Maria MÎȚU
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List of publications

ISI papers:

1. **M. Mitu***, J. Förster, S. Zakel, *Inertization parameters for alcohols and ketones with nitrogen and carbon dioxide*, Process Safety and Environmental Protection, 185, 1286-1302 (2024). https://doi.org/10.1016/j.psep.2024.03.120 IF_{2023} = 6.9.
2. C. Movileanu, V. Giurcan, D. Razus, A.M. Musuc, C. Hornoiu, P. Chesler, **M. Mitu**, *Hydrogen influence on confined explosion characteristics of hydrocarbon-air mixtures at sub-atmospheric pressures*, International Journal of Hydrogen Energy, 67, 150-158 (2024). https://doi.org/10.1016/j.ijhydene.2024.04.128 IF_{2023} = 8.1.
3. V. Giurcan, C. Movileanu, **M. Mitu**, D. Razus, *The impact of H2-enrichment on flame structure and combustion characteristic properties of premixed hydrocarbon-air flames*, Fuel, 376, 132674 (2024). https://doi.org/10.1016/j.fuel.2024.132674 IF_{2023} = 6.7.
4. **M. Mitu***, *Effect of Initial Temperature and Pressure on the Explosion Characteristics and Intermediate Reaction Products of Formic Acid Mixtures: A Theoretical Study*. Fire, 7(8), 290 (2024). https://doi.org/10.3390/fire7080290 IF_{2023} = 3.0.
5. **M. Mitu***, T. Stolz, S. Zakel, *The influence of inert gas on limiting experimental safe gap of fuel-air mixtures at various initial pressures*, Journal of Loss Prevention in the Process Industries, 83, 105094 (2023). https://doi.org/10.1016/j.jlp.2023.105094 IF_{2023} = 3.6.
6. **M. Mitu***, D. Razus, D. Boldor, C. Marculescu, *Flammability Properties of the Pyrolysis Gas Generated from Willow Wood*. Processes, 11, 2103 (2023). https://doi.org/10.3390/pr11072103 IF_{2023} = 2.8.
7. C. Movileanu, **M. Mitu**, V. Giurcan, *The State of the Art of Laminar Burning Velocities of H2-Enriched n-C4H10–Air Mixtures*, Energies, 16(14), 5536 (2023). https://doi.org/10.3390/en16145536 IF_{2023} = 3.0.
8. D. Razus, C. Movileanu, **M. Mitu**, V. Giurcan, *Expansion Coefficients and Propagation Speeds of Premixed n-Butane–Air Flames*. Energies, 16(15), 5728 (2023). https://doi.org/10.3390/en16155728 IF_{2023} = 3.0.
9. D. Razus, **M. Mitu**, C. Movileanu, V. Giurcan, *Calculated Adiabatic Flame Temperature – a Tool for Ascertaining the Minimum Inert Concentration of Fuel-Nitrous Oxide-Inert Gaseous Mixtures*, Revue Roumaine de Chimie, 68(7-8), 321-326 (2023). DOI: 10.33224/rrch.2023.68.7-8.01 IF_{2023} = 0.4.
10. V. Giurcan, **M. Mitu***, C. Movileanu, D. Razus, *Propagation Characteristics of Stoichiometric Inert-Diluted Methane–N_2O Flames*, Industrial & Engineering Chemistry Research, 61(46), 17065–17076 (2022). https://doi.org/10.1021/acs.iecr.2c03106 IF_{2022} = 4.2.
11. V. Giurcan, D. Razus, **M. Mitu,** C. Movileanu, *Dynamics of pressure variation in closed vessel explosions of diluted fuel/oxidant mixtures*, Processes, 10(12), 2726 (2022). https://doi.org/10.3390/pr10122726 IF_{2022} = 3.5.
12. **M. Mitu,** C. Movileanu, G. Giurcan, *Dynamics of Pressure Evolution during Gaseous Ethane–Air Mixture Explosions in Enclosures: A Review*, Energies, 15(19), 6879 (2022). https://doi.org/10.3390/en15196879 IF_{2022} = 3.2.
13. **M. Mitu**, C. Movileanu, V. Giurcan, *The laminar burning velocities of stoichiometric methane-air mixture from closed vessels Measurements*, Energies, 15(14), 5058 (2022). https://doi.org/10.3390/en15145058 IF_{2022} = 3.2.
14. D. Razus, V. Giurcan, C. Movileanu, **M. Mitu***, *Nitric oxide generation in N_2-diluted H_2–N_2O flames: a computational study*, Processes, 10(5), 1032, (2022). https://doi.org/10.3390/pr10051032 IF_{2022} = 3.5.
15. **M. Mitu***, S. Zakel, E. Brandes, W. Hirsch, *Ignition Temperature of Combustible Liquids in Mixtures of Air with Nitrous Oxide*, Fire and Materials, 46(3), 544-548 (2022). https://doi.org/10.1002/fam.2999 IF_{2022} = 1.9.
16. V. Giurcan, **M. Mitu***, C. Movileanu, D. Razus, D. Oancea, *Numerical study of laminar flame propagation in CH_4-N_2O-N_2 at moderate pressures and temperatures*, Combustion, Explosion and Shock Waves, 58(1), 22-33 (2022). ISSN 0010-5082. https://doi.org/10.1134/S0010508222010038 IF_{2022} = 1.2.
17. **M. Mitu***, D. Razus, V. Schroeder, *Laminar burning velocities of hydrogen-blended methane-air and natural gas-air mixtures, calculated from the early stage of p(t) records in a spherical vessel*, Energies, 14(22), 7556 (2021). https://doi.org/10.3390/en14227556 IF_{2021} = 3.252.
18. **M. Mitu**, C. Movileanu, V. Giurcan, *Deflagration Characteristics of N_2-Diluted CH_4-N_2O Mixtures in the Course of the Incipient Stage of Flame Propagation*, Energies, 14(18), 5918 (2021). https://doi.org/10.3390/en14185918 IF_{2021} = 3.252.
19. C. Movileanu, V. Giurcan, **M. Mitu**, D. Razus, D. Oancea, *Ignition by Low-Voltage Electric Discharges of Diluted and Undiluted C_3H_8–Air Mixtures*, Industrial & Engineering Chemistry Research, 60(32), 12123-12132 (2021). https://doi.org/10.1021/acs.iecr.1c02306 IF_{2021} = 4.326.
20. **M. Mitu**, T. Stolz, E. Brandes, S. Zakel, *Burning and explosion behaviour of ethanol/water - sucrose mixtures*, Journal of Loss Prevention in the Process Industries, 71, 104451, (2021). https://doi.org/10.1016/j.jlp.2021.104451 IF_{2021} = 3.916.
21. V. Giurcan, C. Movileanu, A.M. Musuc, **M. Mitu***, *Laminar burning velocity of biogas-containing mixtures. A literature review*, Processes, 9(6), 996 (2021). https://doi.org/10.3390/pr9060996 IF_{2021} = 3.352.
22. **M. Mitu***, E. Brandes, S. Zakel, W. Hirsch, *Explosion regions and limiting oxygen concentrations of methyl propionate, methyl acetate, dimethyl carbonate with air and inert gas mixtures*, Journal of Loss Prevention in the Process Industries, 69, 104384, (2021). https://doi.org/10.1016/j.jlp.2020.104384 IF_{2021} = 3.916.
23. **M. Mitu**, V. Giurcan, C. Movileanu, D. Razus, D. Oancea, *Propagation of CH_4-N_2O-N_2 flames in a closed spherical vessel*, Processes, 9(5), 851 (2021). https://doi.org/10.3390/pr9050851 IF_{2021} = 3.352.

24. V. Giurcan, **M. Mitu***, C. Movileanu, D. Razus, D. Oancea, *Propagation velocity of flames in inert-diluted stoichiometric propane-air mixtures: pressure and temperature dependence*, Processes, 9(6), 997 (2021). https://doi.org/10.3390/pr9060997 IF_{2021} = 3.352.
25. D. Razus, **M. Mitu**, V. Giurcan, C. Movileanu, *Laminar flame propagation in nitrogen-diluted stoichiometric H_2-N_2O mixtures - a numerical study*, Revue Roumaine de Chimie, 66(3), 255-265 (2021). DOI: 10.33224/rrch.2021.66.3.05 IF_{2021} = 0.410.
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27. V. Munteanu, **M. Mitu***, D. Razus, D. Oancea, *Kinetics of isothermal ignition and combustion of some oxygenated VOCs on platinum wire*, Revue Roumaine de Chimie, 65(7-8), 693-698 (2020). DOI: 10.33224/rrch.2020.65.7-8.06 IF_{2020} = 0.278.
28. D. Razus, **M. Mitu**, V. Giurcan, C. Movileanu, D. Oancea, *Numerical study of pressure and composition influence on laminar flame propagation in nitrogen-diluted H_2-O_2 mixtures*, Revue Roumaine de Chimie, 65(6), 529-537 (2020). DOI: 10.33224/rrch.2020.65.6.02 IF_{2020} = 0.278.
29. **M. Mitu**, V. Giurcan, D. Razus, D. Oancea, *Influence of initial pressure and vessel's geometry on deflagration of stoichiometric methane–air mixture in small-scale closed vessels*, Energy & Fuels, 34(3), 3828-3835 (2020). https://doi.org/10.1021/acs.energyfuels.9b04450 IF_{2020} = 3.605.
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32. V. Giurcan, **M. Mitu***, D. Razus, D. Oancea, *Experimental study and kinetic modeling of laminar flame propagation in premixed stoichiometric n-butane-air mixture*, Revista de Chimie (Bucharest), 70(4), 1125-1131 (2019). https://doi.org/10.37358/RC.19.4.7077 IF_{2019} = 1.755.
33. D. Razus, **M. Mitu***, V. Giurcan, C. Movileanu, D. Oancea, *Additive influence on maximum experimental safe gap of ethylene-air mixtures*, Fuel, 237, 888-894 (2019). https://doi.org/10.1016/j.fuel.2018.10.071 IF_{2019} = 5.578.
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35. **M. Mitu***, E. Brandes, *Analysis of reaction products after ignition process of 1-octanol/air mixtures on a hot surface*, Revista de Chimie (Bucharest), 69(11), 2991-2995 (2018). https://doi.org/10.37358/RC.18.11.6668 IF_{2018} = 1.605.
36. **M. Mitu***, E. Brandes, W. Hirsch, *Mitigation effects on the explosion safety characteristic data of ethanol/air mixtures in closed vessel*, Process Safety and Environmental Protection, 117, 190-199 (2018). https://doi.org/10.1016/j.psep.2018.04.024 IF_{2018} = 4.384.
37. **M. Mitu***, D. Razus, D. Oancea, *Coupled catalytic/gas phase ignition of propane-oxygen-inert mixtures on an isothermally heated platinum filament supported on quartz bar*, Revista de Chimie (Bucharest), 69(4), 870-874 (2018). https://doi.org/10.37358/RC.18.4.6218 IF_{2018} = 1.605.
38. D. Razus, **M. Mitu***, V. Giurcan, C. Movileanu, D. Oancea, *Methane-unconventional oxidant flames. Laminar burning velocities of nitrogen-diluted methane-N_2O mixtures*, Process Safety and Environmental Protection, 114, 240-250 (2018). https://doi.org/10.1016/j.psep.2017.12.026 IF_{2018} = 4.384.
39. **M. Mitu**, D. Razus, D. Oancea, *Effect of CO2* Inert gas influence on the laminar burning, Journal of Thermal Analysis and Calorimetry, 131(1), 175-181 (2018). https://doi.org/10.1007/s10973-017-6167-x IF_{2018} = 2.471.
40. **M. Mitu**, V. Giurcan, D. Razus, D. Oancea, *Inert gas influence on propagation velocity of methane–air laminar flames*, Revista de Chimie (Bucharest), 69(1), 196-200 (2018). https://doi.org/10.37358/RC.18.1.6073 IF_{2018} = 1.605.
41. **M. Mitu**, V. Giurcan, D. Razus, M. Prodan, D. Oancea, *Propagation indices of methane-air explosions in closed vessels*, Journal of Loss Prevention in the Process Industries, 47, 110-119 (2017). https://doi.org/10.1016/j.jlp.2017.03.001 IF_{2017} = 1.982.
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44. **M. Mitu***, E. Brandes, *Investigation of reaction products obtained from ignition process of n-heptane/air mixtures on free hot surface*, Revista de Chimie (Bucharest), 68(5), 1035-1039 (2017). IF_{2017} = 1.412.
45. V. Giurcan, **M. Mitu**, D. Razus, D. Oancea, *Pressure and temperature influence on propagation indices of n-butane–air gaseous mixtures*, Process Safety and Environmental Protection, 111, 94-101 (2017). https://doi.org/10.1016/j.psep.2017.06.020 IF_{2017} = 3.441.
46. D. Razus, **M. Mitu***, V. Giurcan, D. Oancea, *Propagation indices of methane-nitrous oxide flames in the presence of inert additives*, Journal of Loss Prevention in the Process Industries, 49, 418-426 (2017). https://doi.org/10.1016/j.jlp.2017.08.010 IF_{2017} = 1.982.
47. **M. Mitu**, D. Razus, D. Oancea, *Overall kinetics of gas-phase ignition of n-pentane – air mixtures using an isothermally heated platinum filament*, Revue Roumaine de Chimie, 62(8-9), 613-618 (2017). IF_{2017} = 0.370.
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53. **M. Mitu***, E. Brandes, *Explosion parameters of methanol–air mixtures*, Fuel, 158, 217-223 (2015). https://doi.org/10.1016/j.fuel.2015.05.024 IF_{2015} = 3.611.
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55. V. Giurcan, D. Razus, **M. Mitu**, D. Oancea, *Prediction of flammability limits of fuel-air and fuel-air-inert mixtures from explosivity parameters in closed vessels*, Journal of Loss Prevention in the Process Industries, 34, 65-71 (2015). https://doi.org/10.1016/j.jlp.2015.01.025 IF_{2015} = 1.409.
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International database papers:

1. **M. Mitu**, V. Brinzea, A. Musuc, D. Razus, D. Oancea, *Deflagration parameters of propane–air mixtures in a closed cylindrical vessel*, U.P.B. Sci. Bull., Series B, 73(3), 17-26 (2011).
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