

**PROGRAM IDEI\_PROIECTE DE CERCETARE EXPLORATORIE\_COMPETITIA 2011  
STIINTA MATERIALELOR**

NR. CRT.	COD PROIECT	NUME DIRECTOR	PRENUME DIRECTOR	INSTITUTIE	TITLU	BUGET APROBAT AN 2013
1	PN-II-ID-PCE-2011-3-0479	Alexandrescu	Rodica	Institutul National pentru Fizica Laserilor, Plasmei si Radiatiei	Novel approach to nanoscale, multi-functional materials, to reduce toxics and bacteria and to manage resources more efficiently. Acronym: MULTINANEF	248,319.97
2	PN-II-ID-PCE-2011-3-0916	Anghel	Dan-Florin	Institutul de Chimie Fizica "Ilie Murgulescu" al Academiei Romane	Investigating micro- and nanostructured colloidal systems by fluorescently labeled polymers and probes	232,969.28
3	PN-II-ID-PCE-2011-3-0238	Ardelean	Ioan	Universitatea Tehnica din Cluj-Napoca	Nuclear magnetic resonance studies of surface effects on dynamics of molecules confined inside porous media with magnetic impurities	140,582.96
4	PN-II-ID-PCE-2011-3-0442	Baia	Lucian	UNIVERSITATEA BABES BOLYAI	Designing composite nanoarchitectures for H2 production and environmental depollution	225,745.43
5	PN-II-ID-PCE-2011-3-0623	Baibarac	Mihaela	Institutul National de Cercetare Dezvoltare pentru Fizica Materialelor	One-dimensional composites based on carbon nanotubes and conjugated polymers for applications in energy storage and optoelectronic devices field	225,745.43
6	PN-II-ID-PCE-2011-3-0199	BERCEA	Maria	Institutul de Chimie Macromoleculara Petru Poni Iasi	POLYMER MATERIALS WITH SMART PROPERTIES	191,883.61
7	PN-II-ID-PCE-2011-3-0129	Biris	Alexandru Radu	Institutul National de Cercetare Dezvoltare pentru Tehnologii Izotopice si Moleculare	Synthesis of high purity graphene by CCVD-IH method on noble-metal catalyst for studying DNA oxidation	231,212.53
8	PN-II-ID-PCE-2011-3-1016	Braic	Mariana	Institutul National de Optoelectronica	High entropy alloy carbides as Next Generation Coatings - HOPING	225,745.43
9	PN-II-ID-PCE-2011-3-0164	Buruiana	Emil Constantin	Institutul de Chimie Macromoleculara Petru Poni	Conception and achievement of hybrid nanocomposites based on novel polymer structures for biomedical and optical applications in nanotechnology	214,458.15
10	PN-II-ID-PCE-2011-3-0473	Carp	Oana	Institutul de Chimie Fizica "Ilie Murgulescu" al Academiei Romane	Eco-friendly design/synthesis of nanooxides: control of size, shape, morphology and functionalization of ZnO by polysaccharide-assisted methodologies	201,477.79
11	PN-II-ID-PCE-2011-3-0384	Circu	Viorel	Universitatea din Bucuresti	Luminescent ionic liquid crystals	223,210.30
12	PN-II-ID-PCE-2011-3-0041	Coman	Simona	Universitatea din Bucuresti	Heterogeneous organocatalysts for the green synthesis of chiral glycinate intermediates	228,567.24
13	PN-II-ID-PCE-2011-3-0407	Craciun	Doina	INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE PENTRU FIZICA LASERILOR, PLASMEI SI RADIATIEI	Investigations of ZrC thin films properties for TRISO nuclear fuel applications	228,567.24

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14	PN-II-ID-PCE-2011-3-0888	Cristescu	Rodica	Institutul National de Cercetare Dezvoltare pentru Fizica Laserilor, Plasmei si Radiatiei	FUNCTIONALIZED FLAVONOID-BIOPOLYMER NANOSTRUCTURED COMPOSITES PROCESSED FOR ANTIBACTERIAL ACTIVITY	199,229.37
15	PN-II-ID-PCE-2011-3-0036	DADARLAT	DORIN NICOLAE	Institutul National de Cercetare Dezvoltare pentru Tehnologii Izotopice si Moleculare	High Accuracy Photopyroelectric Calorimetry for Magnetic Nanofluids	230,260.33
16	PN-II-ID-PCE-2011-3-0128	Darabantu	Mircea	Universitatea BABES-BOLYAI Cluj-Napoca	ITERATIVE SYNTHESIS. NOVEL DENDRITIC MELAMINES INCORPORATING SERINOLIC UNITS. DESIGN, PREPARATION, STRUCTURAL ANALYSIS AND POTENTIAL APPLICATIONS.	246,316.70
17	PN-II-ID-PCE-2011-3-0346	Diudea	Mircea Vasile	Universitatea Babes-Bolyai	Dendrimer-carbon nanostructure conjugates as drug delivery support	208,358.96
18	PN-II-ID-PCE-2011-3-0300	Dragan	Ecaterina Stela	Institutul de Chimie Macromoleculara Petru Poni	Porous ionic matrices with tailored architectures and responsiveness to host bioactive compounds	220,101.79
19	PN-II-ID-PCE-2011-3-0868	Dumitriu	Emil	Universitatea Tehnica "Gheorghe Asachi" din Iasi	New Approach to Prepare Highly Dispersed non-Noble (Bi)metallic Nanoparticles Supported on Ordered Mesoporous Silicas for Catalytic Applications.	235,068.71
20	PN-II-ID-PCE-2011-3-0035	Farcas	Aurica	INSTITUTUL DE CHIMIE MACROMOLECULARA „PETRU PONI”	Polyrotaxanes based on pi-Conjugated backbone for Micro/Optoelectronic Applications	237,032.70
21	PN-II-ID-PCE-2011-3-0544	Fechete	Radu	Universitatea Tehnica din Cluj-Napoca	Structure-dynamics-properties relationships and aging effects in nanocomposite elastomers and proton exchange membranes	221,230.52
22	PN-II-ID-PCE-2011-3-0773	Frunza	Ligia	Institutul National de Cercetare Dezvoltare pentru Fizica Materialelor	Complex characterization of coated/functionalized textiles: wettability, direct analysis, spectroscopic and structural properties in correlation	225,745.43
23	PN-II-ID-PCE-2011-3-0223	Garea	Sorina Alexandra	Universitatea Politehnica din Bucuresti	New polybenzoxazine-based nanohybrids	135,447.26
24	PN-II-ID-PCE-2011-3-0446	Gartner	Mariuca	Institutul de Chimie Fizica Ilie Murgulescu al Academiei Romane	Improved TCO materials for the next generation transparent electronics and their complex investigation by wide range ellipsometry from UV to Mid IR	224,842.44
25	PN-II-ID-PCE-2011-3-0643	Georgescu	Serban	Institutul National de Cercetare-Dezvoltare pentru Fizica Laserilor, Plasmei si Radiatiei	Infrared-infrared and infrared-ultraviolet upconversion processes in rare-earth doped phosphors	225,745.43
26	PN-II-ID-PCE-2011-3-0274	GRIGORAS	MIRCEA	Institutul de Chimie Macromoleculara "P. Poni" Iasi	NOVEL CONJUGATED POLYMER STRUCTURES FOR HIGH EFFICIENCY ALL-ORGANIC SOLAR CELLS	225,745.43

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27	PN-II-ID-PCE-2011-3-0650	Gurlui	Silviu	UNIVERSITATEA ALEXANDRU IOAN CUZA IASI	The study of polymer-laser radiation interactions in controlled atmosphere. Laser ablation nanostructured thin films layers. Applications.	102,714.17
28	PN-II-ID-PCE-2011-3-0668	Ianculescu	Adelina - Carmen	Universitatea POLITEHNICA din Bucuresti	Size effects, formation mechanisms, and properties in micro- and nanostructured perovskite ferroic systems prepared by alternative methods	121,902.53
29	PN-II-ID-PCE-2011-3-0535	Ionescu	Anca-Luiza	Universitatea Politehnica din Bucuresti	Ordered Soft Materials to Improve Dye-sensitized Solar Cells' Efficiency	227,400.59
30	PN-II-ID-PCE-2011-3-0408	Ionita	Petre	Universitatea din Bucuresti	Multifunctional organic stable radicals in supramolecular high-spin architectures and materials	197,527.25
31	PN-II-ID-PCE-2011-3-1065	Leca	Victor	Institutul National de Cercetare-Dezvoltare pentru Microtehnologie - IMT Bucuresti	Experimental investigation on the order parameter symmetry of the superconducting Sr1-xLaxCuO2 thin films using SQUIDS	140,075.04
32	PN-II-ID-PCE-2011-3-0350	Lupu	Dan Miron	Institutul National de Cercetare-Dezvoltare pentru Tehnologii Izotopice si Moleculare	Issues and challenges for hydrogen storage in composites with metal-organic frameworks	246,694.15
33	PN-II-ID-PCE-2011-3-0038	Mangalagiu	Ionel	Universitatea "Alexandru Ioan Cuza" Iasi	New polifunctional nitrogen derivatives (heterocycles, podants and macrocycles) as smart versatile building blocks for multiple tasks	174,952.70
34	PN-II-ID-PCE-2011-3-0218	Mareci	Daniel	Universitatea Tehnică „Gheorghe Asachi” din Iași	Corrosion predictions of titanium-based biomaterials with non-homogenous micro and nanostructured surfaces using neural networks	198,155.72
35	PN-II-ID-PCE-2011-3-0735	MIHAILESCU	Ion N.	Institutul National de Cercetare-Dezvoltare pentru Fizica Laserilor, Plasmei si Radiatiei (INFLPR)	Multi-parameter nanosensors synthesized by advanced metal oxide technologies	213,893.79
36	PN-II-ID-PCE-2011-3-0745	Mitoseriu	Liliana	Universitatea Alexandru Ioan Cuza Iasi	Material design, preparation, properties and modeling of multifunctional oxides structures for microelectronics and new energy storage applications	258,749.41
37	PN-II-ID-PCE-2011-3-0856	Neda	Ion	INSTITUTUL NATIONAL DE CERCETARE-DEZVOLTARE PENTRU ELECTROCHIMIE SI MATERIE CONDENSATA TIMISOARA	IMMUNOMODULANTE FLUOROLYCOPEPTIDE MOLECULAR ARCHITECTURES	243,643.88
38	PN-II-ID-PCE-2011-3-0622	Nichifor	Marieta	Institutul de Chimie Macromoleculara "Petru Poni"	Nanosized micelles and vesicles from amphiphilic block copolymers with polysaccharides as hydrophilic blocks. A versatile route to new biomaterials	225,745.43
39	PN-II-ID-PCE-2011-3-0566	Nistor	Magdalena	Institutul National pentru Fizica Laserilor, Plasmei si Radiatiei (INFLPR)	Multifunctional zinc oxide thin films	234,775.24

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40	PN-II-ID-PCE-2011-3-0232	Ovidiu	Crisan	Institutul National de Cercetare Dezvoltare pentru Fizica Materialelor	Advanced architected self-assembled core-shell nanoparticles as 2D arrays of magnetic nanosensors	261,864.69
41	PN-II-ID-PCE-2011-3-0876	Pana	Ioan - Ovidiu	Institutul National de Cercetare-Dezvoltare pentru Tehnologii Izotopice si Moleculare	Core-shell composite nanoparticles based on Fe and Pt having adjustable magnetic, dispersive and functional properties	207,685.79
42	PN-II-ID-PCE-2011-3-0060	Parvulescu	Vasile	UNIVERSITATEA DIN BUCURESTI	Heterogeneous Catalytic Synthesis of Amine derivatives via Hydroamination and N-C coupling reactions	225,745.43
43	PN-II-ID-PCE-2011-3-0120	Picu	R. Catalin	Universitatea Politehnica Bucuresti	Next generation of epoxies for structural applications: nanocomposites with enhanced strength and toughness	245,046.66
44	PN-II-ID-PCE-2011-3-0708	Popa	Marcel	UNIVERSITATEA TEHNICA GHEORGHE ASACHI DIN IASI	Innovative electroluminescent nanocomposites for a new approach in polymer based light emitting devices	223,036.48
45	PN-II-ID-PCE-2011-3-0125	Pruneanu	Stela Maria	Institutul National de Cercetare-Dezvoltare pentru Tehnologii Izotopice si Moleculare	Graphene-metal nanoparticles based electrodes for detection of pharmaceutical pollutants	193,418.68
46	PN-II-ID-PCE-2011-3-0505	Rau	Ileana	Universitatea Politehnica Bucuresti	Elaboration et caracterisation of functional biopolymers for photonic and electronic applications	220,581.50
47	PN-II-ID-PCE-2011-3-0453	Rezlescu	Nicolae	Institutul National de Cercetare Dezvoltare pentru Fizica Tehnica-IFT Iasi	NEW NANOSTRUCTURED OXIDES MATERIALS, FERRITES AND PEROVSKITES, FOR THE CATALYTIC COMBUSTION OF SOME GASES IN LOW CONCENTRATIONS	199,496.65
48	PN-II-ID-PCE-2011-3-0403	Secu	Mihail	Institutul National de Fizica Materialelor	INFRARED-PUMPED UPCONVERSION GLASS-CERAMIC NANORODS FOR PHOTONICS APPLICATIONS	237,032.70
49	PN-II-ID-PCE-2011-3-0933	Silvestru	Cristian	UNIVERSITATEA BABES-BOLYAI	NEW ORGANOMETALLIC COMPOUNDS OF HEAVY GROUP 15 METALS (ANTIMONY, BISMUTH) – POTENTIAL USE IN CATALYSIS	222,923.61
50	PN-II-ID-PCE-2011-3-0659	Silvestru	Anca	Universitatea Babes-Bolyai din Cluj-Napoca	New complexes with metal-chalcogen bonds as potential precursors for electronic materials	237,032.70
51	PN-II-ID-PCE-2011-3-0937	Silvia	Ioan	Institutul de Chimie Macromoleculara "Petru Poni" Iasi	Complex systems based on polymers containing alicyclic structures for high performance materials	169,309.07
52	PN-II-ID-PCE-2011-3-0270	SIRGHI	LUCEL	UNIVERSITATEA ALEXANDRU IOAN CUZA IASI	PLASMA FUNCTIONALIZATION OF NANOSCOPIC PROBES	116,936.13

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53	PN-II-ID-PCE-2011-3-0268	Teodorescu	Valentin Serban	Institutul National de Cercetare Dezvoltare pentru Fizica Materialelor	Microstructural transformations of thin films by pulsed laser irradiation at fluences lower than the ablation threshold	218,973.06
54	PN-II-ID-PCE-2011-3-0534	Tiseanu	Carmen	INSTITUTUL NATIONAL DE CERCETARE DEZVOLTARE PENTRU FIZICA LASERILOR PLASMEI SI RADIATIEI	Temporally and spectrally resolved luminescence of lanthanide's doped tetravalent nano-oxides: A unitary approach	251,028.91
TOTAL						11,469,952.35