

L I S T A

lucrărilor științifice în domeniul disciplinelor din postul didactic

- A. Teza de doctorat:** „*Nanostructuri oxidice semiconductoare de bandă largă pentru celule solare sensibilizate cu pigmenți. Obținere. Caracterizare*”, instituția eliberatoare a diplomei – Universitatea din București, anul susținerii tezei – 2013, coordonator – Prof.univ.dr. Victor Ciupină, domeniu – Fizică.

[TEZA DOCTORAT - MATEI I. MIOARA-JEANINA \(LUNGU\)](#)

B. Cărți și capitole în cărți publicate în ultimii 10 ani

1. Synthesis and Modification of Nanostructured Thin Films, 264 p. (p.149-163), ISBN 978-3-03928-454-2 (Pbk), ISBN 978-3-03928-455-9 (PDF), MDPI, 2020

https://books.google.ro/books?hl=en&lr=&id=VSXXDwAAQBAJ&oi=fnd&pg=PA149&dq=in+fo:cfGEm8G_VtAJ:scholar.google.com&ots=-ZTXV3W7pz&sig=coYQREMGsYl4kxYxNyFP4OncT3U&redir_esc=y#v=onepage&q&f=false

2. Higher Education in a Digital Era through Project-based E-learning, 2023, pp. 201-212.

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C. Lucrări indexate ISI/BDI publicate în ultimii 10 ani

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3. C.I. Oprea, A. Dumbravă, I. Enache, **J. Lungu**, A. Georgescu, F. Moscalu, C. Oprea, M.A. Gîrțu: Role of energy level alignment in solar cells sensitized with a metal-free organic dye: A combined experimental and theoretical approach, *Physica Status Solidi A-Applications and*

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4. C. I. Oprea, P. Panait, **J. Lungu**, D. Stamate, A. Dumbravă, F. Cimpoesu, and M. A. Gîrțu: DFT Study of Binding and Electron Transfer from a Metal-Free Dye with Carboxyl, Hydroxyl, and Sulfonic Anchors to a Titanium Dioxide Nanocluster, *International Journal of Photoenergy*, 2013, 893850, (DOI: 10.1155/2013/893850), ISSN: 1110-662X.

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5. **J. Lungu**, N. Ștefan, G. Prodan, A. Georgescu, A. Mandeș, V. Ciupină, I. N. Mihăilescu, M. A. Girtu: Characterization of spin-coated TiO₂ buffer layers for dye sensitized solar cells, *Digest Journal of Nanomaterials and Biostructures*, 2015, 10 (3), p. 967 – 976, ISSN 1842 - 3582, (in press).

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9. A. Ndiaye, A. Dioum, C.I. Oprea, A. Dumbrava, **J. Lungu**, A. Georgescu, F. Moscalu, M.A. Gîrțu, A.C. Beye, I. Youm: A combined experimental and computational study of chrysanthemine as a pigment for Dye-Sensitized Solar Cells, *Molecules* 26 (2021) 225, DOI: 10.3390/molecules26010225.

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D. Lucrări publicate în ultimii 10 anii în reviste și volume de conferințe cu referenți (neindexate)

1. A. Dumbravă, I. Enache, C. Badea, A. Georgescu, **J. Lungu**, M.A. Gîrțu: A comparison between anthocyanins and betalain as pigments for dye sensitized solar cells, International Conference “Chimia 2009”, Constanța, mai 2009, Book of Abstracts, pag. 219, 2009.

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3. A. Dumbravă, C.I. Oprea, **J. Lungu**, I. Enache, A.Georgescu, C.Oprea, F. Moscalu, M. A. Gîrțu: Dye sensitized solar cells with mordant yellow-10. a combined experimental and theoretical approach, International Balkan Workshop on Applied Physics, Constanta, iulie 2010, Book of Abstracts, pag.123, 2010, ISBN 978-973-614-554-4.

4. **J. Lungu**, I. Enache, A. Dumbravă, A. Georgescu, C.I. Oprea, C. Rădulescu, I. Ioniță, G.V. Cimpoaca and M. A. Gîrțu: Copigments Used to Improve Performance of Betalain-based dye-sensitized solar cells , International Balkan Workshop on Applied Physics, Constanta, iulie 2010, Book of Abstracts, pag.146, 2010, ISBN 978-973-614-554-4.

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7 A. Dumbravă, C.I. Oprea, I. Enache, **J. Lungu**, A. Georgescu, C.Oprea, F. Moscalu, M. A. Gîrțu: Role of energy level alignment in dye sensitized solar cells – a case study on Mordant Yellow-10, International Balkan Workshop on Applied Physics, Constanta, iulie 2011, Book of Abstracts, pag.157, 2011, ISBN 978-973-614-644-2.

8. **J. Lungu**, A. Georgescu, C.Oprea, G. Socol , I. N. Mihailescu, M. A. Gîrțu, The influence of nanocrystalline TiO₂ at the mesoporous TiO₂/FTO interface in dye sensitized solar cells, International Balkan Workshop on Applied Physics, Constanta, iulie 2012, Book of Abstracts, pag.181, 2012, ISBN: 978-606-598-181-2.

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12. P. Panait, C. I. Oprea, **J. Lungu**, D. Stamate, A. Dumbrava, M. A. Gîrțu: The interaction of TiO₂ nanoparticles with functional groups of some aromatic azo dyes in dye-sensitized solar cells and in photocatalytic processes, International Balkan Workshop on Applied Physics, Constanta, iulie 2014, Book of Abstracts, pag.212, 2014.

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13. **J. Lungu**, G. Socol, N. Ștefan, A. Georgescu, D. Albu, M. A. Gîrțu, I. N. Mihăilescu: Matrix Assisted Pulsed Laser Evaporation of TiO₂ for dye sensitized solar cells, International Balkan Workshop on Applied Physics, Constanta, iulie 2015, Book of Abstracts, pag. 92, 2015.

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17. A. Georgescu, **J. Lungu**, Automated system used in the characterization of photovoltaic cells, International Balkan Workshop on Applied Physics, Constanta, iulie 2017, Book of Abstracts, pag.68, 2017.

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21. N. Simion, **J. Lungu**, and C. Petre, Designing an Assessment for Experiential Learning. Curriculum Case Study on a Discipline in the Field of Applied Engineering Sciences, International Balkan Workshop on Applied Physics, Constanta, iulie 2023, Book of Abstracts, ISSN 2501-9058/ISSN L 2501-9058 and online ISSN 2501-9066/ISSN L 2501-9058

E. Brevete obținute în întreaga activitate

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Sinteza

- A. Teza de doctorat: 1
- B. 2 capitole carte
- C. 10 lucrări ISI/BDI
- D. 21 lucrări publicate

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Semnătura: