

Personal Info.:

Name: Masood Hamadani

Date & Place of Birth: June 10, 1969, Khomeini Shahr

Nationality: Iranian

Address: Department of Physical Chemistry, Faculty of Chemistry,
University of Kashan, Km. 6, Ravand Road, Kashan, Isfahan, I.R. IRAN

Zip Code: 8731753153 **Tel.:** +98-31-55912382 **Fax:** +98-31-55912937

E-Mail: hamadani@kashanu.ac.ir, hamadanim@gmail.com



Education:

1988-1992: B.Sc. Studies in Chemistry (Applied Chemistry)

Department of Chemistry, Faculty of Science, University of Isfahan, Isfahan, I.R. IRAN

1992-1994: M.Sc. Studies in Chemistry (Physical Chemistry)

Title: Photocatalytic Reaction of Heavy Alcohol and Potassium Cyanide by using of Metals Coating on Titanium Dioxide (IV)

Department of Chemistry, Faculty of Science, University of Isfahan, Isfahan, I.R. IRAN

1994-1999: Ph.D. Studies in Chemistry (Quantum Chemistry)

Title: Description of One- and Two-Electron Orbital (Doublet & Triplet State) and Cumulated Double Bond in Molecules by FSGO Method

Department of Chemistry, Faculty of Science, University of Shiraz, Shiraz, I.R. IRAN

Research Interests:

- 1- Computational Quantum Chemistry & Nano Science
- 2- Nano Photo-Catalyst
- 3- Dye Sensitized Solar Cell
- 4- Nanocomposite
- 5- Hydrogen Storage
- 6- Super capacity Nanomaterial

Work Experience:

1993-1998: Branch of Shahreza, Islamic Azad University, Shahreza, I.R. IRAN

1994-1998: Branch of Isfahan, Payam-e-Noor University, Isfahan, I.R. IRAN

1999-2007: Branch of Delijan, Payam-e-Noor University, Delijan, I.R. IRAN

2000-2010: Assistant Professor of Physical Chemistry, University of Kashan, Kashan, I.R. IRAN.

2011-2015: Associate Professor of Physical Chemistry, University of Kashan, Kashan, I.R. IRAN

2016-Now: Professor of Physical Chemistry, University of Kashan, Kashan, I.R. IRAN

Management Experience:

2000-2003: Head of Essence Research Center, University of Kashan, Kashan, I.R. IRAN

2004-2005: Head of Nano research Group, University of Kashan, Kashan, I.R. IRAN

2007-2009: Chief of Institute of Nano Science and Nano Technology, University of Kashan, I.R. IRAN

2019-2023: Chief of Institute of Nano Science and Nano Technology, University of Kashan, I.R. IRAN

2025-Now: Chief of Faculty of chemistry, University of Kashan, I.R. IRAN

Honors:

2025, Distinguished Researcher, Faculty of chemistry, University of Kashan

2022, A researcher ranked among the top 2% of world scientists in the main topics indexed by SCOPUS

2021, A researcher ranked among the top 2% of world scientists in the main topics indexed by SCOPUS

2020, Distinguished Researcher, Institute of Nano Science and Nano Technology, University of Kashan

2018, Distinguished Researcher, Faculty of Chemistry, University of Kashan

2016, Distinguished Researcher, Faculty of Chemistry, University of Kashan

2016, Distinguished Teacher, Faculty of Chemistry, University of Kashan

2014, Distinguished Researcher, Faculty of Chemistry, University of Kashan

2012, Distinguished Researcher, Faculty of Chemistry, University of Kashan

2012, Distinguished Teacher, Faculty of Chemistry, University of Kashan

2011, Distinguished Teacher, Faculty of Chemistry, University of Kashan

2010, Distinguished Teacher, Faculty of Chemistry, University of Kashan

2009, Distinguished Researcher, Institute of Nano-Science and Nanotechnology, University of Kashan

2007, Distinguished Teacher, Faculty of Science, University of Kashan

1994, Rank 1, M.Sc students of chemistry, University of Isfahan

1992, Rank 3, B.Sc Iranian students of. Pure and applied chemistry, First Iranian Olympiad

1992, Rank 1, B.Sc students of. Pure and applied chemistry, University of Isfahan

Teaching Experience

Undergraduate

General Chemistry I & II

Physical Chemistry I & II

Phys. Chem. of Engineering

Quantum Chemistry

Molecular Spectroscopy

Heat and Thermodynamics

Computer in Chemistry

Phys. Chem. I & II Eng. Lab.

Graphic

Postgraduate

Advanced Physical Chemistry

Kinetic Chemistry

Statistical Mechanic & Thermodynamic

Quantum Chemistry II

Advanced Molecular Spectroscopy I

Computational Nano Science

Statistical Mechanic in Small Systems

PhD

Quantum Chemistry III

Non Reversible Thermodynamic

Advanced Molecular Spectroscopy II

Advanced Statistical Chemistry

Nano-Thermodynamic

Nano-Catalyst

Publications:

A) Book

- 1- M. Oftadeh and **M. Hamadanian**, “General Chemistry in Laboratory”, Sama ghalam Ltd., 2006.
- 2- M. Salavati-Niassari, **M. Hamadanian**, A. Majedi and Z. Fereshteh, “NanoCatalyst”, Elm-o-Danesh Ltd., 2009.
- 3- T. Mazochi, **M. Hamadanian**, V. Jabbari, “Application of Polymer Nanofibers in Stem Cell Tissue Engineering”, Morasal Ltd., 2011

B) Journal Papers

- 162- V. Rahimkhoei, M. Salavati-Niasari, F.H. Alsultany, M.A. Nafea, **M. Hamadanian**, “Synthesis and characterization of $\text{Sm}_2\text{CrMnO}_6/\text{GO}$ nanocomposites by sonochemical method as efficient and innovative active materials for electrochemical hydrogen storage application”, *Journal of Rare Earths*, (2026) In press.
- 161- S. Zonoubi, M. Barati, M. Ghanbari, **M. Hamadanian**, “ H_2 -free hydrodeoxygenation of microalgae biomass using Pd-Ni/ γ - Al_2O_3 bimetallic nanocatalyst in the supercritical environment”, *Scientific Reports*, (2026) In press.
- 160- M. Mahdipour, **M. Hamadanian**, M. Esmaeili-Zare, “Enhancing the efficiency of $\text{CH}_3\text{NH}_3\text{PbI}_3$ -based perovskite solar cells by modifying the compact Er-TiO_2 layer’s structural properties”, *International Journal of Green Energy*, (2026) In press.
- 159- A. Mohammadi Mehra, **M. Hamadanian**, “Improving the Mechanical and Thermal Characteristics of Epoxy by a Multi-Phase Nanocomposite (Epoxy/PSA/CF/ SiO_2)”, *Journal of Nanostructure*, 15(4) (2025) 1925-1944.
- 158- V. Rahimkhoei, M. Salavati-Niasari, E.A. Dawi, F.H. Alsultany, H.H. Hamza, **M. Hamadanian**, “ $\text{Lu}_2\text{CrMnO}_6$ double perovskites: Sonochemical fabrication, optimization, characterization, and investigation of the electrochemical hydrogen storage properties”, *International Journal of Hydrogen Energy*, 161 (2025) 150661.
- 157- V. Rahimkhoei, **M. Hamadanian**, M. Salavati-Niasari, “Pechini sol-gel synthesis and fabrication of $\text{Er}_2\text{CrMnO}_6$ double perovskites as a potential active material for electrochemical hydrogen storage application”, *International Journal of Hydrogen Energy*, 111 (2025) 648-660.
- 156- V. Rahimkhoei, **M. Hamadanian**, K.H. Salem, L.Q. Alwan Al-Budair, M. Salavati-Niasari, “Synthesis and characterization of $\text{Sm}_2\text{FeMnO}_6$ double perovskites nanoparticles supported on graphitic carbon nitride as photocatalyst for the degradation of organic dyes under simulated sunlight light” *Energy Nexus*, 18 (2025) 100416.

155- V. Rahimkhoei, M. Salavati-Niasari, F.H. Alsultany, A.M. Aljeboree, **M. Hamadanian**, "Exploration of electrochemical energy storage potential of MWCNT scaffolds functionalized with $\text{Lu}_2\text{FeMnO}_6$ synthesized via a facile sol-gel Pechini chemical method", *Applied Water Science* 15 (2025) 126.

154- V. Rahimkhoei, **M. Hamadanian**, M. Salavati-Niasari, "Sol-gel auto-combustion synthesis and characterization of $\text{Eu}_2\text{CrMnO}_6$ nanostructures as a potential electrochemical hydrogen storage material", *International Journal of Hydrogen Energy*, 102 (2025) 247-259.

۱۵۳- طیبیه محبی، مجید میرزایی، مسعود همدانیان، "ابرخازن های پایه مکسن و چشم انداز آینده آن"، نشریه پژوهش های کاربردی در شیمی (JARC)، سال هجدهم، شماره ۲، تابستان ۱۴۰۳، صفحات ۱۸-۱

۱۵۲- مجید میرزایی، طیبیه محبی، مسعود همدانیان، محمد گل محمد، "مروری بر پوشش های ضد گرد و خاک برای بهبود عملکرد پنل فوتوولتائیک"، نشریه علمی پژوهشی مواد پیشرفته و پوشش های نوین، دوره ۴۷، سال ۱۴۰۳، صفحات ۲۴۴-۲۲۴

۱۵۱- طیبیه محبی، مجید میرزایی، مسعود همدانیان، "خواص مکسن (MXene) و روش های سنتز آن"، نشریه علمی پژوهشی مواد پیشرفته و پوشش های نوین، دوره ۴۵، سال ۱۴۰۳، صفحات ۲۲-۱

150- S. Mehdigholami, **M. Hamadanian**, M.R. Memarzadeh, "Improving the electrochemical performance of supercapacitors through the use of NiO/Ag-TiO_2 ternary nanocomposite: synthesis, characterization, and performance evaluation", *Journal of Materials Science: Materials in Electronics*, 35(36) (2024) 2303.

149- M. Mahdipour, M. Esmaeili-Zare, **M. Hamadanian**, "Modification of solar energy and photoelectrochemical water splitting properties: using $\text{FTO/Er-TiO}_2/\text{MAPbI}_3/\text{CuPc/Au}$ as modified photoelectrode", *Physica Scripta*, 99(11) (2024) 115528.

148- N. Alimirzaie, **M. Hamadanian**, "Enhancing Epoxy's Thermal and Mechanical Properties in a Multi-Phase Nanocomposite (EP/PVAc/CT-CS/CF)", *Journal of Nanostructures*, 14(4) (2024) 1211-1224.

147- E. Shahrousvand, **M. Hamadanian**, M.H. Keshavarz, "A general method for assessment of glass transition temperature of polymeric materials only from various structural factors in their repeating unit structure", *Materials Today Communications*, 38 (2024) 108405.

146- M. Aghilinategh, M. Barati, and **M. Hamadanian**, "Supercritical microalgae conversion to biofuel and value-added components (oxygenates, hydrocarbons, and aromatics): A catalyst characterization study", *Environmental Progress & Sustainable Energy*, 43(3) (2024) e14326.

- 144- **M. Hamadanian**, M. Keshavarz, and E. Shahrousvand, "The reliable predicting refractive index for diverse polymers only from structural moieties in repeating unit structures", *Materials Today Communications*, 35 (2023) 105823.
- 143- S Katebi Koushali and **M Hamadanian**, "Improvement of Neurite Outgrowth in PC12 Cells by TiO₂, Au/TiO₂ and Ag/TiO₂ Nanoparticles", *Journal of Nanostructures* 13 (2023), 325-340.
- 142- M. Hassanpour, **M. Hamadanian**, Omid Amiri, S.A. Hosseini Tafreshi, and M. Salavati-Niasari, "Sonochemical synthesis and characterization of aluminum tungsten oxide nanoparticle and study its impact on the growth of microalga", *Arabian Journal of Chemistry* 15 (2022) 103671.
- 141- S. Moshtaghi, **M. Hamadanian** and M. Salavati-Niasari, "A simple hydrothermal route for the preparation of novel Na-Y-W nano-oxides and their application in dye degradation", *RSC Adv.* 12 (2022) 4913-4923.
- 140- S. Moshtaghi, **M. Hamadanian**, Omid Amiri, M. Goli, M. Salavati-Niasari, "Controllable synthesis and characterization of Mg₂SiO₄ nanostructures via a simple hydrothermal route using carboxylic acid as capping agent and their photocatalytic performance for photodegradation of azo dyes", *RSC Adv.* 11 (2021) 21588-21599.
- 139- M.H. Hadizadeh and **M. Hamadanian**, "Evaluation of corrosion inhibition efficiency of some novel Schiff bases through a proposed QSAR model: DFT investigations supported by weight loss technique", *International Journal of Corrosion and Scale Inhibition* 10 (2021) 1516-1530.
- 138- M. Hassanpour, S.A. Hosseini Tafreshi, O. Amiri, **M. Hamadanian**, M. Salavati-Niasari, "Toxicity of Nd₂WO₆ nanoparticles to the microalga *Dunaliella salina*: synthesis of nanoparticles and investigation of their impact on microalgae", *RSC Adv.* 11 (2021) 27283-27291.
- 137- F. Fotouhi-Far, H. Bashiri, **M. Hamadanian**, M.H. Keshavarz, "A New Approach for the Leaching of Palladium from Spent Pd/C Catalyst in HCl-H₂O₂ System", *Protection of Metals and Physical Chemistry of Surfaces* 57(2) (2021) 297-305.
- 136- M. Ashraf, **M, Hamadanian**, A.R. Ghasemi, "Epoxy/Polyethylene Glycol/TiO₂: Design, Fabrication and Investigation of Mechanical Properties, Thermal Cycling Fatigue and Antibacterial Activity", *Journal of Polymers and the Environment* 29 (2021) 3867-3877.
- 135- S. Katebi Koushali, **M. Hamadanian**, A.R. Ghasemi, M. Ashrafi, "Investigation of Mechanical Properties of Polyester/Polyethylene Glycol/TiO₂ Nanocomposites", *J. Nanostruct.* 11(1) (2021) 38-47.

- 134- M. Sarafrazi, A.R. Ghasemi, **M. Hamadanian**, "Optimization of Curing Conditions and Effect of Plasticizer Amount on the Mechanical and thermal Properties of Epoxy resin", *Iran J. Polym. Sci. Tech.* 33(6) (2021) 479-495.
- 133- M. Sarafrazi, A.R. Ghasemi, **M. Hamadanian**, "A Semi-analytical and Experimental Approach Using Molecular Dynamic Simulation for Thermo-mechanical Properties of Surface Functionalized Epoxy/Polyurethane/MWCNT/ZnMoO₄ Nanocomposites", *Fibers and Polymers* 22(8) 2021 2306-2315.
- 132- M. Hassanpour, S.A. Hosseini Tafreshi, M. Salavati-Niasari, **M. Hamadanian**, "Toxicity evaluation and preparation of CoWO₄ nanoparticles towards microalga *Dunaliella salina*", *Environ. Sci. Pollut. Res.* 28 (2021) 36314–36325.
- 131- A. Takari, A.R. Ghasemi, **M. Hamadanian**, M. Sarafrazi, A. Najafidoust, "Molecular dynamics simulation and thermo-mechanical characterization for optimization of three-phase epoxy/TiO₂/SiO₂ nano-composites", *Polymer Testing* 93(2021) 106890.
- 130- A. Fathollahi Zonouz, M. Ashrafi, M. Ghiyasiyan-Arani, **M. Hamadanian**, "Effect of sol–gel synthesized Al_{0.1}Zr_{0.9}O_{1.95} nanoparticles and PVP on PVDF-based separators in lithium-ion battery performance: The RSM study", *Journal of Elastomers & Plastics* 53(3) (2021) 241–257.
- 129- S. Khademi, **M. Hamadanian**, B. Roozbehani, N. Khademi, "Synthesis and characterization of high flux and antibacterial film nanocomposite based on epoxy-zeolite NaA", *Journal of Nanostructures* 10 (2020) 177-184.
- 128- M. Sarafrazi, A.R. Ghasemi, **M. Hamadanian**, "Synergistic effect between CuCr₂O₄ nanoparticles and plasticizer on mechanical properties of EP/PU/CuCr₂O₄ nanocomposites: Experimental approach and molecular dynamics simulation", *Journal of Applied Polymer Science*, 137 (46) (2020) 49425.
- 127- M. Hassanpour, S.A. Hosseini Tafreshi, O. Amiri, **M. Hamadanian**, M. Salavati-Niasari, "Toxic effects of Fe₂WO₆ nanoparticles towards microalga *Dunaliella salina*: Sonochemical synthesis nanoparticles and investigate its impact on the growth", *Chemosphere*, 258 (2020) Article 127348.
- 126- M. Aghilinategh, M. Barati, **M. Hamadanian**, "The modified supercritical media for one-pot biodiesel production from *Chlorella vulgaris* using photochemically-synthesized SrTiO₃ nanocatalyst", *Renewable Energy*, 160 (2020) 176-184.
- 125- S. Mirsafai, K. Torabi, M. Ashrafi, **M. Hamadanian**, "Tensile strength and elongation of NBR/PVC/CuFe₂O₄ magnetic nanocomposites: a response surface methodology optimization", *Bulletin of Materials Science*, 43 (2020) Article number 101.
- 124- N. Shabani, A.R. Ghasemi, **M. Hamadanian**, "Ultrasonic-assisted rapid preparation of three-phase nanocomposites: The effects of zinc manganite nanoparticles and polyurethane on the thermomechanical,

- physicochemical, and antibacterial properties of polymer matrix composites”, *Journal of Elastomers & Plastics*, 52 (7) (2020) 620-644.
- 123- Pourya Mehdizadeh, Z. Tavangar, N. Shabani, **M. Hamadanian**, “Visible light activity of nitrogen-doped TiO₂ by sol-gel method using various nitrogen sources”, *Journal of Nanostructures*, 10(2) (2020) 307-316.
- 122- S. Tahmasebi, Z. Tavangar, **M. Hamadanian**, “Using of Artemesia Absinthinum, Verbascum Thapsus, Viola Odorata, Matricaria Chamomilla and Corianderum Satirum Natural Dyes in Making Dyesensitized Solar Cells”, *Advanced Materials & Novel Coatings*, 32 (2020) 2346-2356.
- 121- S.K. Nasiri, A. Reisi-Vanani, **M. Hamadanian**, “Molecular Structure, Spectroscopic, Local and Global Reactivity Descriptors and NBO Analysis of C₃₂H₁₂: A New Buckybowl and Sub-Fullerene Structure”, *Polycyclic Aromatic Compounds* 40(3) (2020) 693-704.
- 120- H. Mohammad-Salehi, **M. Hamadanian**, H. Safardoust-Hojaghan, “Visible-Light Induced Photodegradation of Methyl Orange via Palladium Nanoparticles Anchored to Chrome and Nitrogen Doped TiO₂ Nanoparticles”, *Journal of Inorganic and Organometallic Polymers and Materials* 29 (2019) 1457–1465.
- 119- A. Abbasi, **M. Hamadanian**, T. Gholami, M. Salavati-Niasari, N. Sadri, “Facile preparation of PbCrO₄ and PbCrO₄/Ag nanostructure as an effective photocatalyst for degradation of organic contaminants”, *Separation and Purification Technology* 209 (2019) 79-87.
- 118- H. Sayahi, F. Mohsenzadeh, **M. Hamadanian**, “Cost-effective fabrication of perdurable electrodeposited TiO₂ nano-layers on stainless steel electrodes applicable to photocatalytic degradation of methylene blue”, *Research on Chemical Intermediates* 45 (2019) 4275-4286.
- 117- M Ashrafi, AR Ghasemi, **M Hamadanian**, “Optimization of thermo-mechanical and antibacterial properties of epoxy/polyethylene glycol/MWCNTs nano-composites using response surface methodology and investigation thermal cycling fatigue”, *Polymer Testing* 78 (2019) 105946.
- 116- M. Ashrafi, **M. Hamadanian**, A.R. Ghasemi, F. Jookar-Kashi, “Improvement Mechanical and Antibacterial Properties of Epoxy by Polyethylene Glycol and Ag/CuO Nanoparticles”, *Polymer composites* (2019) 3393-3401.
- 115- M. Sarafrazi, **M. Hamadanian**, A.R. Ghasemi, “Optimize epoxy matrix with RSM/CCD method and influence of multi-wall carbon nanotube on mechanical properties of epoxy/polyurethane”, *Mechanics of Materials* 138 (2019) 103154.
- 114- M. Rotami, **M. Hamadanian**, M. Rahimi-Nasrabadi, M.R. Ganjali, “Sol–gel preparation of metal and nonmetal-codoped TiO₂–graphene nanophotocatalyst for photodegradation of MO under UV and visible-light irradiation”, *Ionics* 25 (2019) 1869-1878.

- 113- M. Ashrafi, **M. Hamadanian**, S. Mirsafai, K. Torabi, "Investigation and Optimization of Mechanical Properties of Nitrile-Butadiene Rubber/Polyvinyl Chloride/NiFe₂O₄ Nanocomposite", *Fibers and Polymers* 20 (2019) 2247-2253.
- 112- A. Dourani, M. Haghgoo, **M. Hamadanian**, "Multi-walled carbon nanotube and carbon nanofiber/polyacrylonitrile aerogel scaffolds for enhanced epoxy resins", *Composites Part B: Engineering* 176 (2019) 107299.
- 111- A. Abbasi, S.M.S. Sajadi, O. Amiri, **M. Hamadanian**, H. Moayedi, M. Salavati-Niasari, M. Mohammad Beigi, "MgCr₂O₄ and MgCr₂O₄/Ag nanostructures: Facile size-controlled synthesis and their photocatalytic performance for destruction of organic contaminants", *Composites Part B: Engineering* 175 (2019) 107077.
- 110- M. Aghilinategh, M. Barati, **M. Hamadanian**, "Supercritical methanol for one pot biodiesel production from chlorella vulgaris microalgae in the presence of CaO/TiO₂ nano-photocatalyst and subcritical water", *Biomass and Bioenergy* 123 (2019) 34-40.
- 109- M.P. Mazhari, **M. Hamadanian**, M. Mehypour, V. Jabbari, "Central composite design (CCD) optimized synthesis of Fe₃O₄@ SiO₂@ AgCl/Ag/Ag₂S as a novel magnetic nano-photocatalyst for catalytic degradation of organic pollutants", *Journal of environmental chemical engineering* 6 (2018) 7284-7293.
- 108- M. Sarsabili, R. Rahmatolahzadeh, S.A. Shobeiri, **M. Hamadanian**, A. Farazin, K. Khezri, "Reverse atom transfer radical random copolymerization of styrene and methyl methacrylate in the presence of diatomite nanoplatelets", *Polymers for Advanced Technologies* 29 (2018) 424-432.
- 107- A. Abbasi, H. Khojasteh, **M. Hamadanian**, M. Salavati-Niasari, "Normal spinel CdCr₂O₄ and CdCr₂O₄/Ag nanocomposite as novel photocatalysts, for degradation of water contaminates", *Separation and Purification Technology* 195 (2018) 37-49.
- 106- M. Hassanpour, M. Salavati-Niasari, S.A. Mousavi, H. Safardoust-Hojaghan, **M. Hamadanian**, "CeO₂/ZnO ceramic nanocomposites, synthesized via microwave method and used for decolorization of dye", *Journal of Nanostructures* 8 (2018) 97-106.
- 105- S.A. Mousavi, M. Hassanpour, M. Salavati-Niasari, H. Safardoust-Hojaghan, **M. Hamadanian**, "Dy₂O₃/CuO nanocomposites: microwave assisted synthesis and investigated photocatalytic properties", *Journal of Materials Science: Materials in Electronics* 29 (2018) 1238-1245.
- 104- N. Shabani, **M. Hamadanian**, A.R. Ghasemi, M. Sarafrazi, "Physicochemical and Mechanical Properties of Epoxy/Polyurethane/Nickel Manganite Nanocomposite: A Response Surface Methodology/Central Composite Designs Study", *Journal of Inorganic and Organometallic Polymers and Materials* 28 (2018) 2689-2700.

- 103- R. Rahmatolahzadeh, **M. Hamadanian**, H. Shagholani, S.R. Moosavikia, "Synthesis of Au/SiO₂ Nanoparticles with Highly Porous Structure as a pH-Sensitive Targeting Drug Carrier", *Journal of Inorganic and Organometallic Polymers and Materials* 28 (2018) 187-194.
- 102- M.P. Mazhari, **M. Hamadanian**, "Preparation and Characterization of Fe₃O₄@SiO₂@TiO₂ and Ag/Fe₃O₄@SiO₂@TiO₂ Nanocomposites for Water Treatment: Process Optimization by Response Surface Methodology", *Journal of Electronic Materials* 47 (2018) 7484-7496.
- 101- R. Rahmatolahzadeh, **M. Hamadanian**, L. Ma'mani, A. Shafiee, "Aspartic acid functionalized PEGylated MSN@GO hybrid as an effective and sustainable nano-system for in-vitro drug delivery", *Advances in medical sciences* 63 (2018) 257-264.
- 100- A. Abbasi, **M. Hamadanian**, M. Salavati-Niasari, M.P. Mazhari, "Hydrothermal synthesis, characterization and photodegradation of organic pollutants of CoCr₂O₄/Ag nanostructure and thermal stability of epoxy acrylate nanocomposite", *Advanced Powder Technology* 28 (2017) 2756-2765.
- 99- R. Rahmatolahzadeh, **M. Hamadanian**, L. Ma'mani, A. Shafiee, "Synthesis and characterization of pH-responsive nanocarrier based on PEGylated imidazolium ionic liquid MSN@GO for in-vitro curcumin delivery", *Research journal of pharmaceutical biological and chemical sciences* 8 (2017) 1317-1328.
- 98- F. Fotouhi-Far, H. Bashiri, **M. Hamadanian**, "Study of Deactivation of Pd(OH)₂/C Catalyst in Reductive Debenzylation of Hexabenzylhexaazaisowurtzitane", *Propellants, Explosives, Pyrotechnics* 42 (2017) 213-219.
- 97- A. Dourani, M. Haghgoo, **M. Hamadanian**, R.M. Aghdam, "Effect of Carbon Nanotube Loading on Mechanical and Thermal Properties of Pure and Pyrolyzed Polyacrylonitrile Aerogel", *Journal of Nanoscience and Nanotechnology* 17 (2017) 2959-2969.
- 96- **M. Hamadanian**, M. Rostami, V. Jabbari, "Graphene-supported C–N–S tridoped TiO₂ photo-catalyst with improved band gap and charge transfer properties", *Journal of Materials Science: Materials in Electronics* 28 (2017) 15637-15646.
- 95- M. Salavati-Niasari, F. Soofivand, A. Sobhani-Nasab, M. Shakouri-Arani, **M. Hamadanian**, S. Bagheri, "Facile synthesis and characterization of CdTiO₃ nanoparticles by Pechini sol–gel method", *Journal of Materials Science: Materials in Electronics* 28 (2017) 14965-14973.
- 94- S. Mortazavi-Derazkola, M. Salavati-Niasari, M.P. Mazhari, H. Khojasteh, **M. Hamadanian**, S. Bagheri, "Magnetically separable Fe₃O₄@SiO₂@TiO₂ nanostructures supported by neodymium(III): fabrication and enhanced photocatalytic activity for degradation of organic pollution", *Journal of Materials Science: Materials in Electronics* 28 (2017) 14271-14281.

- 93- A. Abbasi, **M. Hamadanian**, M. Salavati-Niasari, S. Mortazavi-Derazkola, "Facile size-controlled preparation of highly photocatalytically active ZnCr_2O_4 and $\text{ZnCr}_2\text{O}_4/\text{Ag}$ nanostructures for removal of organic contaminants", *Journal of colloid and interface science* 500 (2017) 276-284.
- 92- F. Fotouhi-Far, H. Bashiri, **M. Hamadanian**, M.H. Keshavarz, "Increment of activity of $\text{Pd}(\text{OH})_2/\text{C}$ catalyst in order to improve the yield of high performance 2,4,6,8,10,12-hexanitrohexaazaisowurtzitane (HNIW)", *Inorganic and Nano-Metal Chemistry* 47 (2017) 1489-1494.
- 91- Z. Tavangar, **M. Hamadanian**, H. Basharnavaz, "Studying the effects of the configuration of doped Al atoms on the conductive properties of boron nitride nanotube using density functional theory", *Chemical Physics Letters* 669 (2017) 29-37.
- 90- H.A. Rafiee-Pour, **M. Hamadanian**, S. Katebi-Koushali, "Nanocrystalline TiO_2 films containing sulfur and gold: Synthesis, characterization and application to immobilize and direct electrochemistry of cytochrome c", *Applied Surface Science* 363 (2016) 604-612.
- 89- F. Fotouhi-Far, H. Bashiri, **M. Hamadanian**, M.H. Keshavarz, "A New Method for Assessment of Performing Mechanical Works of Energetic Compounds by the Cylinder Test", *Journal of Inorganic and General Chemistry*, 642 (2016) 1086-1090.
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