Valahia University Targoviste	REversible Watermarking: Algorithms, Results, Data - REWARD	80.33
25	PN-II-ID-PCE-2012-4-0276	Stiinte ingineresti	Rasvan	Vladimir	University of Craiova	Automatic Control of the Systems Described by Equations of Conservation Laws.	80.01
26	PN-II-ID-PCE-2012-4-0101	Stiinte ingineresti	Lelea	Dorin	University Politehnica of Timisoara	The fundamental research on passive mixing of nanofluids in microchannels	79.34
27	PN-II-ID-PCE-2012-4-0212	Stiinte ingineresti	Marinca	Vasile	Universitatea Politehnica Timisoara	New optimal analytical techniques applied in the study of nonlinear problems in mechanical engineering	79.33
28	PN-II-ID-PCE-2012-4-0356	Stiinte ingineresti	ILIE	Mariana	Politehnica University of Timisoara, Mechanical Faculty	Integrated approach of metal-polymer laser welding	79
29	PN-II-ID-PCE-2012-4-0472	Stiinte ingineresti	Belega	Daniel	Politehnica University of Timisoara, Faculty of Electronics and Telecommunications	Accurate Estimation of Signal Parameters by Means of Interpolated DFT Methods and Sine-Fitting Algorithms	78.67
30	PN-II-ID-PCE-2012-4-0312	Stiinte ingineresti	Zamfirescu	Calin	INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE PENTRU ELECTROCHIMIE SI MATERIE CONDENSATA TIMISOARA	Hydrogen, power and heat generation with a guided-light monolithic photoreactor – solar cell hybrid receiver	78.33

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31	PN-II-ID-PCE-2012-4-0553	Stiinte ingineresti	BOZGA	GRIGORE	University Politehnica of Bucharest	New silicon carbide supported catalysts for hydrocarbons oxidation	77.67
32	PN-II-ID-PCE-2012-4-0334	Stiinte ingineresti	Stefanescu	Mircea	Universitatea Politehnica din Timisoara	Development of nanostructured transition metal oxides with targeted properties for technological and biomedical applications	77.01
33	PN-II-ID-PCE-2012-4-0517	Stiinte ingineresti	Pavel	Marilena D.	SC STRAERO-(INSTITUTUL PENTRU CALCULUL SI EXPERIMENTAREA STRUCTURILOR AERO-ASTRONAUTICE) SA	NEW METHODS FOR IMPROVED HELICOPTER HANDLING QUALITIES AND PILOT INDUCED OSCILLATION PREVENTION	76.67
34	PN-II-ID-PCE-2012-4-0083	Stiinte ingineresti	Barabas	Reka	Babes-Bolyai University	Novel applications of flame spraying technology in the fabrication of nano-apatites coatings and their chemical/biological characterization	76.66
35	PN-II-ID-PCE-2012-4-0153	Stiinte ingineresti	Fara	Laurentiu	University Politehnica of Bucharest	Hybrid Solar Cells: Simulation Platform for Design, Testing and New Materials	76
36	PN-II-ID-PCE-2012-4-0158	Stiinte ingineresti	Eugen	Axinte	Gheorghe Asachi Technical University of Iasi	Researches on the development of innovative methods for obtaining Aluminium-based amorphous structures(Al-based "Metallic Glasses")	76
37	PN-II-ID-PCE-2012-4-0562	Stiinte ingineresti	Soreanu	Gabriela	Technical University "Gheorghe Asachi" of Iasi	Enhanced biological removal of highly hydrophobic organics from air (BRHYO)	75.67
38	PN-II-ID-PCE-2012-4-0121	Stiinte ingineresti	Tofan	Lavinia	"Gheorghe Asachi" Technical University of Iasi	TREATMENT AND VALORISATION OF WASTE MATERIALS FOR THE REMOVAL OF TOXIC AND CARCINOGENIC POLLUTANTS FROM AQUEOUS EFFLUENTS (WAREV)	75
39**	PN-II-ID-PCE-2012-4-0592**	Stiinte ingineresti	Rusu	Corneliu	UNIVERSITATEA TEHNICA CLUJ-NAPOCA	Efficient Algorithms and Low-Complexity Sensor Network Modelling for Wildlife Areas Monitoring and Intruder Detection	74.33**
40**	PN-II-ID-PCE-2012-4-0413**	Stiinte ingineresti	Stoica	Adrian-Mihail	University Politehnica of Bucharest	Optimal Control and Filtering Methods for Networked Systems with Fading Communication Channels	73.67**
41**	PN-II-ID-PCE-2012-4-0542**	Stiinte ingineresti	Gogu	Constantin Radu	Technical University of Civil Engineering (UTCB)	Hybrid model of hydraulic interaction between groundwater and lined sewer systems	73.33**
42**	PN-II-ID-PCE-2012-4-0551**	Stiinte ingineresti	DOGARU	Radu	UNIVERSITATEA POLITEHNICA BUCURESTI	Efficient Smart Sensing Architectures based on Natural Computing Methods	73**
43**	PN-II-ID-PCE-2012-4-0326**	Stiinte ingineresti	Galaction	Anca Irina	"Gr.T.Popa" University of Medicine and Pharmacy Iasi	Non-conventional systems for aerobic fermentation - Utilisation of oxygen-vectors in biosynthesis of bioactive compounds	72.66**
44**	PN-II-ID-PCE-2012-4-0420**	Stiinte ingineresti	Lucaci	Mariana	National Institute for Research and Development in Electrical Engineering ICPE-CA	Nanostructured METal matrix composites reinforced with carbon nanotubes	72.33**
45**	PN-II-ID-PCE-2012-4-0205**	Stiinte ingineresti	TOSA	Monica Ioana	Babes-Bolyai University	A new practical approach based on the biocatalysis- click chemistry tandem for the large scale production of the enantiopure building blocks	72**

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46**	PN-II-ID-PCE-2012-4-0510**	Stiinte ingineresti	Catrinescu	Cezar	Gheorghe Asachi Technical University of Iasi	INNOVATIVE METHODS TO IMPROVE THE PERFORMANCES OF HETEROGENEOUS FENTON-LIKE CATALYSTS IN THE OXIDATION OF ORGANIC POLLUTANTS	72**
47**	PN-II-ID-PCE-2012-4-0231**	Stiinte ingineresti	Patachia	Florica Silvia Cristina	Transilvania University of Brasov	Engineering of wooden materials based on their interaction with ionic liquids	71**
48**	PN-II-ID-PCE-2012-4-0544**	Stiinte ingineresti	HANGAN	HORIA MIHAI	University Politehnica of Bucharest	WAKE AND TOPOGRAPHIC EFFECTS FOR WIND FARM DEVELOPMENT	71**
49**	PN-II-ID-PCE-2012-4-0563**	Stiinte ingineresti	Soare	Sorin	National Institute for Research and Development for Cryogenic and Isotopic Technologies	Wolfram Coated Plasma Facing Components Investigation	71**
50**	PN-II-ID-PCE-2012-4-0235**	Stiinte ingineresti	Paulescu	Marius	West University of Timisoara	Smoothing and forecasting the ramp power of distributed photovoltaic plants	70.66**
51**	PN-II-ID-PCE-2012-4-0087**	Stiinte ingineresti	Nicu	Bizon	UNIVERSITY OF PITESTI	Hybrid Power Source architecture with capability of energy harvesting control from multiple-sources and energy management unit of load following type	70**
52**	PN-II-ID-PCE-2012-4-0333**	Stiinte ingineresti	Dan	Daniel	POLITEHNICA UNIVERSITY OF TIMISOARA	Innovative Composite Steel - Concrete Structural Systems for Buildings placed in Seismic Areas	70**
53**	PN-II-ID-PCE-2012-4-0613**	Stiinte ingineresti	MAZILU	TRAIAN	University Politehnica of Bucharest	Research on the dynamics of railway vehicle-track interaction at the stability limit	70**
54**	PN-II-ID-PCE-2012-4-0584**	Stiinte ingineresti	Borangiu	Theodor	University Politehnica of Bucharest	A Service Oriented Framework for Distributed, Intelligent Multi-Agent Manufacturing Execution System Development and Total Enterprise Integration	69**
55**	PN-II-ID-PCE-2012-4-0462**	Stiinte ingineresti	Gheorghies	Constantin	Dunarea de Jos University of Galati, Romania	PHOTOLUMINESCENT PRASEODYM-DOPED CALCIUM TITANATE NANOSTRUCTURES FOR OPTOELECTRONIC APPLICATIONS	68.66**
56**	PN-II-ID-PCE-2012-4-0267**	Stiinte ingineresti	Adrian	Postelnicu	Universitatea Transilvania Brasov	Special Topics in Blood Flow Pattern and Transport Processes in the Human Vascular System	68.34**
57**	PN-II-ID-PCE-2012-4-0368**	Stiinte ingineresti	Constantinescu	Dan Mihai	University POLITEHNICA of Bucharest	Assessment of constitutive parameters in cohesive zone models of adhesively bonded joints	68**
58**	PN-II-ID-PCE-2012-4-0077**	Stiinte ingineresti	Chiriac	Aurica	Petru Poni Macromolecular Chemistry Institute	Hybrid nanoparticles incorporating antioxidant structures: Design strategies and biological evaluation	67.67**
59**	PN-II-ID-PCE-2012-4-0434**	Stiinte ingineresti	Tanase	Dobre	Politehnica University of Bucharest	Investigation of transport properties of bacterial cellulose membranes and bacterial cellulose hybrid composites	67**
60**	PN-II-ID-PCE-2012-4-0031**	Stiinte ingineresti	Ancau	Mircea	Technical University of Cluj-Napoca	Metaheuristic hybrid algorithm for solving optimal strip packing of polygons in industrial application	65**

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61**	PN-II-ID-PCE-2012-4-0250**	Stiinte ingineresti	Chilibon	Irinela	National Institute of Research and Development for Optoelectronics	Composite materials and structures for sensor applications	65**
62**	PN-II-ID-PCE-2012-4-0080**	Stiinte ingineresti	Vizireanu	Dragos Nicolae	University Politehnica of Bucharest	Contributions to the optimization and development of non-watermarking multimedia content authentication algorithms for forensics applications	64.67**
63**	PN-II-ID-PCE-2012-4-0029**	Stiinte ingineresti	Popescu	Theodor Dan	National Institute for Research and Development in Informatics	Performance Improvement of Independent Component Analysis with Application in Blind Source Separation	64**
64**	PN-II-ID-PCE-2012-4-0046**	Stiinte ingineresti	FLORICAU	Dan	University POLITEHNICA of Bucharest	New multilevel converters for a sustainable future of electrical energy	64**
65**	PN-II-ID-PCE-2012-4-0656**	Stiinte ingineresti	Nemes	Ovidiu	Technical University of Cluj-Napoca	Non-linear analysis and modelling of adhesive bonded joints assemblies	63.34**
66**	PN-II-ID-PCE-2012-4-0520**	Stiinte ingineresti	Isvoranu	Dragos	University Politehnica Bucharest	Nature inspired fluid manipulation and control techniques	62.33**
67**	PN-II-ID-PCE-2012-4-0014**	Stiinte ingineresti	Teodor	Virgil Gabriel	Dunarea de Jos University of Galati	Technology for Generating Error Compensation using Thermo Mechanical Deformable Virtual Tools Models	61**
68**	PN-II-ID-PCE-2012-4-0636**	Stiinte ingineresti	Dumitrescu	Horia	Institute of Mathematical Statistics and Applied Mathematics Gheorghe Mihoc - Caius Iacob	Active and passive lift force augmentation concepts on wind turbine performance with focus on the separate stall-flow	60.66**
69**	PN-II-ID-PCE-2012-4-0429**	Stiinte ingineresti	Rada	Elena Cristina	University POLITEHNICA of Bucharest	Advanced combined treatment processes for MBT and landfills leachate and directly polluted soils in order to reduce the impact on human health/DEVIN.	59.58**
70**	PN-II-ID-PCE-2012-4-0430**	Stiinte ingineresti	Marin	Marin	TRANSILVANIA University of Brasov	RASPUNSUL ENERGETIC DISIPATIV IN STRUCTURI DIN MATERIALE COMPOZITE MODELAT LA NIVEL MICROSTRUCTURAL	54.33**
71**	PN-II-ID-PCE-2012-4-0606**	Stiinte ingineresti	Popescu	Daniela	Gheorghe Asachi Technical University of Iasi	Data analysis methods for technical and economical investigation of building energy characteristics	50.33**
72**	PN-II-ID-PCE-2012-4-0485**	Stiinte ingineresti	Castravete	Stefan	Caelynx Europe	Finite element biomechanical arm model (FEBARM)	49.33**
73**	PN-II-ID-PCE-2012-4-0074**	Stiinte ingineresti	Bica	Alexandru Mihai	University of Oradea	Optimal interpolation and iterated approximation algorithms applied to aerodynamics, image processing, and to fuzzy approximation and delay equations	47.33**
74**	PN-II-ID-PCE-2012-4-0120**	Stiinte ingineresti	Radu	Adrian-George	Universitatea Politehnica Timisoara	Buckling and post-buckling of anisotropic plates and shells with and without delamination	35**

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