

Publications of Dorina Ticos

In peer-reviewed journals:

1. **D. Toader**, M. Oane, C.M. Ticos, “*Collimated electron beam accelerated at 12 kV from a Penning discharge*”, Review of Scientific Instruments 86, 013301 (2015).
2. C.M. Ticos, A. Scurtu, **D. Toader**, N. Banu, “*Experimental demonstration of Martian soil simulant removal from a surface using a pulsed plasma jet*”, (in review 2015).
3. M. Oane, A. Peled, **D. Toader**, P. Mursa and C.M. Ticos, “*Semi-analytical solution of the thermal field distribution in a semiconductor under simultaneous irradiation by three laser fields*”, Lasers in Engineering (in press, 2015)
4. M. Oane, **D. Toader**, N. Iacob, C. M. Ticos, “*Thermal phenomena induced in a small tungsten sample during irradiation with a few MeV electron beam: Experiment versus simulations*”, Nuclear Instruments and Methods in Physics Research B 337, 17-20 (2014).
5. M. Oane, **D. Toader**, I. Neaguț, I.N. Mihăilescu, N. Mihăilescu, A. Visan, C. M. Ticoș, “*Thermal phenomena induced in a small C sample under irradiation with a few MeV electron beam by analogy with the laser- metal interaction formalism*”, Journal of Intense Pulsed Lasers and Applications in Advanced Physics 4, 65-70 (2014).
6. M. Oane, **D. Toader**, N. Iacob, C. M. Ticos, “*Thermal phenomena induced in a small graphite sample during irradiation with a few MeV electron beam: Experiment versus theoretical simulations*”, Nuclear Instruments and Methods in Physics Research B 318, 232–236 (2014).
7. N. Banu, M. Munteanu, **D. Toader**, A. Scurtu, C.M. Ticos, “*Survey of Plasma Crystal Symmetry*” Journal of Optoelectronics and Advanced Materials 15, 976 -981 (2013).
8. C.M. Ticos, L. M. Munteanu, **D. Toader**, N. Banu, A. Scurtu, “*1-D Photonic Dusty Plasma Crystal*”, Journal of Applied Physics 114, 113305-1/10 (2013).
9. C. M. Ticoș, **D. Toader**, M.L. Munteanu, N. Banu, “*High Speed Imaging of Dust Particles in Plasma*”, Journal of Plasma Physics 79, part 3, pp. 273–285, (2013).
10. **D. Toader**, M.L. Munteanu, N. Banu, A. Scurtu, C. M. Ticoș, “*Evaluation of submillimeter electromagnetic waves scattering on dust particles in plasma*”, JOAM, 15, nr 3-4, pp 294-298, (2013).
11. **D. Toader**, M.Oane, I.N.Mihăilescu, C.M.Ticos, N.Serban, C.Ristoscu, K.Vutova, G.Georgescu, V.Donchev, “*Beam dynamics: a new computational approach*”, Electrotechnica & Electronica 47, no 5-6 (2012).
12. G. Craciun, E. Manaila, D. Martin, **D. Toader**, D. Ighigeanu, “*Synthesis of New Flocculant Materials by Copolymerization of Acrylamide and Acrylic Acid by Electron Beam Irradiation*”, Materiale Plastice (48), Issue (2),183-188, (2011).
13. **D. Toader**, S.Marghitu, G.Craciun, E.Manaila, C.Oproiu, “*Electron Beam Diagnosis on DIADYN Using a Plasma Source*”, JOAM,12, no 4, p 923-926, (2010)
14. C.Oproiu, **D. Toader**, M.R.Nemtanu, R.Popa, “*The Use of the Cellulose Triacetate to Determine the Dose Distribution of an Electron Beam*”, Romanian Journal of Physics, vol54, nr 9-10, p 861-868, (2009).
15. S. Marghitu, C. Oproiu, **D. Toader**, C. Ruset, E. Grigore, O. Marghitu, M. Vasiliu, “*Diagnosis and Dynamics of low energy electron beams using DIADYN*”, JOAM 10, No. 8, , p. 1984 – 1987, (2008).

16. **D. Toader**, S. Marghitu, C. Oproiu, O. Marghitu, *Beam Diagnosis and Dynamics in a High Energy Mode of the DIADYN Laboratory Equipment*, Analele Universității de Vest, Timișoara, Seria Fizică, vol XLXL, 2008, p.92 – 96

17. S. Marghitu, O. Marghitu, M. Rizea, C. Oproiu, M. Vasiliu, **D. Toader**, C. Matei, Oana Drosu, Mihaela Mihai, “*Experiments on low energy electron beams using DIADYN*”, Rev. Roum. Sci. Techn.-Electrotechn. et Energ., 52, no 4, p.453-461, (2007);

18. S. Marghitu, C. Matei, C. Oproiu, O. Marghitu, **D. Toader**, *Magnetic lenses for low energy beam channels: Computer simulations and experimental measurements*, Analele Universității de Vest, Timișoara, Seria Fizică, vol. 49, pp 97 – 101, (2007).

19. C. Oproiu, S. Marghitu, D. Martin, **D. Toader**, E. Mănăilă, *Miniature calorimeter in electron beam*, Analele Universității de Vest, Timișoara, Seria Fizică, vol. 49, pp 154 – 158, (2007)

Presentations at conferences

1. **D. Toader**, C.M. Ticos, *Penning source for the extraction of electron beams*, International Conference “Modern Lasers Applications -Third Edition (INDLAS), May 24-26, 2013, Bran, Romania;

2. **D. Toader**, M. Oane, N.Iacob, C.M. Ticos, *Plasma source for electron beam generation*, 16th International Conference on Plasma Physics and Applications (cppa), June 20-25, 2013, Bucharest, Romania;

3. **D. Toader**, M.Oane, I.N.Mihailescu, C.M.Ticos, N.Serban, C.Ristoscu, K.Vutova, G.Georgescu, V.Donchev, “*Beam dynamics: a new computational approach*”, 10th International Conference on Electron Beam Technologies, June 1-4, 2012, Varna, Bulgaria;

4. **D. Toader**, S.Marghitu, G.Craciun, E.Manaila, “*Electron Beam Diagnosis and Dynamics Using DIADYN’s Plasma Source*”, 7th Conference on Nuclear and Particle Physics (NUPPAC’09), November 11-15, 2009 Sharm El-Sheikh, Egypt;

5. **D. Toader**, S.Marghitu, G.Craciun, E.Manaila, C.Oproiu, “*Electron Beam Diagnosis on DIADYN Using a Plasma Source*”, 10th International Balkan Workshop on Applied Physics, (IBWAP) June 6-8, 2009, Constanta, Romania;

6. G. Craciun, A. Kluger, M. Craciun, E. Manaila, **D. Toader**, D. Martin, “*Early warning sistem for radiation detection as a part of environmental monitoring activities*”, 10th International Balkan Workshop on Applied Physics, (IBWAP) June 6-8, 2009, Constanta, Romania;

7. C. Oproiu, **D. Toader**, C. Ruset, E. Grigore, O. Marghitu, *DYADIN – Low energy electron beam source; Diagnosis and transport*, S. Marghitu, 14th International Conference on Plasma Physics and Applications (cppa), September 14-18, 2007, Brașov, Romania.