

1. Personal information

Name: Mihaela FLOREA

Place and date of birth: 21 of October 1974, Bucharest, Romania

Current academic position: Scientific researcher I/National Institute of Materials Physics/Romania

Address: National Institute of Materials Physics/Atomistilor 405 A/077125/ Magurele/ Romania.

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2. Education

2005-2007 Master of Science/ Project manager/Academy of the Economics Studies /Bucharest/ Romania
1999-2003 PhD in chemistry “*La plus grande distinction*”/ Université Catholique de Louvain (UCL)/Belgium
1997-1999 Master of Science in Catalysis/Faculty of Chemistry/ University of Bucharest/ Romania
1993-1997 Licentiate in Chemistry/Faculty of Chemistry/ University of Bucharest/ Romania

3. Expertise

2018-prezent Scientific researcher I/ National Institute of Materials Physics/Romania/ Heterogeneous catalysis/
Green energy production (solar cells, fuel cells)/ Biomass valorisation.

2004-prezent Scientific researcher/ Faculty of Chemistry/ University of Bucharest/ Preparation of nanomaterials/
Characterization techniques/ Selective oxidation reactions.

2017-2018 Scientific researcher III/ Heterogeneous catalysis/ Green energy production (solar cells, fuel cells)/
Biomass valorisation.

2007-2017 Assistant professor/ Department of Organic Chemistry, Biochemistry and Catalysis/ Faculty of
Chemistry/ University of Bucharest/ Taught courses and labs: Catalysts Preparation, Catalysts Characterization,
Nanomaterials/ Advisor of BSc and MSc thesis (~2-3 students/year)/ Catalysis and catalytic processes/ Solids
surface characterization/ Analytical chemistry/ Green chemistry.

2004- 2007 Assistant professor, Department of Organic Chemistry, Biochemistry and Catalysis/ Faculty of
Chemistry/ University of Bucharest.

4. Publications (selection)

1. **Mihaela Florea***, Simona Somacescu, Georgeta Postole, Adriana Urdă, Florentina Neațu, Ștefan Neațu, Laurence Massin, Patrick Gélin, $\text{La}_{0.75}\text{Sr}_{0.25}\text{XO}_3$ (X = Fe, Mn or Cr) with coking tolerance for $\text{CH}_4/\text{H}_2\text{O}$ reaction: effect of H_2S on catalytic performance, *Catalysis Science and Technology*, 9(9) (2019) 2351-2366 (IF :5.726)
2. Simona Somacescu, Nicoleta Cioatera, Petre Osiceanu, Jose Maria Calderon-Moreno, Corneliu Ghica, Florentina Neațu, **Mihaela Florea***, Bimodal mesoporous $\text{NiO}/\text{CeO}_2\text{-}\delta\text{-YSZ}$ with enhanced carbon tolerance in catalytic partial oxidation of methane - potential IT -SOFCs anode, *Applied Catalysis B*, 241 (2019) 393-406 (IF : 11.69)
3. **Mihaela Florea**, Daniel Avram, Adrian Maraloiu, Bogdan Cojocaru and Carmen Tiseanu, Heavy doping ceria by wet impregnation: A viable alternative to bulk doping approaches, *Nanoscale*, 10 (2018) 18043-18054 (IF : 7.23)

4. G. Mitran, O. D. Pavel, D. G. Mieritz, D.-K. Seo, **Mihaela Florea***, Effect of Mo/Ce ratio in Mo-Ce-Al catalysts on the hydrogen production by steam reforming of glycerol, *Catalysis Science & Technology*. 6 (2016) 7902-7912, (IF :5.287)
5. Florentina Neațu, Geanina Culică, **Mihaela Florea***, Vasile I. Parvulescu, Fabrizio Cavani, Synthesis of terephthalic acid by means of p-cymene oxidation with O₂: toward a more sustainable production of bio-PET, *CHEMSUSCHEM*, 9 (21) (2016) 3102–3112, (IF=7.342)
6. Codruta G. Rotaru, Georgeta Postole, **Mihaela Florea***, Florina Matei-Rutkovska, Vasile I. Pârvulescu, Patrick Gelin, Dry reforming of methane on ceria prepared by modified precipitation route, *Applied Catalysis A: General*, 494 (2015) 29–40, (IF : 4.012)
7. **Mihaela Florea***, Roxana S. Marin, Florentina M. Pălășanu, Florentina Neațu, Vasile I. Pârvulescu, Messtructured vanadia-alumina catalysts for the synthesis of vitamin K₃, *Catalysis Today* 254 (2015) 29–35 (IF : 4.509)
8. Florentina Neatu, Nicoleta Petrea, Razvan Petre, Vasile Somoghi, **Mihaela Florea***, Vasile I. Parvulescu, Oxidation of 5-hydroxymethyl furfural to 2,5-diformylfuran in aqueous media over heterogeneous manganese based catalysts, *Catalysis Today* 278 (2016) 66–73, (IF : 4.793)
9. **Mihaela Florea**, Mihai Alifanti, Victor Kuncser, Dan Macovei, Nicoleta Apostol, Pascal Granger, Vasile I. Parvulescu, Evidence of the A-B site cooperation in the EuFeO₃ perovskite by ¹⁵¹Eu and ⁵⁷Fe Mössbauer, EXAFS and toluene catalytic oxidation, *Journal of Catalysis* 316 (2014) 130-140, (IF : 6.921)
10. Ana Primo, Florentina Neatu, **Mihaela Florea**, Vasile I. Parvulescu, Hermenegildo Garcia, Graphenes in the absence of metals as carbocatalysts for selective acetylene hydrogenation and alkene hydrogenation, *Nature Communications*, 5, Article number: 5291 (2014) (IF : 11.47) (equal contribution)

*-corresponding author

5. Research stages

2006	Institut de Recherches sur la Catalyse et l'Environnement de Lyon (IRCELYON)/Lyon/France – CONCORDE Project – short visit
2004/2005	Université Catholique de Louvain (UCL)/Belgium – CONCORDE Project- short visits
2003	University of Gent, Belgium and ESFR Grenoble/France – Scientific collaboration during PhD thesis, “EXAFS and TAP experiments”
2002	University of Gent/Belgium – Scientific collaboration during PhD thesis, TAP experiments
2001	Université de Caen, Laboratory Catalysis and Spectrochemistry/France – Summer school, “Infrared spectroscopy”

6. Others responsibilities

2019 – present	Advisory Board member for Journal of Materials Chemistry A, RSC (IF=10.73)
2018 -present	Member of the Scientific Council of National Institute of Materials Physics
2011 – present	External expert, Romanian National Agency (UEFISCDI)/Romania
2015 -present	External expert, European Commission, REA
2004 – 2008	Member of the Faculty of Chemistry Council/University of Bucharest/Romania
2015 – 2017	Member of the Faculty of Chemistry Council/University of Bucharest/Romania
2012 – 2014	Vice-dean of the Faculty of Chemistry /UB /Romania
2004 – 2008	Member of the Romanian Catalysis Society Committee – Scientific secretary and treasurer
2012 – 2016	Member of the management committee of the COST programme, COST CM1104
2006 – 2009	Member of the management committee of the Chemistry, Molecular Sciences and Technology of the COST programme, COST D41
2005–present	Reviewer for different international journals (Appl. Catal. A and B, Catal. Today, Catal. Commun. Int. J. Hydrogen Energ, J. Catal., etc.)