

List of scientific publications

Book Chapters

1. *“Functional nanostructured metal oxide thin films for applications in optical gas detection”*
G. Socol, I. N. Mihailescu, E. Axente, C. Ristoscu, E. Gyorgy, D. Stanoi, S. Grigorescu, L. Escoubas, T. Mazingue
“Functional properties of nanostructured materials”, Eds. R. Kassing, P. Petkov, W. Kulisch and C. Popov NATO Science Series by Springer Science and Business Media, (2006), pp.341 – 344
2. *“Growing thin films of charge density wave system $Rb_{0.3}MoO_3$ by pulsed laser deposition”*
D. Dominko, D. Starešinić, K. Biljaković, K. Salamon, O. Milat, A. Tomeljak, D. Mihailović, J. Demšar, G. Socol, C. Ristoscu, I. N. Mihailescu, J. Marcus
“Functionalized Nanoscale Materials, Devices, & Systems”, Edited by A. Vaseashta, and I. N. Mihailescu, SPRINGER SCIENCE + BUSINESS MEDIA B.V., (2008), p. 399 - 402
3. *“Nanostructured thin optical sensors for detection of gas traces”*
C. Ristoscu, I. N. Mihailescu, D. Caiteanu, C. N. Mihailescu, Th. Mazingue, L. Escoubas, A. Perrone, H. Du
“Functionalized Nanoscale Materials, Devices, & Systems”, Edited by A. Vaseashta, and I. N. Mihailescu, SPRINGER SCIENCE + BUSINESS MEDIA B.V., (2008), p. 27 - 50
4. *“Advanced biomimetic implants based on nanostructured coatings synthesized by pulsed laser technologies”*
Ion N. Mihailescu, Carmen Ristoscu, Adriana Bigi, Isaac Mayer
Chapter 10 in *“Laser-Surface Interactions for New Materials Production Tailoring Structure and Properties”*, Series: Springer Series in Materials Science, Vol. 130, Miotello, Antonio; Ossi, Paolo M. (Eds.), 2010, pp. 235 – 260
5. *“Effect of pulse laser duration and shape on PLD thin films morphology and structure”*
Carmen Ristoscu, Ion N. Mihailescu
Chapter 3 in *“Lasers - Applications in Science and Industry”*, INTECH, Ed. Krzysztof Jakubczak, ISBN 978-953-307-755-0, pp 53 – 74 (2011)
6. *“Biomimetic coatings by pulsed laser deposition”*
Carmen Ristoscu, Ion N. Mihailescu
Chapter 7 in *“Laser Technology in Biomimetics: basics and applications”*, Springer - Biological and Medical Physics, Biomedical Engineering, Eds. Maria Belegatis, Volker Schmidt, Springer-Verlag Berlin Heidelberg (2013), ISBN 978-3-642-41340-7, pp. 163-191
7. *“Biomaterial thin films by soft pulsed laser technologies for biomedical applications”*
Ion N. Mihailescu, Adriana Bigi, Eniko Gyorgy, Carmen Ristoscu, Felix Sima, Ebru Toksoy Oner
Chapter 11 in *“Lasers in Materials Science”* (SLIMS 2012 Proceedings), Springer Series Materials in Science, vol 191, Eds. P.M. Ossi, M. Castillejo, L. Zhigilei, ISBN 978-3-319-02897-2 (2014) pp. 271-294
8. *“Deposition and surface modification of thin solid structures by high intensity pulsed laser irradiation”*
Andrei C. Popescu, Magdalena Ulmeanu, Carmen Ristoscu, Ion N. Mihailescu
Chapter 12 in *“Laser surface engineering: Processes and applications”* edited by: Jonathan Lawrence and David Waugh, Woodhead Publishing Series in Electronic and Optical Materials, Woodhead Publishing Ltd, ISBN 978-1782420743 (2015) pp. 287 – 313
9. *“Biopolymer thin films synthesized by advanced pulsed laser techniques”*

Emanuel AXENTE, Felix SIMA, Carmen RISTOSCU, Natalia MIHAILESCU, Ion N. MIHAILESCU,

Chapter 4 in "Recent Advances in Biopolymers", INTECH (2016), Ed. Farzana Parveen, ISBN 978-953-51-4613-1, pp. 73 - 104

10. *"Soft laser light as tweezers for protected transfer of organic/biological objects"*

I. N. Mihailescu, C. Ristoscu, S. Grigorescu, E. Axente, G. Socol

Proceedings of FIAT Lux Conference, Rome June 3-5, 2015, Nova Science Publishers, Inc.

11. *"Bioresponsive surfaces and interfaces fabricated by innovative laser approaches"*,

F. Sima, E. Axente, C. Ristoscu, O. Gallet, K. Anselme, I.N. Mihailescu,

Chapter 12 in Advanced Materials Interfaces (Advanced Materials Book Series), Editor: Ashutosh Tiwari, Hirak K. Patra and Xuemei Wang, Scrivener Publishing LLC 2016, ISBN: 978-1-119-24275-8, pp.427 - 462

12. *"Pulse laser deposited TiO₂ based films: Synthesis, electronic structures and photocatalytic activity"*,

Oksana Linnik, Nataliia Chorna, Nataliia Smirnova, Anna Eremenko, Oleksandr Korduban, Nicolaie Stefan, Carmen Ristoscu, Gabriel Socol, Marimona Miroiu, Ion N. Mihailescu,

Chapter 5 in "Semiconductor Photocatalysis - Materials, Mechanisms and Applications", InTech, Ed. Wenbin Cao, ISBN 978-953-51-2484-9 (2016) pp. 135-161

13. *"Laser thin films deposition and characterization for biomedical applications"*

F. Sima, C. Ristoscu, L. Duta, O. Gallet, K. Anselme, I.N. Mihailescu

Chapter 3 in "Laser Surface Modification of Biomaterials, Techniques and Applications"; 1st Edition; Editor: R Vilar, Release Date: 15 Apr 2016, Imprint: Woodhead Publishing, Print Book ISBN: 9780081008836, pp.77-125, DOI: 10.1016/B978-0-08-100883-6.00003-4

14. *"Laser ablation of biomaterials"*

G. Popescu-Pelin, C. Ristoscu, I. N. Mihailescu

Chapter 5 in "Applications of Laser Ablation - Thin Film Deposition, Nanomaterial Synthesis and Surface Modification", InTech ISBN 978-953-51-2811-3, Edited by: Dongfang Yang, pp. 103 – 127 (2016)

15. *"Composite coatings based on renewable resources synthesized by advanced laser techniques"*,

A. Visan, C. Ristoscu, I. N. Mihailescu,

Chapter 6 in "Composites from Renewable and Sustainable Materials", InTech, ISBN 978-953-51-2793-2, Edited by: Matheus Poletto, pp. 107 – 132 (2016)

16. *"Protected laser evaporation and deposition of organic/biological materials: thin film deposition for nano-biomedical applications"*

G. Popescu-Pelin, C. Ristoscu, M. Badiceanu, I. N. Mihailescu

Chapter 3 in "Laser Ablation - From Mechanisms to Applications", InTech ISBN 978-953-51-3700-9, Print ISBN 978-953-51-3699-6, Published: December 21, 2017 Edited by Tatiana Itina, pp. 57 - 79 (2017).

17. *"Metamaterials for Antimicrobial Biofilm Applications: Photonic Crystals of Microspheres and Optical Fibers for Decontamination of Liquids and Gases"*

Nicolae Enaki, Aurelia Profir, Sergiu Bazgan, Tatiana Paslari, Carmen Ristoscu, Cristian N. Mihailescu, Maria Badiceanu, Ion N. Mihailescu

Chapter 13 in Handbook of Antimicrobial Coatings, Elsevier ISBN: 978-0-12-811982-2, Edited by Atul Tiwari, 2018, pp. 257 - 282

18. *"Thin Films and Nanoparticles by Pulsed Laser Deposition: wetting, adherence and nanostructuring"*

Carmen Ristoscu, Ion N. Mihailescu

Chapter 7 in “Pulsed Laser Ablation: Advances and Applications in Nanoparticles and Nanostructuring Thin Films”, Pan Stanford Publishing Pte. Ltd., ISBN 978-981-4774-23-9 (Hardcover), ISBN 978-1-315-18523-1 (eBook), DOI: 10.4032/9781315185231, Edited by Ion N. Mihailescu, Anna Paola Caricato (2018) pp. 245-276

19. “*Combinatorial laser synthesis of biomaterial thin films: selection and processing for medical applications*”

Emanuel Axente, Carmen Ristoscu, Adriana Bigi, Felix Sima, Ion N. Mihailescu

Chapter 11 in “*Advances in the Application of Lasers in Materials Science*” (SLIMS 2016 Proceedings), Springer Series Materials in Science, vol. 274, Ed. P.M. Ossi (2018) ISBN 978-3-319-96845-2 https://doi.org/10.1007/978-3-319-96845-2_11, pp. 309 - 338

20. “*Nanoparticle Based Decontamination of Bacteria/Pathogens*”

N. Enaki, T. Paslari, E. Starodub, S. Bizgan, C. Ristoscu, I. N. Mihailescu, A. Vaseashta

Chapter 49 in “Advanced Nanotechnologies for Detection and Defence Against CBRN Agents”, Editors: Petkov, P., Tsiulyanu, D., Popov, C., Kulisch, W., Springer - NATO Science for Peace and Security Series B: Physics and Biophysics, Springer, Dordrecht, ISBN: 978-94-024-1297-0 (2018) pp 493-498

21. “*Efficient microbial decontamination of translucent liquids and gases using optical metamaterials*”

Nicolae Enaki, Sergiu Bizgan, Andrei Nistoreanu, Viorica Tonu, Marina Turcan, Tatiana Paslari, Elena Starodub, Aurelia Profir, Gianina-Florentina Popescu-Pelin, Maria Badiceanu, Carmen Ristoscu, Ion N. Mihailescu

Chapter 9 in “Advanced Surface Engineering Research” InTech ISBN 978-953-51-6940-6, Ed. Mohammad Asaduzzaman Chowdhury, 2018, pp. 169 - 198

22. “*Composite Metamaterials for Biological Decontamination of Fluids*”

N. A. Enaki, M. Turcan, S. Bazgan, E. Starodub, T. Paslari, A. Nistoreanu, C. Ristoscu, and I. N. Mihailescu

IFMBE Proceedings 77 Springer Nature Switzerland AG 2020, ISBN 978-3-030-31865-9, Ion Tiginyanu, Victor Sontea, Serghei Railean (eds.), Pages 373-377, (4th International Conference on Nanotechnologies and Biomedical Engineering), https://doi.org/10.1007/978-3-030-31866-6_69

23. “*Thermal fields in laser cladding processing: a “fire ball” model. A theoretical computational comparison: laser cladding versus electron beam cladding*”

Mihai OANE, Ion N. MIHĂILESCU, Carmen-Georgeta RISTOSCU

Chapter 6 in “Nonlinear Optics - From Solitons to Similaritons” Eds. İlkey Bakırtaş and Nalan Antar, Print ISBN 978-1-83962-651-7, Online ISBN 978-1-83962-652-4, eBook (PDF) ISBN 978-1-83962-653-1, InTech, 2021, pp. 137 – 147, DOI: <http://dx.doi.org/10.5772/intechopen.88710>

24. “*A New Approach to Solve Non-Fourier Heat Equation via Empirical Methods Combined with the Integral Transform Technique in Finite Domains*”

Cristian N. Mihăilescu, Mihai Oane, Natalia Mihăilescu, Carmen Ristoscu, Muhammad Arif Mahmood, Ion N. Mihăilescu

Chapter 10 in *Matrix Theory - Classics and Advances*, InTech ISBN 978-1-80355-823-3, Ed. Dr. Mykhaylo Andriychuk, 2022, DOI: 10.5772/intechopen.104499

25. “*Bioactive glass coatings on metallic implants for biomedical applications*”

Irina Negut, Carmen Ristoscu, Bogdan Bită

Section 2, Chapter 3 in *Antimicrobial Materials and Coatings*, 1st Edition, Editor(s): Ashish Kumar Singh, Marshal Dhayal, Chaudhery Mustansar Hussain, In Woodhead Publishing in Materials, Antimicrobial Materials and Coatings, Woodhead Publishing, 2025, Pages 45-78, ISBN 9780323954600, <https://doi.org/10.1016/B978-0-323-95460-0.00003-4>.

A: Papers in International journals

1997

1. "A method of vibrational temperature determination in electric arc plasma using the CN molecule spectra"

I. Iova, M. Bazavan, C. Biloiu, M. Ganciu, Carmen Ristoscu, Maria-Cristina Penache, D. Penache
Romanian Reports in Physics, Vol. **49**, Nos. 3-4, 245-248 (1997)

1998

2. "New Results In Direct Laser Implantation with Phosphorous of P-Type Silicon Wafers"

I. N. Mihailescu, Enikő György, Carmen Ristoscu, Clementina Timus, A. M. Prokhorov, Galina N. Mikhailova, Anna Szekeres, S. Simeonov, E. Kafedjiiska
Romanian Reports in Physics, vol. **43**, nos. 1-2, pages 9-18, February 1998

1999

3. "Theoretical modelling of phenomena in Pulsed Laser Deposition Process: application to Ti targets ablation in low-pressure N₂"

J. Neamtu, I. N. Mihailescu, Carmen Ristoscu, J. Hermann
Journal of Applied Physics, **86**(11), 6096-6106 (1999)

4. "Persistent extinction effect in fluorescent photosensitive glass under pulsed excimer laser irradiation"

E. Pavel, I. N. Mihailescu, A. Hening, Carmen Ristoscu, V. I. Vlad, Laura Tugulea
Journal of Optoelectronics and Advanced Materials, vol. **1**, no. 2, pp. 71-74 (1999)

2000

5. "Pulsed Laser Deposition of Barium Hexaferrite (BaFe₁₂O₁₉) Thin Films"

M. Koleva, P. Atanasov, R. Tomov, O. Vankov, C. Martin, C. Ristoscu, I. N. Mihailescu, D. Iorgov, S. Angelova, Ch. Ghelev, N. Mihailov
Applied Surface Science **154-155**(1-4), 485-491 (2000)

6. "Structural comparison between La_{0.60}Y_{0.07}Ca_{0.33}MnO_{3-δ} bulk and Pulsed Laser Deposited thin films"

V. S. Teodorescu, L. C. Nistor, M. Valeanu, C. Ghica, C. Sandu, C. Ristoscu, I. N. Mihailescu, J. P. Deville, J. Werckmann
Journal of Magnetism and Magnetic Materials, **211**(1-3), 54-60 (2000)

7. "Growth and characterization of pulsed laser deposited Mn-Zn ferrite thin films"

M. Koleva, R. Tomov, S. Zotova, P. Atanasov, C. Martin, C. Ristoscu, I. Mihailescu
Vacuum, **58**, 294-299 (2000)

8. "Structural investigation of a pulsed laser deposited La_{0.06}Y_{0.07}Ca_{0.33}MnO₃ thin film by high resolution transmission electron microscopy"

C. Ghica, L. C. Nistor, V. S. Teodorescu, M. Valeanu, C. Ristoscu, I. N. Mihailescu, J.-P. Deville, J. Werckmann
Journal of Optoelectronics and Advanced Materials, **2**, 65-72 (2000)

9. "Conduction via deep levels in Si p-n junctions prepared by direct laser implantation of Phosphorous"

Simeon Simeonov, Elisaveta Kafedjijska, Anna Szekeres, Carmen Ristoscu, Enikő György, Ion N. Mihailescu, Galina N. Mikhailova
Journal of Optoelectronics and Advanced Materials, **2**, 99-102 (2000)

10. "Pulsed laser deposition of hydroxyapatite thin films on Ti-5Al-2.5Fe substrates with and without buffer layers"

V. Nelea, C. Ristoscu, C. Chiritescu, C. Ghica, I. N. Mihailescu, H. Pelletier, P. Mille, A. Cornet
Applied Surface Science, **168**(1-4), 127-131 (2000)

11. *"Sr-ferrite thin films grown on sapphire by pulsed laser deposition"*

M. Koleva, S. Zotova, P. Atanasov, R. Tomov, C. Ristoscu, V. Nelea, C. Chiritescu, E. Gyorgy, C. Ghica, I. N. Mihailescu,
Applied Surface Science, **168**(1-4), 108-113 (2000)

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12. *"Influence of the deposition configuration on the composition, structure and morphology of $\text{La}_{0.6}\text{Y}_{0.07}\text{Ca}_{0.33}\text{MnO}_{3-\delta}$ thin films obtained by pulsed laser deposition"*

C. Ghica, M. Valeanu, L. C. Nistor, V. Teodorescu, C. Sandu, C. Ristoscu, I. N. Mihailescu, J. Werckmann, G. Schmerber, J.-P. Deville
International Journal of Inorganic Materials, **3**, 1253-1256 (2001)

13. *"Role of laser pulse duration and gas pressure in deposition of AlN thin films"*

Eniko Gyorgy, Carmen Ristoscu, I. N. Mihailescu, Argyro Klini, N. Vainos, C. Fotakis, C. Ghica, G. Schmerber, J. Faerber
Journal of Applied Physics, **90**(1), 456-461 (2001)

14. *"Trap - assisted tunneling at temperatures near to 77 K in laser processed $\text{Si } n^+ - p$ junctions"*

S. S. Simeonov, E. Kafedjiiska, A. Szekeres, C. Ristoscu, E. Gyorgy, I. N. Mihailescu
Journal of Applied Physics, **90**(2), 860-865 (2001)

15. *" La_2O_3 -doped BaTiO_3 thin film obtained by pulsed laser deposition"*

M. Cernea, I. N. Mihailescu, C. Martin, Carmen Ristoscu, Monica Iliescu
Journal of Modern Optics, **48**, 2185-2189 (2001)

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16. *"Mechanical properties improvement of pulsed laser deposited hydroxyapatite thin films by high energy ion beam implantation"*

V. Nelea, H. Pelletier, D. Muller, N. Broll, P. Mille, C. Ristoscu, I. N. Mihailescu,
Applied Surface Science **186**, 483-489 (2002)

17. *"Plume emissions accompanying 248 nm laser ablation of graphite in vacuum: effects of pulse duration"*

Frederik Claeysens, Michael N.R. Ashfold, Emmanuel Sofoulakis, Carmen Ristoscu Demetrios Anglos, Costas Fotakis
Journal of Applied Physics, **91**(9), 6162-6172 (2002)

18. *"Calcium phosphate thin film processing by pulsed laser deposition and in-situ assisted ultraviolet pulsed laser deposition"*

V. Nelea, M. Iliescu, V. Craciun, I. N. Mihailescu, C. Ristoscu, C. Ghica, H. Pelletier, J. Werckmann
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2003

19. *"Optical Emission Spectroscopy and Time-of-Flight investigations of plasmas generated from AlN targets in cases of Pulsed Laser Deposition with sub-ps and ns Ultra Violet laser pulses"*

Carmen Ristoscu, Ion N. Mihailescu, Michalis Velegrakis, Maria Massaouti, Argyro Klini, Costas Fotakis
Journal of Applied Physics, **93**(5) 2244-2250 (2003)

20. *"Dependence of AlN thin films morphology on laser irradiation in Pulsed Laser Deposition"*

V. Zorba, A. Klini, E. Gyorgy, C. Ristoscu, V. S. Teodorescu, I. N. Mihailescu, C. Fotakis

Laser Physics, **13**(10) (2003) 1325-1329

21. “*Deposition of multistructures of BN/SiC/Si and BN/TiN/Si with sub-ps and ns UV laser pulses*”
Carmen Ristoscu, Ion N. Mihailescu, Valentin Nelea, Ioan Ursu, Argyro Klini, Vasilica Zorba, Costas Fotakis,
Romanian Journal of Physics, **48**, Supplement I, 67-74 (2003)

2004

22. “*Effects of pulse laser duration and ambient nitrogen pressure in PLD of AlN*”
C. Ristoscu, E. Gyorgy, I. N. Mihailescu, A. Klini, V. Zorba, C. Fotakis
Applied Physics A, **79**(4-6), 927-929 (2004)

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23. “*SnO₂ nanostructured films obtained by pulsed laser ablation deposition*”
C. Ristoscu, L. Cultrera, A. Dima, A. Perrone, R. Cutting, H. L. Du, A. Busiakiewicz, Z. Klusek, S. Datta, S. Rose
Applied Surface Science, **247**(1-4), 95-100 (2005)

24. “*Pulsed laser deposition of Mg thin films on Cu substrates for photocathode application*”
L. Cultrera, A. Pereira, C. Ristoscu, A. Clozza, F. Tazzioli, C. Vicario
Applied Surface Science, **248**(1-4), 397-401 (2005)

25. “*Structural and optical characterizations of AlN films grown by pulsed laser deposition*”
C. Ristoscu, C. Ducu, G. Socol, F. Craciunoiu, I. N. Mihailescu
Applied Surface Science, **248**(1-4), 411-415 (2005)

26. “*Nanostructured ZnO coatings grown by pulsed laser deposition for optical gas sensing of butane*”
T. Mazingue, L. Escoubas, L. Spalluto, F. Flory, G. Socol, C. Ristoscu, E. Axente, S. Grigorescu, I. N. Mihailescu, N. A. Vainos
Journal of Applied Physics, **98**(7), 074312 (2005)

27. “*Hydroxyapatite pulsed laser deposited thin films behaviour when submitted to biological simulated tests*”
S. Grigorescu, C. Ristoscu, G. Socol, E. Axente, F. Feugeas, I. N. Mihailescu
Romanian Reports in Physics, Vol. **57**, No. 4, p.1007-1014 (2005)

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28. “*Matrix assisted pulsed laser evaporation processing of triacetate-pullulan polysaccharide thin films for drug delivery systems*”
R. Cristescu, G. Dorcioman, C. Ristoscu, E. Axente, S. Grigorescu, A. Moldovan, I.N. Mihailescu, T. Kocourek, M. Jelinek, M. Albulescu, T. Buruiana, D. Mihaiescu, I. Stamatina, D.B. Chrisey
Applied Surface Science, **252**(13) 4647-4651 (2006)

29. “*Femtosecond pulse shaping for phase and morphology control in PLD: synthesis of cubic SiC*”
C. Ristoscu, G. Socol, C. Ghica, I. N. Mihailescu, D. Gray, A. Klini, A. Manousaki, D. Anglos, C. Fotakis
Applied Surface Science, **252**(13), 4857-4862 (2006)

30. “*Growth studies of thin hydroxyapatite layers obtained by pulsed laser deposition on titanium substrates*”
A. Carradò, S. Joulié, J. Faerber, J. Werckmann, L. Barrallier, C. Ristoscu, G. Dorcioman, S. Grigorescu, I. N. Mihailescu
Composite: Part B engineering, special issue 2006

31. *"Pulsed laser deposition growth of thin hydroxyapatite layers on titanium substrates"*
A. Carradò, S. Joulié, G. Schmerber, J. Faerber, C. Ristoscu, G. Dorcioman, S. Grigorescu, I. N. Mihailescu, J. Werckmann
Revue Matériaux et Techniques, **94**, 105-109 (2006).

32. *"Growth and characterization of β -SiC films obtained by multipulse fs laser ablation"*
C. Ghica, C. Ristoscu, G. Socol, D. Brodoceanu, L. C. Nistor, I. N. Mihailescu, A. Klini, C. Fotakis
Applied Surface Science, **252**(13), 4672-4677 (2006)

2007

33. *"Nanocrystalline Er:YAG thin films prepared by pulsed laser deposition: An electron microscopy study"*
D. Stanoi, A. Popescu, C. Ghica, G. Socol, E. Axente, C. Ristoscu, I. N. Mihailescu, A. Stefan, S. Georgescu
Applied Surface Science **253** (2007) 8268–8272

34. *"Structural and optical characterization of undoped, doped, and clustered ZnO thin films obtained by PLD for gas sensing applications"*
C. Ristoscu, D. Caiteanu, G. Prodan, G. Socol, S. Grigorescu, E. Axente, N. Stefan, V. Ciupina, G. Aldica, I. N. Mihailescu
Applied Surface Science, **253**(15), 6499-6503 (2007)

35. *"Mg based photocathodes for high brightness RF photoinjectors"*
L. Cultrera, G. Gatti, F. Tazzioli, A. Perrone, P. Miglietta, C. Ristoscu, S. Orlanducci, A. Fiori
Applied Surface Science, **253**(15), 6531-6534 (2007)

36. *"Enhanced gas sensing of Au nanocluster-doped or -coated zinc oxide thin films"*
G. Socol, E. Axente, C. Ristoscu, F. Sima, A. Popescu, N. Stefan, I. N. Mihailescu, L. Escoubas, J. Ferreira, A. Szekeres, S. Bakalova
Journal of Applied Physics, **102**, 083103 (2007)

37. *"Photoemission characteristics of PLD grown Mg films under UV laser irradiation"*
L. Cultrera, C. Ristoscu, G. Gatti, P. Miglietta, F. Tazzioli, A. Perrone
Journal of Physics D: Applied Physics, **40** (2007) 5965–5970

38. *"Measurements of quantum efficiency of Mg films produced by pulsed laser ablation deposition for application to bright electron sources"*
Gatti, G., Cultrera, L., Tazzioli, F., Vicario, C., Fiori, A., Perrone, A., Ristoscu, C
International Journal of Modern Physics A **22** (23), pp. 4051-4060, 2007

39. *"Study of the gradual interface between hydroxyapatite thin films PLD grown onto Ti-controlled sublayers"*
S. Grigorescu, A. Carradò, C. Ulhaq, J. Faerber, C. Ristoscu, G. Dorcioman, E. Axente, J. Werckmann and I.N. Mihailescu
Applied Surface Science, **254**(4), 1150-1154 (2007)

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40. *"Double-layer Bioactive Glass Coatings Obtained by Pulsed Laser Deposition"*
D. Tanaskovic, Dj. Veljković, R. Petrović, Dj. Janačković, M. Mitrić, C. Cojanu, C. Ristoscu, I.N. Mihailescu
Key Engin. Mater., **361-363** (2008) 277-280.

41. *"A perspective of pulsed laser deposition (PLD) in surface engineering: alumina coatings and substrates"*

Adele Carradò, Hervé Pelletier, Felix Sima, Carmen Ristoscu, Agnès Fabre, Laurent Barrallier and I. N. Mihailescu

Key Engineering Materials Vol. **384** (2008) 185-212

42. *"Strontium-substituted hydroxyapatite coatings synthesized by pulsed laser deposition: in-vitro osteoblast and osteoclast response"*

C. Capuccini, P. Torricelli, F. Sima, E. Boanini, C. Ristoscu, B. Bracci, G. Socol, M. Fini, I.N. Mihailescu, A. Bigi

Acta Biomaterialia, **4** (2008) 1885–1893

2009

43. *"Shallow Hydroxyapatite coatings pulsed laser deposited on Al₂O₃ substrates with controlled porosity: correlation of morphological characteristics with in vitro testing results"*

F. Sima, C. Ristoscu, N. Stefan, G. Dorcioman, I.N. Mihailescu, L. E. Sima, S. M. Petrescu, E. Palcevskis, J. Krastins, I. Zalite

Applied Surface Science **255** (2009) 5312–5317

44. *"AlN:Cr thin films synthesized by pulsed laser deposition: studies by X-ray diffraction and spectroscopic ellipsometry"*

A. Szekeres, S. Bakalova, S. Grigorescu, A. Cziraki, G. Socol, C. Ristoscu, I. N. Mihailescu

Applied Surface Science **255** (2009) 5271–5274

45. *"Spectroscopic study of (AsSe)_{100-x}Ag_x thin films"*

V. Ilcheva, T. Petkova, P. Petkov, V. Boev, G. Socol, F. Sima, C. Ristoscu, C. N. Mihailescu, I. N. Mihailescu, C. Popov, J. P. Reithmaier

Applied Surface Science, **255** (2009) 9691–9694

46. *"Bioglass –polymer thin coatings obtained by MAPLE for a new generation of implants"*

F. Sima, C. Ristoscu, A. Popescu, I. N. Mihailescu, T. Kononenko, S. Simon, T. Radu, O. Ponta, R. Mustata, L. E. Sima, S. M. Petrescu

Journal of Optoelectronics and Advanced Materials, **11**(9), 1170 – 1174 (2009)

47. *"Surface Morphology Of AlN Films Synthesized By Pulsed Laser Deposition"*

S. Bakalova, A. Szekeres, G. Huhn, K. Havancsak, S. Grigorescu, G. Socol, C. Ristoscu, I.N. Mihailescu

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