



6 PAGE-CURRICULUM VITAE AND 10-YEARS TRACK MARIA LOULUDI, Ph.D.

Contacts

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Standard academic and research record

ACCADEMIC BACKGROUND-EDUCATION

Diploma in Chemistry, University of Ioannina, Ioannina, Greece, 1986
Ph.D., Chemistry Department, University of Ioannina, Ioannina, Greece, 1992

FELLOWSHIPS

Post-doctoral associate, University of Rene Descartes, CNRS, URA 400, Paris, France, 9/93-8/95 (E.U. Human Capital and Mobility Fellowship).

Postdoctoral Fellow Chemistry Department, University of Ioannina, Ioannina, Greece, 1996 (E.U. Return Grant).

ACADEMIC APPOINTMENTS

2012- Full Professor (*Inorganic Chemistry*), Dept. of Chemistry, University of Ioannina.
2007-2012 Associate Professor (*Inorganic Chemistry*), Dept. of Chemistry, University of Ioannina.
2004-2007 Tenure Assistant Professor (*Inorganic Chemistry*), Dept. of Chemistry, University of Ioannina.
2001-2004 Assistant Professor (*Inorganic Chemistry*), Dept. of Chemistry, University of Ioannina.
1996-2001 Lecturer (*Inorganic Chemistry*), Dept. of Chemistry, University of Ioannina.

TEACHING ACTIVITIES

Undergraduate courses: Basic and Advanced Inorganic Chemistry. Topics: Catalysis by Metal Complexes, Mechanisms, MetalloBiomolecules.

Postgraduate courses: Hybrid Materials, Homogeneous/Heterogeneous Catalysts, Chemical Surface Modification of Materials, Catalytic Processes.

ACADEMIC ACTIVITY

Supervision of **4** Postdoctoral Fellows, (2 accomplished, 2 in progress)
Supervisor of **16** PhD Theses, (13 accomplished, 3 in progress)
Supervisor of **31** MsSc. Theses, (28 accomplished, 3 in progress)
Supervisor of **79** Diploma theses, (74 accomplished, 5 in progress)

FOREIGN STAYS-VISITS

2019 - NAU-University, Biomass & Biochar Green Technology Center, Nanjing, China
2010 -Institute of Physical Theoretical Chemistry Center of Magnetic Resonance Goethe-University Frankfurt.
2009 - Frumkin Inst. of Physical Chemistry, Russian Academy of Sci. Moscow Russia.
2007 - Dept. of Chemistry Lomonosof University, Moscow Russia.
2003 -Section De Bioenergetique, Centre des Etudes Nucleaires, Saclay, France.
1999 - Dept. of Chemistry University of Girona, Spain.
1998 - Dept. of Chemistry University of Santiago de Compostela, Spain.

RESEARCH INTERESTS AND ACTIVITY

FOUNTATION OF THE LAB *BIOMIMETIC CATALYSIS & HYBRID MATERIALS*

<http://catalysis.chem.uoi.gr>

- **Biomimetic Catalysis-Molecular Catalysis:** *H₂-production & CO₂ reduction:* Formic acid/formaldehyde/methanol dehydrogenation & small organic molecules production from CO₂ reduction by molecular catalysts, hybrid nanoparticles. *Inorganic Catalytic Technology. Hydrocarbon oxidation:* Mn-complexes, Fe-complexes, Mn-, Fe-porphyrins, mechanistic studies. *Phenol-catechol oxidation:* Cu-complexes, mechanistic studies. *Catalytic decomposition of chlorophenols & dyes:* Fe-, Mn-porphyrins, mechanistic studies.
- **Hybrid organic-inorganic materials-Development of Composite Materials:** Chemical Surface Modification of Silica, Metal Oxides, Carbon-based Materials, Nano-Particles. Hybrid Materials. Sol-gel Materials. *Heterogeneous Oxidation Catalysts.* *Heterogeneous catalysts for H₂ production & CO₂ reduction.* *Bio-active Hybrid Materials.*
- **Chemical Biomimetics:** Metal Ions in Biological Systems, Models of Thiamine Enzymes, Cytochromes P-450, Models of Mn- and Fe-non-Heme Enzymes, Biomimetics of Cu-enzymes.

ORGANISATION OF SCIENTIFIC CONFERENCES

5. [Organiser] 15th Panhellenic Symposium of Catalysis, Ioannina, Greece, October **2018**.
4. [Member of organising committee] 5th Panhellenic Symposium on Green Chemistry, Ioannina, Greece, October **2014**.
3. [Member of organising & Scientific committee] 17th IHSS Conference, Ioannina, Greece, 1-6 September **2014**.
2. [Member of organising committee] 2nd Panhellenic Conference on Thermal Analysis, Ioannina, Greece, 25-27 June **2004**.
1. [Secretary of organising committee and Scientific committee member] Vth International Symposium on Applied Bioinorganic Chemistry Corfu, Greece, 13-17 April **1999**.

MEMBERSHIPS

Member of the American Chemical Society
Member of the Greek Chemical Society
Member of the Greek Catalytic Society
Member of the International Humic Substance Society
Member of the Materials Research Society

REVIEWING ACTIVITIES

- **Reviewer for ISI Journals:** Angewandte, Journal of Materials Chemistry, Catalysis Science & Technology, ChemComm, Dalton Transactions, PCCP & Faraday Discussions, New Journal Chemistry, Polyhedron, Catalysis Communications, J. Molecular Catalysis A, Catalysis Letters, Applied Catalysis A: General, Journal of Catalysis, Environmental Science & Technology, ACS Applied Materials & Interfaces, NanoEnergy, ACS Catalysis, ACS Energy Letters.
- **Reviewer for Research Grants:** national agencies (Hellenic Foundation for Research & Innovation, General Secretariat for Research & Innovation, State Scholarships Foundation, Ministry of Education). Also: reviews for STW (Dutch Technology Foundation), FWF (Austrian Science Foundation), State Secretariat for Education & Research SER (Swiss Confederation).

FUNDED RESEARCH GRANTS

- National Recovery & Resilience Plan *Greece 2.0* 'ADVANCED MATERIALS FOR SUSTAINABLE DEVELOPMENT: GREEN ENERGY PRODUCTION AND STORAGE, ENERGY SAVING & ANTI-POLLUTION APPLICATIONS', (2023-2025) (group member).
- Grant funded by **L'OREAL Paris** 'STUDY OF RARE EARTH COATINGS ON FIBERS', (2023-2024) (coordinator).
- Grant funded by **L'OREAL Paris** 'STUDY OF IONIC INTERACTION ON PROCESSES IN FIBERS', (2022-2023) (coordinator).
- **H.F.R.I.** "Second Call for H.F.R.I. Research Projects to support Faculty Members and Researchers" 'Development of Hybrid NanoScaffolds for Continuous H₂ Production by C1-Substrates', (2022-2025) (coordinator).
- Grant funded by **L'OREAL Paris** 'STUDY OF REDOX PROCESSES IN FIBROUS MATERIALS', (2020-2021) (coordinator).
- Grant funded by **L'OREAL Paris** 'STUDY OF ROS-INDUCED DAMAGE OF FIBERS', (2019-2020) (coordinator).
- Grant funded by **L'OREAL Paris** 'COLORATION & DECOLORATION OF HAIR FIBERS', (2018-2019) (coordinator).
- Grant funded by **L'OREAL Paris** 'STUDY OF RADICALS AND METAL CLUSTERS IN HAIR FIBERS', (2017-2018) (coordinator).
- Grant funded by **L'OREAL Paris** 'COLORED PARTICLES MADE BY FLAME SPRAY PYROLYSIS TECHNOLOGY', (2017-2018).
- Grant funded by **L'OREAL Paris** 'MELANIN STUDY: COLORATION & RADICALS MECHANISM', (2016-2017) (coordinator).
- Grant funded by **L'OREAL Paris** 'PRODUCTION OF COLORED PARTICLES BY FSP', (2016-2017).
- Grant funded by **L'OREAL Paris** 'CATALYTIC OXIDATION & DECOLORATION OF MELANIN', (2015-2016) (coordinator).

- **SYNERGASIA 2012-2015.** DEVELOPMENT OF PYROLYTIC MATERIALS FOR ENVIRONMENTAL AND CATALYTIC APPLICATIONS (co-coordinator).
- **THALIS 2012-2015.** DEVELOPMENT OF SYNTHETIC STRATEGIES, REACTIVITY AND APPLICATIONS IN MAGNETIC AND CATALYTIC MATERIALS (group leader).
- **THALIS 2012-2015.** DEVELOPMENT OF HYBRID MESO AND NANO POROUS MATERIALS FOR ENVIRONMENTAL AND CATALYTIC APPLICATIONS.
- Grant funded by **ALUMINION S.A. 2011-2012.** DEVELOPMENT OF LOW-T_g GLASSES EXPLOITING RED MUD WASTES FOR HEAVY METAL REMEDIATION (coordinator).
- **IKY-DAAD (Greece-Germany) 2010-2012.** STUDIES OF ENVIRONMENTAL AND TECHNOLOGICAL MATERIALS WITH ADVANCED EPR SPECTROSCOPIES.
- **Bilateral Collaboration (Greece-Russia) 2005-2007.** Metallo-porphyrins on silica for hydrocarbon oxidation (coordinator).
- **NATO (Greece-Russia) 2007-2009.** NOVEL HYBRID CATALYTIC MATERIALS FOR DECOMPOSITION OF ORGANIC POLLUTANTS.
- **"PYTHAGORAS" II-EPEAEK (2004-2007)** «Bioactive and biomimetic materials via sol-gel method» (coordinator).
- **"PYTHAGORAS" I-EPEAEK (2004-2007)** «Development of novel hybrid materials for catalytic and environmental applications».
- **"HRAKLEITOS" I-EPEAEK (2002-2006)** DEVELOPMENT OF COMPOSITE BIOMIMETIC MATERIALS FOR CATALYTIC OXIDATION OF ORGANIC SUBSTRATES (coordinator).

CONFERENCES

- 87.** a) A. Gemenetzi, **M. Louloudi** (Lecture): "Plasmonic Nanoparticles (PNPs) in Molecular Catalysis" b) F. Fragkou, **M. Louloudi**, 2nd Panhellenic Symposium on Inorganic Chemistry (2ndPSIN), September 2023, Athens, Greece.
- 86.** **M. Louloudi** (Lecture): "Hybrid Molecular Catalysts for Industrial-scale H₂ production from C1-substrates at near ambient conditions: opportunities and challenges" 16th Global Conference on Catalysis, Chemical Engineering & Technology (CAT2023), September 2023, Valencia, Spain.
- 85.** **M. Louloudi**, Y. Deligiannakis, A. Gemenetzi, M. Theodorakopoulos, IHSS21, August 2023, Santiago, Chile
- 84.** **M. Louloudi** (invited Lecture): "Hybrid Molecular Catalysts for H₂ Production from C1-Substrates at Near Ambient Conditions: The Challenges of High-Efficiency Vs. Cost and Versatility" Inaugurate World Chemistry Congress (IWCC-2023), May 2023, Osaka, Japan.
- 83.** Chr. Gatzouras, K. Gravvani, M. Solakidou, **M. Louloudi** (Lecture): "Industrial-Scale H₂ Production from C1-Substrates at Near Ambient P,T: The Technology of Nanohybrid Molecular Catalysts" 8th World Congress on Recent Advances in Nanotechnology (RAN'23), March 2023, Lisbon, Portugal.
- 82.** a) F. Fragkou, Y. Deligiannakis, **M. Louloudi**, (oral presentation) b) A. Theoganous, F. Fragkou, M. Theodorakopoulos, Y. Deligiannakis, **M. Louloudi**, 7th International Conference on Multifunctional Hybrid and Nanomaterials, October 2022, Genoa, Italy.
- 81.** a) Chr. Gatzouras, **M. Louloudi**, b) M. Solakidou, G. Koutsikou, **M. Louloudi** (oral presentation), c) A. Gemenetzi, K. Moularas, Y. Deligiannakis, **M. Louloudi**, (oral presentation), d) M. Theodorakopoulos, Y. Deligiannakis, **M. Louloudi**, e) A. Theoganous, F. Fragkou, M. Theodorakopoulos, Y. Deligiannakis, **M. Louloudi**, 16th Panhellenic Symposium of Catalysis, October 2022, Chania, Greece.
- 80.** **M. Louloudi** (Lecture): "Hybrid Nanocatalytic Materials for Industrial Scale H₂-Production from HCOOH under Ambient Conditions" 9th World Congress on Particle Technology (WCPT9), September 2022, Madrid, Spain.
- 79.** L. Hercouët (oral presentation), H. Samain, Ch. Jouy, E. Folliasson, W. Keuon, G. Robert, T. Vautier, L. Abdat-Vindel, A. Gemenetzi, M. Theodorakopoulos, Y. Deligiannakis, **M. Louloudi**, XXVI International Federation of Societies of Cosmetic Chemists (IFSCC), October 2021, Cancun, Mexico.
- 78.** L. de Pierri, J. Borges Regitano, Y. Deligiannakis, **M. Louloudi**, XXIII EBSH-MON, October 2019, Maceio, Brazil.
- 77.** **M. Louloudi** (invited Lecture): "Metal complexes interfaced with inorganic particles: the hybrid technology in catalysis", 5th European Chemical Society Inorganic Chemistry Conference (EICC-5), June 2019, Moscow, Russia.
- 76.** Y. Georgiou, M. Solakidou, A. Zindrou, Y. Deligiannakis, **M. Louloudi**, Advanced Nano & Energy Materials (ANEM 2018), December 2018, Perth, Australia.

75. a) Y. Georgiou, A. Zindrou, Y. Deligiannakis, **M. Louloudi** (oral presentation), b) M. Solakidou, Y. Deligiannakis, **M. Louloudi** (oral presentation), c) A. Gemenetzi, P. Stathi, A. Mavrogiorgou, Y. Deligiannakis, **M. Louloudi**, (oral presentation), d) P. Stathi, **M. Louloudi**, Y. Deligiannakis e) E. Fragou, A. Mavrogiorgou, E. Bletsas, E. Mouzourakis, Y. Deligiannakis, **M. Louloudi**, f) M. Theodorakopoulos, M. Solakidou, **M. Louloudi**, 15th Panhellenic Symposium of Catalysis, October 2018, Ioannina, Greece.

74. **M. Louloudi**, E. Bletsas, Y. Deligiannakis, IHSS19, September 2018, Varna, Bulgaria.

73. M. Solakidou, **M. Louloudi** (Lecture): "NH₂-based Heterogeneous Cocatalyst Boosts H₂-Production from HCOOH by the Ru^{III}/P(CH₂CH₂PPh₂)₃ Catalyst" 255th ACS National Meeting, March 2018, New Orleans, LA, USA.

PATENT HOLDING

29 National, European, World Patents on Applications of Hybrid Materials
<https://patentscope.wipo.int/search/en/result.jsf>

LIST OF (ISI) PUBLICATIONS

Citations > 2300

110. M. Theodorakopoulos, Y. Deligiannakis, **M. Louloudi**, "Double-Ligand [Fe/PNP/PP3] and their Hybrids [Fe/SiO₂@PNP/PP3] as Catalysts for H₂-Production from HCOOH" *Int. J. Hydrogen Energy* submitted for publication (2024).

109. F. Fragou, A. Zindrou, Y. Deligiannakis, **M. Louloudi**, "Oxygen-deficient Nano-CeO_{2-x} with Tunable Biocide and Antioxidant Activity" *ACS Appl. Nano Mater.* submitted for publication (2024).

108. A. Theophanous, Y. Deligiannakis, **M. Louloudi**, "{Silk@Gallic-Acid} Hybrid Material with Long-Lasting Antioxidant Hydrogen-Atom-Transfer Capacity" *ACS Appl. Mater. Interfaces* submitted for publication (2024).

107. M. Theodorakopoulos, Y. Deligiannakis, **M. Louloudi**, "Solution-Potential and Solution-Hydrides as Key-Parameters in H₂ Production via HCOOH-Dehydrogenation by Fe- and Ru-Molecular Catalysts" *Int. J. Hydrogen Energy* 58 (2024) 1608.

106. C. Moularas, A. Gemenetzi, Y. Deligiannakis, **M. Louloudi**, "Nanoplasmonics in Catalysis for Energy Technologies: The Concept of Plasmon-Assisted-Molecular-Catalysis (PAMC)" *Nanoenergy Adv.* 4 (2024) 25.

105. A. Itziou, K. Zaralis, A. Theophanous, **M. Louloudi**, G. Rozos, I. Vasiliadou, E. Lakioti, V. Karayannis, C.G. Tsanaktsidis "Sustainable antioxidants production for hygienic disinfection using bioextractants from lavender and oregano distillation process in a circular economy" *Energies* 16 (2023) 7534.

104. F. Fragou, A. Zindrou, Y. Deligiannakis, **M. Louloudi**, "Nanocarbon-Nanosilica {nano-SiO₂/C} Hybrids with Enhanced Radical Stabilization and Biocide Activity" *ACS Appl. Nano Mater.* 6 (2023) 20841.

103. L. Belles, Chr. Dimitriou, C. Moularas, M. Solakidou, M. Theodorakopoulos, Y. Deligiannakis, **M. Louloudi**, "Correlation of Magnetic Resonance (EPR, ssNMR) Parameters and Crystal-Microstrain in Marbles as a Tool to Probe their Provenance" *Phys.Chem. Chem Phys.* 25 (2023) 31040.

102. A. Gemenetzi, Y. Deligiannakis, **M. Louloudi**, "Controlled Photo-Plasmonic Enhancement of H₂ Production via Formic Acid Dehydrogenation by a Molecular Fe Catalyst" *ACS Catal.* 13 (2023) 9905.

101. Chr. Gatzouras, M. Solakidou, **M. Louloudi**, "Efficient [Fe-Imidazole@SiO₂] Nanohybrids for Catalytic H₂ Production from Formic Acid" *Nanomaterials* 13 (2023) 1670.

100. M. Solakidou, A. Gemenetzi, G. Koutsikou, M. Theodorakopoulos, Y. Deligiannakis, **M. Louloudi**, "Cost efficiency analysis of H₂ production from Formic Acid by molecular catalysts" *Energies* 16 (2023) 1723.

99. F. Fragou, A. Theophanous, Y. Deligiannakis, **M. Louloudi**, "Nanoantioxidant materials: Nanoengineering Inspired by Nature" *Micromachines* 14 (2023) 383.

98. M.G. Papanikolaou, A. V. Simaioforidou, C. Drouza, A. C. Tsipis, H. N. Miras, A. D. Keramidis, **M. Louloudi**, T. A. Kabanos "Non-heme N₄-Oxidovanadium(IV) Compounds of the formula *cis*-[V^{IV}(=O)(Cl/F)(N₄)]⁺: A Combined Experimental and Theoretical Investigation of Oxidation Catalysis by *cis*-[V^{IV}(=O)(Cl/F)(N₄)]⁺ Species with Hydrogen Peroxide" *Inorg.Chem.* 61 (2022) 18449.

97. A. Theophanous, I. Sarli, F. Fragou, E. Bletsas, Y. Deligiannakis, **M. Louloudi**, "Antioxidant Hydrogen-Atom-Transfer to DPPH Radicals by Hybrids of {Hyaluronic-Acid Components}@SiO₂" *Langmuir* 38 (2022) 12333.
96. P. Stathi, E. Fotou, V. Moussis, V. Tsikaris, Y. Deligiannakis, **M. Louloudi**, "Control of Tyrosyl-Radical's Stabilisation by {SiO₂@Oligopeptide} Hybrid Biomimetic Materials" *Langmuir* 38 (2022) 9799.
95. A. Gemenetzi, C. Moularas, L. Belles, Y. Deligiannakis, **M. Louloudi**, "A Reversible Plasmonic Switch in a Molecular Oxidation Catalysis Process" *ACS Catal.* 12 (2022) 9908.
94. F. Fragou, P. Stathi, Y. Deligiannakis, **M. Louloudi**, "Safe-by-Design Flame Spray Pyrolysis of SiO₂ Nanostructures for Minimizing Acute Toxicity" *ACS Appl. Nano Mater.* 5 (2022) 8184.
93. M. Theodorakopoulos, M. Solakidou, Y. Deligiannakis, **M. Louloudi**, "A Use-Store-Reuse [USR] Concept in Catalytic HCOOH dehydrogenation: case-study of a Ru-based catalytic system for long-term USR under ambient O₂" *Energies* 14 (2021) 481.
92. A. Gemenetzi, P. Stathi, Y. Deligiannakis, **M. Louloudi**, "Study of the catalytic mechanism of a non-heme Fe catalyst: The role of the spin state of the iron" *Chem. Phys. Lett.* 764 (2021) 138282.
91. P. Stathi, **M. Louloudi**, Y. Deligiannakis, "EPR monitoring of in-situ Catalytic Oxidative Assembly of Mn^{III}-Mn^{IV} Dimers via Monomeric Mn^{IV}=O" *Chem. Phys. Lett.* 763 (2021) 138255.
90. Y. Deligiannakis, V. Tsikourkitoudi, P. Stathi, K. Wegner, J. Papavasiliou, **M. Louloudi**, "PdO/Pd⁰/TiO₂ Nanocatalysts Engineered by Flame Spray Pyrolysis: Study of the Synergy of PdO/Pd⁰ on H₂ Production by HCOOH Dehydrogenation and the Deactivation Mechanism" *Enegy Fuels* 34 (2020) 15026.
89. F. Fragou, C. Moularas, K. Adamska, Y. Deligiannakis, **M. Louloudi**, "[Nanocarbon@SiO₂] Supported Mn-Catalysts with Enhanced Epoxidation Catalytic Activity: Scalable Engineering and Mechanisms" *ACS Appl. Nano Mater.* 3 (2020) 5583.
88. Y. Georgiou, S. Rapti, A. Maurogiorgou, G. Armatas, M. J. Manos, **M. Louloudi**, Y. Deligiannakis, "A Hybrid {Silk@Zirconium MOF} Material as Highly Efficient As^{III}-sponge" *Sci. Rep.* 10 (2020) 9358.
87. M. Solakidou, M. Theodorakopoulos, Y. Deligiannakis, **M. Louloudi**, "Double-Ligand Fe, Ru Catalysts: a Novel Route for Enhanced H₂ Production from Formic Acid" *Int. J. Hydrogen Energy* 45 (2020) 17367.
86. L. Pierri, A. Gemenetzi, A. Mavrogiorgou, J.B. Regitano, Y. Deligiannakis, **M. Louloudi**, "Bio-char as supporting material for heterogeneous Mn(II) catalysts: efficient olefins epoxidation with H₂O₂" *Mol. Catal.* 489 (2020) 110946.
85. P. Stathi, M. Solakidou, Y. Deligiannakis, **M. Louloudi**, "From Homogeneous to Heterogenized Molecular Catalysts for H₂ Production by Formic Acid Dehydrogenation: mechanistic aspects, role of additives & co-catalysts" *Energies* 13 (2020) 733.
84. E. Bletsas, M. Solakidou, **M. Louloudi**, Y. Deligiannakis, "Ambient O₂ is a Switch between [1-electron/1-radical] vs. [2-electrons] Oxidative Catalytic Path of a Fe-Phtalocyanine catalyst" *Chem. Phys. Lett.* 743 (2020) 137180.
83. M. Solakidou, A. Giannakas, Y. Georgiou, **M. Louloudi**, Y. Deligiannakis, "Efficient photocatalytic water-splitting performance by ternary CdS/Pt-N-TiO₂ and CdS/Pt-N,F-TiO₂: interplay between CdS photo corrosion and TiO₂-dopping" *Appl. Catal. B- Environ.* 254 (2019) 194.
82. A. Simaioforidou, V. Costas, M.A. Karakassides, **M. Louloudi**, "Surface Chemical Modification of Macroporous and Mesoporous Carbon materials: Effect on their textural and catalytic properties" *Micropor. Mesopor. Mat.* 279 (2019) 334.
81. M. Solakidou, Y. Deligiannakis, **M. Louloudi**, "NH₂-based Heterogeneous Cocatalyst Boosts H₂-Production from HCOOH by the Ru^{III}/P(CH₂CH₂PPh₂)₃ Catalyst" *Int. J. Hydrogen Energy* 43 (2018) 21386.
80. A. Simaioforidou, Y. Georgiou, A. Bourlinos, **M. Louloudi**, "Molecular Mn-catalysts grafted on graphitic carbon nitride (gCN): the behavior of gCN as support matrix in oxidation reactions" *Polyhedron* 153 (2018) 41.
79. A. Maurogiorgou, A. Simaioforidou, **M. Louloudi**, "Pyrolytic Carbon as Support Matrix for Heterogeneous Oxidation Catalysts: Influence of Pyrolytic Process on Catalytic Behaviour" *J. Environ. Chem. Eng.* 6 (2018) 1127.

- 78.** M. Papastergiou, Ag. Stamatis, A. Simaioforidou, **M. Louloudi**, "Bio-Inspired Mn-catalysts immobilized on silica surface: the influence of the ligand synthesis on catalytic behavior" **Catalysis Communications** 108 (2018) 33.
- 77.** K.C. Christoforidis, I. Vasiliadou, **M.Louloudi**, Y.Deligiannakis, "Gallic acid mediated oxidation of pentachlorophenol by the Fenton reaction under mild oxidative conditions" **J. Chem. Technol. Biotechnol.** 93 (2018) 1601.
- 76.** E. Mouzourakis, Y. Georgiou, **M. Louloudi**, I.K. Konstantinou, Y. Deligiannakis, "Recycled-Tire Pyrolytic Carbon Made Functional: a High-Arsenite (AsIII) Uptake, High Cost-Efficiency Material PyrC₃₅₀" **J. Hazard. Mater.** 326 (2017) 177.
- 75.** A. Simaioforidou, E. Bletsa, Y.Deligiannakis, **M.Louloudi**, "Functionalised Graphene Oxides Stabilizing Cu⁺¹ Ions under Ambient O₂" **Mater. Design** 116 (2017) 227.
- 74.** A. Simaioforidou, M. Papastergiou, A. Margellou, D. Petrakis, **M. Louloudi**, "Activated vs. Pyrolytic Carbon as Support Matrix for Chemical Functionalization: Efficient Heterogeneous non-Heme Mn(II) Catalysts for Alkene Oxidation with H₂O₂" **J. Mol. Catal. A** 426 (2017) 516.
- 73.** K.C. Christoforidis, D.A. Pantazis, L.L. Bonilla, **M.Louloudi**, Y.Deligiannakis, "Axial ligand effect on the catalytic activity of biomimetic Fe-porphyrin catalyst: An experimental and DFT study" **J. Catal.** 344 (2016) 768.
- 72.** P. Stathi, **M. Louloudi**, Y. Deligiannakis, "Efficient Low-Temperature H₂ Production from HCOOH/HCOO⁻ by [Pd⁰@SiO₂-Gallic-Acid] Nanohybrids: Catalysis and the Underlying Thermodynamics & Mechanism" **Energy Fuels** 30 (2016) 8613.
- 71.** M. Papastergiou, P. Stathi, E.R. Milaeva, Y.Deligiannakis, **M.Louloudi**, "Comparative Study of the Catalytic Thermodynamic Barriers for two Homologous Mn- and Fe-Non-Heme oxidation catalysts" **J. Catal.** 341 (2016) 104.
- 70.** E. Bletsa, M. Solakidou, **M.Louloudi**, Y.Deligiannakis, "Oxidative Catalytic Evolution of Redox- and Spin-States of a Fe-Phtalocyanine Studied by EPR" **Chem. Phys. Lett.** 649 (2016) 48.
- 69.** A. Maurogiorgou, M. Baikousi, V. Costas, E. Mouzourakis, Y. Deligiannakis, M.A. Karakassides, **M. Louloudi**, "Mn-Schiff base modified MCM-41, SBA-15 and CMK-3 NMs as Single-Site Heterogeneous catalysts: Alkene Epoxidation with H₂O₂ incorporation" **J. Mol. Catal. A** 413 (2016) 40.
- 68.** K.C. Christoforidis, **M. Louloudi**, Y. Deligiannakis, "Effect of Humic Acid on Chemical Oxidation of Organic Pollutants by Iron(II) and H₂O₂: a dual mechanism" **J. Environ. Chem. Eng.** 3 (2015) 2991.
- 67.** E. Bletsa, P. Stathi, K. Dimos, **M. Louloudi**, Y. Deligiannakis, "Interfacial Hydrogen Atom Transfer by Nanohybrids based on Humic Acid Like Polycondensates" **J. Colloid Interf. Sci.** 455 (2015) 163.
- 66.** E. Seristatidou, A. Maurogiorgou, I.K. Konstantinou, **M. Louloudi**, Y. Deligiannakis, "Recycled Carbon (RC) Materials Made Functional: An Efficient Heterogeneous Mn-RC Catalyst" **J. Mol. Catal. A** 403 (2015) 84.
- 65.** P. Stathi, Y. Deligiannakis, G. Avgouropoulos, **M. Louloudi**, "Efficient H₂ Production from Formic Acid by a Supported Iron Catalyst on Silica." **Appl. Catal. A-Gen.** 498 (2015) 176.
- 64.** P. Stathi, Y. Deligiannakis, **M. Louloudi**, "Co-catalytic Enhancement of H₂ Production by Metal Oxide Nanoparticles." **Catal. Today** 242 (2015) 146.
- 63.** S. Lympeopoulou, M. Papastergiou, **M. Louloudi**, C. Raptopoulou, V. Psycharis, A.N. Georgopoulou, C. J. Milios, J. C. Plakatouras, "Synthesis, Characterization, Magnetic and Catalytic properties of a novel Mn(II) Ladder Shaped Coordination Polymer." **Eur. J. Inorg. Chem.** (2014) 3638.
- 62.** A. Maurogiorgou, M. Papastergiou, Y. Deligiannakis, **M. Louloudi**, "Activated Carbon Functionalised with Mn(II) Schiff base Complexes as Efficient Alkene Oxidation Catalysts: Solid Support Matters" **J. Mol. Catal. A** 393 (2014) 8.
- 61.** G. Bilis, P. Stathi, A. Mavrogiorgou, Y. Deligiannakis, **M. Louloudi**, "Improved Robustness of Heterogeneous Fe-non-heme Oxidation Catalysts: a Catalytic and EPR study" **Appl. Catal. A-Gen.** 470 (2014) 376.

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