

Author: Assoc. Prof. Dr. Elena-Manuela STANCIU

Habilitation thesis title: LASER WELDING AND SURFACE ENGINEERING OF ADVANCED MATERIALS

Domain: Industrial Engineering

PUBLICATIONS LIST

RELEVANT PAPERS

1. **E.M. Stanciu** , A. Pascu , C. Croitoru , I. C. Roata, D. Cristea, M.H.Tierean, I. Hulka, I.M. Petre, J. C. Mirza Rosca, *Functional Surfaces via Laser Processing in Nickel Acetate Solution*, **Materials**, 2023, 16, 3087, e-ISSN 1996-1944, **FI 3.4, (Q2)**

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2. **E.M. Stanciu**, A. Pascu, I.C. Roată, C. Croitoru, M. Tierean, J. Mirza Rosca, I. Hulka, *Solar radiation synthesis of functional carbonaceous materials using Al₂O₃/TiO₂-Cu-HA doped catalyst*, **Applied Surface Science**, pp 33–40, 2018, ISSN 0169-4332t, **FI 5.15, (Q1)**

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3. **E.M. Stanciu**, A. Pascu, M.H. Tierean, I. Voiculescu, I.C. Roata, C. Croitoru, I. Hulka, *Dual Coating Laser Cladding of NiCrBSi and Inconel 718*, **Materials and Manufacturing Processes**, Volume 31, Issue 12, pp. 1556-1564, 2016, **FI 2.27**

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4. **E.M. Stanciu**, A. Pascu, I.C. Roata, C. Croitoru, M.H. Tierean, *Laser welding of dissimilar materials*, **Materials Today-Proceedings**, 19, pp 1066-1072, ISSN 2214-7853, 2019.

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PHD THESIS

Title: Research on Nd:YAG laser weldig of stainless steel thin walled components

Domain: Industrial engineering

Thesis supervisor: Prof. Dr. Ing. Gabriel Marius Dumitru

Prof. Dr. Ing. Dănuț Iordăchescu

Public defence 09.09.2011, Politehnica University of Bucharest, Faculty of Engineering and Management of Technological Systems

PATENTS

1. Invention Patent, No. 133180/30.08.2022, *FeCrAl(Y) Type Alloys and Method for Obtaining a Product from this Alloy*, V. Geanta, I. Voiculescu, R. Ștefănoiu, V. Fugaru, **E.M. Stanciu**, A. Pascu, C. Postolache, M.R. Ioan.

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OTHER PAPERS / RELEVANT ACHIEVEMENTS

RESEARCH GRANTS

GRANT DIRECTOR

1. Project: EU-DG RTD Solar Facilities for the European Research Area (SFERA 3) / FRANȚA, Solar synthesis of functional carbonaceous under constant electric charge, 2019
2. Project: EU-DG RTD Solar Facilities for the European Research Area (SFERA 2) / ITALIA, Corrosion and wear behavior of NiCrBSi coatings fabricated by laser cladding, 2016
3. Partnership Project, RESPONSIBLE P1, Contract PCCA 243/2014 - Advanced Metallic Materials for the New Generations of Nuclear Power Plants, 4R, NUCLEARMAT.

MEMBER OF THE RESEARCH TEAM

1. FP7 Project - Reclamation of Gallium, Indium, and Rare-Earth Elements from Photovoltaics, Solid-State Lighting, and Electronics Waste- RECLAIM, Grant agreement no: 309620
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3. Project: EU-DG RTD Solar Facilities for the European Research Area (SFERA 2) / SPAIN, Mechanical properties improvement of Cu₁₀Al laser cladded on aluminum, 2014
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23. Contract PNCDI-Innovation Nr. 1321/2007 - Ecological Installation for Municipal Waste Processing – ECOMAGp
24. Contract PNCD 2/PARTNERIATE, Nr. 72-216/2008, Hybrid Laser-MIG Powder Deposition Technology – LASERDEP

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