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Journal Name:	Asian Journal of Chemical Sciences
Manuscript Number:	Ms_AJOCS_41465
Title of the Manuscript:	Synthesis, Spectral Characterization, DNA Binding, Cleavage and Biological Evaluation on Co(II), Ni(II) and Cu(II) Complexes of Substituted Isoxazole Schiff Bases
Type of the Article	Original Research Article

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PART 1: Review Comments

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Compulsory REVISION comments	<p>The authors presented Synthesis, Spectral Characterization, DNA Binding, Cleavage and Biological Evaluation on Co(II), Ni(II) and Cu(II) Complexes of Substituted Isoxazole Schiff Bases . However the study is interested, there some points must be considered before publications</p> <p>1- Abbreviation such as FT-IR, UV-Vis, NMR, Mass, ESR, TGA, , SEM and XRD should be explained when mentioned in the first time as in abstract.</p> <p>2 - Why the authors choose Cu(II) and Ni (II) metal centers in his study?</p> <p>3- in the Vitro should be italic through the manuscript.</p> <p>4- References 1, 2 must be updated by adding the following citations:</p> <ul style="list-style-type: none"> • Abdel-Rahman, L. H.; Abu-Dief, A. M.; El-Khatib, R. M.; Abdel-Fatah, S. M., Sonochemical synthesis, DNA binding, antimicrobial evaluation and in vitro anticancer activity of three new nano-sized Cu(II), Co(II) and Ni(II) chelates based on tri-dentate NOO imine ligands as precursors for metal oxides, J. Photochem. Photobio. B. 2016, 162 298–308. • Abdel-Rahman, L.H., Abu-Dief, A.M., Basha, M., Abdel-Mawgoud, Azza A.H., Three novel Ni(II), VO(II) and Cr(III) mononuclear complexes encompassing potentially tridentate imine ligand: Synthesis, structural characterization, DNA interaction, antimicrobial evaluation and anticancer activity, Appl. Organomet. Chem., 2017, 31, e3555. <p>5-- All the chemicals used in the investigation should be mentioned with their purity.</p> <p>6- Grams of each component should be added in method of synthesis.</p> <p>7- For application of imine complexes, the following citations should be added to reference 5:</p> <ul style="list-style-type: none"> • Abdel-Rahman, L. H.; El-Khatib, R. M.; Nassr, L. A. E.; Abu- Dief, A. M., Ismael, M., Seleem, A. A., , Metal based pharmacologically active agents: Synthesis, structural characterization, molecular modeling, CT-DNA binding studies and in vitro antimicrobial screening of iron(II) bromosalicylidene amino acid chelates, Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy , 2014, 117, 366–378 • Abdel-Rahman, L. H.; Abu-Dief, A. M.; Hashem, Nahla Ali , Seleem, Amin Abdou, Recent Advances in Synthesis, Characterization and Biological Activity of Nano Sized Schiff Base Amino Acid M (II) Complexes Int. J. Nano. Chem., 2015, 1 (2), 79-95. • Abdel-Rahman, L. H.; Abu-Dief, A. M.; El-Khatib, R. M.; Abdel-Fatah, S. M., Some new nano-sized Fe(II), Cd(II) and Zn(II) Schiff base complexes as precursor for metal oxides: Sonochemical synthesis, characterization, DNA interaction, in vitro antimicrobial and anticancer activities Bioorganic Chemistry 69 (2016) 140–152 • Abdel-Rahman, L.H., Abu-Dief, A.M., Aboelez, M.O., Abdel-Mawgoud, Azza A.H., DNA interaction, antimicrobial, anticancer activities and molecular docking study of some new VO (II), Cr (III), Mn (II) and Ni (II) mononuclear chelates encompassing 	



	<p>quaridentate imine ligand. J. Photochem. Photobiol. B, 2017,170, 271–285.</p> <p>8- NMR spectra charts should be supplied as supplementary materials. 9- Why MeOH is chosen as solvent in synthesis process.</p> <p>10- For these sentence "These is confirming the participation of nitrogen atom of azomethine group in coordination to the metal ion" in discussion of IR, the following citations should be added:</p> <ul style="list-style-type: none"> • Abdel-Rahman, L. H.; El-Khatib, R. M.; Nassr, L. A. E.; Abu- Dief, A. M.; Lashin, F. E., Synthesis, physicochemical studies, embryos toxicity and DNA interaction of some new Iron(II) Schiff base amino acid complexes , Journal of Molecular Structure, 2013, 1040, 9–18 • Abu-Dief, A. M. and Nassr, L. A. E., Tailoring, physicochemical characterization, antibacterial and DNA binding mode studies of Cu(II) Schiff bases amino acid bioactive agents incorporating 5-bromo-2-hydroxybenzaldehyde , J. Iran. Chem. Soc. 2015, 12, 943-955. • Abdel-Rahman, L.H., Abu-Dief, A.M., Adam, M.S.S., Hamdan, S.K., Some new nano-sized mononuclear Cu(II) Schiff base complexes: design, characterization, molecular modeling and catalytic potentials in benzyl alcohol oxidation. Catal. Lett. 2016, 146, 1373–1396. <p>11- Resolution of figures 1 and 2 should be increased. 12- for Debye-Scherrer's equation, the following citations must be added:</p> <ul style="list-style-type: none"> ○ Ahmed M. Abu-Dief, Ibrahim. F. Nassar, Wafaa H. Elsayed, Magnetic NiFe₂O₄ nanoparticles: efficient, heterogeneous and reusable catalyst for synthesis of acetylferrocene chalcones and their anti-tumour activity, Applied organometallic Chemistry, 2016,30, 917-923. • E.M.M. Ibrahim, Ahmed M. Abu-Dief, A. Elshafaie, A.M. Ahmed Electrical, thermoelectrical and magnetic properties of approximately 20-nm Ni-Co-O nanoparticles and investigation of their conduction phenomena, Materials Chemistry and Physics, 2017, 192, 41-47 • WS Mohamed and Ahmed M Abu-Dief, Synthesis, characterization and photocatalysis enhancement of Eu₂O₃- ZnO mixed oxides nanoparticles, Journal of Physics and Chemistry of Soilds, 2018, 116, 375-385 <p>13- Does the autors try to calculate the particle size of the prepared complexes and matched with their biological activity?</p> <p>14- for the equation used in calculating binding constant of DNA-aomplex adduct, the following citations should be added:</p> <ul style="list-style-type: none"> • Abdel-Rahman, L. H.; Abu-Dief, A. M.; Newair, E. F.; Hamdan, S. K., Some new nano-sized Cr(III), Fe(II), Co(II), and Ni(II) complexes incorporating 2-((E)-(pyridine-2-ylimino)methyl)naphthalen-1-ol ligand: Structural characterization, electrochemical, antioxidant, antimicrobial, antiviral assessment and DNA interaction, J. Photochem. Photobiol. B. 2016, 160, 18–31. • Abdel Rahman, L. H., Abu-Dief, A. M., Moustafa, H., Hamdan, S. K. , Ni(II) and 	
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	<p>Cu(II) complexes with ONNO asymmetric tetradentate Schiff base ligand: synthesis, spectroscopic characterization, theoretical calculations, DNA interaction and antimicrobial studies, Appl. Organometal. Chem., 2017, 31, e3555 15- what about the reducibility of antimicrobial measurements. The author should add standard deviation for inhibition zone values. 16-What about MIC measurements if it possible?</p>	
Minor REVISION comments	Please revise the language of the manuscript carefully before publication.	
Optional/General comments		

Reviewer Details:

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