

## Indeplinire standarde minimale Domeniul Chimie

### Tabel criterii generale domeniu chimie:

Categorie	N <sub>max</sub> (*)	FIC (**)	FIC <sub>D</sub> (***)	FIC <sub>AP</sub> (****)	FIC <sub>AC</sub> (*****)	h index
Profesor/CS 1/Habilitare  Criterii minime	50	100	70	50	25	13
<b>Mihaela Florea</b>	<b>50</b>	<b>250,52</b>	<b>228,14</b>	<b>151,3</b>	<b>107,34</b>	<b>23</b>

Nr. crt.	Articole în reviste cotate ISI Thomson Reuters și în volume indexate ISI proceedings	FIC	FIC <sub>AP</sub>	FIC <sub>D</sub>	FIC <sub>AC</sub>
1	<a href="#">M. Florea, R. Prada Silvy, P. Grange, Catal. Lett., 87 (2003) 63-66, DOI: 10.1023/A:1022857211248; "New Class of Catalysts for the Propane Ammoxidation Process Based Vanadium Aluminum Oxynitrides"</a>	<b>1,581</b>	<b>1,581</b>	<b>1,581</b>	
2	<a href="#">A.-S. Mamede, E. Payen, P. Granger, M. Florea, V. I. Pârvulescu, AIChE 54(5) (2008) 1303-1312; DOI: 10.1002/aic.11468; WO<sub>x</sub>-CeO<sub>2</sub> and WO<sub>x</sub>-Nb<sub>2</sub>O<sub>5</sub> catalysts deactivation during hexane isomerization"</a>	<b>1,883</b>	<b>1,883</b>	<b>1,883</b>	<b>1,883</b>
3	<a href="#">S. Nicolae, F. Neatu, M. Florea, Comptes Rendue de Chimie, 2017, DOI: 10.1016/j.crci.2017.06.005, "Selective catalytic oxidation reaction of p-xylene on manganese-iron mixed oxide materials"</a>	<b>1,879</b>	<b>1,879</b>	<b>1,879</b>	<b>1,879</b>

4	<b>M. Florea</b> , A-S. Mamede, P. Eloy, V.I. Parvulescu, E. M. Gaigneaux, Catal. Today 112 (2006) 139–142 ; DOI: 10.1016/j.cattod.2005.11.080; “High surface Mo-V-Nb-Te-O catalysts: preparation, characterization and catalytic behaviour in ammoxidation of propane“	2,148	2,148	2,148	2,148
5	<b>M. Florea</b> , M. Sevinci, V.I. Parvulescu, G. Lemay and S. Kaliaguine, Microp. Mes. Mat. 44-45 (2001) 483-488, DOI: 10.1016/S1387-1811(01)00224-4; “Ru-MCM-41 catalysts for diastereoselective hydrogenation”	2,497	2,497	2,497	
6	<b>M. Florea</b> , R. Prada Silvy, P. Grange, Appl. Catal. A 286 (2005) 1-10 ; DOI: 10.1016/j.apcata.2005.02.032 ; “Vanadium aluminium oxynitride catalysts for propane ammoxidation reaction. Effect of the V/Al ratio on the structure and catalytic behaviour“	2,728	2,728	2,728	2,728
7	<b>M. Florea</b> , R. Prada Silvy, P. Grange, Appl. Catal. A, 255 (2) (2003) 289-300, DOI: 10.1016/S0926-860X(03)00591-X; “Influence of the reaction conditions on the activity properties of vanadium-aluminium oxynitride propane ammoxidation catalyst ”	2,825	2,825	2,825	
8	E. Angelescu, R. Ionescu, O.D. Pavel, R. Zavoianu, R. Bîrjega, C.R. Luculescu, <b>M. Florea</b> , R. Olar, J. Mol. Catal. A: Chem., 315( 2) (2010), 178-186; DOI: 10.1016/j.molcata.2009.09.009; „Epoxidation of cyclohexene with O <sub>2</sub> and isobutyraldehyde catalysed by cobalt modified hydrotalcites”	2,872		2,872	
9	S. Somacescu, L. Navarrete; <b>M. Florea</b> ; J. M. Calderon-Moreno; J. M. Serra, J. Alloys Comp. 690 (2017), 873-883, DOI: 10.1016/j.jallcom.2016.08.193; „Self-assembled (Ni/Cu, Ti)-YSZ with potential applications for IT-SOFCs: Catalytic and electrochemical assessment”	3,113		3,113	
10	E. Angelescu, O.D. Pavel, R. Bîrjega, <b>M. Florea</b> , R. Zăvoianu, Appl. Catal. A, 341 (2008) 50–57; DOI: 10.1016/j.apcata.2007.12.022 ; "The impact of the “Memory effect” on the catalytic activity of Mg/Al; Mg,Zn/Al; Mg/Al,Ga hydrolacite-like compounds used as catalysts for cyclohexene epoxidation"	3,19		3,190	

11	F. Matei-Rutkovska, G. Postole, C. G. Rotaru, <b>M. Florea</b> , V. I. Pârvulescu, P. Gelin, Int. J. Hydrogen Energy, 41 (2016) 2512 -2525, „Synthesis of ceria nanopowders by microwave-assisted hydrothermal method for dry reforming of methane”	3,582	3,582	3,582	3,582
12	N. Candu, M. Tudorache, <b>M. Florea</b> , E. Ilyes, I. Haiduc, M. Andruh, F. Vasiliu, I. Mercioniu, S. M. Coman, V. I. Pârvulescu, ChemPlusChem 78(5), (2013) 443–450; DOI: 10.1002/cplu.201300076; “Postsynthetic modification of a MOF structure for enantioselective catalytic epoxidation”	3,242		3,242	
13	<b>M. Florea</b> , M. Alifanti V. Kuncser, V.I. Parvulescu, Catal. Today, 208, (2013) 56-59; DOI: 10.1016/j.cattod.2012.09.035; “Structural Changes During Toluene Complete Oxidation on Supported EuFeO <sub>3</sub> monitored by in situ <sup>151</sup> Eu and <sup>57</sup> Fe Mössbauer spectroscopy“	3,309	3,309	3,309	3,309
14	G. Mitran, O. D. Pavel, <b>M. Florea</b> , D. Mieritz, D.-K. Seo, Catal. Comm., 77 (2016) 83–88, DOI: 10.1016/j.catcom.2016.01.029; „Hydrogen production from glycerol steam reforming over molybdena-alumina catalysts”	3,33		3,33	
15	F. Neatu, M.M. Trandafir, M. Marcu, L. Preda, J.M. Calderon-Moreno, S. Neatu, S. Somacescu, <b>M. Florea</b> , Catal. Commun., 93 (2017) DOI: 10.1016/j.catcom.2016.12.026; „Potential application of Ni and Co stabilized zirconia as oxygen reduction catalyst”	3,33	3,33	3,33	3,33
16	S. Coman, <b>M. Florea</b> , F. Cocu, V.I. Parvulescu, P. A. Jacobs, C. Danumah and S. Kaliaguin, Chemical Communications, (1999) 2175-2176, DOI: 10.1039/A907119I; “Low metal loading Ru-MCM-41 stereocontrolled hydrogenation of prostaglandin intermediates”	3,477		3,477	
17	G. Mitran, F. Neatu, S. Neatu, M.M. Trandafir, <b>M. Florea</b> , Catalysts, 10(7 (2020) 728; DOI: 10.3390/catal10070728; "VAIPOs as Efficient Catalysts for Glycerol Conversion to Methanol"	3,52	3,52	3,52	3,52
18	<b>M. Florea</b> , M. Alifanti, V. I. Parvulescu, D. Mihaila-Tarabasanu, L. Diamandescu, M. Feder, C. Negrila, L. Frunza, Catal. Today, 141 (2009) 361-366; DOI: 10.1016/j.cattod.2008.05.005; "Total oxidation of toluene on ferrite-type catalysts"	3,526	3,526	3,526	

19	M. Alifanti, <b>M. Florea</b> , S. Somacescu, V.I. Parvulescu, Appl. Catal. B 60 (2005) 33-39, <b>DOI:</b> 10.1016/j.apcatb.2005.02.018; “Supported perovskites for total oxidation of toluene“	<b>3,809</b>		<b>3,809</b>	
20	N. Candu, <b>M. Florea</b> , S. M. Coman, V. I. Parvulescu, Appl. Catal. A, 393 (1-2) (2011) 206-214 ; <b>DOI:</b> 10.1016/j.apcata.2010.11.044 ; „Benzylation of benzene with benzyl alcohol on zeolite catalysts”	<b>3,903</b>		<b>3,903</b>	
21	European Patent, <b>EP1476420</b> , “Ammoxidation of hydrocarbons and hydrogenated metallo oxynitride catalysts therefore”, R. Prada Silvy, <b>M. Florea</b> , P. Grange, <b>2004</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>
22	C. G. Rotaru, G. Postole, <b>M. Florea</b> , F. Matei-Rutkovska, V. I. Pârvescu, P. Gelin, Appl. Catal. A: General, 494 (2015) 29–40; <b>DOI:</b> 10.1016/j.apcata.2015.01.024 ; "Dry reforming of methane on ceria prepared by modified precipitation route”	<b>4,012</b>	<b>4,012</b>	<b>4,012</b>	<b>4,012</b>
23	G. Mitran, O. D. Pavel, <b>M. Florea</b> , V. I. Pârvescu, Appl. Catal. A, 514 (2016) 71–82, <b>DOI:</b> 10.1016/j.apcata.2016.01.010; “Cross-coupling of p-xylene to 2, 2', 5, 5'-tetramethyl 1, 1'-Diphenyl on supported vanadia catalysts”,	<b>4,339</b>		<b>4,339</b>	
24	<b>M. Florea</b> , R.S. Marin, F.M. Palasanu, F. Neatu, V.I. Parvulescu, Catal. Today, 254 (2015) 29–35, <b>DOI:</b> 10.1016/j.cattod.2015.02.026; „Mesostructured vanadia-alumina catalysts for the synthesis of vitamin K3”	<b>4,312</b>	<b>4,312</b>	<b>4,312</b>	<b>4,312</b>
25	F. Neatu, N. Petrea, R. Petre, V. Somoghi, <b>M. Florea</b> , V.I. Parvulescu, Catal. Today, 278 (2016) 66–73, <b>DOI:</b> 10.1016/j.cattod.2016.03.031; „Oxidation of 5-hydroxymethyl furfural to 2,5-diformylfuran in aqueous media over heterogeneous manganese based catalysts”	<b>4,636</b>	<b>4,636</b>	<b>4,636</b>	<b>4,636</b>
26	<b>M. Florea</b> , F. Matei-Rutkovska, G. Postole, A. Urda, F. Neatu, V.I. Pârvescu, P. Gelin, in press, 2017, <b>DOI:</b> 10.1016/j.cattod.2016.12.006; „Doped ceria prepared by precipitation route for solid oxide fuel cells operated on methane”	<b>4,636</b>	<b>4,636</b>	<b>4,636</b>	<b>4,636</b>

27	<b>M. Florea</b> , D. Avram, B. Cojocaru, I. Tiseanu, V. Parvulescu, C. Tiseanu, <i>Phys. Chem. Chem. Phys.</i> 18 (2016) 18268-18277, DOI: 10.1039/C6CP02754G; "Defects induced tunable near infrared emission of Er - CeO <sub>2</sub> by heterovalent co - dopants"	4,123	4,123		
28	E. Ilyes, <b>M. Florea</b> , A. M. Madalan, I. Haiduc, V. I. Parvulescu, M. Andruh, <i>Inorg. Chem.</i> 51, (2012) 7954-7956; DOI: 10.1021/ic301139j; "A Robust Metal-Organic Framework Constructed from Alkoxo-bridged Binuclear Nodes and Hexamethylenetetramine Spacers: Crystal Structure and Sorption Studies"	4,593			
29	Mihai Alifanti, <b>M. Florea</b> , V.I. Parvulescu, <i>Appl. Catal. B</i> , 70 (2007) 400-405; DOI: 10.1016/j.apcatb.2005.10.037 ; "Ceria based oxides as supports for LaCoO <sub>3</sub> perovskite; catalysts for total oxidation of VOC"	4,651		4,651	
30	M. Magureanu, N. Bogdan Mandache, J. Hu, R. Richards, <b>M. Florea</b> , V. I. Parvulescu, <i>Appl. Catal. B</i> . 76( 3-4) (2007) 275-281; DOI: 10.1016/j.apcatb.2007.05.030; "Plasma-assisted catalysis total oxidation of trichloroethylene over gold nano-particles embedded in SBA-15 catalysts"	4,651		4,651	
31	S. M. Coman, <b>M. Florea</b> , V. I. Parvulescu, V. David, A. Medvedovici, D. De Vos, P. A. Jacobs, G. Poncelet, P. Grange, <i>J. Catal.</i> 249 (2007), 359-369; DOI: 10.1016/j.jcat.2007.04.022 ; "Metal-triflate ionic liquid systems immobilized onto mesoporous MS41 materials as new and efficient catalyst for N-acylation"	4,737		4,737	
32	M. Olea, <b>M. Florea</b> , I. Sack, R. Prada Silvy, E. M. Gaigneaux, G. B. Marin and P. Grange, <i>J. Catal.</i> 232 (1) (2005) 152-160, DOI: 10.1016/j.jcat.2005.02.020; "Evidences of the participation of the nitrogen species from vanadium aluminium oxynitrides in propane ammoxidation"	4,78		4,78	
33	<b>M. Florea</b> , F. Matei-Rutkovska, G. Postole, A. Urda, F. Neatu, V.I. Părvulescu, P. Gelin, <i>Catal. Today</i> , 306 (2018) 166-171, DOI: 10.1016/j.cattod.2016.12.006, „Doped ceria prepared by precipitation route for solid oxide fuel cells operated on methane"	4,888	4,888	4,888	4,888

34	<a href="#">M. Florea</a> , G. Postole, F. Matei-Rutkovska, A. Urda, F. Neațu, L. Massin, P. Gelin, Catal. Sci. & Tech. 8(5) (2018) 1333 – 1348; DOI: 10.1039/c7cy02192e; „Influence of Gd and Pr doping on the properties of ceria: texture, structure, redox behaviour and reactivity in CH <sub>4</sub> /H <sub>2</sub> O reactions in the presence of H <sub>2</sub> S”	5,727	5,727	5,727	5,727
35	G. Mitran, O. D. Pavel, D. G. Mieritz, D.-K. Seo, <a href="#">M. Florea</a> , Catal. Sci. Technol. 6 (2016) 7902-7912, DOI: 10.1039/c6cy00999a; „Effect of Mo/Ce ratio in mo-ce-al catalysts on the hydrogen production by steam reforming of glycerol”	5,773	5,773	5,773	5,773
36	M.M. Trandafir, L. Pop, N.D. Hadade, <a href="#">M. Florea</a> , F. Neatu, C.M. Teodorescu, B. Duraki, J.A. van Bokhoven, I. Grosu, V.I. Parvulescu, H. Garcia, Catal. Sci. Technol., 6 (23) (2016) 8344–8354, DOI: 10.1039/c6cy01631f; „An adamantane-based COF: stability, adsorption capability, and behaviour as a catalyst and support for Pd and Au for the hydrogenation of nitrostyrene”	5,773		5,773	
37	M. Verziu, <a href="#">M. Florea</a> , S. Simon, V. Simon, P. Filip, V. I. Parvulescu, C. Hardacre, J. Catal. 263 (2009) 56–66; DOI: 10.1016/j.jcat.2009.01.012 ; "Transesterification of vegetable oils on basic large mesoporous alumina supported alkaline fluorides – evidences of the nature of the active site and catalytic performances”	5,288		5,288	
38	O.V. Safonova, <a href="#">M. Florea</a> , J. Bilde, P. Delichere, J.M.M. Millet, J. Catal. 268 (2009) 156–164; DOI: 10.1016/j.jcat.2009.09.014 ; „Local environment of vanadium in V/Al/O-mixed oxide catalyst for propane ammoxidation: Characterization by in situ valence-to-core X-ray emission spectroscopy and X-ray absorption spectroscopy”	5,288		5,288	
39	F. Neațu, L. Protesescu, <a href="#">M. Florea</a> , V. I. Pârvulescu, C. M. Teodorescu, N. Apostol, P. Y. Toullec, V. Michelet Green Chem., 12 (2010) 2145-2149, DOI: 10.1039/c0gc00258e; „Novel Pd heterogeneous catalysts for cycloisomerisation of acetylenic carboxylic acids”	5,472		5,472	

40	<b>M. Florea</b> , S. Somacescu, G. Postole, A. Urdă, F. Neațu, Ș. Neațu, L. Massin, P. Gélin, Catal. Sci. Technol., 9(9) (2019) 2351-2366, DOI:10.1039/C9CY00065H; "La <sub>0.75</sub> Sr <sub>0.25</sub> XO <sub>3</sub> (X = Fe, Mn or Cr) with coking tolerance for CH <sub>4</sub> /H <sub>2</sub> O reaction: effect of H <sub>2</sub> S on catalytic performance"	5,721	5,721	5,721	5,721
41	A. Stanoiu, C.E. Simion, J.M. Calderon-Moreno, P. Osiceanu, <b>M. Florea</b> , V.S. Teodorescu, S. Somacescu, Journal of Hazardous Materials 331 (2017) 150–160; DOI: 10.1016/j.jhazmat.2017.02.038 "Sensors based on mesoporous SnO <sub>2</sub> -CuWO <sub>4</sub> with high selective sensitivity to H <sub>2</sub> S at low operating temperature"	6,065		6,065	
42	<b>M. Florea</b> , M. Alifanti, V. Kuncser, D. Macovei, N. Apostol, P. Granger, V. I. Parvulescu, J. Catal. 316 (2014) 130-140; DOI: 10.1016/j.jcat.2014.04.016 ; "Evidence of the A-B site cooperation in the EuFeO <sub>3</sub> perovskite by <sup>151</sup> Eu and <sup>57</sup> Fe Mössbauer, EXAFS and toluene catalytic oxidation"	6,921	6,921	6,921	
43	M.M. Trandafir, <b>M. Florea</b> , F. Neatu, A. Primo, V.I. Parvulescu, H. Garcia, ChemSusChem, 9 (13) (2016) 1565–1569, DOI: 10.1002/cssc.201600197; „Graphene from alginate pyrolysis as a metal-free catalyst for hydrogenation of nitro compounds”	7,226		7,226	
44	F. Neatu, G. Culica, <b>M. Florea</b> , V.I. Parvulescu, F. Cavani, ChemSusChem, 9 (21) (2016) 3102–3112, DOI: 10.1002/cssc.201600718; „Synthesis of terephthalic acid by means of p-cymene oxidation with O <sub>2</sub> : toward a more sustainable production of bio-PET”	7,226	7,226	7,226	7,226
45	<b>M. Florea</b> , D. Avram, A. Maraloiu, B. Cojocaru, C. Tiseanu, Nanoscale, 10 (2018) 18043-18054, DOI: 10.1039/C8NR03695K "Heavy doping ceria by wet impregnation: A viable alternative to bulk doping approaches"	7,23	7,23		

46	Ș. Neațu, F. Neațu, V. C. Diculescu, M. M. Trandafir, N. Petrea, S. Somacescu, F. Krumeich, A. J. Knorpp, J. A. van Bokhoven, <b>M. Florea</b> , ACS Appl. Mater. Interfaces, 12(16) (2020) 18407-18420, DOI: 10.1021/acscami.9b19541, "Undoped SnO <sub>2</sub> as Support for Ni Species to Boost the Oxygen Generation through Alkaline Water Electrolysis"	8,758	8,758	8,758	8,758
47	F. Neatu, R.S. Marin, <b>M. Florea</b> , N. Petrea, O.D. Pavel, V.I. Parvulescu, Appl. Catal. B, 180 (2016) 751–757, DOI: 10.1016/j.apcatb.2015.07.043; „Selective oxidation of 5-hydroxymethyl furfural over non-precious metal heterogeneous catalysts”	9,446		9,446	
48	A. Primo, F. Neatu, M. Florea, V.I. Parvulescu, H. Garcia, Nat. Commun., 5 (2014) DOI: 10.1038/ncomms6291; „Graphenes in the absence of metals as carbocatalyst for selective acetylene hydrogenation and alkene hydrogenation”	11,47	11,47	11,47	
49	M. M. Trandafir, F. Neațu, I. M. Chirica, Ș. Neațu, A. Kuncser, E. I. Cucolea, V. Natu, M.I W. Barsoum, <b>M. Florea</b> , ACS Catalysis, 10 (10) (2020) 5899–590 DOI: 10.1021/acscatal.0c00082 "Highly Efficient Ultralow Pd Loading Supported on MAX Phases for Chemoselective Hydrogenation"	12,35	12,35	12,35	12,35
50	S. Somacescu, N. Cioatera, P. Osiceanu, J. Maria Calderon-Moreno, C. Ghica, F. Neațu, <b>M. Florea</b> , Appl. Catal. B, 241 (2019) 393-406, (IF= 16.683, AIS= 1.664) DOI: 10.1016/j.apcatb.2018.09.065; "Bimodal mesoporous NiO/CeO <sub>2</sub> - $\delta$ -YSZ with enhanced carbon tolerance in catalytic partial oxidation of methane - potential IT -SOFCs anode"	16,683	16,683	16,683	16,683
		250,5	151,3	228,14	107,34
		FIC	FIC <sub>AP</sub>	FIC <sub>D</sub>	FIC <sub>AC</sub>