

Deposition and coating of thin films, multilayers, and nanostructured materials

P73 **Film continuity studies of refractory metal nano-layers obtained using an improved set-up of the high voltage anodic plasma**

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P74 **Comparison between HiPIMS and PLD Deposition of ZnO and TiO₂ thin films**

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P75 **Biological evaluation and surface characteristics of Si-DLC and Ti-DLC coatings deposited by magnetron sputtering**

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P76 **PLD and MAPLE deposited WO₃ thin films for gas sensors**

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P77 **Copolymer PLCL-PEG-PLCL functional bio-coating obtained by Matrix Assisted Pulsed Laser Evaporation: a deposition parametric study**

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Effects of the Deposition Geometry on Structure and Stoichiometry of PLD Grown Films

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Pulsed Laser Deposition of Nanocrystalline and Amorphous Biocompatible Protective Coatings

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Properties of tungsten, magnesium and carbon composite thin films deposited by PLD

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Polyvinylidene fluoride thin films deposited by MAPLE

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Laser techniques for deposition and microstructuring of layered double hydroxides and organo-modified layered double hydroxides

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Surface modification of PVC for biomedical applications

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In vitro assessment of reinforced biological hydroxyapatite thin films for implantology applications

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Laser processing of ferrocene thin films patterns for sensor application

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Antimicrobial thin films based on ayurvedic plants extracts embedded in a polymeric matrix

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Biocompatible HAp–Ag nanostructured coatings for titanium implants

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Oxide thin film transistors made by pulsed electron beam deposition

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MAPLE fabricated thin coatings based on magnetite nanoparticles embedded into biopolymeric spheres with resistance to microbial colonization

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Selection of antimicrobial Silver-doped Carbon structures by combinatorial pulsed laser deposition

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In vitro degradability and bioactivity of hybrid coatings containing Lactoferrin and Hydroxyapatite embedded in a copolymer matrix

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- P92 **Biocompatibility studies on $(\text{Ba}_{1-x}\text{Ca}_x)(\text{Zr}_y\text{Ti}_{1-y})\text{O}_3$ thin films obtained by laser deposition methods**
V. Ion¹, N.D. Scarisoreanu¹, F. Craciun², R. Birjega¹, A. Bercea¹, A. Bonciu¹, A. Moldovan¹, V. Dinca¹, M. Dinescu¹, L.E. Sima³, M. Icriverzi³, A. Roseanu³
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- P93 **Effect of ZrO_2 coating on the electrochemical behavior and surface properties of 316L stainless steel**
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- P95 **Zinc oxide- a material for the future**
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- P96 **Diffusion in thermoelectric multilayers observed by SIMS**
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P98 **The selection of optimal deposition conditions for producing thin films of Mg-Al LDH using laser techniques**

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P99 **Layered double hydroxides thin films grown by laser techniques for food additives detection**

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P100 **Nanostructured bioactive glass thin films synthesized by pulsed laser deposition onto biodegradable metallic implants**

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P101 **Low transition temperature in strain-free VO₂/TiO₂ epitaxial thin films**

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P102 **MAPLE Deposition of Complex Hybrid Fe₃O₄-PEDOT:PSS-PLGA Coatings**

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P103 **Functionalized Graphene Oxide nanoscale thin films for melanoma therapy**

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P104 **Investigation of Au nanostructures fabricated by laser ablation in air**

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P105 **Zn_{1-x}Fe_xO thin films grown by pulsed laser deposition: from transparent Fe-diluted ZnO wurtzite to magnetic Zn-diluted Fe₃O₄ spinel**

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P106 **Improved stability of LSCF thin films cathode with Gd-doped ceria interface deposited by PLD on YSZ electrolyte**

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P107 **Pulsed Laser Deposition of Thin Catalyst Layers for PEM Fuel Cells**

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P108 **Fe₂O₃-polyaniline based coatings for biomedical applications**

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P109 **MAPLE of Graphene Oxide Nanocomposites**

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P110 **Effect of aluminum electrode nano-patterning on the properties of the laser prepared arylenevinylene polymer based mixed layer**

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P111 **Structural and biological investigations of pulsed laser deposited thin films of biocomposites containing HA and foaming agents**

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P112 **The influence of addition PbO and MnO on PZT thin films**

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P113 **Tungsten bronze Sr_xBa_{1-x}Nb₂O₆ and Ca-doped Sr_xBa_{1-x}Nb₂O₆ thin films by PLD for electro-optic and pyroelectric devices**

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P114 **Strain induced nanoscale phase fluctuations for enhanced dielectric behavior of (1-x)Ba(Zr_{0.2}Ti_{0.8})O_{3-x}(Ba_{0.7}Ca_{0.3})TiO₃ (x = 0.45) epitaxial thin films**

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P115 **Bi-Based Nanostructures Produced by Laser Ablation in Liquid and Their Functional Properties**

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P116 **Organic heterostructures deposited by MAPLE on AZO substrate**

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P117 **MAPLE fabrication of CaPs: Poly (3-hydroxybutyrate-co3-hydroxyvalerate) - based coatings as substrate for bone tissue engineering**

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P118 **Wet chemical synthesis of ZnO-CdS composites with enhanced photocatalytic activity**

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P119 **Mechanical and *in vitro* biological performance of bioglass coatings deposited by magnetron sputtering on dental implant fixtures**

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P120 **MAPLE prepared heterostructures with oligoazomethine: fullerene derivative mixed layer for photovoltaic applications**

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P121 **Role of Substrate Morphology on the Characteristics of Noble Nanoparticles Produced by Laser-induced Deposition**

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P122 **Inter-diffusion studies in stacks of nano-layers of alternating W and B**

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P123 ***In vitro* evaluation of antitumoral and antibacterial activities of Curcumin loaded biodegradable copolymer**

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P124 **Polyaniline grafted lignin coatings fabricated by MAPLE for medical applications**

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P125 **Muramidase embedded into degradable polymers blends for antimicrobial applications**

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P126 **Comparison of different routes for the manufacture of intercalated dodecyl sulfate Mg,Al-layered double hydroxides composite thin films using laser techniques**

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Synthesis of nanomaterials

P127 **Vanadium dioxide: thermochromic properties of nanoparticle stacks versus dense thin film**

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P128 **Method of nano titanium dioxide synthesis by laser pyrolysis targeting photocatalytic applications**

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P129 **Magnetite nanoparticles functionalized with β -pinene modulate virulence, attachment and biofilm formation of opportunistic pathogens**

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P130 **Synthesis of Ti-based nano-particles for photocatalytic reaction by laser ablation in water**

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P131 **Surface Diffusion in PLD/VLS Growing**

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- P132 **Synthesis and Characterization of Hydrophobic Fe₃O₄ Nanoparticles Functionalized with Triphenylphosphine**
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- P133 **MAPLE deposition of Fe₃O₄ nanoparticles functionalized with *Nigella sativa* for antimicrobial applications**
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- P134 **Structural and morphological characterization of MAPLE deposited thin films from TiO₂-SnO₂ NPs obtained by different methods**
^{1,2}A. M. Niculescu, ¹C. T. Fleaca, ¹M. Scarisoreanu, ¹M. Dumitru, ¹C. Luculescu, ¹M. Dinescu, ¹I. Morjan
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- P135 **Investigation of colloidal zinc oxide nanoparticles produced by laser ablation of zinc target in water**
R.G. Nikov¹, N.N. Nedyalkov¹, P.A. Atanasov¹, D.B. Karashanova², J.W. Gerlach³, B. Rauschenbach³, I.N. Mihailescu⁴
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- P136 **Mesoporous carbon obtained by light assisted Evaporation induced self-assembly (LA-EISA)**
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- Photo/laser-induced nanoscale processing**
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- P137 **A study on micro hydroforming using shock wave of 355nm UV-pulsed laser**
G.J. Je¹, H.S. Kim², B.S. Shin³

P138 **UV-LED induced plasmonic and excitonic nanocomposites**

A.A. Smirnov¹, A. Afanasiev¹, N. Ermolaev¹, S. Gusev², N. Biturin¹

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Cutting, drilling, surface patterning and micromachining

P139 **Laser scribing of perovskite thin-film solar cells**

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P140 **Personalized Hip Implants Manufacturing and Testing**

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P141 **R&D on Dental Implants Breakage**

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P142 **High-aspect ratio channels by self-guiding and filamentation of high-power CW CO₂ laser beam in solids**

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P143 **High-speed processing of CIGS thin film solar cells**

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P144 **Laser-induced Coloring of Titanium Alloy Using Nanosecond Pulses Scanning Technology**

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P145 **Experimental analysis and comparison on laser ablations of a cobalt cemented tungsten carbide using various pulse lasers**

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P146 **Three-Dimensional Numerical Simulation of Laser Processing of CFRP**

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P147 **Thermal effect on CFRP ablation with 150W class pulse fiber laser using PCF amplifier**

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P148 **High resolution 2D code marking on PCB using a fiber laser based equipment**

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P149 **Optimization of Laser Induced Color Marking on Metals**

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P150 **Functionalization of medical grade PDMS processed by ns-laser pulses**

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P151 **Fabrication of Periodic ZnO Microdot Arrays by Laser Interference Patterning**

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Surface modification including crystallization, amorphization, phase transformation, and doping

P152 **Morphological and structural study of the laser-induced diamond to graphite transformation**

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P153 **Mapping the optical near field of metallic nanoparticles: applications for high-efficiency photovoltaics**

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P154 **Investigation of the efficiency of Pt/Rd, Pt/Ru and Pt/Co multilayer catalysts in Polymer Electrode Membrane fuel cells**

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P155 **Laser Induced Selective Phase Transition of Molybdenum Disulphide Nanoplatelet Arrays**

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