ACADEMIA ROMÂNĂ
SCOSAAR

Anexa nr.3

AVIZAT,

Director ȘCOALA DOCTORALĂ DE ȘTIINȚE CHIMICE

Marcela Mihai Digitally signed by Marcela Mihai Date: 2025.01.08 13:39:22 +02'00'

1. Îndeplinirea standardelor IOSUD superioare standardelor minimale naţionale* [] DA| [] | NU

2. Indeplinirea standardelor IOSUD egale standardelor minimale naţionale* [X] DA| [] | NU

FIŞA DE ÎNDEPLINIRE A STANDARDELOR IOSUD

Criterii generale:

Categorie habilitare	N_{max} (*)	FIC (**)	FIC_D (***)	FIC_{AP} (****)	FIC_{AC} (*****)	h index
Cerințe	50	100	70	50	25	13
Realizat	50	**177,998**	**177,998**	**118,309**	**74,738**	**26**

(*) N_{max} – primele maxim N lucrări, organizate în ordinea descrescătoare a factorilor de impact a revistelor în care au fost publicate;
(**) FIC – factorul de impact cumulat minimal al revistelor în care s-au publicat lucrările în cauză;
(***) FIC_D – factorul de impact cumulat minimal din publicații în domeniile de cercetare declarate;
(****) FIC_{AP} – factorul de impact cumulat minimal din publicații în calitate de autor principal (prim-autor și autor de corespondență);
(*****) FIC_{AC} – factorul de impact cumulat minimal din publicații în calitate de autor de corespondență.

Candidat: **MÎȚU MARIA**

Data: 02.12.2024

Semnătura:

ACADEMIA ROMÂNĂ
SCOSAAR

FIŞA DE VERIFICARE

a îndeplinirii standardelor IOSUD

Nr.	Listă lucrări	FIC	FIC_D	FIC_{AP}	FIC_{AC}
1.	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	8,1	8,1	-	-
2.	**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	6,9	6,9	6,9	6,9
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	6,7	6,7	-	-
4.	C. Movileanu, **M. Mitu**, V. Giurcan, D. Razus, D. Oancea, *Quenching distances, minimum ignition energies and related properties of propane-air-diluent mixtures,* Fuel, 274, 117836 (2020). https://doi.org/10.1016/j.fuel.2020.117836	6,609	6,609	-	-
5.	**M. Mitu**, V. Giurcan, D. Razus, D. Oancea, *Inert gas influence on the laminar burning velocity of methane-air mixtures,* Journal of Hazardous Materials, 321 440-448 (2017). https://doi.org/10.1016/j.jhazmat.2016.09.033	6,434	6,434	6,434	-
6.	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	5,578	5,578	5,578	5,578
7.	**M. Mitu***, E. Brandes, *Influence of pressure, temperature and vessel volume on explosion characteristics of ethanol/air mixtures in closed spherical vessels,* Fuel, 203, 460-468 (2017). https://doi.org/10.1016/j.fuel.2017.04.124	4,908	4,908	4,908	4,908

8.	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	4,384	4,384	4,384	4,384
9.	**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	4,384	4,384	4,384	4,384
10.	C. Movileanu, V. Giurcan, **M. Mitu**, D. Razus, D. Oancea, *Ignition by Low-Voltage Electric Discharges of Diluted and Undiluted C3H8–Air Mixtures*, Industrial & Engineering Chemistry Research, 60(32), 12123-12132 (2021). https://doi.org/10.1021/acs.iecr.1c02306	4,326	4,326	--	-
11.	V. Giurcan, **M. Mitu***, C. Movileanu, D. Razus, *Propagation Characteristics of Stoichiometric Inert-Diluted Methane–N2O Flames*, Industrial & Engineering Chemistry Research, 61(46), 17065–17076 (2022). https://doi.org/10.1021/acs.iecr.2c03106	4,2	4,2	4,2	4,2
12.	D. Razus, V. Brinzea, **M. Mitu**, C. Movileanu, D. Oancea, *Temperature and pressure influence on maximum rates of pressure rise during explosions of propane-air mixtures in a spherical vessel*, Journal of Hazardous Materials, 190(1-3), 891-896 (2011). https://doi.org/10.1016/j.jhazmat.2011.04.018	4,173	4,173	-	-
13.	D. Razus, V. Brinzea, **M. Mitu**, D. Oancea, *Explosion characteristics of LPG-air mixtures in closed vessels*, Journal of Hazardous Materials, 165(1-3), 1248-1252 (2009). https://doi.org/10.1016/j.jhazmat.2008.10.082	4,144	4,144	-	-
14.	**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	3,916	3,916	3,916	-

15.	**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	3,916	3,916	3,916	3,916
16.	D. Razus, V. Brinzea, **M. Mitu**, D. Oancea, *Temperature and pressure influence on explosion pressures of closed vessel propane–air deflagrations*, Journal of Hazardous Materials, 174(1-3), 548-555 (2010). https://doi.org/10.1016/j.jhazmat.2009.09.086	3,723	3,723	-	-
17.	**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://dx.doi.org/10.1021/acs.energyfuels.9b04450	3,605	3,605	3,605	-
18.	**M. Mitu**, D. Razus, V. Giurcan, D. Oancea, *Normal burning velocity and propagation speed of ethane–air: Pressure and temperature dependence,* Fuel, 147, 27-34 (2015). https://doi.org/10.1016/j.fuel.2015.01.026	3,611	3,611	3,611	-
19.	**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	3,611	3,611	3,611	3,611
20.	**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	3,6	3,6	3,6	3,6
21.	**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	2,8	2,8	2,8	2,8
22.	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	3,5	3,5	3,5	3,5
23.	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	3,5	3,5	-	-

24.	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	3,441	3,441	-	-
25.	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	3,352	3,352	3,352	3,352
26.	**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	3,352	3,352	3,352	-
27.	V. Giurcan, C. Movileanu, A.M. Musuc, **M. Mitu***, *Laminar burning velocity of biogas-containing mixtures. A literature review*, Processes, 9(6), 966 (2021). https://doi.org/10.3390/pr9060996	3,352	3,352	3,352	3,352
28.	**M. Mitu**, C. Movileanu, V. Giurcan, *Deflagration Characteristics of N2-Diluted CH4-N2O Mixtures in the Course of the Incipient Stage of Flame Propagation*, Energies, 14(18), 5918 (2021). https://doi.org/10.3390/en14185918	3,252	3,252	3,252	-
29.	**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	3,252	3,252	3,252	3,252
30.	**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	3,2	3,2	3,2	-
31.	**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	3,2	3,2	3,2	-

32.	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	3,0	3,0	-	-
33.	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	3,0	3,0	-	-
34.	**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	3,0	3,0	3,0	3,0
35.	**M. Mitu**, M. Prodan, V. Giurcan, D. Razus, D. Oancea, *Influence of inert gas addition on propagation indices of methane–air deflagrations*, Process Safety and Environmental Protection, 102, 513-522 (2016). https://doi.org/10.1016/j.psep.2016.05.007	2,905	2,905	2,905	-
36.	D. Razus,V. Brinzea, **M. Mitu**, C. Movileanu, D. Oancea, *Burning velocity of propane-air mixtures from pressure-time records during explosions in a closed spherical vessel*, Energy & Fuels, 26(2), 901-909 (2012). https://doi.org/10.1021/ef201561r	2,853	2,853	-	-
37.	**M. Mitu**, V. Giurcan, D. Razus, D. Oancea, *Temperature and pressure influence on ethane−air deflagration parameters in a spherical closed vessel*, Energy & Fuels, 26(8), 4840-4848 (2012). https://doi.org/10.1021/ef300849r	2,853	2,853	2,853	-
38.	**M. Mitu***, E. Brandes, W. Hirsch, *Ignition temperatures of combustible liquids with increased oxygen content in the (O_2 + N_2) mixture*, Journal of Loss Prevention in the Process Industries, 62, 103971 (2019). https://doi.org/10.1016/j.jlp.2019.103971	2,795	2,795	2,795	2,795
39.	**M. Mitu**, D. Razus, V. Giurcan, D. Oancea, *Experimental and numerical study of laminar burning velocity of ethane-air mixtures of variable initial composition, temperature and pressure,* Energy & Fuels, 28(3), 2179-2188 (2014). https://doi.org/10.1021/ef402197y	2,790	2,790	2,790	-

40.	V. Giurcan, **M. Mitu***, C. Movileanu, D. Razus, D. Oancea, *Influence of inert additives on small-scale closed vessel explosions of propane-air mixtures,* Fire Safety Journal, 111, 102939 (2020). https://doi.org/10.1016/j.firesaf.2019.102939	2,764	2,764	2,764	2,764
41.	**M. Mitu**, D. Razus, D. Oancea, *Effect of CO_2 dilution on propane-air isothermal catalytic combustion on platinum,* Journal of Thermal Analysis and Calorimetry, 131(1), 175-181 (2018). https://doi.org/10.1007/s10973-017-6167-x	2,471	2,471	2,471	-
42.	D. Razus, V. Brinzea, **M. Mitu**, D. Oancea, *Burning velocity of liquefied petroleum gas (LPG)–air mixtures in the presence of exhaust gas,* Energy & Fuels, 24(3), 1487-1494 (2010). https://doi.org/10.1021/ef901209q	2,444	2,444	-	-
43.	D. Razus, D. Oancea, V. Brinzea, **M. Mitu**, C. Movileanu, *Experimental and computed burning velocities of propane-air mixtures,* Energy Conversion Management, 51(12), 2979-2984 (2010). https://doi.org/10.1016/j.enconman.2010.06.041	2,072	2,072	-	-
44.	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	1,982	1,982	1,982	1,982
45.	**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	1,982	1,982	1,982	-
46.	**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	1,9	1,9	1,9	1,9
47.	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).	1,755	1,755	1,755	1,755

48.	**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).	1,605	1,605	1,605	1,605
49.	D. Oancea, V. Munteanu, D. Razus, **M. Mitu**, *A simplified kinetic model for isothermal catalytic ignition : Propane/air mixture on platinum wire*, Journal of Thermal Analysis and Calorimetry, 103(3), 911-916 (2011). https://doi.org/10.1007/s10973-010-1131-z	1,604	1,604	-	-
50.	V. Giurcan, **M. Mitu***, C. Movileanu, D. Razus, D. Oancea, *Numerical study of laminar flame propagation in CH4-N2O-N2 at moderate pressures and temperatures*, Combustion, Explosion and Shock Waves, 58(1), 22-33 (2022). https://doi.org/10.1134/S0010508222010038	1,2	1,2	1,2	1,2
	TOTAL	**177,998**	**177,998**	**118,309**	**74,738**

* Corresponding author

Candidat: **MÎȚU MARIA**

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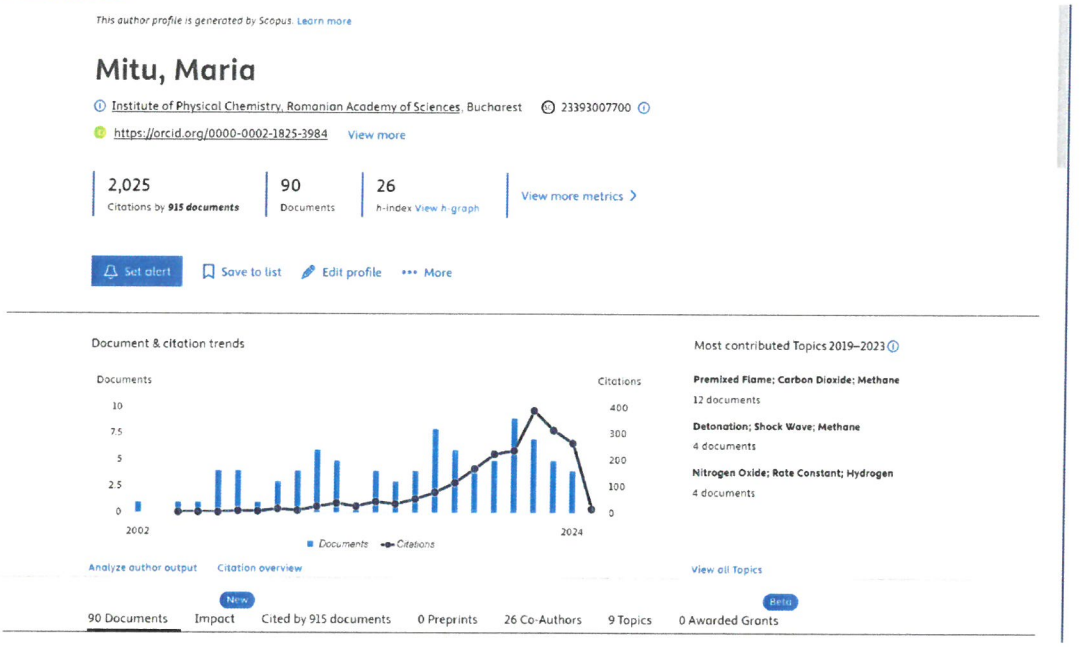

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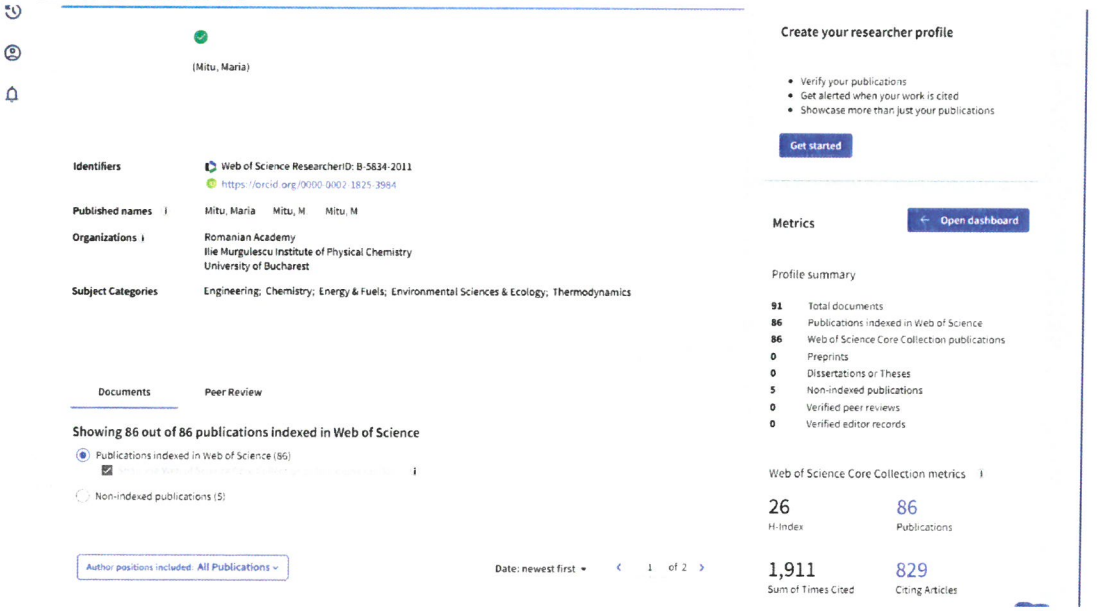

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