

LISTĂ DE LUCRĂRI

Articole

1. **Gheorghe A.I.**, Nae I., Additive Manufacture. Applications in the Petroleum and Petrochemical Industry. Romanian Journal of Petroleum & Gas Technology 2021, 3.
2. Zisopol, D.G.; Nae, I.; **Portoaca, A.I.**; Ramadan, I. A Theoretical and Experimental Research on the Influence of FDM Parameters on Tensile Strength and Hardness of Parts Made of Polylactic Acid. Eng. Technol. Appl. Sci. Res. 2021, 11, 7458–7463, doi:10.48084/etasr.4311.
3. **Portoaca, A.I.**; Nae, I.; Zisopol, D.G.; Ramadan, I. Studies on the Influence of FFF Parameters on the Tensile Properties of Samples Made of ABS. IOP Conf. Ser.: Mater. Sci. Eng. 2022, 1235, 012008, doi:10.1088/1757-899X/1235/1/012008.
4. Zisopol, D.G.; Nae, I.; **Portoaca, A.I.**; Ramadan, I. A Statistical Approach of the Flexural Strength of PLA and ABS 3D Printed Parts. Eng. Technol. Appl. Sci. Res. 2022, 12, 8248–8252, doi:10.48084/etasr.4739.
5. Zisopol, D.G.; **Portoaca, A.I.**; Nae, I.; Ramadan, I. A Comparative Analysis of the Mechanical Properties of Annealed PLA. Eng. Technol. Appl. Sci. Res. 2022, 12, 8978–8981, doi:10.48084/etasr.5123.
6. Zisopol, D.G.; Iacob, D.V.; **Portoaca, A.I.** A Theoretical-Experimental Study of the Influence of FDM Parameters on PLA Spur Gear Stiffness. Eng. Technol. Appl. Sci. Res. 2022, 12, 9329–9335, doi:10.48084/etasr.5183.
7. Zisopol, D.G.; Nae, I.; **Portoaca, A.I.** Compression Behavior of FFF Printed Parts Obtained by Varying Layer Height and Infill Percentage. Eng. Technol. Appl. Sci. Res. 2022, 12, 9747–9751, doi:10.48084/etasr.5488.
8. Zisopol, D.G.; Ion, N.; **Portoaca, A.I.** Comparison of the Charpy Resilience of Two 3D Printed Materials: A Study on the Impact Resistance of Plastic Parts. Eng. Technol. Appl. Sci. Res. 2023, 13, 10781–10784, doi:10.48084/etasr.5876.
9. Diniță, A.; Neacșa, A.; **Portoaca, A.I.**; Tănase, M.; Ilinca, C.N.; Ramadan, I.N. Additive Manufacturing Post-Processing Treatments, a Review with Emphasis on Mechanical Characteristics. Materials 2023, 16, 4610, doi:10.3390/ma16134610.
10. Zisopol, D.G.; **Portoaca, A.I.**; Tanase, M. Dimensional Accuracy of 3D Printed Dog-Bone Tensile Samples: A Case Study. Eng. Technol. Appl. Sci. Res. 2023, 13, 11400–11405, doi:10.48084/etasr.6060.
11. **Portoaca, A.I.**; Ripeanu, R.G.; Diniță, A.; Tănase, M. Optimization of 3D Printing Parameters for Enhanced Surface Quality and Wear Resistance. Polymers 2023, 15, 3419, doi:10.3390/polym15163419.

12. Zisopol, D.G.; Tănase, M.; **Portoaca, A.I.** Innovative Strategies for Technical-Economical Optimization of FDM Production. *Polymers* **2023**, *15*, 3787, doi:10.3390/polym15183787.
13. Tanase, M.; Zisopol, D.G.; **Portoaca, A.I.** A Study Regarding the Technical-Economical Optimization of Structural Components for Enhancing the Buckling Resistance in Stiffened Cylindrical Shells. *Eng. Technol. Appl. Sci. Res.* **2023**, *13*, 11511–11516, doi:10.48084/etasr.6135.
14. Zisopol, D.G.; **Portoaca, A.I.**; Tanase, M. Improving the Impact Resistance through Annealing in PLA 3D Printed Parts. *Eng. Technol. Appl. Sci. Res.* **2023**, *13*, 11768–11772, doi:10.48084/etasr.6281.
15. Diniță, A.; Ripeanu, R.G.; Ilincă, C.N.; Cursaru, D.; Matei, D.; Naim, R.I.; Tănase, M.; **Portoaca, A.I.** Advancements in Fiber-Reinforced Polymer Composites: A Comprehensive Analysis. *Polymers* **2024**, *16*, 2, doi:10.3390/polym16010002.
16. Portoaca, A.I.; Zisopol, D.G.; Ripeanu, R.G.; Nae, I.; Tanase, M. Accelerated Testing of the Wear Behavior of 3D-Printed Spur Gears. *Engineering, Technology & Applied Science Research* **2024**, *14*, 13845–13850, doi:10.48084/etasr.7113.
17. **Portoacă, A.I.**; Diniță, A.; Tănase, M.; Săvulescu, A.; Sirbu, E.-E.; Călin, C.; Brănoiu, G. Analyzing Sustainable 3D Printing Processes: Mechanical, Thermal, and Crystallographic Insights. *Polymers* **2024**, *16*, 1364, doi:10.3390/polym16101364.

Cărți

1. Nae, I.; Portoaca, A.I. *Managementul Inovării*; Editura Universității Petrol-Gaze din Ploiești: Ploiești, 2022; ISBN 978-973-860-0.

Brevete

1. Bogdan-Roth, M.; Zisopol, D.G.; Portoaca, A.I.; Romanet, M.; Mihail, M.; Diniță, A.; Nae, I.; Ripeanu, R.G. Stand pentru testarea la oboseală a roților dințate din materiale plastice cu citirea automată a valorii momentului și a valorii uzurii dinților, cerere brevet de invenție Oficiul de Stat Pentru Invenții Și Mărci, București, Nr. A/00877 2023.