

Publication List

Refereed papers

- [64] E.-M. Pavelescu, O. Ligor, J. Occena, **C. Ticoş**, A. Matei, R. Gavrilă, K. Yamane, A. Wakahara, R.S. Goldman
Influence of electron irradiation and rapid thermal annealing on photoluminescence emission from GaAsN₂Bi alloys
In review (2020).
- [63] D. Ticoş, A. Scurtu, J.D. Williams, L. Scott, E. Thomas, Jr., D. Sanford, **C.M. Ticoş**,
Rotation of a strongly coupled dust cluster in plasma by the torque of an electron beam
In review (2020).
- [62] **C.M. Ticoş**, D. Ticoş, J.D. Williams
Pushing microscopic matter in plasma with an electron beam
Plasma Physics and Controlled Fusion 62, 025003 (2020).
- [61] M. Ganciu, A. Chiroşca, A. Groza, E. Stancu, O. Stoican, D.B. Dregheci, B. Butoi, **C. Ticoş**, B. Cramariuc
Radiation dose simulation during laser-plasma proton acceleration experiments and method to increase the measurement resolution of the proton energy spectrum
Romanian Cyber Security Journal 1 (2), 13 (2019).
- [60] D. Ticoş, A. Scurtu, M. Oane, C. Diplăşu, G. Giubega, I. Călina, **C.M. Ticoş**
Complementary dosimetry for a 6 MeV electron beam
Results in Physics 14, 102377 (2019).
- [59] **C.M. Ticoş**, D. Ticoş, J.D. Williams
Kinetic effects in a plasma crystal induced by an external electron beam
Physics of Plasmas 26, 43702 (2019).
- [58] I.N. Mihăilescu, M. Oane, **C.M. Ticoş**, C. Ristoscu, M. Bădiceanu
Linear Fourier Model Predictions in Case of Solids under IR FS Laser Irradiation
Journal of Lasers, Optics & Photonics 6(1), 1000194 (2019).
- [57] L. Avotina, M. Lungu, P. Dinca, B. Butoi, G. Cojocaru, R. Ungureanu, A. Marcu, C. Luculescu, C. Hapenciuc, P.C. Ganea, A. Petjuevics, C.P. Lungu, G. Kizane, **C.M. Ticoş**, S. Antohe
Irradiation of nuclear materials with laser-plasma filaments produced in air and deuterium by terrawatt (TW) laser pulses
Journal of Physics D-Applied Physics 51, 25302 (2018).
- [56] **C. M. Ticoş**, M. Galatanu, A. Galatanu, C. Luculescu, A. Scurtu, N. Banu, D. Ticoş,
Cracks and nanoparticles produced on tungsten surface by dense plasma jets
Applied Surface Science 434, 1122-1128 (2018).
- [55] **C.M. Ticoş**, A. Scurtu, D. Ticoş,
A pulsed "plasma broom" for dusting off surfaces on Mars,
New Journal of Physics 19, 063006 (2017).
- [54] M. G. Florescu, O. G. Dului, D. Pantazi, **C. M. Ticoş**, D. Sporea, R. Vasilache, V. Ionescu, M. Oane,
Radiological safety assessment for the experimental area of a hyper-intense laser with peak-power of 1 PW—CETAL,
Radiation Protection Dosimetry 175 (1), 104-109 (2017).
- [53] M. Oane, I.N. Mihăilescu, A. Buca, C. Ristoscu, G. Popescu-Pelin, **C.M. Ticoş**
Two-temperature model using the Cattaneo-Vernotte equation in the Anisimov-Nolte model for application in laser additive manufacturing
Digest Journal of Nanomaterials and Biostructures 12, 1247-1257 (2017)
- [52] N. Banu, **C.M. Ticoş**,
Precession of cylindrical dust particles in the plasma sheath
Physics of Plasmas 22 (10), 103704 (2015)
- [51] O. Budriga, E. D'Humieres, **C.M. Ticoş**
Simulations for protons and electrons acceleration with the 1 PW laser pulse from CETAL facility
Romanian Reports in Physics 67 (4), 1271 (2015)

- [50] **C.M. Ticoş**, A. Scurtu, D. Toader, N. Banu,
Experimental demonstration of Martian soil simulant removal from a surface using a pulsed plasma jet
Review of Scientific instruments 86, 033509 (2015).
- [49] N. Iacob, G. Schinteie, P. Palade, **C.M. Ticoş**, V. Kuncser
Stepped heating procedure for experimental SAR evaluation of ferrofluids
Material Letters E 38, 57 (2015)
- [48] D. Toader, M. Oane, **C.M. Ticoş**,
Collimated electron beam accelerated at 12 kV from a Penning discharge
Review of Scientific instruments 86, 013301 (2015).
- [47] **C.M. Ticoş**
Highly accelerated microparticles in plasma flows
Romanian Reports in Physics 67 (3), 1018 (2015)
- [46] M. Oane, A. Peled, D. Toader, P. Mursa and **C.M. Ticoş**
Semi-analytical solution of the thermal field distribution in a semiconductor under simultaneous irradiation by three laser fields
Lasers in Engineering 32 (3-4), 161 (2015)
- [45] M. Oane, I.N. Mihăilescu, **C.M. Ticoş**, N. Banu, L.M. Mitu, I. Neguţ, N. Mihăilescu, D. Ticos
General two -photons non-Fourier model for weak laser-solid interaction
Journal of Intense Pulsed Lasers and Applications in Advanced Physics 5 (1), 5-8 (2015)
- [44] M. Oane, D. Toader, N. Iacob, **C. M. Ticoş**
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Journal of Intense Pulsed Lasers and Applications in Advanced Physics 4, 65-70 (2014).
- [42] C.P. Lungu, C. Porosnicu, I. Jepu, M. Lungu, A. Marcu, C. Luculescu, **C. Ticoş**, A. Marin, C.E.A. Grigorescu
The behavior of W, Be and C layers in interaction with plasma produced by terawatt laser beam pulses
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- [41] M. Oane, D. Toader, N. Iacob, **C. M. Ticoş**
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).
- [40] C. P. Lungu, **C. M. Ticoş**, C. Porosnicu, I. Jepu, M. Lungu, A. Marcu, C. Luculescu, G. Cojocaru, D. Ursescu, R. Banici, and G. R. Ungureanu
Periodic striations on beryllium and tungsten surfaces by indirect femtosecond laser irradiation
Applied Physics Letters 104, 101604-1/4 (2014).
- [39] **C.M. Ticoş**
Bandgaps in the dispersion of waves on a string of dust particles floating in plasma
U.P.B. Sci. Bull., Series A 76, 193-198 (2014).
- [38] D. Toader, M.L. Munteanu, N. Banu, A. Scurtu, **C. M. Ticoş**
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- [36] **C.M. Ticoş**, L. M. Munteanu, D. Toader, N. Banu, A. Scurtu
1-D Photonic Dusty Plasma Crystal
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- [35] **C.M. Ticoş**, L. M. Munteanu, N. Banu, A. Scurtu
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- [34] **C.M. Ticoş**, D.S. Stoica, G. L. Delzanno,
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- [33] M. L. Pascu, G.V. Popescu, **C. M. Ticoş**, I. R. Andrei,
Unresonant interactions of laser beams with microdroplets
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- [32] G. Salamu, O. Sandu, O., F.Voicu, M. Dejanu, D. Popa, S. Parlac, **C. Ticoş**, N. Pavel, T. Dascalu
Study of flame development in 12% methane-air mixture ignited by laser
Optoelectronics and Advanced Materials-Rapid Communications 5 (11), pp. 1166-1169 (2011).
- [31] **C. M. Ticoş**, Z. Wang, G. A. Wurden
Observation of the Evolution of a Supersonic Plasma Jet launched by a Coaxial Gun
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- [30] A. Marcu, **C. M. Ticoş**, C. Grigoriu, I. Jepu, C. Porosnicu, A. M. Lungu, C. P. Lungu
Simultaneous Carbon and Tungsten Thin Film Deposition Using Two Thermionic Vacuum Arcs
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- [29] **C. M. Ticoş**, I. R. Andrei, M. L. Pascu, M. Bulinski,
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Physica Scripta 83, 055402 (2011).
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Removal of Floating Dust in Glow Discharge Using Plasma Jet,
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Journal of Optoelectronics and Advanced Materials 12, 63-67 (2010).
- [25] D. A. Gates et al (196 co-autors in alphabetical order)
Overview of Results from the National Spherical Torus Experiment (NSTX)
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- [24] **C. M. Ticoş**, Z. Wang, G. A. Wurden,
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Physics of Plasmas 14, 103701 (2007).
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