

Autorul tezei de abilitare: **Conf. Dr. ANDRONIC LUMINIȚA CAMELIA**

Titlul tezei de abilitare: ***Evaluarea, modelarea și optimizarea proceselor fotocatalitice heterogene pentru decontaminarea apelor reziduale***

Domeniul: **Ingineria Mediului**

LISTA DE LUCRĂRI

TEZA DE DOCTORAT

Titlul tezei: *“Materiale ceramice nanostructurate cu proprietăți fotocatalitice utilizate pentru distrugerea poluanților din ape”*, titlul de doctor în Domeniul Știința și Ingineria Materialelor, conform OMECTS 4542/28.07.2010.

CĂRȚI / CAPITOLE DE CĂRȚI

1. A. Enesca, **L. Andronic**, A. Duta, I. Visa, **(2018)** Sustainable Wastewater Treatment for Households in Small Communities. In: Visa I., Duta A. (Eds) Nearly Zero Energy Communities. Book Series: Springer Proceedings in Energy, Editura Springer International Publishing, p. 550-565, Print ISBN: 978-3-319-63214-8
2. M. Visa, C. Cazan, **L. Andronic**, **(2014)** Fly Ash Based Substrates for Advanced Wastewater Treatment. In: Visa I. (Eds) Sustainable Energy in the Built Environment - Steps Towards nZEB. Book Series: Springer Proceedings in Energy, Editura Springer, p. 539-569, ISBN 978-3-319-09707-7.
3. A Duta, A Enesca, L Isac, D Perniu, **L Andronic**, C Bogatu, **(2014)** Thin Film Vis-Active Photocatalysts for Up-scaled Wastewater Treatment. In: Visa I. (Eds) Sustainable Energy in the Built Environment - Steps Towards nZEB. Book Series: Springer Proceedings in Energy, Editura Springer, p. 521-538, ISBN 978-3-319-09707-7.
4. A. Duta, **L. Andronic**, D. Perniu, L. Manceri, A. Enesca, **(2013)** Capitolul 9. Crystalline Wide Bandgap Semiconductors with Optoelectronic Properties. In: Mahmood Aliofkhae (Ed.), Handbook of Functional Nanomaterials. Volume 1: Synthesis and Modification, Nova Publisher, ISBN: 978-1-62948-364-1.
5. **L. Andronic**, A. Duță, **(2013)** Analize fizico-chimice și metode avansate de epurare a apelor uzate, Editura Universității Transilvania din Brașov, ISBN: 978-606-19-0200-2.
6. L. Isac, R. Țică, **L. Andronic**, C. Vlăduță, **(2004)** *Chimie- Activități experimentale*, Editura Universității Transilvania din Brașov, ISBN: 973-635-375-3.

ARTICOLE ÎN REVISTE

Articole publicate in jurnale cotate ISI (cu factor de impact)

1. A. Duta, **L. Andronic**, A. Enesca, The influence of low irradiance and electrolytes on the mineralization efficiency of organic pollutants using the Vis-active photocatalytic tandem CuInS₂/TiO₂/SnO₂, Catalysis Today 300 (2018) 18 – 27. **FI=4.636**
2. **L. Andronic**, L. Isac, S. Miralles-Cuevas, M. Visa, I. Oller, A. Duta, S. Malato, Pilot-plant evaluation of TiO₂ and TiO₂-based hybrid photocatalysts for solar treatment of polluted water, Journal of Hazardous Materials 320 (2016) 469-478. **FI=6,065**

3. M. Visa, **L. Andronic**, A. Enesca, Behavior of the new composites obtained from fly ash and titanium dioxide in removing of the pollutants from wastewater, *Applied Surface Science* 388 (2016) 359-369. [FI=3,387](#)
4. M. Visa, **L. Andronic**, A. Duta, Fly ash TiO₂ nanocomposite material for multi-pollutants wastewater treatment, *Journal of Environmental Management* 150 (2015) 336-343. [FI=4,01](#)
5. **L. Andronic**, A. Enesca, C. Cazan, M. Visa, TiO₂-active carbon composites for wastewater photocatalysis, *Journal of Sol-Gel Science and Technology* 71 (2014) 396-405. [FI=1,545](#)
6. A. Enesca, L. Isac, **L. Andronic**, D. Perniu, A. Duta, Tuning SnO₂-TiO₂ tandem systems for dyes mineralization, *Applied Catalysis B: Environmental* 147 (2014) 175-184. [FI=9,446](#)
7. **L. Andronic**, D. Perniu, A. Duta, Synergistic effect between TiO₂ sol-gel and Degussa P25 in dye photodegradation, *Journal of Sol-Gel Science and Technology*, 66 (3) (2013) 472-480. [FI=1,575](#)
8. L. Isac, **L. Andronic**, A. Enesca, A. Duta, Copper sulfide films obtained by spray pyrolysis for dyes photodegradation under visible light irradiation, *Journal of Photochemistry and Photobiology A: Chemistry*, 252 (2013) 53– 59. [FI=2,625](#)
9. **L. Andronic**, A. Duta, Photodegradation of dyes in binary systems-simultaneous analysis by first-order spectra derivative method, *Chemical Engineering Journal*, 198-199 (2012) 468–475. [FI=6,216](#)
10. R.A. Carcel, **L. Andronic**, A. Duta, Photocatalytic Activity and Stability of TiO₂ and WO₃ Thin Films, *Materials Characterisation*, 70 (2012) 68-73. [FI=2,714](#)
11. A. Enesca, L. Andronic, A. Duta, Optimization of optoelectrical and photocatalytic properties of SnO₂ thin films using Zn²⁺ and W⁶⁺ dopant ions, *Catalysis Letter* 142 (2012) 224-230. [FI=2,799](#)
12. A. Enesca, **L. Andronic**, A. Duta, The influence of surfactants on the crystalline structure, electrical and photocatalytic properties of hybrid multi-structured (SnO₂, TiO₂ and WO₃) thin films, *Applied Surface Science* 258 (2012) 4339-4346. [FI=3,387](#)
13. **L. Andronic**, A. Duta, The influence of precursor's composition and concentration on cadmium doped TiO₂ film, *Central European Journal of Chemistry*, 10(1) (2012) 85-90. [FI=1,46](#)
14. R. A. Carcel, **L. Andronic**, A. Duta, Photocatalytic degradation of methylorange using TiO₂, WO₃ and mixed thin films under controlled pH and H₂O₂, *Journal of Nanoscience and Nanotechnology* 11 (2011) 9095-9101. [FI=1,483](#)
15. **L. Andronic**, L. Isac, A. Duta, Photochemical synthesis of Copper sulphide/Titanium oxide photocatalyst, *Journal of Photochemistry and Photobiology A: Chemistry* 221 (2011) 30-37. [FI=2,625](#)
16. **L. Andronic**, D. Andrasi, A. Enesca, M. Visa, A. Duta, The influence of titanium dioxide phase composition on dyes photocatalysis, *Journal of Sol-Gel Science and Technology* 58 (2011) 201–208. [FI=1,575](#)
17. M. Visa, **L. Andronic**, D. Lucaci, A. Duta, Concurrent dyes adsorption and photodegradation on fly ash based substrates, *Adsorption-Journal of the International Adsorption Society* 17 (2011) 101-108. [FI=2,074](#)
18. **L. Andronic**, Photodegradation processes for advanced real wastewaters treatment, *Environmental Engineering and Management Journal* 10 (8) (2011) 1015-1019. [FI=1,096](#)
19. C. Vladuta, **L. Andronic**, A. Duta, Effect of TiO₂ nanoparticles on the interfaces PET-rubber composites, *Journal of Nanoscience and Nanotechnology* 10 (2010) 2518–2526. [FI=1,483](#)

- 20 A.Enesca, **L. Andronic**, A. Duta, Influence of sodium ions (Na^+) dopant on the efficiency of the tungsten trioxide photoelectrode, *Revue Roumaine de Chimie* 55 (2010) 11-15, FI 0.418. [FI=0,246](#)
- 21 A.M. Lazăr, I. Ciobanu, D. Chaumont, Y. Lacroute, R. Chassagnon, **L. Andronic**, M. Sacilotti, The use of TiO_2 nanostructures on the photocatalytic degradation of methylene blue, *Metalurgia International* 2 (2010) 26-29. [FI=0,134](#)
- 22 **L. Andronic**, A. Enesca, C. Vladuta, A. Duta, Photocatalytic activity of cadmium doped TiO_2 films for photocatalytic degradation of dyes, *Chemical Engineering Journal* 152 (2009) 64-71. [FI=6,216](#)
- 23 M. Visa, R.A. Carcel, **L. Andronic**, A. Duta, Advanced treatment of wastewater with methyl orange and heavy metals on TiO_2 , fly ash and their mixtures, *Catalysis Today* 144 (1-2) (2009) 137-142. [FI=4,636](#)
- 24 **L. Andronic**, B. Hristache, A. Enesca, M. Visa, A. Duta, Studies on titanium oxide catalyst doped with heavy metals (cadmium, copper and nickel), *Environmental Engineering and Management Journal* 8(4) (2009) 747-751. [FI=1,096](#)
- 25 M. Visa, **L. Andronic**, A. Duta, Photocatalytic properties of titania - fly ash thin films, *Environmental Engineering and Management Journal* 8(4) (2009) 633-638. [FI=1,096](#)
- 26 A. Enesca, **L. Andronic**, A. Duta, Wastewater treatment using optimized TiO_2 photocatalytic properties, *Environmental Engineering and Management Journal* 8(4) (2009) 753-758. [FI=1,096](#)
- 27 R. A. Carcel, **L. Andronic**, A. Duta, Cd^{2+} modified TiO_2 for methyl orange photodegradation, *Revue Roumaine de Chimie* 54(4) (2009) 311-314. [FI=0,246](#)
- 28 **L. Andronic**, S. Manolache, A. Duta, Photocatalytic degradation of methyl orange: influence of H_2O_2 in the TiO_2 -based system, *Journal of Nanoscience and Nanotechnology* 8 (2008) 728-732. [FI=1,483](#)
- 29 C. Vladuta, **L. Andronic**, M. Visa, A. Duta, Ceramic interface properties evaluation based on contact angle measurement, *Surface & Coatings Technology* 202 (2008) 2448-2452. [FI=2,589](#)
- 30 **L. Andronic**, A. Duta, The influence of TiO_2 powder and film on the photodegradation of methyl orange, *Materials Chemistry and Physics* 112 (3) (2008) 1078-1082. [FI=2,084](#)
- 31 **L. Andronic**, A. Duta, Thin TiO_2 films for dyes photodegradation, *Thin Solid Films* 515(16) (2007) 6294-6297. [FI=1,879](#)
- 32 **L. Andronic**, S. Manolache, A. Duta, TiO_2 thin films prepared by spray pyrolysis deposition (SPD) and their photocatalytic activities, *Journal of Optoelectronics and Advanced Materials* 9(5) (2007) 1403-1406. [FI=0,449](#)
- 33 S. A. Manolache, **L. Andronic**, A. Duta, A. Enesca, The influence of the deposition condition on crystal growth and on the band gap of CuSbS_2 thin film absorber used for solid state solar cells (SSSC), *Journal of Optoelectronics and Advanced Materials* 9(5) (2007) 1269-1272. [FI=0,449](#)
- 34 A.Enesca, **L. Andronic**, A. Duta, S. Manolache, Optical properties and chemical stability of WO_3 and TiO_2 thin films photocatalysts, *Romanian Journal of Information Science and Technology* 10 (2007) 269-277. [FI=0,365](#)

Articole publicate in jurnale indexate ISI (fara factor de impact)

35. A. Duta, A. Enesca, **L. Andronic**, Tailoring Photocatalytic Properties of Tungsten Oxide Thin Films, *Advanced Materials Research*, vol. 79-82, p. 847-850, 2009, DOI: 10.4028/www.scientific.net/AMR.79-82.847

36. **L. Andronic**, A. Duta, Influence of pH and H₂O₂ on dyes photodegradation, *Physica Status Solidi C - Current Topics in Solid State Physics*, vol. 5, no. 10, p. 3332-3337, 2008, DOI: 10.1002/pssc.200778880
37. **L. Andronic**, A. Duta, Titanium dioxide thin film for photodegradation of methyl orange, *Advanced Materials Research*, Vol. 23, p. 325-328, 2007, DOI: 10.4028/www.scientific.net/AMR.23.325

Articole publicate in volume ale unor conferinte indexate ISI (proceedings fara factor de impact)

38. A.Enesca, **L. Andronic**, S. Manolache, A. Duta, „ Investigation of WO₃ and TiO₂ thin films used in photocatalysis”, *International Semiconductor Conference*, Sinaia, Romania, Book of proceeding, vol. 2, p. 241-244, IEEE proceedings: BFM58, ISBN: 1-4244-0109-7, 2006.
39. A. Duta, I. Visa, S.A. Manolache, A. Enesca, **L. Andronic**, G.R. Calin, “Nanostructured TiO₂ for Solar Energy Conversion”, *International Semiconductor Conference*, Sinaia, Romania, Book of Proceeding, vol. 2 p. 267-270, IEEE Catalog number: 05TH8818, ISBN: 0-7803-9214-0, Library of Congress: 2005925118, 2005.

ALTE LUCRĂRI / REALIZĂRI RELEVANTE

Guest Editors: Tian-Yi Ma, Zhan-Ying Zhang, Jian-Liang Cao, **Luminita Andronic**, Yong Ma, Lei Liu (2014) “*Structurally and Elementally Promoted Nanomaterials for Photocatalysis*”, In: *International Journal of Photoenergy*, ISSN: 1110-662X.

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