

Curriculum Vitae

Dr. Mona Mostafa Ali Saif

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Work address: Faculty of Education, Department of Chemistry, Ain Shams University, Roxy, Cairo, Egypt.

PERSONAL DATA

Date of Birth: June 13, 1977

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EDUCATION

- **Ph.D. in Inorganic Chemistry (Photochemistry and Nano-Material Science), 2006**
Chemistry Department, Inorganic Chemistry Division (Photochemistry and Nano-Material Science), Faculty of Education, Ain Shams University
- **M.Sc in Inorganic Chemistry (Photochemistry and Nano-Material Science), 2002**
Chemistry Department, Inorganic Chemistry Division (Photochemistry and Nano-Material Science), Faculty of Education, Ain Shams University
- **B.Sc. in chemistry (v. good, honour degree), 1998.** *from Department of Chemistry, Faculty of Education, Ain Shams University, Cairo, Egypt.*

ACADEMIC NOMINATIONS AND APPOINTMENTS

- **Member of the Research Council of Ain Shams University (2021- now).**
- **Professor of Inorganic Chemistry (photochemistry and Nano-material Science) (2019-now)**
Department of Chemistry, Faculty of Education, Ain Shams University.
- **Assistant Prof. (Photochemistry and Nano-Material Science) (2013-2019)**
Department of Chemistry, Faculty of Education, Ain Shams University.

- **Visitor Scientist (4/2007–10/2007)**

Department of Mechanical Engineering, Virginia Commonwealth University, Richmond, Virginia, USA

- **Lecturer of Inorganic Chemistry (photochemistry and Nano-material Science) (2006 – 2013)**

Department of Chemistry, Faculty of Education, Ain Shams University.

- **Assistant lecturer (2002 – 2006)**

Chemistry Department, Faculty of Education, Ain Shams University

- **Demonstrator in Chemistry (1999 – 2002)**

Chemistry Department, Faculty of Education, Ain shams University.

TEACHING SKILLS

Teaching the following courses for Under graduate, Diploma, Master and Doctoral Students:

- Analytical Chemistry.
- Environmental Pollution.
- Photochemistry.
- Solar energy and solar cells.
- Lanthanide chemistry.
- Nanotechnology.
- Inorganic chemistry.
- Renewable Energies
- Material science

THESIS

Master Thesis:

- Ahmed Amen Abd alhalim Mostfa, (2008-2013), Structural Diversity of Some Metallohydrazones Bearing the Quinoline Ring.
- Rania ahmed foad, (2009-2012), Binary and Mixed Schiff base complexes of Thiosemicarbazone Derivatives and Macrocyclic Compounds: Synthesis, Characterization and Potential Application.
- Saad mahmoud abdel aziz asal, (2008-2011), Production of Renewable Energy and Industrial Wastewater Treatment Using Different Titanium Dioxide Nanocomposites.
- Doaa anwar hamouda, (2010-2014), Photocatalytic Production of Hydrogen and Degradation of Industrial Wastes.

- Radwa Mohamed shokry (2012-2014), New Developed transition metal compounds and lanthanide based nanomaterials: Preparation, Characterization and potential Applications
- Nermeen el-saied Ahmed, (2013-2017), Synthesis and Characterization of Luminescent nanomaterials Based on Lanthanide ions and their Applications for Latent Fingerprint Detection.
- Mohamed fawzy hadad (2013-2018), Solar-mediated removal of organic contaminants from industrial wastewater using TiO₂ nanomaterials in a pilot plant photoreactor.
- Hanan atef soliman ebaid (2015-2019), Preparation, Characterization and Environmental Application of New Nanomaterials based on heteropolyacids doped titania.
- Rana Helmy (2015-2018) Synthesis and Characterization of new photoluminescent nanomaterials based on lanthanides for different applications.
- Nourhan Abd-elmaboud Ibrahim (2018-2021), " Phytosynthesis of iron oxide nanoparticles using some plant extracts and studying their effect on biochemical attributes of wheat plant.
- Marwa Zekr-allah Mostafa Salem (2021-now), "Coumarin moiety based optical nanomaterials: Fabrication, Characterization and analytical applications."
- Samy Hagag (2021-now)," Photovoltaic Efficiency improvement of environmentally friendly solar cell"
- Heba Mostafa Khattab(2022-now), Production and characterization of new perovskite materials for diverse applications.

Ph. D. Thesis:

- Marwa Mohamed Ibrahim, (2010-2013), New Developed Semiconductor Nanomaterials: Preparation, Characterization and its Green Chemistry Applications.
- Saad mahmoud abdel aziz asal, (2014-2018), Production and Characterization of Nanomaterials based on ZnO for Environmental and Biomedical Applications.
- Rania ahmed foad, (2014-2017), "Synthesis and Characterization of New Solid Complexes of Hydrazone Derivatives: Nano-structures Study and Different Potential Applications"
- Wafaa el-said abdallah (2013-2015), "Production and Characterization of Silver Nanoparticles using some Soil Microorganisms"

- Asmaa Mohamed (2013-2018) "Preparation and Characterization of Silica Composite Nanomaterials for Different Potential Applications"
- Marium shaker gerges (2014-2019), preparation and characterization of some lanthanides doped TiO₂ nanoparticles on carbon based supports and their applications as efficient photocatalysts.
- Mona Ahmed keshk (2015-2019), "Synthesis and Characterization of pure and supported metal nano-complexes for different applications"
- Heba Mahmoud elshafiy, (2014-2020), Synthesis, characterization and application of nano-crystalline glass ceramics for green potential applications"
- Eman Mohamed rashad (2018-now), Synthesis and spectral studies of solid complexes based on new photoluminescent quinolinones for various applications.
- Zaynab abd elhamed abd alraoof goubish (2017- 2021), Production and Characterization of Nanomaterials based on alkaline-earth stannate for different potential Applications"
- Hanan Atef Soliman Ebaid (2019-now) "Nanoparticles design and characterization for environmental applications"
- Rana Helmy Abdo Abd El hamid (2019- 2022), Synthesis and Application of new nanomaterials doped with Lanthanide elements.
- Omar Abdel-Mordi (2020-now), Synthesis of plasmonic active nanomaterials for Visible light photocatalysis and its applications
- Mona Karam Farhan (2018-now), Development of some analytical methods for determination of some drugs and their Photocatalytic degradation rate

RESEARCH INTEREST

- Light conversion devices.
- Solar energy and Photovoltaics (Dye-sensitized and polymer solar cells).
- Wastewater Treatment and analysis.
- Biogas production.
- Self-cleaning.
- Down-Up- converting nano-materials for latent fingerprint detection.

- Fluorescent sensors for analytical applications.
- Nano-Inorganic complexes and its biological applications.

AWARDS, GRANTS AND SCIENTIFIC VISITS

- Awards for distinction and honor from Ain Shams University to be ranked among the best 2% of the world's scholars according to the Stanford University classification (2021).
- Awards for distinction and honor from Ain Shams University to be ranked among the best 2% of the world's scholars according to the Stanford University classification (2020).
- Certificates of Appreciation from Ain Shams university for International publications from 2018 to 2021
- Certificate of Appreciation from the Community and Environmental Affairs Sector - Ain Shams University for distinguished efforts and effective participation in supporting the progress of the Community Service Affairs and Environmental Development Sector in the field of applied research (2018).
- Certificate of Appreciation from Chemistry Department, Faculty of Education, Ain Shams University (2015).
- Awards for Distinguished Scientific Researches Offered by MFK Foundation and BUE (2014).
- State Incentive Prize in Chemical Sciences 2014.
- Scientific Excellence Award for continuous development of scientific research published in 2012 in international journals (2010-2011) with the highest Eigen Factor from the National Authority for Quality Assurance & Accreditation of Education.
- Award for continuous development of scientific research published in 2012 in international journals from Ain Shams University.
- Grant from TWAS-ARO for participation in 7th Annual Meeting "Water, Nuclear and Renewable Energy: Challenges Versus Opportunities" in Alexandria (28-29 December 2011).
- Grant from the Academy of Sciences for the Developing countries (TWAS) in 2011 for participation in the Afro-Asia Workshop on Advanced Topics in Chemistry, in Jawaharal Nehru Centre for Advanced Scientific Research, Bangalore, India during June 13 - 17, 2011.
- Fellowship from The Bibliotheca Alexandrian (BA), and The Academy of Sciences for the Developing countries (TWAS) in 2010 for the TWAS/BioVisionAlexandria.NXT 2010 Conference.
- Scientific visit to Virginia Commonwealth University (VCU), School of engineering, Department of Mechanical Engineering, Energy Conversion system Laboratory. For three months (15 April to 15 October 2007). For doing Joint research in the field of "Alignment of

TiO₂ in polymer films towards the fabrication of low-cost solid-state dye-sensitized TiO₂ solar cells”

PROJECTS

- Scientific project No. 42957 funded from the Science & Technology Development Fund (STDF-CBG) “Development of Nano Photochemistry Lab. and its Environmental Applications "(2021-up to Now)
- Joint scientific project between Egypt and India, financed by Academy of Scientific Research and Technology “Production of new non-toxic photoluminescent nano-materials and their applications in energy and forensic fields" (2018-2019).
- Scientific project funded from Ain Shams University “Production of High Efficiency Dye Sensitized solar cells using new Environment safe nano-phosphors (2017-2018) "
- Scientific project funded from Ain Shams University “Production non-toxic nanomaterials for latent fingerprint detection“(2015-2016).
- Scientific project funded from Ain Shams University" Photo-Biogas Production from Wastewater (2014-2015) "
- Scientific project funded from RDI "e-laboratories for chemistry Education” No. RDI2/S2/106 (2014-2016).
- Joint scientific project between Egypt and Tunisia funded by Ministry of Scientific Research, “Production and application of high efficient luminescent nanomaterials for latent fingerprint detection No. 10/4/19“, (2012-2014).
- US – Egypt Scientific Research Project with Verginia Commonwealth University (2007 – 2009) – Towards efficient polymer solar cell: alignment of TiO₂ nanoparticles in polymer films – the nanowiring effect.
- Joint scientific project financed by the European Community; Aquacat project photodisinfection of water- in collaboration with international European [France, Swiss, Spain, UK and Portugal] and North African Laboratories (Fez and Tunis) (2003-2005).

SKILLS

- **Experience in the handling the following lab facilities:**
 - Fabrication of dye sensitized and polymer solar cells
 - X-ray diffraction (XRD) Measurement and analysis
 - Transmission Electron Microscope (TEM)
 - Spin & Sputter coaters

- Spectrophotometer
- Spectrofluorometer
- Diode Array spectrometer
- Photoreactors and Light source measurements
- Total Organic Carbon (TOC) analyzer
- Chemical Oxygen Demand
- TGA/DSC analysis

SCIENTIFIC ACTIVITIES

[A] Delivered lectures and led as well as designed the practical courses in the following training workshops:

- ❖ Training Workshop on “Applications of Photoenergy Technologies”, Photoenergy Center, Ain Shams University, October 13-18, 2001
- ❖ Training Workshop on “Photoenergy Technology: Applications in the Environment Concepts and Hands-on Approach” Photoenergy Center, Ain Shams University, October 14-16, 2003.
- ❖ Training Workshop on “Photoenergy Technology: Solar Cells and Environmental Applications” Photoenergy Center, Ain Shams University, 25-26 February, 2004.
- ❖ Training Workshop on “Treatment and Recovery of Heavy Metals from water and Wastewater”, National Research Centre, Water Pollution Research Department, 16-20 July 2005.
- ❖ Training Workshop on Nanotechnology, Photoenergy Centre, Ain Shams University, 23-25 November 2009.
- ❖ Training Workshop on “National Industries for Renewable Energy and Environmental Equipment” Faculty of science, Ain Shams University, **April 29-30, 2009.**
- ❖ Training Workshop on “Solar energy conversion and Photoenergy systems or clean Environment; Applications of green chemistry and Nanotechnology” Minofiya University, Sadat Branch , 4 - 5 April 2011
- ❖ Training Workshop on “The International Workshop on Environmental Nanotechnology and Advanced Optical Spectroscopic Applications” Minofiya University, Sadat Branch , 22 May 2013
- ❖ Training Workshop on “Application of Nanochemistry in Energy, water and environment development, Department of Chemistry, Faculty of Science, Ain

Shams University, 14, April 2013.

- ❖ Training Workshop on “Nanotechnology applications in forensic science (latent fingerprint detection)” 21 May, 2013.
- ❖ 1st Workshop on Nanomaterials for Environmental and Biomedical applications, Faculty of Education, Ain Shams University, 30 December 2018.

[B] Attended Workshops:

- ❖ Training Workshop on “Treatment and Recovery of Heavy Metals from water and Wastewater”, National Research Centre, Water Pollution Research Department, 16-20 July 2005.
- ❖ Training Workshop on “Environmental Aspects and Production of Glass Ceramic Materials from Industrial and Urban Wastewater Sludge” Minofiya University, Sadat Branch, 12 January 2011.
- ❖ US-Egypt Solar Energy Workshop NRC, Cairo, Egypt, March **11-14, 2012**
- ❖ Training workshop on “Egyptian Standard Specifications for the analysis of commercial products”, Chemistry Administration, 27 November 2013.
- ❖ Training Workshop on Recent Trends in clean Environment” National Research Centre, Cairo, Egypt, May 3, 2017.

[C] A member of the local organizing committee and attended the following international conferences:

- ❖ 7th International Conference on “Solar Energy and applied Photochemistry” 23-28 February 2003, Luxor, Egypt: *”Medium effect on the photophysical properties of the intensely luminescent Terbium complex of pyridine-2,6-dicarboxylic acid“*, **poster presentation**
- ❖ 8th International Conference on “Solar Energy and Applied Photochemistry [SOLAR '05], 20-25 February 2005, Luxor, Egypt. *“Photochromism of spiropyran-derived merocyanine and its complexes with some lanthanide metal ions”* and *“Spectroscopic studies of some lanthanide complexes with triazole derivatives in PMMA and non-aqueous solutions”*, **poster presentations.**
- ❖ 9th International Conference on “Solar Energy and Applied Photochemistry [SOLAR '06], 23-27 January 2006, Cairo, Egypt. *“The preparation and*

characterization of Ln³⁺ doped TiO₂ nanoparticles and their photocatalytic activity”, **oral and poster presentations.**

- ❖ Nanotech insight Conference, 10-17th march, 2007, Luxor, Egypt., “*Production of nanomaterial containing rare-earth ions Tb, Eu and Sm: preparation, chracterization and application potential* “, **poster presentation.**
- ❖ International Conference and Training Workshop on Molecular/Nano Phptochemistry, Photocatalysis and solar Energy conversion Solar’08, Cairo, Egypt, February 24-28, 2008.” *Luminescnce based on energy transfer in silica xerogels doped with lanthanide titanate pyrochlores (Gd₂Ti₂O₇: Ln³⁺) [Ln³⁺ = Eu³⁺ and Dy³⁺]*, **poster presentations.**
- ❖ International Conference and Training Workshop on Molecular/Nano Phptochemistry, Photocatalysis and solar Energy conversion Solar’08, Cairo, Egypt, February 24-28, 2008.” *Dye-Sensitized Solar Cells based on Ln³⁺ Doped TiO₂*, **oral presentations.**
- ❖ International Conference and Training Workshop on Powering a Greener Future: Nanomaterials and Solar Energy Conversion Solar’09 Luxor, Egypt, January 10 - 14, 2009. “*One-dimensional single-crystalline TiO₂ nanostructures: preparation, characterization and potential application*” **poster presentations.**
- ❖ BioVision NXT conference 10-15th April **2010**, BA, Alexandria, Egypt. [**Poster presentation**].
- ❖ Solar Electricity Conference and Exhibition, SOLARTR-2, on November 7-9, 2012, Antalya-Turky, “*Down-converting lanthanide doped TiO₂ photoelectrodes for efficiency enhancement of dye-sensitized solar cells*” **Poster presentation.**
- ❖ Second International Conference on “*Research to Applications & Markets, Sousse, June 28-30, 2013, Tunisia,*” *Photobiogas and hydrogen generation based on lanthanide doped titania nanoparticles*” **Oral presentation.**
- ❖ First International conference on Applied Chemistry (ICAC 2015 Chemistry for Sustainable World” Nov. 18-19 2015, Jeddah, Saudi Arabia, “. *Novel non-toxic and red luminescent sensor based on Eu³⁺:Y₂Ti₂O₇/SiO₂ nano-powder for latent fingerprint detection*” **Oral Presentation.**

[D] Reviewer indifferent international journals such as:

- **Journal of Hazardous Materials**
- **Materials Letters**
- **Spectrochimica Acta Part A**
- **Journal of Power Sources**
- **International Journal of Photoenergy**
- **Material Science and Engineering B**
- **Journal of Molecular Structure**
- **Journal of Inorganic and Organometallic Polymers and Material**
- **Energy Conversion and Mangement**
- **ACS Applied Materials & Interfaces**
- **Chemical Engineering Journal**
- **Journal of Luminescence**
- **Journal of photochemistry and photobiology A: Chemistry**
- **Sensor and actuator B**

LIST OF PUBLICATIONS

- Total Citations: 1199
- *h* Index: 19
- *i10* index: 31

(1) L.F.M. Ismail, A.M. Tawfike, **M. Saif**, M.S.A. Abdel-Mottaleb, Medium effect on the photophysical properties of the intensely luminescent Terbium complex of pyridine-2,6-dicarboxylic acid, *El-Azhair. Bull. Sci.*, 14 (2003) 33.

(2) **M. Saif**, M.S.A. Abdel-Mottaleb, Titanium Dioxide Nanomaterial Doped with Trivalent Lanthanide Ions of Tb, Eu and Sm: Preparation, Characterization and potential Applications, *Inorganica Chimica Acta*, 360 (2007) 2863. [Impact Factor: 1.71].

(3) **M. Saif**, Luminescence based on Energy Transfer in Silica doped with Lanthanide Titania ($Gd_2Ti_2O_7: Ln^{3+}$) [$Ln^{3+} = Eu^{3+}$ or Dy^{3+}], *Journal of Photochemistry and Photobiology A: Chemistry*, 205 (2009) 145. [Impact Factor: 2.553]

(4) Hoda S. Hafez, **M. Saif**, James T. McLeskey Jr., M.S.A. Abdel-Mottaleb, I.S.Yahia, T. Story, and W. Knoff, Hydrothermal Preparation of Gd^{3+} -Doped Titanate Nanotubes: Magnetic Properties and Photovoltaic Performance, *International Journal of Photoenergy*, 2009 (2009) 1-8, doi:10.1155/2009/240402. [Impact Factor: 1.494]

- (5) Hoda S. Hafez, **M. Saif**, M.S.A. Abdel-Mottaleb, Down-converting lanthanide doped TiO₂ photoelectrodes for efficiency enhancement of dye-sensitized solar cells, *Journal of Power Sources* 196 (2011) 5792. [Impact Factor: **4.95**]
- (6) S. Asal, **M. Saif**, H. Hafez, S. Mozia, A. Heciak, D. Moszyński, M.S.A. Abdel-Mottaleb, Photocatalytic generation of useful hydrocarbons and hydrogen from acetic acid in the presence of lanthanide modified TiO₂, *International Journal of Hydrogen Energy*, 36 (2011) 6529. [Impact Factor: **4.084**].
- (7) **M. Saif**, Mahmoud M. Mashaly, Mohamed F. Eid, , R. Fouad, Synthesis and Thermal Studies of Tetraaza Macrocylic Ligand and its transition metal Complexes. DNA binding and anti-tumor activities on copper complex, *Spectrochimica Acta: Part A*, 79 (2011) 1849. [Impact Factor: **2.090**]
- (8) **M. Saif**, S.M.K. Aboul-Fotouh, S. A. El-Molla, M.M. Ibrahim, L.F.M. Ismail, Improvement of the structural, morphology and optical properties of TiO₂ for solar treatment of industrial wastewater, *Journal of Nanoparticle Research*, (2012) 14:1227. [Impact Factor: **2.157**].
- (9) **M. Saif**, Mahmoud M. Mashaly, Mohamed F. Eid, , R. Fouad, Synthesis, Characterization and Thermal Studies of Binary and/or mixed ligand complexes of Cd(II), Co(III), Cu(II), Ni(II) based on 2-Hydroxybenzylidene thiosemicarbazone. DNA Binding Affinity of Binary Copper Complex, *Spectrochimica Acta: Part A*, 92 (2012) 347– 356. [Impact Factor: **1.977**]
- (10) **M. Saif**, Synthesis of down conversion, high luminescent nano-phosphor materials based on new developed Ln³⁺:Y₂Zr₂O₇/SiO₂ for latent finger print application, *Journal of Luminescence* 135 (2013) 187–195. [Impact Factor: **2.367**].
- (11) **M. Saif**, H. Hafez, A.I. Nabeel, Photo-induced self-cleaning and sterilizing activity of Sm³⁺ doped ZnO nanomaterials, *Chemosphere* 90 (2013) 840–847 [Impact Factor: **3.499**].
- (12) H.R. Mahmoud, S.A. El-Molla, **M. Saif**, Improvement of physicochemical properties of Fe₂O₃/MgO nanomaterials by hydrothermal treatment for dye removal from industrial wastewater, *Powder Technology* 249 (2013) 225-233. [Impact Factor: **2.269**].
- (13) **M. Saif**, S.A. El-Molla, S.M.K. Aboul-Fotouh, H. Hafez, M.M. Ibrahim, M.S.A. Abdel-Mottaleb, L.F.M. Ismail, Synthesis of highly active thin film based on TiO₂ nanomaterial for self-cleaning application, *Spectrochimica Acta Part A*, 112 (2013) 46–51. [Impact Factor: **2.129**]

- (14) Hussein S. Seleem, **M. Saif**, A. Amin, Copper(II)-Complexes of an Isatinic Quinoly Hydrazone-Anion effect, *Research Journal of Chemical Sciences*, 3 (2013) 86-91.
- (15) R.M. Ahmed, **M. Saif**, Optical properties of rhodamine b dye doped in transparent polymers for sensor application, *Chinese Journal of Physics*, 51(3) (2013) 511-521. [Impact Factor: **0.431**].
- (16) **M. Saif**, S.M.K. Aboul-Fotouh, S.A. El-Molla, M.M. Ibrahim, L.F.M. Ismail, Evaluation of the photocatalytic activity of Ln^{3+} - TiO_2 nanomaterial using fluorescence technique for real wastewater treatment, *Spectrochimica Acta: Part A*, 128 (2014) 153-162. [Impact Factor: **2.353**]
- (17) **M. Saif**, S.A. El-Molla, S.M.K. Aboul-Fotouh, M.M. Ibrahim, L.F.M. Ismail, D.C. Dahn, Nanostructured Gd^{3+} - TiO_2 surfaces for self-cleaning application, *Journal of Molecular Structure* 1067(1) (2014) 120-126. [Impact Factor: **1.602**].
- (18) M.S.A. Abdel-Mottaleb, M.M.S. Abdel-Mottaleb, H.S. Hafez, **M. Saif**, J-aggregates of amphiphilic cyanine dyes for dye-sensitized solar cells: A combination between computational chemistry and experimental device physics, *International Journal of Photoenergy*, 2014 (2014) 579476. [Impact Factor: **1.563**].
- (19) **M. Saif**, M. Shebl, A. Mbarek, A.I. Nabeel, R. Maalej, R. Shokry, Synthesis of non-toxic phosphor material based on pyrochlore-type dititanate ($\text{Eu}^{3+}/\text{Y}_2\text{Ti}_2\text{O}_7$), *Journal of Photochemistry and Photobiology A: Chemistry* 301 (2015) 1–5. [Impact factor: 2.477].
- (20) **M. Saif**, M. Shebl, A.I. Nabeel, R. Shokry, H. Hafez, A. Mbarek, K. Dama, R. Maalej, M.S.A. Abdel-Mottaleb, Novel non-toxic and red luminescent sensor based on $\text{Eu}^{3+}:\text{Y}_2\text{Ti}_2\text{O}_7/\text{SiO}_2$ nano-powder for latent fingerprint detection, *Sensors and Actuators B* 220 (2015) 162–170. [Impact factor: **4.758**]
- (21) **M. Saif**, N. Alsayed, A. Mbarek, M. El-Kemary, M.S.A. Abdel-Mottaleb., Preparation and characterization of new photoluminescent nano-powder based on $\text{Eu}^{3+}:\text{La}_2\text{Ti}_2\text{O}_7$ and dispersed into silica matrix for latent fingerprint detection, *Journal of Molecular Structure*, 1125 (2016) 763-771. [Impact Factor: **1.753**].
- (22) **M. Saif**, H.F. El-Shafiy, M.M. Mashaly, Mohamed F. Eid, A.I. Nabeel, R. Fouad, Synthesis, characterization, and antioxidant/cytotoxic activity of new chromone Schiff base

nano-complexes of Zn(II), Cu(II), Ni(II) and Co(II), *Journal of Molecular Structure* 1118 (2016) 75-82. [Impact Factor: **1.753**].

(23) Magdy Shebl, **M. Saif**, Asmaa I. Nabeel, R. Shokry, New non-toxic transition metal nanocomplexes and Zn complex-silica xerogel nanohybrid: Synthesis, spectral studies, antibacterial, and antitumor activities, *Journal of Molecular Structure* 1118 (2016) 335-343. [Impact Factor: **1.753**].

(24) M. Ghareib, M. A. Tahon, **M.M. Saif**, W. E. S. Abdallah,. Rapid extracellular biosynthesis of silver nanoparticles by cunninghamella phaeospora culture supernatant, *Iranian Journal of Pharmaceutical Research*, 15(4) (2016) 915-924. [Impact Factor: **1.507**].

(25) H. F. El-Shafiy, **M. Saif**, M.M. Mashaly, S. AbdelHalim, M.F.Eid, A.I. Nabeel, A.I., R. Fouad, New nano-complexes of Zn(II), Cu(II), Ni(II) and Co(II) ions; spectroscopy, thermal, structural analysis, DFT calculations and antimicrobial activity application, *Journal of Molecular Structure* 1147 (2017) pp. 452-461. [Impact Factor: **2.011**].

(26) M.S.A. Abdel-Mottaleb, E. Hamed, **M. Saif**, H.S. Hafez, Binding, and thermodynamics of β -cyclodextrin inclusion complexes with some coumarin laser dyes and coumarin-based enzyme substrates: a simulation study, *Journal of Inclusion Phenomena and Macrocyclic Chemistry*, 92(3-4) (2018) 319-327. [Impact Factor: **1.429**].

(27) M.S.A. Abdel-Mottaleb, **M. Saif**, M.S. Attia, M.M. M.M. Abo-Aly, S.N Mobarez, Lanthanide complexes of spiropyran photoswitch and sensor: spectroscopic investigations and computational modeling, *Photochemical and Photobiological Sciences*, 17(2) (2018) 221-23. [Impact Factor: **2.902**].

(28) **M. Saif**, Hoda F. El-Shafiy, Mahmoud M. Mashaly, Mohamed F. Eid, A.I. Nabeel, R. Fouad, Hydrothermal preparation and physicochemical studies of new copper nano-complexes for antitumor application, *Journal of Molecular Structure*, 1155 (2018) 765-775. [Impact Factor: 2.12]

(29) **M. Saif**, Hoda F. El-Shafiy, Mahmoud M. Mashaly, Mohamed F. Eid, A.I. Nabeel, R. Fouad, Synthesis, characterization, photoluminescence and cytotoxic properties of novel luminescent Eu(III)complexes based on chromone Schiff base, *Journal of Molecular Structure*, 1161 (2018) 26-33. [Impact Factor: **2.12**].

- (30) G. A. El-Inany, H. S. Seleem, R. Helmy, M.O. Abdel-Salam, **M. Saif**, Synthesis and characterization of $\text{Sm}^{3+}:\text{Bi}_4\text{Si}_3\text{O}_{12}$ and dispersed into silica nanophosphor for sensing application, *Journal of Molecular Structure*, 1173 (2018)111-119. [Impact Factor: 2.12]
- (31) **M. Saif**, R. Kamal, H. S. Hafez, $\text{BaZrO}_3:\text{Eu}^{3+}$ nanophosphor: A potential fluorescent sensor for highly selective and sensitive detection of chromium ions from tannery leather and wastewater, *Journal of Alloys and Compounds* 803 (2019) 658-663 [Impact Factor: 4.175]
- (32) **M. Saif**, R. Fouad, Novel Bi-functional Lanthanide-centered Nanphosphors For Latent Fingerprint Detection and Anti-counterfeiting Applications, *Applied Organometallic Chemistry*, (2019), e5131.<https://doi.org/10.1002/aoc.5131>. [Impact Factor: 3.259]
- (33) Magdy Shebl, Saied M. Khalil, Mona A.A. kishk, Doaa M. EL-Mekkawi, **M. Saif**, New less toxic zeolite-encapsulated Cu(II) complex nanomaterial for dual applications in biomedical field and wastewater remediation, *Applied Organometallic Chemistry*, (2019); e5147. <https://doi.org/10.1002/aoc.5147>. [Impact Factor: 3.259].
- (34) Hala R. Mahmoud, **M. Saif**, R. Fouad, Novel Multi-functional $\text{Pr}^{3+}:\text{Bi}_{12}\text{SiO}_{20}$ Luminescent Nano-sensor for Latent Human Prints, Iron Ions in Drinking Water and Anti-counterfeiting Application, *Journal of Alloys and Compounds* (2019), 805 (2019) 887-895. [Impact Factor: 4.175].
- (35) R. Fouad, **M. Saif**, Synthesis, spectroscopic and photoluminescence studies of novel Eu^{3+} nanophosphor complex as fluorescent sensor for highly sensitive detection of latent fingerprints and anti-counterfeiting, *Journal of molecular structure*, 1217 (2020), Article 128472.
- (36) Z. Ghubish, **M. Saif**, H. Hafez, H. Mahmoud, R. Kamal, M. El-Kemary, Novel red photoluminescence sensor based on Europium ion doped calcium hydroxyl stannate $\text{CaSn}(\text{OH})_6:\text{Eu}^{3+}$ for latent fingerprint detection, *Journal of molecular Structure*, 12707 (2020) 127840.
- (37) M.Sh. Gohr, , H.S. Hafez, **M.M. Saif**, H.M.A. Soliman, M.S.A. Abdel-Mottaleb, Facile hydrothermal synthesis of Sm and Eu doped TiO_2 /graphene oxide nanocomposites for photocatalytic applications, *Egyptian Journal of Chemistry*, 63(4) (2020) 1359-1382
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