

Curriculum Vitae

Name Mohsen Oftadeh

Present Occupation Professor

Nationality Iranian

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Educational Qualification

Degree	University	Year
B.Sc. (Pure Chemistry)	Isfahan University (Isfahan, Iran)	1990
M.Sc. (Physical Chemistry)	Isfahan University (Isfahan, Iran)	1993
Ph.D. (Quantum Chemistry)	Shiraz University (Shiraz, Iran)	1998

Teaching Experience (1999-2012)

Taught the following graduate and undergraduate courses:

General Chemistry, Physical Chemistry, Physical Chemistry Lab., Advanced Physical Chemistry, Quantum Chemistry, Molecular Spectroscopy, Organic Physical Chemistry, Computer Programming, Mathematical Methods in Physical Chemistry.

Research Experience

Quantum Calculations, Explosives, Propellants.

The Title of the MSC Dissertation (1993)

The Investigation of the High Pressures on the Displacement of the Radial Distribution of The Hydrogen Atom in Ground State (supervisor: Prof. M. Soltanolketabi).

The Title of the PhD Dissertation (1998)

First and Second Analytical Derivatives of Molecular Integrals for Calculations of Energy Using Spherical Gaussian & Application of Simplified PV-RR Procedure for H₂ and LiH Molecules & Lone Pair Description in FSGO Method for Some Cyclic Carbenes (supervisor: Prof. A. H. Pakyari).

List of the Publications (1997-2014)

1. A. H. Pakyari, **M. Oftadeh**, First Derivative of Molecular Integrals for Electronic Energy Using Spherical Gaussian Type Orbitals, *J. Molecular Structure (THEOCHEM)*, 389 (1997) 169-177.
2. A. H. Pakyari, **M. Oftadeh**, Analytical Second Derivatives of Molecular Integrals Obtained by Spherical Gaussian Orbital, *J. Molecular Structure (THEOCHEM)*, 430 (1998) 177-190.
3. M. H. Keshavarz, **M. Oftadeh**, A New Correlation for Predicting the C-J Pressure of CHNO Explosive, *High Temperature-High Pressure*, 34, (2002) 495-497.
4. M. H. Keshavarz, **M. Oftadeh**, Two New Correlations for Predicting Detonation Power of CHNO Explosives, *Bull. Korean Chem. Soc.*, 24(1) (2003) 19-22.
5. M. H. Keshavarz, **M. Oftadeh**, New Estimated Method for Estimating Heat of Formation of CHNO Explosives in Crystalline State, *High Temperature-High Pressure*, 35/36 (2003) 499-504.
6. M. H. Keshavarz, **M. Oftadeh**, Simple Method of Predicting Detonation Pressure of CHNO Mixed Explosives, *Indian J. Eng. Mater. Sci.*, 10 (2003) 236-238.
7. M. H. Keshavarz, **M. Oftadeh**, Performance Study of Energetic Compound 2,4,6-Trinitro-1,3,5-Triazine, *Asian J. Chem.*, 17(2) (2005) 663-667.
8. M. H. Keshavarz, **M. Oftadeh**, Performance Study of 1,1-Dimethyl-2- Cyanoethylhydrazine as Liquid Propellant, *Theory and Practice of Energetic Materials*, 5 (2003) 173-177.
9. M. H. Keshavarz, **M. Oftadeh**, New Method for Predicting of C-J Detonation Velocity of CHNO Explosives at Any Loading Density, *Theory and Practice of Energetic Materials*, 5 (2003) 721-724.
10. M. Salavati Niasari, S. Abdolmohammadi, **M. Oftadeh**, Host (Nanopores of Zeolite-Y)/Guest (Co(II)-Azamacrocyclic Complexes) Nanocomposite Materials: Synthesis, Characterization and

- Catalytic Epoxidation of Styrene with Molecular Oxygen, *J. Coord. Chem.*, 61(17) (2008) 2837-2851,
11. A. Semnani, H. R. Pouretedal, M. F. keshavarz, A. R. Firooz, **M. Oftadeh**, Interaction Between 1, 3, 5-Trithiane and Iodine Monobromide in Halomethane Solutions, *Heterocyclic Commu.*, 14(3), 206, 2008.
 12. **M. Oftadeh**, M. Salavati Niasari, F. Davar, Synthesis of ZnO Nanoparticles and Their Optical Properties, *Int. J. Nanoparticles*, 2 (2009) 328-334.
 13. **M. Oftadeh**, M. Salavati Niasari, F. Davar, Sized-Controlled ZnO Nanoparticles, Synthesis and Morphology, *Int. J. Nanoscience*, 3 (2009) 277-279.
 14. A. Semnani, A.R. Firooz, H.R. Pouretdal, M.H. Keshavarz, **M. Oftadeh**, Complex Formation Between Some Thiacrownethers and 1,3,5-Trithian with Bromine in Gas Phase and Carbon Tetrachloride Solution, *Chemistry*, 19 (2010) 80-92.
 15. **M. Oftadeh**, M. Hamadianian Khozani, M. Radhoosh, M. H. Keshavarz, DFT molecular orbital calculations of initial step in decomposition pathways of TNAZ and some of its derivatives with –F, –CN and –OCH₃ groups, *Comp. Theo. Chem.*, 964 (2011) 262–268.
 16. **M. Oftadeh**, S. Naseh, M. Hamadianian, Electronic properties and dipole polarizability of thiophene and thiophenol derivatives via density functional theory, *Comp. Theo. Chem.*, 966 (2011) 20-25.
 17. **M. Oftadeh**, N. Makkei, M. Khosravi Farsani, Investigation of adsorption process and thermodynamics of cochineal dye on wool, *J. Mat. Sci. Eng. B, USA*, 1 (2011) 388-393.
 18. **M. Oftadeh**, A. Aghtar, M. Nasr Esfahani, , Masoud Salavati-Niasari, N. Mir, Fabrication of highly efficient dye-sensitized solar cell and CO₂ reduction photocatalyst using TiO₂ nanoparticles prepared by spin coating assisted sol-gel method, *J. Iranian Chem. Soc.*, 9(2) (2011) 143-149.
 19. **M. Oftadeh**, L. Tavakolizadeh, Investigation of optoelectronic properties of N3 dye-sensitized TiO₂ nanocrystals by hybrid methods: ONIOM (QM/MM) calculations, *International Nano Letters*, 2(1) (2011) 5-9.
 20. N. Madadi Mahani, **M. Oftadeh**, Kinetic and thermodynamic study of activated Carbon from pistachio shell by thermogravimetric method, *J. Mat. Sci. Eng. A, USA*, 1 (2011) 887-891.
 21. **M. Oftadeh**, B. Gholamalian, M. Hamadianian, Investigation of the interaction of carbon dioxide fluid with internal and external single-wall carbon nanotubes by DFT, *J. Nano Struct.*, 1 (2012) 213-223.

22. **M. Oftadeh**, N Madadi Mahani, M. Hamadani, Density Functional Theory Study of the Local Molecular Properties of Acetamide Derivatives as Anti-HIV Drugs, *Res. Pharm. Sci.*, 8(4), (2013) 285-297.
23. **M. Oftadeh**, M. Moghadari, M. Solimannejad, A. Semnani, A Study of Donor-Acceptor in the Charge Transfer Molecular Complexes of Some Thiacrown Ethers with Dihalogen Molecules by DFT Method, *Acta Chim. Slov.*, 60 (2013) 95-104.
24. G. Rezaiebehbahani. **M. Oftadeh**, S. Rafiei, Experimental Investigation of the Effects of Beta-cyclodextrin on the Unfolding and Aggregation of Human Serum Albumin, *Biochem. Indian J.*, 7(1) (2013) 15-21.
25. **M. Oftadeh**, M. Gholamian, H. H. Abdallah, Investigation of interaction hydrogen sulfide with (5,0) and (5,5) single-wall carbon nanotubes by density functional theory method, *Int. Nano Let.*, 7(3) (2013) 7-14.
26. **M.**, S. Selahvarzi1, M. H. Keshavarz, Intermolecular Interactions between TNAZ and H₂O: a DFT Study, *Cen. Eur. J. Energ. Mat.*, 10 (2) (2013) 289-300.
27. **M. Oftadeh**, N. Madadi Mahani and R. Bahjatmanesh Ardakani, The Investigation of a Linear–Dendrite Copolymeric Nanoparticles As Drug Carriers: ONIOM Study, *J. Nano Struct.*, 2 (2013) 485-488.
28. **M. Oftadeh**, N. Madadi Mahani, Polymer drug interactions in thiadiazolylthioacetamide derivatives–linear dendritic copolymer nanoparticles: ONIOM approach, *J. Pharm. Inves.*, 43 (2013) 323–331
29. **M. Oftadeh**, M. Geramirad, A. Teymouri, Theoretical Study of Some Methyl and Fluoride Derivatives of Bis-piperidiniummethyl-thiourea as Corrosion Inhibitors, *Phys. Chem. Indian J.*, 8 (3) (2013) 97-105.
30. E. Shakerzadeh, E. Tahmasebi, **M. Oftadeh**, The impact of intramolecular H-bonding on the aromatic character of substituted penta-fulvenes, *Comp. Theo. Chem.*, 1017 (2013) 31-36.
31. **M. Oftadeh**, A. Kabiri, Charge Transfer in Some Complexes of Crown Ether and of Thiocrown Ether with Dihalogens: DFT Study, *Acta Chim. Slov.*, 60(4) (2013) 790-796.
32. **M. Oftadeh**, M. Gholamian, H. H. Abdallah, Sulfur Dioxide Internal and External Adsorption on the Single-Walled Carbon Nanotubes: DFT Stud, *Phys. Chem. Res.*, 2(1) (2014) 30-40.
33. **M. Oftadeh**, M. Madadi Mahani, A Thermodynamic Study of the Interactions between Acetamide Derivatives and PCA-PEG-PCA Copolymers: ONIOM Calculations, *Phys. Chem. Res.*, 2 (2) (2014) 131-136.

34. **M. Oftadeh**, M. H. Keshavarz, R. Khodadadi, Prediction of the Condensed Phase Enthalpy of Formation of Nitroaromatic Compounds Using the Estimated Gas-Phase Enthalpies of Formation by PM3 and B3LYP Methods, *Cen. Eur. J. Energ. Mat.*, 11(1) (2014) 569-580.
35. **M. Oftadeh**, L. Saghai, S. Pirialam, Theoretical Evaluation of Medicinal Properties for Some of N-aryl-3-hydroxypyridine-4-ones Derivative Compounds, *Iran. Chem. Commun.*, 2 (2014) 82-92.
36. M. Ghaedi, M. Danaei Ghazanfarkhani, S. Khodadoust, N. Sohrabi, **M. Oftadeh**, Acceleration of methylene blue adsorption onto activated carbon prepared from dross licorice by ultrasonic: Equilibrium, kinetic and thermodynamic studies, *J. Ind. Eng. Chem.* 20 (2014) 2548–2560.
37. N. Yaghoobi Nia, P. Farahani, H. Sabzyan, M. Zendehtdel, **M. Oftadeh**, A combined computational and experimental study of the $[\text{Co}(\text{bpy})_3]^{2+/3+}$ complexes as one-electron outer-sphere redox couples in dye-sensitized solar cell electrolyte media, *Phys. Chem. Chem Phys.* 16 (2014) 11481-11491.
38. M. Ghorbani, H.R. Shaterian, S. Noura, F. Khammar, K. Behbodi, B. Reisi, **M. Oftadeh**, Effective preparation of hexahydroquinolines under ambient and solvent-free conditions, *J. Mol. Liq.* 204 (2015) 15–20.
39. **M. Oftadeh**, G. Rezaei Behbahani, A. A. Saboury and S. Rafiei, Investigation of the effects of various cyclodextrins on the stabilisation of human serum albumin by a spectroscopic method, *J. Aus. Chem.*, <http://dx.doi.org/10.1071/CH15079>.
40. M. Ghorbani, S. Noura, **M. Oftadeh**, M. Narimani, Preparation, characterization and application of novel ionic liquid as an efficient and reusable catalyst for the solvent-free synthesis of hexahydroquinolines, *J. Mol. Liq.* 209 (2015) 224-232.
41. M. Ghorbani, S. Noura, **M. Oftadeh**, E. Gholami and M. A. Zolfigol, Novel ionic liquid [2-Eim] HSO₄ as a dual catalytic-solvent system for preparation of hexahydroquinolines under green condition, *RSC Adv.* 5 (2015) 55303-55312.
42. **M. Oftadeh**, M. Rezaeisadat, A. Rashidi, A theoretical study of H₂S and CO₂ interaction with the single-walled nitrogen doped carbon nanotubes, *Int. J. Bio-Inorg. Hybr. Nanomater.* 4 (2015) 39-48.
43. M. H. Keshavarz, K. Esmaeilpour, **M. Oftadeh** and Y. Hayat Abadi, Assessment of two new nitrogen-rich tetrazine derivatives as high performance and safe energetic compounds, *RSC Adv.* 5 (2015) 87392-87399.

44. **M. Oftadeh**, M. Moshfegh; H. H. Abdallah, Optical properties of some oligothiophene derivatives: DFT study, *Phys. Chem. Res.* 4 (2016) 35-46.
45. M. Bielejewski, M. Ghorbani, M. A. Zolfigol, J. TrittGoc, S. Noura, M. Narimani and **M. Oftadeh**, Thermally reversible solidification of novel ionic liquid [im]HSO₄ by self-nucleated rapid crystallization: investigations of ionic conductivity, thermal properties, and catalytic activity, *RSC Adv.* 6 (2016) 108896-108907
46. M. **Oftadeh**, F. Hajati, M. Jamshidi, H. javaherian Naghash, Study of structure and thermal properties of styrene-butylacrylate copolymer with OMMT nanocomposite emulsions, *Iran. Chem. Commun.*, 7 (2019) 63-70.
47. S. Noura, M. Ghorbani, M.A. Zolfigol, M. Narimani, M.Yarie, and **M. Oftadeh**, Biological based (nano) gelatoric ionic liquids (NGILs): Application as catalysts in the synthesis of a substituted pyrazole via vinylogous anomeric based oxidation, *J. Mol. Liq.* 271 (2018) 778–785.
48. **M. Oftadeh**, M Fereidoonzezahad,, M Aliyan, F Aliyan, Molecular docking studies on xanthohumol derivatives as novel anticancer agents , *Iran. Chem. Commun.*, 7 (2019) 432-444.
49. S. Noura, M. Ghorbani, M. A. Zolfigol, M. Narimani, M. Yarie and M. Oftadeh, Biological based (nano) gelatoric ionic liquids (NGILs): Application as catalysts in the synthesis of a substituted pyrazole via vinylogous anomeric based oxidation, *J. Mol. Liq.*, 271 (2018) 778–785.
50. A. Khosravi, E. Vessaly, **M. Oftadeh** and R. Behjatmanesh Ardakani, Ammonia capture by MN₄ (M = Fe and Ni) clusters embedded in graphene, *J. Coord. Chem.*, in press.
51. **M. Oftadeh** and B. Jamalian, Theoretical calculations of refractive index of synthesized one and two substituted derivatives of functionalized bithiophene compounds, *Phys. Chem. Res.*, 7 (2019) 261-270.
52. A. Khosravi, E. Vessally, **M. Oftadeh** and R. Behjatmanesh-Ardakani, Ammonia capture by MN₄ (M = Fe and Ni) clusters embedded in graphene, *J. Coord. Chem.*, 71:21, (2018) 3476-3486.
53. A. Shiekhzadeh, N. Sohrabi, M. Eslami Moghadam and **M. Oftadeh**, Kinetic and thermodynamic investigation of human serum albumin interaction with anticancer glycine derivative of platinum complex by using spectroscopic methods and molecular docking, *Appl. Biochem. Biotech.*, 190, (2020) 506-528.
54. S. Sadeghi, H. Mohammad Shiri, A. Ehsani and **M. Oftadeh**, Electrosynthesis of high-purity TbMn₂O₅ nanoparticles and its nanocomposite with conjugated polymer: Surface, density of state and electrochemical investigation, *Solid State Sciences* 105 (2020) 106227.

55. Z. Yazdanpanahfard, **M. Oftadeh** and S. Fakhraee, Ultrafast luminescence decay in Rhenium(I) complexes with imidazo[4,5-f]-1,10-phenanthroline ligands: TDDFT method, Phys. Chem. Res., 8(4) 92020) 609-627.
56. H. Mohammad-Salim, R. Hassan, H. H. Abdallah and **M. Oftadeh**, Theoretical study on the mechanism of [3+2] cycloaddition reactions between π , π -unsaturated selenoaldehyde with nitrene and with nitrile oxide, J. Mex. Chem. Soc., 64(2) (2020) 73-90.
۵۷. بهناز شاهرخ، محسن افتاده، نسرین سهرابی، پتانسیل واگرایی خاک کانال های آبیاری در مناطق خشک و نیمه خشک با اثربخشی امواج الکترومغناطیسی در روش شیمیایی: مطالعه موردی خوزستان، نشریه زمین شناسی مهندسی، ۱۵ (۱۴۰۰).
58. S. Sadeghi, H. Mohammad Shiri, A. Ehsani and **M. Oftadeh**, Electrosynthesis of highly pure perovskite type YbMnO₃ nanoparticles and its nanocomposite with conjugated polymer: Surface, density of state and electrochemical investigation, Surface and interfaces, 24 (2021) 101130.
59. A. Shiekhzadeh, N. Sohrabi, M. Eslami-Moghadam, A. Divsalar, N. Soltani, **M. Oftadeh** and F. Fateminasab, Spectroscopic and docking molecular study of new anticancer Pt complex binding with human serum albumin, Nucl. Nucl. Nucleic Acids, in press.

Conference Papers (2001-2011)

1. M. H. Keshavarz and **M. Oftadeh**, "Performance of 2, 4-Dinitroimidazole as a Insensitive Energetic Material", 28th International Pyrotechnics Seminar, Australia, 421-423 (2001).
2. M. H. Keshavarz and **M. Oftadeh**, "A New Correlation for Predicting Detonation Properties of Explosives", 28th International Pyrotechnics Seminar, Australia, 417-420 (2001).
3. M. H. Keshavarz and **M. Oftadeh**, "Detonation Properties of 2, 4, 6-Trinitro-1,3,5-Triazine (TNTA) as a High-Energy Density Explosive", 4th Physical Chemistry Seminar, Booshehr, Iran, March 2001.
4. M. H. Keshavarz and **M. Oftadeh**, "Behavior of Hydroxyethylhydrazine as Liquid Propellant and Composition Detonation Products of 24-DNI with BKW-EOS", 5th Physical Chemistry Seminar, Tehran, Iran, Feb., 2002.
5. M. H. Keshavarz and **M. Oftadeh**, "Study of Performance of 24-DNI as a Solid Oxidizer in Rocket Propellant", 5th Physical Chemistry Seminar, Tehran, Iran, Feb., 2002.
6. **M. Oftadeh** and M. H. Keshavarz, "The Synthesis of Fullerene C₆₀ by Simple Arc Method", 5th Physical Chemistry Seminar, Tehran, Iran, Feb., 2002.

7. M. H. Keshavarz and **M. Oftadeh**, “Study of P_{Cj} Correlation Aided by PM3 Procedure for Condensed CHNO Explosives”, 30th ASPEP Conference, France 2003.
8. M. H. Keshavarz and **M. Oftadeh**, “Study of the Performance of 1-Methyl-1-cyanoethylhydrazine as a Liquid Mono- and Bipropellant”, 30th ASPEP Conference, France 2003.
9. M. H. Keshavarz and **M. Oftadeh**, “Performance Study of 1,1-dimethyl-2-cyanoethylhydrazine as Liquid Propellant”, 8th AISPEP Conference, China, 2003.
10. M. H. Keshavarz and **M. Oftadeh**, “New Method for Predicting od CJ Detonation Velocity of CHNO Explosives at any Loading Density” , 8th AISPEP Conference, China, 2003.
11. M. H. Keshavarz and **M. Oftadeh**, “Theoretical Study of K-6 as High Performance Explosive and Oxidizer”, 8th AISPEP Conference, China, 2003.
12. M. Oftadeh, “The Investigation of the propellant performance of Some of the Nitroguanidine, Azol Derivatives and Nitroamides Compounds as Gas Generators”, 11th Asian Chemical Congress, Korea, 2005.
13. M. Hamadani and **M. Oftadeh**, “Investigation of Explosive Performance of mono-, Bi- and Tri-cyclic Nitramines by ab-initio Computational Methods”, MCC 2006 , Croatia, 2006.
14. **M. Oftadeh** and M. Hamadani, “The Investigation of the Deflagration Pathway of CHNOF Explosives of Mono and Di Cyclic nitramine Compounds by Ab initio and semiempirical calculations”, 41st IUPAC World Chemistry Congress, Turin, Italy, Aug. 2007.
15. M. Hamadani and **M. Oftadeh**, “The Investigation of the Deflagration Pathway of CHNOF Explosives of tri-Cyclic Nitramine Compounds by Ab Initio and Semiempirical Calculations”, 41st IUPAC World Chemistry Congress, Turin, Italy, Aug. 2007.
16. **M. Oftadeh** and M. Salavati niasari, “Synthesis, Characterization and Catalytic Oxidation by Host (Nanocage of Zeolite-Y)/Guest (Metal Complexes of 12-Membered Thio Macrocyclic Schiff-base Ligand) Nano Composite Materials”, IXth Netherlands' Catalysis and Chemistry Conference, Noordwijkerhout, Netherlands, March 2008.
17. **M. Oftadeh**, N. Makkei and M. Khosravi Farsani, “An Adsorption and Thermodynamic Study of Cochineal Dyeing on Wool”, PACCON2009, Phistanulok, Thailand, Jan. 2009.
18. **M. Oftadeh**, M Salavati Niasari and F. Davar, “Nanodimensional microreactors encapsulation of 15- and 16-membered macrocyclic Schiff-base copper(II) complex nanoparticles: catalytic oxidation”, XIth Netherlands Catalysis and Chemistry Conference, Netherlands, March 2010.
19. **M. Oftadeh** and M. Moghadari, “ Donor-acceptor in the charge transfer molecular complexes of $C_4S_4H_8$ and $C_6S_3H_{12}$ with dihalogenes: DFT method”, Fourth Humboldt Conference on Computational Chemistry, Bulgaria, July 2010.

20. **M. Oftadeh** and L. Tavakolizadeh, "Investigation of optical properties of sensitized TiO₂ nanoparticles by N3 with ONIOM method", 3rd International Congress on Nanoscience and Nanotechnology (ICNN2010), Shiraz, Iran, Nov 2010.
21. **M. Oftadeh**, M. Gholamian and H. H. Abdallah, "Investigation of Interaction Hydrogen Sulfide with (5,0) and (5,5) Single-Wall Carbon Nanotubes by DFT Method", Proceedings of the International Conference Nanomaterials: Applications and Properties (NAP2012), Alushta, Ukraine, 2012.
22. **M. Oftadeh**, M. Totonkohan and N. Farzi, "Study of the Structure Effect on Water Adsorption by a Group of Nano Copper Clusters", Proceedings of the International Conference Nanomaterials: Applications and Properties (NAP2012), Alushta, Ukraine, Sep 2012.

Recent Research Projects Completed (2000-2013)

1. **M. Oftadeh** and M. H. Keshavarz, "Synthesis and Evaluation of The Explosive and Propellant Performance of High Energetic 2,4-dimethylimidazol", Malek Ashtar University, Shahinshar, Isfahan (2000).
2. M. H. Keshavarz and **M. Oftadeh**, "Synthesis and Evaluation of Many Low Volatile Hydrazine Derivatives for Using in Missiles with Liquid Fuels", Malek Ashtar University, Shahinshar, Isfahan (2000).
3. **M. Oftadeh** and M. K. Keshavarz, "Investigation of Explosive Performance of Dense Fluid by Using Equation of State", Payame Noor University, Isfahan (2004).
4. **M. Oftadeh** and M. Hashmi Talkhonchek, "Laboratory Synthesis of Diallylester" Isfahan Payame Noor University, Isfahan (2005).
5. **M. Oftadeh** and M. Hamadian, "Investigation of The Degradation Pathways for Many Mono, Di and Tri Cyclic Compounds of CHNOF Explosives by Ab Initio and Semiempirical Methods", Payame Noor University, Isfahan (2007).
6. **M. Oftadeh** and M. Salavati Niasari, "Host/Guest Nanocomposite Materials (HGNM): Synthesis, Characterization and Catalytic Activity", Payame Noor University, Isfahan (2010).
7. **M. Oftadeh**, "AM1 Study of Acidities of Fulleropyrrolindines in Gas and Solution Phases", Payame Noor University, Isfahan (2010).
8. **M. Oftadeh**, "Theoretical Study and Investigation of the Adsorption of N3 Dye and Its Derivatives on the TiO₂ Nanoparticles as an Electrode using in DSSC by DFT Method", Payame Noor University, Isfahan (2011).

9. **M. Oftadeh**, "CO₂ Adsorption on Carbon Nanotubes and Variation Effects of the Structural Nanotube on the Adsorption Process", Payame Noor University, Isfahan (2013).
10. **M. Oftadeh**, "A Theoretical Study of H₂S and CO₂ Interaction with the Single-Walled Nitrogen Doped Nanotubes to Sweeten Sour Gases", Payame Noor University, Isfahan (2013).
11. **M. Oftadeh**, "Thermochemistry of the Surface Adsorption of Bezoquinone and Its Halide Derivatives on ZnO Nanocrystals: ONIOM Method", Payame Noor University, Isfahan (2013).
12. **M. Oftadeh**, "Electronic, Melting Point and Pharmaceutical Properties of 2-minobenzothiazol and Its Derivatives: QSAR/QSPR Study", Payame Noor University, Isfahan (2015).
13. **M. Oftadeh**, "Thermodynamic Stability and Thermophysical Properties of Some Ionic Liquids As Catalysis with High Efficiency to Promote Syntheses of Organic Materials", Payame Noor University, Isfahan (2015).

Recent Books

- 1- **M. Oftadeh** and M. Hamadian, "*General Chemistry in Laboratory*", Samaghalam Publications, (2006) (in Persian).
- 2- **M. Oftadeh**, "*English for Chemistry Students*", Payame Noor University Publications (2006) (in English).
- 3- **M. Oftadeh**, "Physical Chemistry I", translated of "Physical Chemistry" by R. G. Mortimer, 3rd edition, Elsevier publications, (2010) (in Persian).
- 4- **M. Oftadeh**, "Analytical Derivatives and Lone Pair Description Using FSGO", Lambert Academic Publishing, Germany (2012).
- 5- **M. Oftadeh** and F. Ashrafi, "Physical Chemistry I", Payame Noor University Publications (2013) (in Persian).
- 6- **M. Oftadeh** and R. Behjatmanesh Ardakani, "Computational Chemistry", Payame Noor University Publications (2015). (in Persian)
- 7- **M. Oftadeh**, A. Karimianfard and m. Taghizadeh, "Carbon Nanomaterials As Absorbent for Environmental and Biological Applicationc", translated of "Carbon Nanomaterials As Absorbent for Environmental and Biological Applicationc" by C.P. Bergmann, F.M. Machado, Samaeghalam Pulications, Iran, (2018) (in Persian).
- 8- **M. Oftadeh**, R. Behjatmanesh-Ardakani, N. Bahramipanah, Z. Rostami and V. Moieni, "Advanced Physical Chemistry", Payame Noor University Publications (2019). (in Persian)

Honors

1. REXON team, First rank in the 10th national ChemCar Competition in the Performance section, Isfahan University, Iran, 2014.
2. REXON team, First rank in the 10th national ChemCar Competition in the Free League section, Isfahan University, Iran, 2014
3. REXON team, 3rd rank in the international Chem-E-Car performance Competition, Adelaide University, Adelaide, Australia, 2016.