

CURRICULUM VITAE

Enikő György

Senior scientific Researcher, 1st degree

INSTITUTE OF ATOMIC PHYSICS

NATIONAL INSTITUTE FOR LASERS, PLASMA AND RADIATION PHYSICS

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EDUCATION

B.Sc in Physics	Faculty of Physics, University of Bucharest, Romania <i>overall mark:9.62</i>	1989-1994
Master in Physics	Faculty of Physics, University of Bucharest, Romania <i>overall mark:10</i>	1994-1995
Ph.D in Physics 10 Febr. 1999	Institute of Atomic Physics, Bucharest, Romania	1995-1999
Post-doctoral Fellowship Spanish Ministry of Education and Culture	University of Barcelona, Spain	2000-2003

PROFESSIONAL ACTIVITY

Research Assistant	Institute of Atomic Physics, National Institute for Lasers, Plasma and Radiations Physics, Bucharest, Romania	1994-1995
Scientific Researcher	Institute of Atomic Physics, National Institute for Lasers, Plasma and Radiations Physics, Bucharest, Romania	1996 – 2006
Senior Scientific Researcher 1 st degree	Institute of Atomic Physics, National Institute for Lasers, Plasma and Radiations Physics, Bucharest, Romania	2006 – present
Senior Scientific Researcher	Institute of Materials Science of Barcelona, Consejo Superior de Investigaciones Cientificas, Spain	2008-present

SCIENTIFIC COLLABORATIONS AND RESEARCH STAGES

1.	University of Salento, Italy
2.	“Johannes Kepler” University Linz, Austria
3.	Institute of Electronic Structures and Lasers, Foundation for Research and Technology of Hellas, FORTH-IESL, Heraklion, Greece
4.	University of Milano, Italy
5.	Institute of Theoretical Physics and Chemistry, Foundation for Research and Technology of Hellas, Athens, Greece
6.	Institute of Electronics, Sofia, Bulgaria
7.	Institute of Solid State Physics, Sofia, Bulgaria
8.	Institute of Physics, Prague, Check Republic
9.	”József Attila University of Szeged, Hungary
10.	University of Barcelona, Spain
11.	Instituto de Tecnologia Quimica e Biologica /Universidade Nova de Lisboa (ITQB/UNL)

12.	Swiss Federal Laboratories for Materials Science and Technology, Lerchenfeldstr 5, CH-9014 St. Gallen, Switzerland
13.	Rutgers University Camden, 227 Penn Street, Camden, New Jersey 08102, United States
14.	ALBA Synchrotron, Barcelona

MAIN FIELDS OF INTEREST:

- Non-conventional laser techniques for advanced materials processing
- Laser-matter interactions, direct laser irradiations using high repetition rate laser pulses, surface engineering: study of physical and chemical mechanisms induced by laser radiation; 3D structures growth; direct laser synthesis of oxide, nitride, and oxynitride layers on the surface of transition metal oxides
- Growth of noble metal-transition metal oxide nanocomposite layers for chemical and biological sensors and photocatalytic applications
- Laser processing and immobilisation of organic and bio-organic materials for medical applications

Recent research lines:

- Synthesis of noble metal nanoparticles, nitrogen doped transition metal oxides, as well as noble metal and transition oxide nanocomposites through laser techniques, for sensing and photocatalytic applications
- Laser processing of nano-entities as carbon nanotubes, graphene, inorganic core-shell quantum dots
- Study of the physical mechanisms taking place during laser processing of nano-entities
- Non-conventional laser techniques for the immobilization of biomolecules and hybrid bio-inorganic materials for medical implants and biosensors

Studied materials:

- nanostructures and thin films: Ti, Si, Ta, TiC, Si₃N₄, SiC, CN_x, CW_x, TiN, TiO₂, TiN_xO_y, WO₃, NiO, ZnO, AlN, CdSe/ZnS quantum dots, Si-Ge nanoparticles, TaO_x, carbon nanotubes, graphene, graphene oxide
- biomaterials - proteins (papain, creatinine, urease, RNase A), polysaccharides, hydroxyapatite (Ca₁₀(PO₄)₆(OH)₂), silica bioglasses
- transition metal oxide (ZnO, TiO₂, WO₃) – noble metal (Au, Ag) nanocomposites.

PARTICIPATION IN RESEARCH PROJECTS

National research contracts:

1. MEC 329/2002 “*Diffusion and recrystallisation of semiconductor materials through direct laser treatment: an innovative process consisting of an unique technological step*”, 2001-2002, Romanian Ministry for Education and Science
2. MEC 328/2002: “*Thin films for magneto-optical sensors, non-linear waveguides by reactive laser deposition: fundamental physical processes and technological developments*”, 2000-2002, Romanian Ministry for Education and Science
3. Romanian Academy 47/2000: “*Study of the physical processes taking place in the ablation plasma during pulsed laser deposition. Establishment of the correlation between the physical parameters of the plasma and the characteristics of the nanometer sized structures obtained by pulsed laser deposition*”, 1998-1999

5. MCT “*Pulsed laser deposition en reactive chemical atmosphere: application to the synthesis of carbon-nitride thin films (C₃N₄)*”, 1997-1998, Romanian Ministry for Education and Science
6. CERES 138: “*Synthesis, characterization and applications of thin films and multistructures of AlN, BN, and SiC obtained by pulsed laser deposition and reactive pulsed laser deposition*”, 2001-2004, Romanian Ministry for Education and Science

International research contracts:

1. Inter-Governmental “*Laser Generated Plasma Investigations and Applications in Thin Films Synthesis*”, 1996-1998, University of Milano, Italy
2. Inter-Governmental “*Laser Deposition of Thin Oxide Films for Applications in Optoelectronics*”, 2001- 2002, University of Lecce, Italy
3. Inter-Governmental “*Deposition and Characterisation of hard thin films*”, 1996-1998, University of Lecce, Italy
4. Inter-Governmental “*Laser deposition of thin films of nitrides and carbides* ”, 1998-2000, Institute of Electronic Structure and Lasers, Fundation for Research and Technology – Hellas, FORTH-IESL, Heraklion, Greece
5. Inter-Governmental “*Laser deposition of thin films of nitrides and carbides* ”, 2000-2002, Institute of Electronic Structure and Lasers, Fundation for Research and Technology – Hellas, FORTH-IESL, Heraklion, Greece
6. Bulgarian Academy of Science “*Optical and electrical investigations of the structures obtained by pulsed laser deposition or laser surface processing*”, 1998-2000, Institute of Solid State Physics, Sofia
7. Bulgarian Academy of Science “*Pulsed laser deposition of oxide thin films*”, 2000-2003, Institute of Electronics, Sofia
8. Bulgarian Academy of Science “*Electrical and Optical Properties of CN_x-Si, WC_x-Si, AlN_x-Si and BN_x-Si*”, 2001-2004, Institute of Solid State Physics, Sofia
9. Academy of Science of the Chech Republic “*Pulsed laser deposition of thin films*”, 2001-2003, Institute of Physics, Prague
10. Hungarian Academy of Science “*Pulsed laser deposition of oxide, nitride and carbide thin films*”, 2000-2002, University “Jozsef Attila” of Szeged
11. FP5 “*Innovative preparation methods and new materials*”, SIMI, G5RD-CT-2000-00423, 2001-2004
12. FP5 “*Fotonic Sensors*”, NANOPHOS, IST-2001-39112, 2003-2006
13. INCO-COPERNICUS IC15-CT98-0807, “*Inter-European Network of Pulsed Laser Deposition of Innovative Materials*”, INPULSNET, 1998-2002
14. NATO-CLG PST.CLG.977325 “*Multiwavelength laser plasma investigations for applications in thin films deposition and processing*”, 2001-2002
15. NATO-CLG PST.CLG 980464 “*Deposition of doped thin films with the aid of two synchronised laser systems for nano-electronic applications*”, 2003-2004

RESPONSIBLE OF RESEARCH PROJECTS

National research contracts:

1. CNCSIS 863/2006 “*Multifunctional oxide thin films for optical gas sensor applications*”, 2006-2008, Romanian National University Council, 25.000 EURO/year
2. CEEEX 150/2006 “*Laser techniques for biosensors design and fabrication*”, BIOSENSOR, 2006-2008, Romanian Ministry for Education and Science, 350.000 EURO
3. IDEAS 1290/2009 “*Innovative processing of biomaterials with the aid of laser radiation for controlled drug delivery and detection devices*”, Romanian Ministry for Education and Science, 100.000 EURO

4. Partnership 162/2012 „*Complex high surface area photoactive nano-materials for environmentally-friendly energy production and organic pollutants degradation*” Romanian Ministry for Education and Science, 700.000 EURO, 4 partners implied, 230.000 EURO for the National Institute for Lasers, Plasma and Radiations Physics
5. IDEAS 85/2013 “*Processing and immobilization by non-conventional laser techniques of nanocomposite materials for next-generation stretchable transparent electrodes*” Romanian Ministry for Education and Science, 250.000 EURO
6. Experimental Demonstration Project (PED) 47/2017 „*Photoactive carbon based nanocomposite materials for efficient wastewater treatment by organic pollutant removal*” Romanian Ministry for Education and Science, 150.000 EURO
7. Exploratory Research Project (PCE) 175 / 2017 „*Nanocomposite materials obtained by laser techniques for flexible electronic devices*”, 200.000 EURO

International research contracts:

1. Inter-Governmental “*Multiwavelength laser plasma investigations for applications in deposition of nitride thin films*”, 2000-2002, Institute of Theoretical Physics and Chemistry, Athens, Greece
2. Inter-Governmental “*Thin oxide films grown by laser techniques for optical sensor applications*”, 2006-2007, University of Lecce, Italy
3. Inter-Governmental “*Biosensors design using laser radiation*”, 2006-2007, University “Jozsef Attila” of Szeged, Hungary
4. NATO EAP.RIG 981200 “*Biosensors obtained by matrix assisted pulsed laser deposition*”, 2004-2007
5. MAT2006-26534-E “*Development of completely new laser techniques for the growth of biomolecular thin films*”, Spanish Ministry for Education and Science, 86.000 EURO
6. 2007PT0007 “*Development of biogenic amines optical biosensors by innovative laser nanostructuring of solid supports*”, Consejo Superior de Investigaciones Cientificas, España, Fundacion para la Ciencia y Tecnología, Portugal
7. ENE2014-56109-C3-3-R, “*Carbon and metal oxide hybrid nanocomposites for supercapacitor application*” Spanish Ministry of Economy and Competitiveness
8. ENE2017-89210-C2-1-R, “*Advanced fabrication of hybrid electrodes based on nanocarbon materials for supercapacitor applications*” Spanish Ministry of Economy and Competitiveness
9. 2017092465-2018, “*Synchrotron-based Fourier Transform Infrared Microspectroscopy investigations of graphene oxide / transition metal oxide nanocomposite thin films obtained by advanced laser techniques*”, ALBA Synchrotron, MIRAS beamline, Spain

Expert evaluator-raportor of project proposals:

European Commission:

- FP6, **SSA** Specific Support Actions, 2004
- FP7, **LARGE** scale integrating research projects, 2009
- FP7, **PEOPLE** Marie Curie Actions, **IF** 2012
- FP7, **PEOPLE** Marie Curie Actions, **ITN** 2013
- FP7, **PEOPLE** Marie Curie Actions, **IF** 2013
- Horizont2020, **MSCA**, **IF** 2014
- Horizont2020, **LEIT**, 2014
- Horizont2020, **MSCA**, **ITN** 2015
- Horizont2020, **MSCA**, **IF** 2015

- Horizont2020, **MSCA, IF** 2016
- **ERA.Net RUS Plus for S&T** Projects 2017
- Horizont2020, **MSCA, IF** 2017
- Horizont2020, **MSCA, DOC-FAM Postdocs Programme, COFUND**, 2017
- Horizont2020, **MSCA, IF** 2018
- Horizont2020, **MSCA DOC-FAM Postdocs Programme, COFUND**, 2018
- Horizont2020, **MSCA LEaDing Fellows Postdocs Programme, COFUND**, 2018

Spanish Ministry of Education and Competitiveness

- National Programme for Fostering Excellence in Scientific and Technical Research, competition 2011
- Postdoctoral Research Contracts, The National Distance Education University (UNED), competition 2014
- Youth Employment Promotion Contracts, competition 2015
- National Programme for Research Aimed at the Challenges of Society, competition 2017

Catalan Government, Agency for Management of University and Research Grants (AGAUR)

- Agència per la Competitivitat de l'Empresa (ACCIÓ), **TECNIOspring PLUS** programme for individual mobility projects carried out by experienced researchers, competition 2018
- Call for Knowledge Industry Grants 2019 – **LLAVOR** and **PRODUCTE** Grants, competition 2019
- Call for Innovators Grants, competition 2019

Romanian Ministry of Education and Research

- Multiannual scientific research / artistic creation projects, type **A** senior research groups, **AT** young research groups, and **TD** doctoral fellowships, competition 2005
- Collaborative research projects, **Partnerships, CEEEX**, competition 2007
- Multiannual scientific research / artistic creation projects, type **A** senior research groups, **AT** young research groups, and **TD** doctoral fellowships, competition 2007
- Collaborative research projects, **Partnerships, CEEEX**, competition 2008
- Creation of young research groups, **TE**, competition 2010
- Post-doctoral fellowships, **PD**, competition 2010
- Exploratory research projects, **IDEAS**, competition 2011
- Collaborative research projects, **Partnerships, PCCA**, competition 2013
- Core research projects, **NUCLEU**, competition 2016
- Projects for Transfer to the Economic Entities, **PTE**, competition 2016
- Innovative Enterprises of the type start-up or spin-off, **European Structural Funds**, competition 2016
- **EUREKA** projects, competition 2016
- Creation of young research groups, **TE**, competition 2016
- Post-doctoral fellowships, **PD**, competition 2016
- Complex projects realised in consortiums **CDI (PCCDI)** 2017
- Projects for Transfer to the Economic Entities, **PTE**, competition 2019

Hungarian Ministry of Education and Culture

- Individual research projects financed by The Hungarian Scientific Research Fund (OTKA), competition 2005

National Science Centre, Poland

- National research projects, competition 2012

- Acquisition of research equipments, competition 2012

Agencia Nacional de Promoción Científica y Tecnológica – ANPCyT, Argentina

- Scientific and technological research projects, competition 2014

German Academic Exchange Service

- DAAD fellowships, financed by the German Federal Foreign Office, the Federal Ministry of Education and Research, the Federal Ministry for Economic Cooperation and Development, and the European Union, competition 2017
- DAAD fellowships, competition 2018
- DAAD fellowships, competition 2020

Bulgarian National Science Fund

- P. Beron call, MSCA inspired post-doctoral fellowships, competition 2019

Participation in Panel Meetings – member of evaluation Panels:

- Collaborative research projects, **Partnerships, PCCA**, competition 2013
- Innovative Enterprises of the type start-up or spin-off, **European Structural Funds**, competition 2016
- Projects for Transfer to the Economic Entities, **PTE**, competition 2016
- Creation of young research groups, **TE**, competition 2016
- Post-doctoral fellowships, **PD**, competition 2016
- Complex projects realised in consortiums CDI (**PCCDI**) 2017

Participation in the organization and the management of the scientific research:

Participation in the organization and setting of strategic research objectives in the field of physics in Romania in the short (2012-2014) and half (2015-2020) term - member in the cluster nr. 10 Applied Physics, Romanian Ministry of Education and Research, year 2011

Monitoring of ongoing research projects:

- Monitoring of exploratory research projects, **IDEAS** financed under the call 2011, Romanian Ministry of Educations and Research, mid-term evaluation in **2014**, final evaluation in **2016**
- Monitoring of post-doctoral projects **PD** financed under the call 2012, Romanian Ministry of Educations and Research, final evaluation in **2015**
- Monitoring of core research projects, **NUCLEU**, competition 2016, mid-term evaluation in **January 2017**
- Monitoring of **H2020-MSCA-RISE** projects of competition 2014, innovation radar - examination of state and progress of the action implementation, final evaluation **November 2019**

Co-director of PhD Thesis:

Guillaume Sauthier, “*Synthesis and characterization of undoped and nitrogen doped titanium oxide thin films for photocatalytic applications*”, Universitat Autònoma de Barcelona, Spain, 2008-2012

Pablo Garcia Lebière, “*Fabrication of nanocarbon-based supercapacitor electrodes through advanced laser processing*”, Universitat Autònoma de Barcelona, Spain, 2018-present

Co-director of Master Thesis:

Ana-Maria Anicai, “*Development of urease biosensors by matrix assisted pulsed laser evaporation method*” Polytechnique University of Bucharest, Romania, June 2008

Guillaume Sauthier, “*Laser synthesis of nitrogen doped titanium oxide thin films for photocatalytic applications*”, Universitat Autònoma de Barcelona, Spain, 2008

Iulian Mitache, “*Laser induced reduction and nitrogen doping of graphene oxide in titanium oxide / graphene oxide composites*”, University of Bucharest, Faculty of Physics, July 2015

Seyed Mahyad Komarizadeh Asl, “*Laser synthesis of photoactive nanocomposites for environmental applications*” Universitat Autònoma de Barcelona, Spain, September 2019

Maroua Omezzine Gnioua, “*Laser synthesis of carbon nanomaterial – transition metal oxide layers for environmental applications*” Universitat Autònoma de Barcelona, Spain, September 2019-June 2020

PhD Thesis committee member:

Camelia Popescu Cojanu, “*Contributions in the field of nanostructured thin films obtained by pulsed laser techniques for biosensors and controlled drug delivery*” University of Bucharest, Romania, November 2011

Maria Marilena Motoc, “*Immobilization by laser techniques of biomaterials for therapeutic applications*”, University of Bucharest, Romania, September 2014

Arevik Mushegyyan Avetisyan, “*Synthesis and characterization of multilayer graphene nanostructures*” University of Barcelona, Spain, July 2019

Luis Fernando Pantoja Suárez, “*Carbon Nanotubes Grown on Stainless Steel for Supercapacitor Applications*”, University of Barcelona, Spain, September 2019

Memberships

External Member of the Hungarian Academy of Science

Member of the Physics Commission, Regional Committee in Cluj, Romania of the Hungarian Academy of Science

Official referee of ISI quoted, high impact factor international journals:

Solid State Communications, Materials Letters, Journal of Optoelectronics and Advanced Materials, Journal of Physics D: Applied Physics, Surface and Coatings Technology, Sensors and Actuators B, The Journal of Physical Chemistry, Applied Surface Science, Journal of Materials Science, Materials Science and Engineering B, Journal of Physics: Condensed Matter, Applied Physics A: Materials & Processes, Europhysics Letters, Materials Chemistry and Physics, Journal of Hazardous Materials, Journal of Colloids and Interface Science, Advanced Biomaterials, Journal of the American Ceramic Society, Optics and Laser Technology, Physica B, Physica Status Solidi, Journal of Electronic Materials, Electrochemistry Communications, Journal of American Ceramic Society, Materials Science and Engineering C, Diamond & Related Materials, Thin Solid Films, Journal of Photochemistry and Photobiology, Catalysis Communications, Physical Chemistry Chemical Physics, RSC Advances, Materials & Design, New Journal of Chemistry, Advanced Optical Materials, Journal of Non-Crystalline Solids, ACS Applied Materials & Interfaces, Colloids and Surfaces A: Physicochemical and Engineering Aspects, Langmuir, Nanoscale,

CrystEngComm, Carbon, Nanotechnology, Science of the Total Environment, Solid State Science, Chemical Engineering Journal, Materials Chemistry and Physics, Journal of Materials Chemistry A

Evaluator of book proposal:

Elsevier - Dr Kostas Marinakis, Senior Acquisition Editor, Chemical and Biochemical Engineering, “*Graphitic carbon nitride: an uprising carbonaceous material; synthesis, characterisation and applications*”, Eds. S. Thomas, S. Anas

Participation in working groups and scientific advisory committees:

-Participation in a project of the Institutional Review Boards of the University of Albany and the National Bureau of Economic Research, USA, to identify scientific work that is of particularly high-impact and/or transformative in specific research fields; invited by Prof. Gerald Marschke, University of Albany, January, 2020

-Impact assessment, related to the impact generated in the industrial field by large research infrastructures, within the framework of RIPATHS project, Horizon2020. Objectives: observe and describe the impact of innovation arising in the industry from the results of experiments carried out by online users of synchrotron radiation and identification of pathways that allow impact generation.

Awards:

-*International Association of Advanced Materials (IAAM) Scientist Medal Award*, European Advanced Materials Congress, 23-25 August 2016, Stockholm, Sweden

- IOP Institute of Physics - Outstanding Reviewer award, the journal *Nanotechnology*, 2018

Conference organization:

-Member of International Advisory Committee
10th International Conference on Photoexcited Processes and Applications, August 29 – September 2, 2016, Brasov, Romania

-Co-chair of the sessions: “*World Technology Forum*”
“*Clean and Sustainable Energy Technologies*”
European Advanced Materials Congress, 23-25 August 2016, Stockholm, Sweden

-Chair of the session: “*MAPLE and Materials Processing*”
International High Power Laser Ablation and Directed Energy Conference, HPLA2018, 26-29 March 2018, Santa Fe, New Mexico, USA

- Member of Scientific Committee

-Chair of the session: “Laser Ablation for PLD and MAPLE”
International High Power Laser Ablation and Directed Energy Conference, HPLA2020, 14-17 April 2020, Santa Fe, New Mexico, USA

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LIST OF SCIENTIFIC PUBLICATIONS

ARTICLES PUBLISHED IN ISI QUOTED SCIENTIFIC JOURNALS

- [1] “A parametric study of the deposition of the TiN thin films by Laser Reactive Ablation of Ti targets in N₂: the roles of the total gas pressure and the contaminations with oxides”
I. N. Mihailescu, N. Chitica, **E. György**, V. S. Teodorescu, A. Luches, A. Perrone, M. Martino, J. Neamtu
Journal of Material Science, 31, (1996) 2909-2915
- [2] “The study of the crater forming on the surface of a Ti target submitted to a multipulse excimer laser irradiation under low pressure N₂”
V. S. Teodorescu, I. N. Mihailescu, **E. György**, A. Luches, M. Martino, L. C. Nistor, J. Van Landuyt
Journal of Modern Optics, 43(9) (1996) 1773-1784
- [3] “Laser ablation in a reactive atmosphere: application to the synthesis and deposition of performant titanium carbide thin films”
I. N. Mihailescu, **E. György**, M. Popescu, S. Csutak, G. Marin, I. Ursu, A. Luches, M. Martino, A. Perrone, J. Hermann
Optical Engineering, 35(6), (1996) 1652-1655
- [4] “Synthesis and Deposition of Silicon Nitride Films by Laser Reactive Ablation of Silicon in Low Pressure Ammonia: a Parametric Study”
I. N. Mihailescu, A. Lita, V. S. Teodorescu, **E. György**, R. Alexandrescu, A. Luches, M. Martino, A. Barborica
Journal of Vacuum Science and Technology A, 14(4) (1996) 1986-1994
- [5] “Laser Reactive Ablation Deposition of Silicon Carbide Films”
G. Leggieri, A. Luches, M. Martino, A. Perrone, R. Alexandrescu, A. Barborica, **E. György**, I.N. Mihailescu, G. Majni, P. Mengucci
Applied Surface Science, 96-98, (1996) 866-869
- [6] “Synthesis of Tungsten Carbide Thin Films by Reactive Pulsed Laser Deposition”
N. Chitica, **E. György**, A. Lita, G. Marin, I. N. Mihailescu, D. Pantelica, M. Petrascu, A. Hadgiapostol, C. Grivas, N. Broll, A. Cornet, C. Mirica, A. Andrei
Thin Solid Films, 301, (1997) 71-76
- [7] “Characterisation of C-N thin films deposited by reactive excimer laser ablation of graphite targets in nitrogen atmosphere”

- A. P. Caricato, G. Leggieri, A. Luches, A. Perrone, **E. György**, I. N. Mihailescu, M. Popescu, G. Barucca, P. Menguucci, J. Zemek, M. Trchova
Thin Solid Films, 307, (1997) 54-59
- [8] "*Optical studies of carbo-nitride thin films deposited by reactive pulsed laser ablation of a graphite target in low pressure ammonia*"
I.N. Mihailescu, **E. György**, R. Alexandrescu, A. Luches, A. Perrone, C. Ghica, J. Werckmann, I. Cojocaru, V. Chumash
Thin Solid Films, 323(1,2) (1998) 72-78
- [9] "*Carbon nitride films deposited by reactive laser ablation*"
M. L. De Giorgi, G. Leggieri, A. Luches, M. Martino, A. Perrone, A. Zocco, G. Barucca, G. Majni, **E. György**, I. N. Mihailescu, M. Popescu
Applied Surface Science, 127-129, (1998) 481-485
- [10] "*About the nature of particulates covering the surface of thin films obtained by reactive pulsed laser deposition*"
I. N. Mihailescu, V. S. Teodorescu, **E. György**, A. Luches, A. Perrone, M. Martino
Journal of Physics D: Applied Physics, 31, (1998) 2236-2240
- [11] "*Crystalline structure of very hard tungsten carbide thin films obtained by reactive pulsed laser deposition*"
I. N. Mihailescu, **E. György**, G. Marin, M. Popescu, V. S. Teodorescu, J. Van Landuyt, C. Grivas, A. Hadgiapostol
Journal of Vacuum Science and Technology A, 17(1) (1999) 249-255
- [12] "*Characteristic features of the laser radiation-target interactions during reactive pulsed laser ablation of Si targets in ammonia*",
I. N. Mihailescu, **E. György**, V. S. Teodorescu, Gy. Steinbrecker, J. Neamtu, A. Perrone, A. Luches
Journal of Applied Physics, 86(12), (1999) 7123-7128
- [13] "*Sr-ferrite thin films grown on sapphire by pulsed laser deposition*"
M. E. Koleva, S. Zotova, P. A. Atanasov, R. I. Tomov, C. Ristoscu, V. Nelea, C. Chiritescu, **E. György**, C. Ghica, I. N. Mihailescu
Applied Surface Science, 168 (2000) 108-113
- [14] "*Conduction via deep levels in Si p-n junctions prepared by direct laser implantation of phosphorus*"
Simeonov, E. Kafedjiiska, A. Szekeres, C. Ristoscu, **E. György**, I.N. Mihailescu, G. Mikhailova
Journal of Optoelectronics and Advanced Materials 2 (2000) 99-102
- [15] "*About the possible diminution of the sp^3 C presence along with the increase of the nitrogen enclosure in the CN_x thin films produced by reactive pulsed laser*"
E. György, I. N. Mihailescu, M. Baleva, E. P. Trifonova, M. Abrashev, V. Darakchieva, A. Zocco, A. Perrone
Journal of Materials Science, 36(8) (2001) 1951-1957
- [16] "*Transmission electron microscopy study of silicon nitride amorphous films obtained by Reactive Pulsed Laser Deposition* ",
V. S. Teodorescu, L. C. Nistor, M. Popescu, I. N. Mihailescu, **E. György**, J. Van Landuyt, A. Perrone

Thin Solid Films 397 (2001) 12-16

[17] *“Correlation between hardness and structure of the carbon-nitride thin films obtained by Reactive Pulsed Laser Deposition”*

E. György, V. Nelea, I. N. Mihailescu, A. Perrone, H. Pelletier, A. Cornet, S. Ganatsios, J. Werckmann

Thin Solid Films 388(1-2) (2001) 93

[18] *“Role of laser pulse duration and gas pressure in deposition of AlN thin films”*

E. György, C. Ristoscu, I. N. Mihailescu, A. Klini, N. Vainos, C. Fotakis, C. Ghica, G. Scheimbreyer, J. Faerber

Journal of Applied Physics 90(1) (2001) 456

[19] *“Trap-assisted tunneling at temperatures near 77 K in laser annealed Si n⁺-p junctions”*

S. S. Simeonov, E. Kafedjiiska, A. Szekeres, C. Ristoscu, **E. György**, I. N. Mihailescu

Journal of Applied Physics 90(2) (2001) 860

[20] *“Surface nitridation of titanium by pulsed Nd:YAG laser irradiation”*

E. György, A. Pérez del Pino, P. Serra, J. L. Morenza

Applied Surface Science, 186 (2002) 130-134

[21] *“Single-pulse Nd:YAG laser irradiation of titanium: influence of laser intensity on surface morphology”*

E. György, I. N. Mihailescu, P. Serra, A. Pérez del Pino, J. L. Morenza

Surface Coatings and Technology, 154 (2002) 63-67

[22] *“Crown-like structure development on titanium exposed to multipulse Nd:YAG laser irradiation”*

E. György, I. N. Mihailescu, A. Pérez del Pino, P. Serra, J. L. Morenza

Applied Physics A: Materials Science and Processing, 74 (2002) 755-759

[23] *“Growth of surface structures in Ti through Nd:YAG laser irradiation in vacuum”*

E. György, A. Pérez del Pino, P. Serra, J. L. Morenza

Applied Surface Science, 197-198 (2002) 851-855

[24] *“Particulates-free Ta thin films obtained by pulsed laser deposition: the role of a second laser in the laser-induced plasma heating”*

E. György, I. N. Mihailescu, M. Kompitsas, A. Giannoudakos

Applied Surface Science, 195 (2002) 270-276

[25] *“Correlation between the chemical bonding and the physical properties of the CN_x films pulsed laser deposited from C targets in low pressure N₂”*

E. György, I. N. Mihailescu, M. Baleva, M. Abrashev, E. P. Trifonova, A. Szekeres, A. Perrone

Materials Science and Engineering B, 97 (2003) 251-257

[26] *“Particulates-free thin films deposited by a synchronized two-laser system”*

M. Kompitsas, A. Giannoudakos, **E. György**, I. N. Mihailescu

Photonik, 35(2) (2003) 48-51

[27] *“Micro-columns development on titanium by multi-pulse laser irradiation in nitrogen”*

E. György, A. Pérez del Pino, P. Serra, J. L. Morenza

Journal of Materials Research, 18 (2003) 2228-2234

- [28] “*Depth profiling characterization of the surface layer obtained by pulsed Nd:YAG laser nitridation*”
E. György, A. Pérez del Pino, P. Serra, J. L. Morenza
 Surface and Coatings Technology, 173 (2003) 265-270
- [29] “*Dependence of morphology of AlN thin films on laser irradiation in pulsed laser deposition*”
 V. Zorba, A. Klini, **E. György**, C. Ristoscu, V. S. Teodorescu, I. N. Mihailescu
 Laser Physics, 13(10) (2003) 1325-1329
- [30] “*Chemical composition of dome-shaped structures grown on titanium by multi-pulse Nd:YAG laser irradiation*”
E. György, A. Pérez del Pino, P. Serra, J. L. Morenza
 Applied Surface Science, 222 (2004) 415-422
- [31] “*Deposition of particulates-free thin films by two synchronised laser sources*”
E. György, I. N. Mihailescu, M. Kompitsas, A. Giannoudakos
 Thin Solid Films, 446 (2004) 178-183
- [32] “*Structure formation on Ti during oxidation induced by cumulative pulsed Nd:YAG laser irradiation*”
E. György, A. Pérez del Pino, P. Serra, J. L. Morenza
 Applied Physics A: Materials Science and Processing, 78(5) (2004) 765-770
- [33] “*CN_x/Si thin heterostructures for miniaturized temperature sensors*”
 S. Simeonov, A. Szekeres, **E. György**, I. N. Mihailescu, A. Perrone
 Journal of Applied Physics, 95(9) (2004) 5111-5115
- [34] “*Particulates generation and solutions for their elimination in pulsed laser deposition*”
E. György, I. N. Mihailescu, M. Kompitsas, A. Giannoudakos
 Journal of Optoelectronics and Advanced Materials, 6(1) (2004) 39-46
- [35] “*Surface morphology studies of sub-ps pulsed laser deposited AlN thin films*”
E. György, V. S. Teodorescu, I. N. Mihailescu, A. Klini, V. Zorba, A. Manousaki, C. Fotakis
 Journal of Materials Research, 19(3) (2004) 820-826
- [36] “*Influence of the ambient gas in laser structuring of the titanium surface*”
E. György, A. Pérez del Pino, P. Serra, J. L. Morenza
 Surface and Coatings Technology, 187 (2004) 245-251
- [37] “*Pulsed laser deposition of LiNbO₃ thin films from Li-rich targets*”
 N. E. Stankova, S. H. Tonchev, **E. György**, G. Socol, I. Mihailescu
 Journal of Optoelectronics and Advanced Materials, 6(4) (2004) 1345-1349
- [38] “*Effects of pulse laser duration and ambient nitrogen pressure in PLD of AlN*”
 C. Ristoscu, **E. György**, I. N. Mihailescu, A. Klini, V. Zorba, C. Fotakis
 Applied Physics A: Materials Science and Processing, 79 (2004) 927-929
- [39] “*Biocompatible Mn²⁺ doped carbonated hydroxyapatite thin films grown by pulsed laser deposition*”
E. György, P. Toricelli, G. Socol, M. Iliescu, I. Mayer, I. N. Mihailescu, A. Bigi, J. Werckman
 Journal of Biomedical Materials Research-Part A, 71A(2) (2004) 353-358

[40] “*Laser induced growth of titanium nitride micro-columns arrays on biased targets surfaces*”

E. György, A. Pérez del Pino, P. Serra, J. L. Morenza
Journal of Materials Research, 20(1) (2005) 62-67

[41] “*Anatase phase TiO₂ thin films obtained by pulsed laser deposition for gas sensing applications*”

E. György, G. Socol, E. Axente, I. N. Mihailescu, C. Ducu, S. Ciuca
Applied Surface Science, 247(1-4) (2005) 429-433

[42] “*Growth of Al doped ZnO thin films by a synchronized two laser system*”

E. György, J. Santiso, A. Giannoudakos, M. Kompitsas, I. N. Mihailescu, D. Pantelica
Applied Surface Science, 248(1-4) (2005) 147-150

[43] “*Structural and optical characterization of WO₃ thin films for gas sensor applications*”

E. György, G. Socol, I. N. Mihailescu, C. Ducu, S. Ciuca
Journal of Applied Physics, 97 (2005) 093527

[44] “*Morphology evolution and local electric properties of Au nanoparticles on ZnO thin films*”

E. György, J. Santiso, A. Figueras, A. Giannoudakos, M. Kompitsas, I. N. Mihailescu
Journal of Applied Physics, 98 (2005) 084302

[45] “*Growth of oxide thin films for optical gas sensor applications*”

D. Caiteanu, **E. György**, S. Grigorescu, I. N. Mihailescu, G. Prodan, V. Ciupina
Applied Surface Science, 252 (2006) 4582-4586

[46] “*Doped thin metal oxide films for catalytic gas sensors*”

E. György, E. Axente, I. N. Mihailescu, C. Ducu, H. Du
Applied Surface Science, 252 (2006) 4578-4581

[47] “*Au cluster growth on ZnO thin films by pulsed laser deposition*”

E. György, J. Santiso, A. Figueras, A. Giannoudakos, M. Kompitsas, I. N. Mihailescu, C. Ducu
Applied Surface Science, 252 (2006) 4429-4432

[48] “*Growth of Au-TiO₂ nanocomposite thin films by a synchronized two laser system*”

E. György, G. Sauthier, A. Figueras, A. Giannoudakos, M. Kompitsas, I. N. Mihailescu
Journal of Applied Physics, 100 (2006) 114302

[49] “*Biomolecular papain thin films deposited by laser techniques*”

E. György, J. Santiso, A. Figueras, G. Socol, I. N. Mihailescu
Journal of Materials Science: Materials in Medicine, 18 (2007) 1643-1647

[50] “*Bioactive glass and hydroxyapatite thin films obtained by pulsed laser deposition*”

E. György, S. Grigorescu, G. Socol, I. N. Mihailescu, D. Janackovic, E. Palcevskis, L. E. Zdrentu, S. Petrescu
Applied Surface Science, 253 (2007) 7981-7986

[51] “*Growth of metal-oxide semiconductor nanocomposite thin films by a dual-laser, dual target deposition system*”

M. Kompitsas, A. Giannoudakos, **E. György**, G. Sauthier, A. Figueras, I. N. Mihailescu
Thin Solid Films, 515 (2007) 8582-8585

- [52] “*Effect of visible and UV illumination on the water contact angle of TiO₂ thin films with incorporated nitrogen*”
A. Borrás, C. Lopez, V. Rico, F. Gracia, A. R. Gonzalez-Elipe, E. Richter, G. Battiston, R. Gerbasi, N. McSparran, G. Sauthier, **E. György**, A. Figueras
Journal of Physical Chemistry C 111 (2007) 1801-1808
- [53] “*Structural, morphological and local electric properties of TiO₂ thin films grown by pulsed laser deposition*”
E. György, A. Perez del Pino, G. Sauthier, A. Figueras, F. Alsina, J. Pascual
Journal of Physics D: Applied Physics, 40 (2007) 5246-5251
- [54] “*Synthesis of undoped and Ni doped InTaO₄ photoactive thin films by Metal Organic Chemical Vapor Deposition*”
N. McSparran, V. Rico, A. Borrás, A. R. González-Elipe, G. Sauthier, **E. György**, J. Santiso, G. Garcia, A. Figueras, L. Parafianovic, A. Abrutis
Surface and Coatings Technology, 201 (2007) 9365–9368
- [55] “*Creatinine biomaterial thin films grown by laser techniques*”
E. György, E. Axente, I. N. Mihailescu, D. Predoi, S. Ciuca, J. Neamtu
Journal of Materials Science: Materials in Medicine, 19 (2008) 1335-1339
- [56] “*Nickel oxide thin films synthesized by reactive pulsed laser deposition: characterization and application to hydrogen sensing*”
I. Fasaki, A. Giannoudakos, M. Stamataki, M. Kompitsas, **E. György**, I. N. Mihailescu, F. Roubani-Kalantzopoulou, A. Lagoyannis, S. Harissopoulos
Applied Physics A: Materials Science and Processing, 91 (2008) 487-492
- [57] “*Laser grown gold nanoparticles on zinc oxide thin films for gas sensor applications*”
E. György, A. Giannoudakos, M. Kompitsas, I. N. Mihailescu
Journal of Optoelectronics and Advanced Materials, 10 (2008) 536-540
- [58] “*Investigation of nitrogen doped TiO₂ thin films grown by reactive pulsed laser deposition*”
G. Sauthier, **E. György**, A. Figueras
Journal of Materials Research, 23 (2008) 2340-2345
- [59] “*Tunable optical properties of laser grown double-structures with gold nanoparticles and zinc oxide thin films*”
E. György, A. Pérez del Pino, A. Giannoudakos, M. Kompitsas, I. N. Mihailescu
Physica Status Solidi (a), 205 (2008) 1978-1982
- [60] “*Immobilization of urease by laser techniques: synthesis and application to urea biosensors*”
E. György, F. Sima, I. N. Mihailescu, T. Smausz, G. Megyeri, R. Kékesi, B. Hopp, L. Zdrentu, S. M. Petrescu
Journal of Biomedical Materials Research, 89A(1) (2009) 186-191
- [61] “*Comparative study on Pulsed Laser Deposition and Matrix Assisted Pulsed Laser Evaporation of urease thin films*”
T. Smausz, G. Megyeri, R. Kékesi, Cs. Vass, **E. György**, F. Sima, I. N. Mihailescu, B. Hopp
Thin Solid Films, 517 (2009) 4299-4302

[62] “*Biomolecular papain thin films grown by matrix assisted and conventional pulsed laser deposition: a comparative study*”

E. György, A. Pérez del Pino, G. Sauthier, A. Figueras
Journal of Applied Physics, 106 (2009) 114702

[63] “*Biomolecular urease thin films grown by laser techniques for blood diagnostic applications*”

E. György, F. Sima, I. N. Mihailescu, T. Smausz, B. Hopp, D. Predoi, L. E. Zdrentu, S. Petrescu
Materials Science and Engineering C, 30 (2010) 537-541

[64] “*Growth and characterization of nitrogen doped TiO₂ thin films prepared by reactive pulsed laser deposition*”

G. Sauthier, J. Ferrer, A. Figueras, **E. György**
Thin Solid Films, 519 (2010) 1464–1469

[65] “*Processing and immobilization of enzyme Ribonuclease A through laser irradiation*”

C. Popescu, J. Roqueta, A. Pérez del Pino, M. Moussaoui, M. V. Nogués, **E. György**
Journal of Materials Research, 26 (2011) 815-821

[66] “*Synthesis and characterization of Ag nanoparticles and Ag loaded TiO₂ photocatalysts*”

G. Sauthier, A. Pérez del Pino, A. Figueras, **E. György**
Journal of American Ceramics Society, 94 (2011) 3780-3786

[67] “*Tunable optical and nano-scale electrical properties of WO₃ and Ag-WO₃ nanocomposite thin films*”

E. György, A. Pérez del Pino
Journal of Materials Science, 46 (2011) 3560–3567

[68] “*Effects of pulsed laser radiation on epitaxial self-assembled Ge quantum dots grown on Si substrates*”

A. Perez del Pino, **E. György**, I. C. Marcus, J. Roqueta, M. I. Alonso
Nanotechnology, 22 (2011) 295304-1 – 295304-11

[69] “*Synthesis and laser immobilisation onto solid substrates of CdSe/ZnS core-shell quantum dots*”

E. György, A. Pérez del Pino, J. Roqueta, A.S. Miguel, C. Maycock, A G. Oliva
The Journal of Chemical Physics C, 115 (2011) 15210–15216

[70] “*Immobilisation of CdSe/ZnS core-shell quantum dots through matrix assisted pulsed laser evaporation*”

E. György, A. Pérez del Pino, J. Roqueta, A.S. Miguel, C. Maycock, A G. Oliva
Physica Status Solidi A, 209(11) (2012) 2201–2207

[71] “*Hybrid dextran-iron oxide thin films deposited by laser techniques for biomedical applications*”

D. Predoi, C. S. Ciobanu, M. Radu, M. Costache, A. Dinischiotu, C. Popescu, E. Axente, I. N. Mihailescu, **E. György**
Materials Science and Engineering C, 32 (2012) 296–302

[72] “*Hemispherical and columnar TiO₂ arrays grown by reactive pulsed laser deposition for photocatalytic applications*”

G. Sauthier, A. Figueras, **E. György**
Journal of the American Ceramics Society, 95(9) (2012) 2833–2840

- [73] “*Deposition of Functionalized Single Wall Carbon Nanotubes through Matrix Assisted Pulsed Laser Evaporation*”
A. Pérez del Pino, **E. György**, L. Cabana, B. Ballesteros, G. Tobias
Carbon, 50(12) (2012) 4450-4458
- [74] “*Laser synthesis and characterization of nitrogen doped TiO₂ vertically aligned columnar array photocatalysts*”
G. Sauthier, **E. György**, A. Figueras, R. S. Sánchez, J. Hernando
The Journal of Physical Chemistry C, 116 (27) (2012) 14534–14540
- [75] “*Biomedical properties and preparation of iron oxide-dextran nanostructures by MAPLE technique*”
C. S. Ciobanu, S. L. Iconaru, **E. György**, M. Radu, M. Costache, A. Dinischiotu, P. Le Coustumer, K. Lafdi, D. Predoi
Chemistry Central Journal, 6 (2012) 17
- [76] “*Processing and immobilization of chondroitin-4-sulphate by UV laser radiation*”
E. György, A. Pérez del Pino, J. Roqueta, C. Sánchez, A G. Oliva
Colloids and Surfaces B: Biointerfaces, 104 (2013) 169–173
- [77] “*Active protein and calcium hydroxyapatite bi-layers grown by laser techniques for therapeutic applications*”
M. Motoc, C. Popescu, E. Axente, L. E. Sima, S. M. Petrescu, I. N. Mihailescu, **E. György**
Journal of Biomedical Materials Research: Part A, 101 (2013) 2706-2711
- [78] “*Effect of laser radiation on multi-wall carbon nanotubes: study of shell structure and immobilization process*”
E. György, Á. Pérez del Pino, J. Roqueta, B. Ballesteros, L. Cabana, G. Tobias
Journal of Nanoparticle Research 15 (2013) 1852 (1-11)
- [79] “*Study of the deposition of graphene oxide sheets by matrix assisted pulsed laser evaporation*”
Á. Pérez del Pino, **E. György**, C. Logofatu, A. Enesca, A. Duta
Journal of Physics D: Applied Physics 46 (2013) 505309
- [80] “*Ultraviolet Pulsed Laser Irradiation of Multi-Walled Carbon Nanotubes in Nitrogen Atmosphere*”
A. Pérez del Pino, **E. György**, L. Cabana, B. Ballesteros, G. Tobias
Journal of Applied Physics, 115 (2014) 093501
- [81] “*Immobilization of Ribonuclease A onto solid substrates by Matrix Assisted Pulsed Laser Evaporation*”
C. Popescu, A. C. Popescu, I. Iordache, M. Motoc, D. Pojoga, A. Simon-Gruita, N. Constantin, G. Duta Cornescu, **E. György**
Journal of Materials Science, 49 (2014) 4371–4378
- [82] “*Synthesis and Characterization of Nitrogen Doped and Gold Loaded TiO₂ Photocatalysts*”
L. Duta, C. Popescu, A. Popescu, M. Motoc, C. Logofatu, A. Duta, **E. György**
Applied Physics A: Materials Science and Processing, 117 (2014) 97–101
- [83] “*Simultaneous laser-induced reduction and nitrogen doping of graphene oxide in titanium oxide/graphene oxide composites*”

E. György, Á. Pérez del Pino, C. Logofatu, C. Cazan, A. Duta
Journal of American Ceramic Society, 97 [9] (2014) 2718–2724

[84] “*Effect of nitrogen doping on wetting and photoactive properties of laser processed zinc oxide - graphene oxide nanocomposite layers*”

E. György, A. Pérez del Pino, C. Logofatu, A. Duta, L. Isac
Journal of Applied Physics, 116 (2014) 024906

[85] “*Resonant infrared and ultraviolet matrix assisted pulsed laser evaporation of titanium oxide / graphene oxide composites: a comparative study*”

S. M. O’Malley, J. Tomko, A. Pérez del Pino, C. Logofatu, **E. György**
Journal of Physical Chemistry C, 118 (2014) 27911–27919

[86] “*Laser-induced chemical transformation of graphene oxide–iron oxide nanoparticles composites deposited on polymer substrates*”

A. Perez del Pino, **E. György**, C. Logofatu, J. Puigmartí-Luis, W. Gao,
Carbon 93 (2015) 373-383

[87] “*One-step preparation of nitrogen doped titanium oxide / Au / reduced graphene oxide composite thin films for photocatalytic applications*”

A. Datcu, L. Duta, A. Pérez del Pino, C. Logofatu, C. Luculescu, A. Duta, D. Perniu, **E. György**
RSC Advances, 5 (2015) 49771-49779

[88] “*Solar-active photocatalytic tandems. A compromise in the photocatalytic processes design*”

A. Duta, A. Enesca, C. Bogatu, **E. György**
Materials Science in Semiconductor Processing, 42 (2016) 94–97

[89] “*Morphological and chemical properties of laser processed titanium oxide – graphene oxide nanocomposite layers*”

A. Pérez del Pino, A. Datcu, **E. György**
Ceramics International, 42 (2016) 7278–7283

[90] “*Laser-induced Chemical Transformation of Free-standing Graphene Oxide Membranes in Liquid and Gas Ammonia Environments*”

A. Pérez del Pino, **E. György**, C. Cotet, L. Baia, C. Logofatu
RSC Advances, 6 (2016) 50034-50042

[91] “*Titanium oxide – graphene oxide – silver ternary composite thin films grown by matrix assisted pulsed laser evaporation*”

E. György, A. Perez del Pino, A. Datcu, L. Duta, C. Logofatu, I. Iordache, A. Duta
Ceramics International, 42 (2016) 16191-16187

[92] “*Laser nanostructuring of vertically aligned carbon nanotubes coated with nickel oxide nanoparticles*”

A. Pérez del Pino, **E. György**, S. Hussain, J. L. Andujar, E. Pascual, R. Amade, E. Bertran
Journal of Materials Science, 52 (2017) 4002-40015

[93] “*Nanosecond laser-assisted nitrogen doping of graphene oxide dispersions*”

D. Kepic, S. Sandoval, A. Perez del Pino, **E. György**, L. Cabana, B. Ballesteros, G. Tobias
ChemPhysChem, 18 (2017) 935-941

- [94] “*Optically active Eu doped nanoparticulated TiO₂ thin films grown by matrix assisted pulsed laser evaporation from colloidal sols*”
I. Camps, R. Serna, M. Borlaf, M. T. Colomer, R. Moreno, C. Logofatu, L. Duta, C. Nita, A. Perez del Pino, **E. György**
RSC Advances, 7 (2017) 37643–37653
- [95] “*Laser-driven coating of vertically aligned carbon nanotubes with manganese oxide from metal organic precursors for energy storage*”
A Pérez del Pino, **E György**, I Alshaikh, F Pantoja-Suárez, J L Andújar, E Pascual, R Amade, E Bertran-Serra
Nanotechnology 28 (2017) 395405 (9pp)
- [96] “*MAPLE synthesis of reduced graphene oxide/silver nanocomposite electrodes: Influence of target composition and gas ambience*”
A. Queraltó, A. Perez del Pino, C. Logofatu, A. Datcu, R. Amade, I. Alshaikh, E. Bertran, I. Urzica, **E. György**
Journal of Alloys Compounds, 726 (2017) 1003-1013
- [97] “*Enhanced UV- and visible-light driven photocatalytic performances and recycling properties of graphene oxide/ZnO hybrid layers*”
E. György, C. Logofatu, Á. Pérez del Pino, A. Datcu, O. Pascu, R. Ivan
Ceramics International, 44 (2018) 1826–1835
- [98] “*Synthesis of graphene-based photocatalysts for water splitting by laser-induced doping with ionic liquids*”
A. Perez del Pino, A. Gonzalez-Campo, S. Giraldo, J. Peral, **E. György**, C. Logofatu, A. J. deMello, J. Puigmartí-Luis
Carbon 130 (2018) 48-58
- [99] “*Reduced graphene oxide/iron oxide nanohybrid flexible electrodes grown by laser-based technique for energy storage applications*”
A. Queraltó, A. Pérez del Pino, C. Logofatu, A. Datcu, R. Amade, E. Bertran-Serra, **E György**
Ceramics International, 44 (2018) 20409–20416
- [100] “*Selective laser-assisted synthesis of tubular van der Waals heterostructures of single-layered PbI₂ within carbon nanotubes exhibiting carrier photogeneration*”
S. Sandoval, D. Kepic, Á. Perez del Pino, **E. György**, A. Gomez, M. Pfanmoeller, G. Van Tendeloo, B. Ballesteros, G. Tobias
ACS Nano 12 (2018) 6648–6656
- [101] “*Reactive laser synthesis of nitrogen-doped hybrid graphene-based electrodes for energy storage*”
A. Perez del Pino, A. Martínez Villarroja, A. Chuquitarqui, C. Logofatu, D. Tonti, **E. György**
Journal of Materials Chemistry A, 6 (2018) 16074–16086
- [102] “*UV–vis light induced photocatalytic activity of TiO₂/graphene oxide nanocomposite coatings*”
A. Datcu, M. L. Mendoza, A. Pérez del Pino, C. Logofatu, C. Luculescu, **E. György**
Catalysis Today, 321–322 (2019) 81–86
- [103] “*Laser-induced synthesis and photocatalytic properties of hybrid organic–inorganic composite layers*”
R. Ivan, C. Popescu, A. Perez del Pino, I. Yousef, C. Logofatu, **E. György**

[104] “*Fabrication of graphene-based electrochemical capacitor electrodes through reactive inverse matrix assisted pulsed laser evaporation*”

A. Pérez del Pino, M. Ramadan, P. García Lebière, R. Ivan, C. Logofatu, I. Yousef, **E. György**
Applied Surface Science 484 (2019) 245–256

[105] “*Super-capacitive performance of manganese dioxide/graphene nano-walls electrodes deposited on stainless steel current collectors*”

R. Amade, A. Muyshegyan-Avetisyan, J. Martí González, A. Pérez del Pino, **E. György**, E. Pascual, J. L. Andújar, E. Bertran Serra
Materials 2019, 12(3), 483; <https://doi.org/10.3390/ma12030483>

[110] “*Enhancement of the supercapacitive properties of laser deposited graphene-based electrodes through carbon nanotube loading and nitrogen doping*”

A. Perez del Pino, M. Rodriguez Lopez, M. A. Ramadan, P. Garcia Lebiere, C. Logofatu, I. Martinez-Rovira, I. Yousef, **E. György**
Phys. Chem. Chem. Phys. 21 (2019) 25175-25186

[111] “*Laser induced synthesis and deposition of photoactive organic-inorganic composite layers*”

R. Ivan, A. Pérez del Pino, I. Yousef, C. Logofatu, **E György**
Submitted for publication

[112] “*Carbon-based nanomaterials and ZnO ternary compound layers grown by laser technique for environmental and energy storage applications*”

R. Ivan, C. Popescu, A. Pérez del Pino, C. Logofatu, **E György**
Applied Surface Science 509 (2020) 145359(1-15)

ARTICLES PUBLISHED OTHER SCIENTIFIC JOURNALS

[1] “*Chromosomal aberrations induced in cell cultures (HEp2) after treatment with an ultraviolet laser radiation of 248nm*”

Lucretia Popescu, Liliana Radu, V. Preoteasa, I. N. Mihailescu, **E. György**
Romanian J. Biophys., 5(4), 347-351 (1996)

[2] “*Controlled doping of Al:ZnO thin films by pulsed laser deposition using two synchronized laser sources*”

M. Kompitsas, A. Giannoudakos, **E. György**, J. Santiso, I. N. Mihailescu, D. Pantelica
Photonik, 2 (2005) 58-61

[3] “*Controlled doping of Al:ZnO films by two-laser, two-target PLD*”

M. Kompitsas, A. Giannoudakos, **E. György**, I. N. Mihailescu, J. Santiso, D. Pantelica
Photonik International (2006) 95-97

CONTRIBUTIONS TO INTERNATIONAL CONFERENCES

- [1] I. N. Mihailescu, N. Chitica, **E. György**, V. S. Teodorescu, G. Marin, M. Popescu, A. Barborica, A. Luches, A. Perrone, M. Martino, “*Pulsed laser deposition in reactive gas: application to the synthesis of good quality TiN thin films*”
Oral presentation, International Conference Laser Material Processing, Opatia, Croatia, 1995
- [2] **E. György**, I. N. Mihailescu, V. S. Teodorescu, M. Popescu, A. Luches, A. Perrone “*Pulsed laser deposition of titanium nitride and carbide thin films*”
Poster presentation, Workshop “Thin Films and Characterisation”, Trieste, Italy, 1996
- [3] **E. György**, I. N. Mihailescu, V. S. Teodorescu, M. Popescu, A. Luches, “*Synthesis and characterisation of titanium carbide thin films*”
Poster presentation, Condensed Matter and Thin Films, Varna, Bulgaria, 1996
- [4] I. N. Mihailescu, **E. György**, V. S. Teodorescu, G. Marin, D. Pantelica, A. Andrei, J. Neamtu, “*New studies of reactive pulsed laser deposition*”
Oral presentation, ROMOPTO ‘97: Fifth Conference on Optics, Bucharest, Romania, 1997
- [5] V. D. Nelea, C. Ghica, C. Martin, A. Hening, I. N. Mihailescu, L. C. Nistor, V. S. Teodorescu, R. Alexandrescu, J. Werckmann, **E. György**, G. Marin, “*Growth of polycrystalline hydroxyapatite thin films by pulsed laser deposition and subsequent heat-treatment in air*”
Oral presentation, ROMOPTO ‘97: Fifth Conference on Optics, Bucharest, Romania, 1997
- [6] A. Luches, E. D’Anna, G. Leggieri, M. Martino, A. Perrone, G. Majni, P. Mengucci, **E. György**, I. N. Mihailescu, M. Popescu, “*Thin carbon nitride films deposited by laser ablation with an XeCl* excimer laser*”
Oral presentation, ALT’97 International Conference on Laser Surface Processing, Jerusalem, Israel, 1997
- [7] I.N. Mihailescu, **E. György**, A. Luches, A. Perrone, M. Baleva, A. Abrashev, “*Recent progress in the deposition of carbon nitride thin films by laser reactive ablation*”
Oral presentation, 10th International School on Quantum Electronics “Lasers Physics and Applications” Varna, Bulgaria, 1998
- [8] M. E. Koleva, S. Zotova, P. A. Atanasov, R. I. Tomov, C. Ristoscu, V. Nelea, C. Chiritescu, **E. György**, C. Chica, I. N. Mihailescu, “*Sr-ferrite thin films grown on sapphire by pulsed laser deposition*”
Poster presentation, EMRS-Spring Meeting, Strasbourg, France, 2000
- [9] M. Branescu, **E. György**, C. Ristoscu, I. N. Mihailescu, J. Jaklovsky, V. Mihalache, “*Aspects in HTS laser ablation thin film technology and characterization*”
Poster presentation, 11th International School on “Laser Physics and Applications”, Varna, Bulgaria, 2000
- [10] M. Koleva, R. Tomov, S. Zotova, P. Atanasov, C. Ristoscu, V. Nelea, S. Arens, **E. György**, I. N. Mihailescu, “*Influence of substrate orientation on the characteristics of Sr-ferrite thin films obtained by Pulsed Laser Deposition*”
Poster presentation, 11th International School on “Laser Physics and Applications”, Varna, Bulgaria, 2000

- [11] I.N. Mihailescu, V. S. Teodorescu, **E. György**, C. Ristoscu, R. Cristescu, “*Particulates in pulsed laser deposition: formation mechanisms and possible approaches to their elimination*” Oral presentation, ALT'01 International Conference on Laser Surface Processing, Constanta, Romania, 2001
- [12] **E. György**, A. Pérez del Pino, P. Serra, J. L. Morenza, “*Surface nitridation of titanium by pulsed Nd:YAG laser irradiation*” Poster presentation, EMRS-Spring Meeting, Strasbourg, France, 2001
- [13] **E. György**, A. Pérez del Pino, P. Serra, J. L. Morenza, “*Growth of surface structures in Ti through Nd:YAG laser irradiation*” Poster presentation, COLA-Conference on Laser Ablation, Tsukuba, Japan, 2001
- [14] **E. György**, I. N. Mihailescu, M. Kompitsas, A. Giannoudakos, *Pulsed laser deposition of thin films: elimination of particulates by second laser irradiation*, Oral presentation, 12th International School on Quantum Electronics “Lasers Physics and Applications”, Varna, Bulgaria, 21-25 September 2002, Bulgaria
- [15] **E. György**, A. Pérez del Pino, P. Serra, J. L. Morenza, “*Surface structuring of titanium under pulsed Nd:YAG laser irradiation*” Invited lecture, ROMOPTO 8-12 Sept. 2003, Constanta, Rumania
- [16] N. E. Stankova, S. H. Tonchev, **E. György**, G. Socol, I. N. Mihailescu, “*LiNbO₃ thin films grown on MgO (100) substrates by pulsed laser deposition*” Poster presentation, ROMOPTO 8-12 Sept. 2003, Constanta, Rumania
- [17] **E. György**, G. Socol, I. N. Mihailescu, J. Santiso, C. Ducu, S. Ciuca, “*Pulsed laser deposited zinc oxide thin films for optical gas sensor applications*” Poster presentation, 13th International School on Quantum Electronics “Lasers Physics and Applications”, Varna, Bulgaria, 20-25 September 2004 Bulgaria
- [18] **E. György**, J. Santiso, A. Giannoudakos, M. Kompitsas, I. N. Mihailescu, D. Pantelica, “*Growth of Al doped ZnO thin films by a synchronized two laser system*” Poster presentation, ICPEPA, Lecce, Italia, 04-09 September 2004, Italia
- [19] **E. György**, E. Axente, I. N. Mihailescu, C. Ducu, H. Du, “*Doped thin metal oxide films for catalytic gas sensors*” Poster presentation, EMRS-Spring Meeting, Strasbourg, France, 2005
- [20] **E. György**, J. Santiso, A. Figueras, A. Giannoudakos, M. Kompitsas, I. N. Mihailescu, C. Ducu, “*Au cluster growth on ZnO thin films by pulsed laser deposition*” Poster presentation, EMRS-Spring Meeting Strasbourg, France, 2005
- [21] D. Caiteanu, **E. György**, S. Grigorescu, I. N. Mihailescu, G. Prodan, V. Ciupina, “*Growth of oxide thin films for optical gas sensor applications*” Poster presentation, EMRS-Spring Meeting, Strasbourg, France, 2005
- [22] G. Sauthier, S. Ricart, **E. György**, A. Figueras, F. Alsina, J. Pascual “*Titanium dioxide thin films synthesized by sol-gel process for photocatalytic applications*” Poster presentation EMRS-Spring Meeting Nice, France 2006

[23] **E. György**, A. Figueras, A. Giannoudakos, I. Fasaki, M. Kompitsas, I. N. Mihailescu, C. Ducu, F. Roubani-Kalantzopoulou, “*Pulsed laser deposited nickel oxide thin films growth and characterization*”

Poster presentation, EMRS-Spring Meeting, Nice, France, 2006

[24] **E. György**, S. Grigorescu, G. Socol, I. N. Mihailescu, A. Figueras, C. Ducu, D. Janackovic, E. Palcevskis, L. E. Zdrentu, S. Petrescu, “*Bioactive glass and hydroxyapatite thin films obtained by pulsed laser deposition*”

Poster presentation, EMRS-Spring, Nice, France, 2006

[25] **E. György**, E. Axente, I. N. Mihailescu, D. Predoi, S. Ciuca, J. Neamtu, “*Creatinine biomaterial thin films grown by laser techniques*”

Poster presentation, EMRS-Spring Meeting, Nice, France, 2006

[26] I.N. Mihailescu, G. Socol, **E. György**, G. Sauthier, A. Figueras, J. Ferreira, L. Escoubas, F. Flory, P. Torchio. “*Nanostructured transparent thin oxide films for optical gas sensing*”, Invited presentation, International Symposium on Transparent Conductive Oxides, Hersonissos, Creta, Grecia, 2006

[27] **E. György**, A. Giannoudakos, M. Kompitsas, I. N. Mihailescu, “*Controlled doping of metal-oxide thin films by a dual-target, dual-laser deposition system*”

Oral presentation, International Symposium on Transparent Conductive Oxides, Hersonissos, Creta, Grecia, 2006

[28] **E. György**, G. Sauthier, A. Figueras, A. Giannoudakos, M. Kompitsas, “*Growth of Au-TiO₂ nanocomposite thin films by a dual-laser dual-target system*”,

Oral presentation, NanoTech Insight, Luxor, Egipt, 2007

[29] **E. György**, F. Sima, I. N. Mihailescu, T. Smausz, B. Hopp, D. Predoi, S. Ciuca, L. E. Zdrentu, S. Petrescu, “*Biomolecular urease thin films grown by laser techniques for blood diagnostic applications*”

Oral presentation, EMRS-Spring Meeting, Strasbourg, France, 2007

[30] **E. György**, M. Kompitsas, A. Giannoudakos, N. Stefan, A. Popescu, I. N. Mihailescu, “*Laser grown gold nanoparticles on zinc oxide thin films for gas sensor applications*”

Oral presentation, EMRS-Spring Meeting, Strasbourg, France, 2007

[31] I.N. Mihailescu, G. Socol, C. Ristoscu, F. Sima, A. Popescu, N. Stefan, **E. György**, G. Sauthier, A. Figueras, J. Ferreira, L. Escoubas, F. Flory, P. Torchio, A. Giannoudakos, M. Kompitsas, “*Nanostructured metal oxide thin oxide films for optical gas sensing applications*”

Invited presentation, Fundamentals of Laser Assisted Micro & Nanotechnologies, FLAMN-07, St. Petersburg, Russia, 2007

[32] **E. György**, G. Sauthier, A. Figueras, A. Giannoudakos, M. Kompitsas, I. N. Mihailescu, “*Growth of nanocomposite thin films by a dual-laser dual-target deposition system*”

Oral presentation Fundamentals of Laser Assisted Micro & Nanotechnologies, FLAMN-07, St. Petersburg, Russia, 2007

- [33] **E. György**, C. Cojanu, A. Popescu, G. Sauthier, P. Miglietta, A. Perrone, L. Cultrera, “*Growth of Pt doped WO₃ thin films for photocatalytic applications*”
Poster presentation, EMRS-Spring Meeting, Strasbourg, France, 2008
- [34] **E. György**, C. Cojanu, F. Sima, A. Popescu, I. N. Mihailescu, D. Predoi, S. Ciuca, L. Zdrentu, S. M. Petrescu, “*Urease immobilization by laser techniques for bio-sensor applications*”
Poster presentation, EMRS-Spring Meeting, Strasbourg, France, 2008
- [35] **E. György**, A. Perez del Pino, C. Cojanu, A. Popescu, E. Axente, I. N. Mihailescu, “*Noble metal doped transition metal oxide thin films grown by pulsed laser deposition*”
Poster presentation, International Symposium on Transparent Conductive Oxides, Hersonissos, Crete, Greece, 2008
- [36] C. Popescu, J. Roqueta, A. Perez del Pino, M. Moussaoui, M. V. Nogués, **E. György**, “*Processing and immobilization of enzyme Ribonuclease A through laser irradiation*”
Oral presentation, EMRS-Spring Meeting, Strasbourg, France, 2010
- [37] C. Popescu, E. Axente, I. N. Mihailescu, **E. György**, M. Radu, M. C. Munteanu, A. Dinischiotu, I. Pasuk, D. Predoi, “*Hybrid iron oxide–dextran thin films deposited by laser techniques for biomedical applications*”
Poster presentation EMRS-Spring Meeting, Strasbourg, France, 2010
- [38] A. Perez del Pino, **E. György**, I. C. Marcus, J. Roqueta, M. I. Alonso, “*Effects of pulsed laser radiation on epitaxial self-assembled Ge quantum dots grown on Si substrates*”
Poster presentation, EMRS-Spring Meeting, Nice, France, 2011
- [39] **E. György**, E. Axente, M. Motoc, C. Popescu, A. Perez del Pino, I. N. Mihailescu, L. Sima, S. Petrescu, “*Laser immobilisation of active proteins on calcium hydroxyapatite layers for antimicrobial therapies and regenerative medicine*”
Poster presentation, EMRS-Spring Meeting, Nice, France, 2011
- [40] **E. György**, A. Pérez del Pino, J. Roqueta, B. Ballesteros, A.S. Miguel, C. Maycock, A. G. Oliva, “*Laser immobilisation onto solid substrates of CdSe/ZnS core-shell quantum dots*”
Oral presentation, EMRS-Spring Meeting, Nice, France, 2011
- [41] M. Motoc, C. Popescu, E. Axente, L. Sima, S. M. Petrescu, I. N. Mihailescu, **E. György**, “*Active protein and calcium hydroxyapatite composite layers grown by laser techniques for therapeutic applications*”
Poster presentation, EMRS-Spring Meeting, Strasbourg, France, 2012
- [42] C. Popescu, A. Popescu, I. Iordache, A. Simon Gruita, G. Duta Cornescu, N. Constantin, D. Pojoga, **E. György**, “*Catalytic activity of laser immobilised RNase A for RNA removal from DNA preparations*”
Poster presentation, EMRS-Spring Meeting, Strasbourg, France, 2012
- [43] **E. György**, Á. Pérez del Pino, F. Sava, V. Braic, A.M. Vlaicu, C. Logofatu, M. Popescu, A. Duta, “*Photoactive nanocomposite materials grown by matrix assisted pulsed laser evaporation*,”
Poster presentation, E-MRS Spring Meeting 2013, Strasbourg, France

- [44] A. Pérez del Pino, L. Cabana, B. Ballesteros, G. Tobias, **E. György** “*Deposition of Multi Wall and Functionalized Single Wall Carbon Nanotubes through Matrix Assisted Pulsed Laser Evaporation*”
Poster presentation, E-MRS Spring Meeting 2013, Strasbourg, France
- [45] L. Duta, C. Popescu, A. Popescu, C. Logofatu, A. Duta, **E. György** “*Synthesis and Characterization of Anion Doped and Noble Metal Loaded TiO₂ Photocatalysts*”
Poster presentation, 12th International Conference on laser Ablation, COLA-2013, October 6-11, 2013, Ischia, Italy
- [46] I. Camps, L. Duta, C. Nita, **E. György**, M. Borlaf, R. Serna, C. Logofatu, M. T. Colomer, R. Moreno “*Light emitting TiO₂: Eu thin films produced by matrix assisted pulsed laser evaporation from colloidal sols*”
Poster presentation, E-MRS Spring Meeting 2014, Lille, France
- [47] L. Duta, C. Nita, I. Camps, R. Serna, M. Borlaf, M. T. Colomer, R. Moreno, A. Perez del Pino, C. Logofatu, **E. György** “*Er and Eu doped TiO₂ thin films grown by matrix assisted pulsed laser evaporation from colloidal solutions: structure and optical properties*”
Poster presentation, E-MRS Spring Meeting 2014, Lille, France
- [48] A. Datcu, C. Logofatu, A. Duta, A. Perez del Pino, **E. György**, “*Effect of Nitrogen Doping on Wetting and Photoactive Properties of Laser Processed Zinc Oxide - Graphene Oxide Nanocomposite Layers Nanoscience*”
Oral presentation, Advances in CBRN Agents Detection, Information and Energy Security; NATO Advanced Study Institute, Science for Peace and Security (SPS) North Atlantic Treaty Organization, 29 May – 06 June 2014, Sozopol, Bulgaria
- [49] A. Pérez del Pino, A. Datcu, **E. György**, “*Morphological studies of laser processed titanium oxide – graphene oxide nanocomposite layer*”
Poster presentation, E-MRS Spring Meeting 2015, Lille, France
- [50] A. Datcu, L. Duta, A. Perez del Pino, C. Luculescu, C. Logofatu, A. Enesca, A. Duta, **E. György**, “*Photocatalytic nanocomposite materials grown by matrix assisted pulsed laser evaporation*”
Oral presentation, E-MRS Spring Meeting 2015, Lille, France
- [51] A. Datcu, L. Duta, A. Pérez del Pino, C. Logofatu, A. Duta, **E. György** “*Laser processing and immobilisation of TiO₂ / graphene oxide (GO) / noble metal nanocomposite materials*”
Oral Presentation, 11th International Conference "Micro- to Nano-Photonics IV- ROMOPTO 2015" September 1 - 4, 2015 Bucharest, Romania
- [52] **E. György**, “*MAPLE deposition of nano-entities and composite nanomaterials*”
Invited Presentation, International High Power Laser Ablation and Directed Energy Conference, 4-7 April 2016, Santa Fe, New Mexico, USA
- [53] **E. György**, A. Pérez del Pino “*Laser transfer and immobilization of nano-entities and nanocomposite materials*”
International Association of Advanced Materials (IAAM) Scientist Medal Lecture, European Advanced Materials Congress, 23-25 August 2016, Stockholm, Sweden
- [54] A. Pérez del Pino, **E. György**, “*Laser processing of low dimensional carbon-based materials*”
Oral presentation, European Advanced Materials Congress, 23-25 August 2016, Stockholm, Sweden

[55] A. Datcu, M. L. Mendoza, A. Pérez del Pino, C. Logofatu, C. Luculescu, **E. György**, “*Titanium oxide / graphene oxide spin coated composite material for photocatalytic applications*”

Poster presentation, 10th International Conference on Photoexcited Processes and Applications, August 29 – September 2, 2016, Brasov, Romania

[56] A. Queraltó, A. Datcu, A. Pérez del Pino, E. György, “*MAPLE of Graphene Oxide Nanocomposites*”

Poster presentation, 10th International Conference on Photoexcited Processes and Applications, August 29 – September 2, 2016, Brasov, Romania

[57] **E. György**, “*Laser based methods for the processing and immobilization of nanomaterials*”

Invited Presentation, Energy Materials Nanotechnology (EMN) Meeting on Materials Chemistry, September 9-13, 2016, Budapest, Hungary

[58] A. Datcu, O. Pascu, R. M. Ivan, C. Logofatu, A. Pérez del Pino, **E. György**, “*MAPLE transfer and immobilization of ZnO/graphene oxide nanocomposites for photocatalytic applications*”

Poster presentation, E-MRS Spring Meeting 2017, Strasbourg, France

[59] A. Datcu, A. Queraltó, C. Logofatu, A. Pérez del Pino, **E. György**, “*Photocatalytic iron oxide / graphene oxide nanocomposite material synthesized by laser techniques*”

Poster presentation, E-MRS Spring Meeting 2017, Strasbourg, France

[60] **E. György**, “*Photoactive Nano-Carbon Based Composite Materials Obtained by Matrix Assisted Pulsed Laser Evaporation*”

Oral Presentation, International High Power Laser Ablation and Directed Energy Conference, 26-29 March 2018, Santa Fe, New Mexico, USA

[61] R. Ivan, C. Popescu, A. Pérez del Pino, C. Logofatu, **E. György**, “*Reduced graphene oxide / transition metal oxide / urea composite materials for photocatalytic degradation of organic pollutants in aqueous medium*”

Poster presentation, TCM2018, 7th International Symposium on Transparent Conducting Materials, 14-17 October, 2018, Crete, Greece

[62] R. Ivan, C. Popescu, A. Pérez del Pino, C. Logofatu, **E. György**, “*Transition metal oxide – carbon based nanomaterials photocatalyst layers synthesized by laser techniques*”,

Poster presentation, E-MRS2019 Spring Meeting, Symposia H, 27-31 May, 2019, Nice, France

[63] **E. György**, “*Hybrid organic-inorganic composite layers synthesised by laser techniques for environmental and energy storage applications*”

Oral presentation, World Chemistry Forum 2019, 22-24 May, 2019, Barcelona, Spain

[64] P. García Lebière, A. Koutsogianni, J. Gispert, M. Minguillon, A. Pérez del Pino, **E. György**, “*Cost Effective Laser Processing of Graphene Oxide, Transition Metal Oxides and Alginate Composite Layers for Hybrid Supercapacitors*”

Poster presentation, World Chemistry Forum 2019, 22-24 May, 2019, Barcelona, Spain

[65] P. García Lebière, N. Posa Campanyà, A. Pérez del Pino, **E. György**, “*Fabrication of reduced graphene oxide supercapacitor electrodes through easily-scalable laser-method*”

Poster presentation, NanoSpain2019, 28-31 May, Barcelona, Spain

[66] R. Ivan, C. Popescu, S. Antohe, A. Pérez del Pino, C. Logofatu, E. György „*Laser synthesis of hybrid materials for removal of pharmaceutical products from aqueous solution*”, Oral Presentation, 19th International Balkan Workshop on Applied Physics and Materials Science, 2019, July 15-20, Constanta, Romania

PAPERS PUBLISHED IN PROCEEDINGS OF INTERNATIONAL CONFERENCES

[1] “*Pulsed laser deposition in reactive gas: application to the synthesis of good quality TiN thin films*”

I. N. Mihailescu, N. Chitica, **E. György**, V. S. Teodorescu, G. Marin, M. Popescu, A. Barborica, A. Luches, A. Perrone, M. Martino

Invited lecture to the International Conference Laser Material Processing, Opatia, 1-3 June, 1995, 1995, Ed. Bozidar Liscic, Publishing House Tisak, KRATIS s p.o. -Zagreb, p.155-163

[2] “*Pulsed laser deposition in a chemically reactive environment: Application to the synthesis and deposition of high quality thin films*”

I. N. Mihailescu, N. Chitica, **E. György**, V. S. Teodorescu, G. Marin, R. Alexandrescu, A. Luches, A. Perrone, M. Martino, J. Hermann, C. Leborgne

17th Congress of the International Commission for Optics: Optics for Science and New Technology, Proceedings of the Society of Photo-optical Instrumentation Engineers (SPIE) Eds. J. S. Chang, J. H. Lee, S. Y. Lee, C. H. Nam, 2778, 1996, 137-140

[3] “*New studies of reactive pulsed laser deposition*”

I. N. Mihailescu, **E. György**, V. S. Teodorescu, G. Marin, D. Pantelica, A. Andrei, J. Neamtu SPIE Proceedings, vol 3405, 182-187, ROMOPTO '97, 8-12 Sept. 1997, Bucharest, Romania

[4] “*Growth of polycrystalline hydroxiapatite thin films by pulsed laser deposition and subsequent heat-treatment in air*”

V. D. Nelea, C. Ghica, C. Martin, A. Hening, I. N. Mihailescu, L. C. Nistor, V. S. Teodorescu, R. Alexandrescu, J. Werckmann, **E. György**, G. Marin

SPIE Proceedings, vol. 3405, 218-224, ROMOPTO '97, 8-12 Sept. 1997, Bucharest, Romania

[5] “*Thin carbon nitride films deposited by laser ablation with an XeCl* excimer laser*”

A. Luches, E. DAnna, G. Leggieri, M. Martino, A. Perrone, G. Majni, P. Mengucci, **E. György**, I. N. Mihailescu, M. Popescu

SPIE Proceedings, 3404 (1998) 91 – 98, Ed. Vladimir I.Pustovoy, ALT'97 International Conference on Laser Surface Processing, 1997

[6] “*Recent progress in the deposition of carbon nitride thin films by laser reactive ablation*”

I.N. Mihailescu, **E. György**, A. Luches, A. Perrone, M. Baleva, A. Abrashev

Tenth International School on Quantum Electronics “Lasers Physics and Applications”, Varna, Bulgaria, 21-25 September 1998

[7] “*Aspects in HTS laser ablation thin film technology and characterization*”

M. Branescu, **E. György**, C. Ristoscu, I. N. Mihailescu, J. Jaklovsky, V. Mihalache

SPIE Proceedings, Eds. Atanasov, Peter A.; Cartaleva, Stefka, Vol. 4397 (2001) p. 309-313, of the 11th International School on “Laser Physics and Applications”, 18-22 September, 2000, Varna, Bulgaria

- [8] *“Influence of substrate orientation on the characteristics of Sr - ferrite thin films obtained by Pulsed Laser Deposition”*
M. Koleva, R. Tomov, S. Zotova, P. Atanasov, C. Ristoscu, V. Nelea, S. Arens, **E. György**, I. N. Mihailescu
Published in SPIE Proceedings, Eds. Atanasov, Peter A.; Cartaleva, Stefka, Vol. 4397 (2001) p. 314-318, of the 11th International School on “Laser Physics and Applications”, 18-22 September, 2000, Varna, Bulgaria
- [9] *“Particulates in pulsed laser deposition: formation mechanisms and possible approaches to their elimination”*
I.N. Mihailescu, C. Ristoscu, V. S. Teodorescu, **E. György**
Presented in the 11th International School on “Laser Physics and Applications”, 18-22 September, 2000 Varna, Bulgaria
- [10] *“Particulates in pulsed laser deposition: formation mechanisms and possible approaches to their elimination”*
I.N. Mihailescu, V. S. Teodorescu, **E. György**, C. Ristoscu, R. Cristescu
Published in SPIE Proceedings, ALT '01 International Conference on Advanced Laser Technologies, 11-14 September 2001, Constanta, Romania, Vol. 4762 (2002) 64-74
- [11] *“Pulsed laser deposition of thin films: elimination of particulates by second laser irradiation”*
E. György, I. N. Mihailescu, M. Kompitsas, A. Giannoudakos
12th International School on Quantum Electronics “Lasers Physics and Applications”, Varna, Bulgaria, 23-27 September 2002, SPIE Proceedings 5226 (2003) 327-334
- [12] *“Surface structuring of titanium under pulsed Nd:YAG laser irradiation”*
E. György, A. Pérez del Pino, P. Serra, J. L. Morenza
Invited lecture ROMOPTO 8-12 Sept. 2003, Constanta, Romania, SPIE Proceedings, 5581 (2004) 323-333
- [13] *“LiNbO₃ thin films grown on MgO (100) substrates by pulsed laser deposition”*
N. E. Stankova, S. H. Tonchev, **E. György**, G. Socol, I. N. Mihailescu
Poster presentation ROMOPTO 8-12 Sept. 2003, Constanta, Romania, SPIE Proceedings, 5581 (2004) 498-502
- [14] *“Pulsed laser deposited zinc oxide thin films for optical gas sensor applications”*
E. György, G. Socol, I. N. Mihailescu, J. Santiso, C. Ducu, S. Ciuca
Poster presentation 13th International School on Quantum Electronics “Lasers Physics and Applications”, Varna, Bulgaria, 20-25 September 2004, SPIE Proceedings, 5830 (2005) 50-55
- [15] *“Functional nanostructured metal oxide thin films for applications in optical gas detection”*
G. Socol, I. N. Mihailescu, E. Axente, C. Ristoscu, **E. György**, D. Stanoi, S. Grigorescu, L. Escoubas, T. Mazingue
Conference of the NATO-Advanced-Study-Institute on Functional Properties of Nanostructured Materials, June 03-15, 2005 Sozopol BULGARIA
Functional Properties of Nanostructured Materials 223 (2006) 363-366

BOOK CHAPTERS

[1] *"Pulsed Laser Deposition: An Overview"*

I. N. Mihailescu, **E. György**

Chapter 1 in Part IV Optical materials and Processing, 4-th International Commission for Optics (ICO) Book "International Trends in Optics and Photonics", T. Asakura (Ed. ICO President), Springer Series in Optical Science, Berlin, Heidelberg, pp. 201-214 (1999), ISSN 0342-4111, ISBN 978-3-662-14212-7, ISBN 978-3-540-48886-6 (e-book)

<https://www.springer.com/gb/book/9783662142127>

[2] *"Functional nanostructured metal oxide thin films for applications in optical gas detection"*

G. Socol, I. N. Mihailescu, E. Axente, C. Ristoscu, **E. György**, D. Stanoi, S. Grigorescu, L. Escoubas, T. Mazingue

Chapter 13 in Part: Nanoscale thin Films of the book "Functional Properties of Nanostructured Materials", NATO SCIENCE SERIES, SERIES II: MATHEMATICS, PHYSICS AND CHEMISTRY, Springer Verlag, Kassing R; Petkov P; Kulisch W; Popov C (Eds.) Volume: 223 pp. 363-366 (2006), ISBN 978-1-4020-4594-3

<https://www.springer.com/gp/book/9781402045936>

[3] *"XRD Study of Pulsed Laser Deposited AlN Films with Nanosized Crystallites"*,

S. Bakalova, A. Szekeres, A. Cziraki, **E. György**, S. Grigorescu, G. Socol, I.N. Mihailescu in Chapter 31 in "Functionalized Nanoscale Materials, Devices and Systems", NATO Science for Peace and Security Series B: Physics and Biophysics, Springer Verlag, Vaseashta, A.; Mihailescu, I.N. (Eds.) (2008) pp. 357-364, ISBN 978-1-4020-8902-2 (PB), ISBN 978-1-4020-8901-5 (HB), ISBN 978-1-4020-8903 -9 (e-book)

<https://www.springer.com/gp/book/9781402089015>

[4] *"Biomaterial thin films by soft pulsed laser technologies for biomedical applications"*

I. N. Mihailescu, A. Bigi, **E. György**, C. Ristoscu, F. Sima, E. T. Oner

Chapter 11 in "Lasers in Materials Science" (SLIMS 2012), Springer Series in Materials Science, vol 191, Eds. P.M. Ossi, M. Castillejo, L. Zhigilei, (2014) pp. 271-294, ISBN 978-3-319-02897-2 (Hardcover), ISBN 978-3-319-02898-9 (e-book)

<https://www.springer.com/gp/book/9783319028972>

[5] *"Wetting and photoactive properties of laser irradiated zinc oxide – graphene oxide nanocomposite layers"*

A. Datcu, A. Perez del Pino, C. Logofatu, A. Duta, **E. György**

Chapter 13 in "Nanoscience Advances in CBRN Agents Detection, Information and Energy Security" NATO Science for Peace and Security Series A: Chemistry and Biology, Springer Verlag, Volume 39, P. Petkov, D. Tsiulyanu, W. Kulisch, C. Popov (Eds) 2015, pp. 119-125, ISBN 978-94-017-9697-2

<https://www.springer.com/gp/book/9789401796965>

[6] *"Enzyme-Based Biosensors for Trace Detection"*

E. György and I. N. Mihailescu

Chapter 9 in "Life Cycle Analysis of Nanoparticles: Risk, Assessment, and Sustainability", A. Vaseashta, (Ed.), DEStech Publications Inc., Lancaster, Pennsylvania, USA, 2015, pp. 231-248, ISBN 978-1-60595-023-5

<https://www.destechpub.com/product/life-cycle-analysis-of-nanoparticles/>

[7] *"MAPLE deposition of nanomaterials"*

E. György and A.P. Caricato

Chapter 6 in “Pulsed Laser Ablation: Advances and Applications in Nanoparticles and Nanostructuring Thin Films”, Ion N. Mihailescu, Anna Paola Caricato (Eds.) Pan Stanford Publishing Pte. Ltd, 2018, pp. 207-245, ISBN 978-1-315-18523-1 (eBook), ISBN 978-981-4774-23-9 (Hardcover)

<https://www.crcpress.com/Pulsed-Laser-Ablation-Advances-and-Applications-in-Nanoparticles-and-Nanostructuring/Mihailescu-Caricato/p/book/9789814774239>

[8] “*Laser processing of graphene oxide / transition metal oxide nanocomposite coatings*”

E. György, A. Perez del Pino, C. Logofatu, A. Duta

Chapter 2 in “Graphene Oxide: Advances in Research and Application” Nova Science Publishers, Inc., A. K. Mishra (Ed.), 2018, pp. 11-36, ISBN: 978-1-53614-168-9

<https://novapublishers.com/shop/graphene-oxide-advances-in-research-and-applications/>