

بسم الله الرحمن الرحيم



سيرة ذاتية

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المعلومات الشخصية

تاريخ ومكان الميلاد: 1387/7/29 هـ - الرياض.

الحالة الاجتماعية: متزوج.

محل الإقامة: الرياض

العنوان: جامعة الملك سعود - ص. ب. 2455 الرياض 11541

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إجادة اللغات: اللغة الإنجليزية تحدثاً وكتابة.

المؤهلات:

- دكتوراه في الأحياء الجزيئية، مركز الملكة الطبي جامعة نوتنغهام - المملكة المتحدة 1416 هـ

الخبرات المهنية والأكاديمية

- مستشار معالي مدير جامعة شقراء من 1438/5/8 هـ - الآن
- المشرف على برنامج تواصل للتميز البحثي بجامعة الملك سعود 1437 هـ - 1439 هـ.
- عميد كلية المجتمع - عضو مجلس جامعة الملك سعود 1433 هـ - 1437 هـ.

- مساعد وكيل جامعة الملك سعود للدراسات العليا والبحث العلمي لشؤون البحث العلمي 1431 - 1433 هـ.
- مستشار البحث العلمي – جامعة الملك سعود 1430 - 1431 هـ.
- رئيس فريق إعداد الخطة الاستراتيجية للدراسات العليا والبحث العلمي بجامعة الملك سعود 1432 - 1433 هـ.
- المشرف على برنامج أستاذ زائر - جامعة الملك سعود 1431 - 1433 هـ.
- عضو لجنة الحماية الفكرية بإمارة منطقة الرياض 1435 - 1437 هـ.
- مشرف كرسي أبحاث الحمض النووي (DNA) 1429 هـ وحتى تاريخه.
- أستاذ الوراثة الجزيئية والجينوم - كلية العلوم - جامعة الملك سعود 1426 هـ - الآن.
- أستاذ مشارك – قسم علم الحيوان – كلية العلوم – جامعة الملك سعود 1423 - 1426 هـ.
- أستاذ مساعد – قسم علم الحيوان – كلية العلوم – جامعة الملك سعود 1418 - 1423 هـ.
- أستاذ مساعد – كلية الملك خالد العسكرية 1416 - 1418 هـ.
- معيد - كلية الملك خالد العسكرية سعود 1410 - 1416 هـ.
- عضو اللجنة الدائمة للتميز البحثي لأعضاء هيئة التدريس السعوديين بجامعة الملك سعود 1432 -- 1433 هـ.
- عضو اللجنة العليا للمؤتمر الأول للبحث العلمي بدول الخليج العربي – مملكة البحرين 1431 هـ.
- عضو مجلس كلية العلوم للاعتماد الأكاديمي بجامعة الملك سعود 1427 - 1429 هـ.
- عضو اللجنة العلمية لمراكز التميز في التقنية الحيوية بجامعة الملك سعود 1427 - 1429 هـ.
- تدريس مقررات البكالوريوس والماجستير والدكتوراة لطلاب بجامعة الملك سعود والإشراف على عدد من طلاب الماجستير والدكتوراة.
- حضور مؤتمرات وورش وحلقات تدريب عمل عالمية ومحلية والمشاركة بأوراق علمية.
- تحكيم ترقيات أعضاء هيئة التدريس بالجامعات السعودية.
- تنظيم فعاليات ومؤتمرات عالمية.

- إنشاء شركة في مجال الاقتصاد المعرفي يملكها أحد طلاب الدراسات العليا.
- عضو جمعيات تخصصية محلية وعالمية.
- رئيس تحرير مجلة عالم الحياة (الجمعية السعودية لعلوم الحياة) 1423 - 1426 هـ
- مستشار غير متفرغ - وزارة الشؤون الاجتماعية (1423 هـ).
- أستاذ زائر - المعهد العالي للعلوم الأمنية - العلوم الجنائية 1428 هـ
- باحث متعاون - برنامج الهندسة الوراثية والتقنية الحيوية - مدينة الملك عبد العزيز للعلوم والتقنية (1416 هـ - 1417 هـ)
- المشاركة في كتابة المقالات الصحفية بصحيفة الجزيرة (1416 هـ - 1417 هـ)
- المشاركة في اللقاءات التلفزيونية والاذاعية في القنوات الإعلامية السعودية.

الجوائز

- جائزة مدينة الملك عبد العزيز (الفئة الذهبية) (للتميز البحثي) 4126 هـ
- جائزة باحث متميز بجامعة الملك سعود للعام الأكاديمي 1430/1431 هـ
- جائزة أفضل بحث - الجمعية السعودية لعلوم الحياة - اللقاء الخامس والعشرين للجمعية السعودية لعلوم الحياة تحت عنوان "تقنية النانو في علوم الحياة" 1431 هـ
- جائزة جامعة الملك سعود لأفضل كرسي بحث علمي 1432 هـ

الخبرات العلمية

- تنفيذ 41 مشروع مدعم في مجالات حفظ وتعريف المورثات البشرية والحيوانية والسموم الوراثة والملوثات البيئية والمخلفات الصناعية والمواد النانوية.
 - تسجيل أكثر من 11 مورث في بنك المورثات الأمريكي NCBI.
 - المساهمة في تأليف ستة كتب تخصصية باللغة الانجليزية وهي:
1. Rizwan Wahab, Farheen Khan, Nagendra K. Kaushik, Javed Musarrat and Abdulaziz A.Al-Khedhairi, Construction of Nanostructures: A Basic Concept Synthesis and Their Applications. (2014) In, Advanced Sensor and Detection Materials. Editor: Ashutosh Tiwari, Mustafa M. Demir. <http://eu.wiley.com/WileyCDA/WileyTitle/productCd-1118773489.html>
ISBN: 978-1-118-77348-2

2. Farheen Khan, Rizwan Wahab, Mohd. Rashid, Asif Khan, Asma Khatoon, Javed Musarrat and Abdulaziz A.Al-Khedhairi. The Use of Carbonaceous Nanomembrane Filter for Organic Waste Removal (2014) *In* Application of Nanotechnology in Water Research. Editors: Ajay Kumar Mishra . <http://eu.wiley.com/WileyCDA/WileyTitle/productCd-1118496302.html>. ISBN: 978-1-118-49630-5
3. Rizwan Wahab, Farheen Khan, Javed Musarrat, and Abdulaziz A.Al-Khedhairi. Role of Smart Nanostructured Materials in Cancers (2013) *In*, Responsive Materials and Methods: State-of-the-Art Stimuli-Responsive Materials and Their Applications. Editor: Ashutosh Tiwari. <http://eu.wiley.com/WileyCDA/WileyTitle/productCd-1118686225.html>. ISBN: 978-1-118-68622-5
4. Rizwan Wahab, I. H. Hwang, Hyung-Shik Shin, Young-Soon Kim, Javed Musarrat, Abdulaziz A. Al-Khedhairi and Maqsood A. Siddiqui. Zinc Oxide Nanostructures and their Applications (2012) *In*, Intelligent Nanomaterials: Processes, Properties, and Applications. Editor: Ashutosh Tiwari, Ajay K. Mishra, Hisatoshi Kobayashi, Anthony P.F. Turner. <http://onlinelibrary.wiley.com/book/10.1002/9781118311974> ISBN: 9780470938799
5. Javed Musarrat, Almaz Zaidi, Mohammad S. Khan, Maqsood A. Sidique and Abdulaziz A. Al-Khedhairi. Genotoxicity Assessment of Heavy Metal–Contaminated Soils (2011) *In*, Biomanagement of Metal-Contaminated Soils. Editor: Khan, M.S., Zaidi, A., Goel, R., Musarrat, <http://www.springer.com/la/book/9789400719132> ISBN 978-94-007-1914-9
6. Javed Musarrat, Sourbah Dwivedi, Brag Rag Singh Quaiser Saquib and Abdulaziz A. Al-Khedhairi. (2011) *In*, Microbes and Microbial Technology, Agricultural and Environmental Applications. Editor: Ahmad, Iqbal, Ahmad, Farah, Pichtel, John. <http://www.springer.com/la/book/9781441979308> ISBN 978-1-4419-7931-5

• براءة إختراع ممنوحة من مكتب براءات الاختراع الأمريكي USPTO

Inventors: Abdulaziz A. Alkhedhairi, Javed Musarrat

Patent Title: Methods for producing silver nanoparticles

Patent number: 9216455 (2015)

• نشر أكثر من 160 بحث ودراسة محكمة في مجلات عالمية جميعها ضمن مؤشر ISI (تومبسون رويترز) تشمل مجالات توثيق المورثات البشرية والحيوانية والسموم الوراثية والملوثات البيئية والمخلفات الصناعية والمواد النانوية وطرق قياس التأثير وتأثيرها على الكائنات الحية.

1. Guan, M, Fang, W, Ullah, S, Zhang, X, Saquib, Q, & **Al-Khedhairi, AA** (2017) Functional genomics assessment of narcotic and specific acting chemical pollutants using E. coli. *ENVIRONMENTAL POLLUTION*, doi: 10.1016/j.envpol.2017.09.027. [Epub ahead of print]
2. Alatar, AA, Faisal, M, Abdel-Salam, EM, Canto, T, Saquib, Q, Javed, SB, El-Sheikh, MA & **Al-Khedhairi, AA** (2017) Efficient and reproducible in vitro regeneration of Solanum lycopersicum and assessment genetic uniformity using flow cytometry and SPAR methods. *SAUDI JOURNAL OF BIOLOGICAL SCIENCES*, 24(6):1430-1436.
3. Al-Oqail, MM, Al-Sheddi, ES, Al-Massarani, SM, Siddiqui, MA, Ahmad, J, Musarrat, J, **Al-Khedhairi, AA**, & Farshori, NN (2017) Nigella sativa seed oil suppresses cell proliferation and induces ROS dependent mitochondrial apoptosis through p53 pathway in hepatocellular carcinoma cells. *SOUTH AFRICAN JOURNAL OF BOTANY*, 112: 70-78.
4. Ali, K, Abul Qais, F, Dwivedi, S, Abdel-Salam, EM, Ansari SM, Saquib, Q, Faisal, M, **Al-Khedhairi, AA**, Al-Shaeri, M & Musarrat, J (2017) Titanium dioxide nanoparticles preferentially bind in subdomains IB, IIA of HSA and minor groove of DNA. *JOURNAL OF BIOLOGICAL STRUCTURE AND DYNAMICS*, 1-13.
5. Lee, J, Hong, S, Yoon, SJ, Kwon, BO, Ryu, J, Giesy, JP, Allam, AA, **Al-khedhairi, AA** & Khim, JS (2017). Long-term changes in distributions of dioxin-like and estrogenic compounds in sediments of Lake Sihwa, Korea: Revisited mass balance. *CHEMOSPHERE*, 181: 767-777.
6. Saquib, Q, Attia, SM, Ansari, SM, Al-Salim, A, Faisal, M, Alatar, AA, Musarrat, J, Zhang, X & **Al-Khedhairi, AA** (2017) p53, MAPKAPK-2 and caspases regulate nickel oxide nanoparticles induce cell death and cytogenetic anomalies in rats. *INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES*, 105 (1):228-237.

7. Khan, ST, Malik, A, Wahab, R, Abd-Elkader, OH, Ahamed, M, Ahmad, J, Musarrat J, Siddiqui, MA & **Al-Khedhairi, AA** (2017) Synthesis and characterization of some abundant nanoparticles, their antimicrobial and enzyme inhibition activity. *ACTA MICROBIOLOGICA ET IMMUNOLOGICA HUNGARICA*, 64(2): 203-216.
8. Adhikari, M, Negi, B, Kaushik, N, Adhikari, A, **Al-Khedhairi, AA**, Kaushik, NK & Choi, EH (2017) T-2 mycotoxin: toxicological effects and decontamination strategies. *ONCOTARGET*, 8(20):33933-33952.
9. Siddiqui, MA, Wahab, R, Ahmad, J, Farshori, NN, Saquib, Q, Khan, ST, Al-Salem, AM, Musarrat, J & **Al-Khedhairi, AA** (2017) Zinc Oxide Nanoparticles: Mechanism (s) of Cell Death Induced in Human Epidermoid Larynx Cell Line (HEp-2). *NANOSCIENCE AND NANOTECHNOLOGY LETTERS*, 9(4):573-582.
10. Jha, N, Ryu, JJ, Wahab, R, **Al-Khedhairi, AA**, Choi, EH & Kaushik, NK (2017) Treatment of oral hyperpigmentation and gummy smile using lasers and role of plasma as a novel treatment technique in dentistry: An introductory review. *ONCOTARGET*, 8(12): 20496-20509.
11. Wahab, R, Khan, F, Kaushik, NK, Musarrat, J & **Al-Khedhairi, AA** (2017) Photocatalytic TMO-NMs adsorbent: Temperature-Time dependent Safranin degradation, sorption study validated under optimized effective equilibrium models parameter with standardized statistical analysis. *SCIENTIFIC REPORTS*, 7: Article number 42509.
12. Ahmed, B, Dwivedi, S, Abidin, MZ, Azam, A, Al-Shaeri, M, Khan, MS, Saquib, Q, **Al-Khedhairi, AA** & Musarrat, J (2017) Mitochondrial and Chromosomal Damage Induced by Oxidative Stress in Zn²⁺ Ions, ZnO-Bulk and ZnO-NPs treated *Allium cepa* roots. *SCIENTIFIC REPORTS*, 7: Article number 40485.
13. Ahmad, J, Siddiqui, MA, Akhtar, MJ, Alhadlaq, HA, Alshamsan, A, Khan, ST, Wahab, R, **Al-Khedhairi, AA**, Al-Salim, A, Musarrat, J & Saquib, Q (2017) Copper doping enhanced the oxidative stress-mediated cytotoxicity of TiO₂ nanoparticles in A549 cells. *HUMAN AND EXPERIMENTAL TOXICOLOGY*, DOI: 10. 1177/0960327117714040. [Epub ahead of print]
14. Wahab, R, Khan, F, Lutfullah & **Al-Khedhairi, AA** (2017) Photocatalytic activity and statistical determination of ball-shaped zinc oxide NPs with methylene blue dye. *INORGANIC AND NANO-METAL CHEMISTRY*, 47(4): 536-542.

15. Wahab, R, Khan, F, Aldahmash, BA & **Al-Khedhairi, AA** (2017) Statistical Analytical Determination of Miniature Zinc Oxide Nanoclusters for Photodegradation of Methylene Red Dye. *NANOSCIENCE AND NANOTECHNOLOGY LETTERS*, 9(1): 1-7.
16. Khan, ST, Musarrat, J & **Al-Khedhairi, AA**, (2016) Countering drug resistance, infectious diseases, and sepsis using metal and metal oxides nanoparticles: Current status. *COLLOIDS AND SURFACES B-BIOINTERFACES*, 146:70-83.
17. Ahmad, J, Alhadlaq, HA, Alshamsan, A, Siddiqui, MA, Saquib, Q, Khan, ST, Wahab, R, **Al-Khedhairi, AA**, Musarrat, J, Akhtar, MJ & Ahamed, M, (2016) Differential cytotoxicity of copper ferrite nanoparticles in different human cells. *JOURNAL OF APPLIED TOXICOLOGY*, 36: 1284-1293.
18. Saquib, Q, Faisal, M, Alatar, AA, **Al-Khedhairi, AA**, Ahmed, M, Ansari, SM, Alwathnani, HA, Okla, MK, Dwivedi, S, Musarrat, J, Praveen, S, Khan, ST, Wahab, R, Siddiqui, MA, Ahmad, J (2016) Genotoxicity of ferric oxide nanoparticles in *Raphanus sativus*: Deciphering the role of signaling factors, oxidative stress and cell death. *JOURNAL OF ENVIRONMENTAL SCIENCES*, 47:49-62.
19. Lee, YJ, Moon, SU, Park, MG, Jung, WY, Park, YK, Song, SK, Ryu, JG, Lee, YS, Heo, HJ, Gu, HN, Cho, SJ, Ali, BA, **Al-Khedhairi, AA**, Lee, I & Kim, S (2016) Multiplex bioimaging of piRNA molecular pathway-regulated theragnostic effects in a single breast cancer cell using a piRNA molecular beacon. *BIOMATERIALS*. 101:143-155.
20. Siddiqui, MA, Rasheed, S, Saquib, Q, **Al-Khedhairi, AA**, Al-Said, MS, Musarrat, J & Choudhary, MI (2016) In-Vitro dual inhibition of protein glycation, and oxidation by some Arabian plants. *BMC COMPLEMENTARY AND ALTERNATIVE MEDICINE*, 16 Article No. 279.
21. Al-Sheddi, ES, Farshori, NN, Al-Oqail, MM, Al-Massarani, SM, Al Salem, AM, Musarrat, J, **Al-Khedhairi, AA** & Siddiqui, MA (2016) *Portulaca oleracea* Linn seed extract ameliorates hydrogen peroxide-induced cell death in human liver cells by inhibiting reactive oxygen species generation and oxidative stress. *TROPICAL JOURNAL OF PHARMACEUTICAL*, 15(8): 1643-49.
22. Khan, ST, Ahmad, J, Ahamed, M, Musarrat, J & **Al-Khedhairi, AA**. (2016) Zinc oxide and titanium dioxide nanoparticles induce oxidative stress, inhibit growth, and attenuate biofilm formation activity of *Streptococcus mitis*. *JOURNAL OF BIOLOGICAL INORGANIC CHEMISTRY*, 21(3): 295-303.

23. Al-Oqail, MM, Siddiqui, MA, Al-Sheddi, ES, Saquib, Q, Musarrat, J, **Al-Khedhairi, AA** & Farshori, NN (2016) Verbesina encelioides: cytotoxicity, cell cycle arrest, and oxidative DNA damage in human liver cancer (HepG2) cell line. *BMC COMPLEMENTARY AND ALTERNATIVE MEDICINE*, 16 Article Number 126.
24. Saquib, Q, Siddiqui, MA, Ahmed, J, Al-Salim, A, Ansari, SM, Faisal, M, **Al-Khedhairi, AA**, Musarrat, J, AlWathnani, HA, Alatar, AA & Al-Arifi, SA (2016) Hazards of low dose flame-retardants (BDE-47 and BDE-32): Influence on transcriptome regulation and cell death in human liver cells. *JOURNAL OF HAZARDOUS MATERIALS*, 308:37-49.
25. Saquib, Q, Siddiqui, MA, Ahmed, J, Al-Salim, A, Ansari, SM, Faisal, M, **Al-Khedhairi, AA**, Musarrat, J, AlWathnani, HA, Alatar, AA & Al-Arifi, SA (2016) Hazards of low dose flame-retardants (BDE-47 and BDE-32): Influence on transcriptome regulation and cell death in human liver cells. *JOURNAL OF HAZARDOUS MATERIALS*, 308:37-49.
26. Atif, M, Farooq, WA, Siddiqui, MA & **Al-Khedhairi, AA** (2016) Preliminary study of spectral features of normal and malignant cell cultures. *LASER PHYSICS*, 26(4) Article number 045601.
27. Faisal, M, Saquib, Q, Alatar, AA, **Al-Khedhairi, AA**, Ahmed, M, Ansari, SM, Alwathnani, HA, Dwivedi, S, Musarrat, J & Praveen, S (2016) Cobalt oxide nanoparticles aggravate DNA damage and cell death in eggplant via mitochondrial swelling and NO signaling pathway. *BIOLOGICAL RESEARCH*, 49 Article number 20.
28. Attia, SM, Ahmad, SF, Saquib, Q, Harisa, GI, Al-Khedhairi, AA & Bakheet, SA (2016) Dexrazoxane mitigates epirubicin-induced genotoxicity in mice bone marrow cells. *MUTAGENESIS* 31(2):137-145.
29. Al-Sheddi, ES, Farshori, NN, Al-Oqail, MM, Musarrat, J, **Al-Khedhairi, AA** & Siddiqui, MA (2016) Protective effect of *Lepidium sativum* seed extract against hydrogen peroxide-induced cytotoxicity and oxidative stress in human liver cells (HepG2). *PHARMACEUTICAL BIOLOGY*, 54(2): 314-321.
30. Wahab, R, Kaushik, N, Khan, F, Kaushik, NK, Choi, EH, Musarrat, J, **Al-Khedhairi, AA** (2016) Self-Styled ZnO Nanostructures Promotes the Cancer Cell Damage and Suppresses the Epithelial Phenotype of Glioblastoma. *SCIENTIFIC REPORTS*, 6 Article No.19950.

31. Wahab, R, Khan, F, Yang, YB, Hwang, IH, Shin, HS, Ahmad, J, Dwivedi, S, Khan, ST, Siddiqui, MA, Saquib, Q, Musarrat, J, **Al-Khedhairi, AA**, Mishra, YK & Ali, BA (2016) Zinc oxide quantum dots: multifunctional candidates for arresting C2C12 cancer cells and their role towards caspase 3 and 7 genes. *RSC ADVANCES*, 6(31): 26111-26120.
32. Atif, M, Fakhar-e-Alam, M, Abbas, N, Siddiqui, MA, Ansari, AA, **Al-Khedhairi, AA** & Wang, ZMM (2016) In Vitro Cytotoxicity of Mesoporous SiO₂@Eu(OH) (3) Core-Shell Nanospheres in MCF-7. *JOURNAL OF NANOMATERIALS*, Article Number: 7691861.
33. Wahab, R, Khan, F, Mishra, YK, Musarrat, J, **Al-Khedhairi, AA** (2016) Antibacterial studies and statistical design set data of quasi zinc oxide nanostructures, *RSC ADVANCES* 6(38):32328-32339.
34. Kang, WJ, Lee, J, Lee, YS, Cho, S, Ali, BA, **Al-Khedhairi, AA**, Heo, H & Kim, S (2015). Multimodal imaging probe for targeting cancer cells using uMUC-1 aptamer. *COLLOIDS AND SURFACES B-BIOINTERFACES*, 136:134-140.
35. Ko, H. Y., Lee, J., Lee, Y. S., Choi, Y., Ali, B. A., **Al-Khedhairi, A. A.**, & Kim, S. (2015). Bioimaging of transcriptional activity of microRNA124a during neurogenesis. *Biotechnology letters*, 37(11), 2333-2340.
36. Lee, J., Kim, S. U., Lee, D. S., Lee, Y. S., Heo, H., Ali, B. A., **Al-Khedhairi A.A.** & Kim, S. (2015). Bioimaging of microRNA124a-independent neuronal differentiation of human G2 neural stem cells. *FEBS open bio*, 5, 647-655.
37. Kang, W. J., Lee, J., Lee, Y. S., Cho, S., Ali, B. A., **Al-Khedhairi, A. A.**, & Kim, S. (2015). Multimodal imaging probe for targeting cancer cells using uMUC-1 aptamer. *Colloids and Surfaces B: Biointerfaces*, 136, 134-140.
38. Attia, S. M., Ahmad, S. F., Saquib, Q., Harisa, G. I., **Al-Khedhairi, A. A.**, & Bakheet, S. A. (2015). Dexrazoxane mitigates epirubicin-induced genotoxicity in mice bone marrow cells. *Mutagenesis*, gev065.
39. Khan ST, Wahab R, Ahmad J, **Al-Khedhairi AA**, Siddiqui MA, Saquib Q, Ali BA, Musarrat J (2015). CoO Thin Nanosheets Exhibit Higher Antimicrobial Activity Against Tested Gram-positive Bacteria Than Gram-negative Bacteria. *Korean Journal of Chemical Engineering Research*. 53 (5): 565569.

40. Maqsood Ahamed, Hisham A. Alhadlaq, Javed Ahmad, Maqsood A. Siddiqui, Shams T. Khan, Javed Musarrat, **Abdulaziz A. Al-Khedhairi** (2015). Comparative cytotoxicity of dolomite nanoparticles in human larynx HEp2 and liver HepG2 cells. *Journal of Applied Toxicology*. 35: 640– 650.
41. Ebtesam S Al-Sheddi, Mai M Al-Oqail, Quaiser Saquib, **Abdulaziz A AlKhedhairi**, Maqsood A Siddiqui, Javed Musarrat, Nida N Farshori (2015). Novel All Trans-Retinoic Acid Derivatives: Cytotoxicity, Inhibition of Cell Cycle Progression and Induction of Apoptosis in Human Cancer Cell Lines. *Molecules*. 20: 8181-8197.
42. Ebtesam S Al-Sheddi, Nida N Farshori, Mai M Al-Oqail, Javed Musarrat, **Abdulaziz A Al-Khedhairi**, Maqsood A Siddiqui (2015). Portulaca oleracea Seed Oil Exerts Cytotoxic Effects on Human Liver Cancer (HepG2) and Human Lung Cancer (A-549) Cell Lines. *Asian Pacific Journal of Cancer Prevention*. 16 (8): 3383-3387.
43. Sourabh Dwivedi, Quaiser Saquib, **Abdulaziz A. Al-Khedhairi**, Javed Ahmad, Maqsood A. Siddiqui, Javed Musarrat (2015). Rhamnolipids functionalized AgNPs-Induced Oxidative Stress and Modulation of Toxicity Pathway Genes in cultured MCF-7 Cells. *Colloids and Surfaces B: Biointerfaces*. 132: 290-298.
44. Ali K, Ahmed B, Dwivedi S, Saquib Q, **Al-Khedhairi AA**, Musarrat J (2015). Microwave Accelerated Green Synthesis of Stable Silver Nanoparticles with Eucalyptus globulus Leaf Extract and Their Antibacterial and Antibiofilm Activity on Clinical Isolates. *PLoS One*. 10 (7): e0131178.
45. Lee J, Choi KJ, Choi Y, Ali BA, **Al-Khedhairi AA**, Kim S (2015). Sperm DNA mediated reduction of nonspecific fluorescence during cellular imaging with quantum dots. *Chem Commun (Camb)*. 51 (58): 11584-6.
46. Lee J, Moon SU, Lee YS, Ali BA, **Al-Khedhairi AA**, Ali D, Ahmed J, Al Salem AM, Kim S (2015). Quantum dot-based molecular beacon to monitor intracellular microRNAs. *Sensors (Basel)*. 15 (6): 12872-83.
47. Jonghwan Lee, Hyo Jin Kang, Hyeok Jang, Youn Jung Lee, Yong Seung Lee, Bahy A. Ali, **Abdulaziz A. Al-Khedhairi** and Soonhag Kim (2015). Simultaneous Imaging of Two Different Cancer Biomarkers Using Aptamer-Conjugated Quantum Dots. *Sensors* 2015, 15, 8595-8604.

48. Javed Ahmad, Hisham A Alhadlaq, Maqsood A Siddiqui, Quaiser Saquib, **Abdulaziz A. Al-Khedhairi**, Javed Musarrat, Maqusood Ahamed (2015). Concentration-dependent induction of reactive oxygen species, cell cycle arrest and apoptosis in human liver cells after nickel nanoparticles exposure. *Environmental Toxicology*. 30 (2): 137-48.
49. Jonghwan Lee, Hyo Jin Kang, Bahy A. Ali, **Abdulaziz A. Al-Khedhairi**, Soonhag Kim (2015). Detection of intracellular microRNA using a selfassembling magnetic resonance beacon. *RNA & DISEASE*. 2 (2): e705.
50. Hyo Jin Kang, Jonghwan Lee, Bahy A. Ali, **Abdulaziz A. Al-Khedhairi**, Soonhag Kim (2015). Bioimaging of miRNA biogenesis using a colortunable molecular beacon. *RNA & DISEASE* 2015; 2: e697.
51. Rizwan Wahab, Farheen Khan, Lutfulla, R.B.Singh, Nagendra Kumar Kaushik, Javed Ahmad, Maqsood A. Siddiqui, Quaiser Saquib, Bahy A. Ali, Shams T. Khan, Javed Musarrat, **Abdulaziz A. Al-Khedhairi** (2015). Utilization of photocatalytic ZnO nanoparticles for deactivation of safranin dye and their applications for statistical analysis. *Physica E*. 69: 101–108.
52. Hae Young Ko, Jonghwan Lee, Yong Seung Lee, Ha-Na Gu, Bahy A. Ali, **Abdulaziz A. Al-Khedhairi**, Hyejung Heo, Sujeong Choa and Soonhag Kim (2015). Bioimaging of the microRNA-294 expression dependent color change in cells by a dual fluorophore-based molecular beacon. *Chem. Commun*. 51: 2159—2161.
53. Maqsood A Siddiqui, Quaiser Saquib, Maqusood Ahamed, Nida N Farshori, Javed Ahmad, Rizwan Wahab, Shams T. Khan, Javed Musarrat, **Abdulaziz A. Al-Khedhairi**, Aditya B. Pant (2015). Molybdenum nanoparticles induced cytotoxicity, oxidative stress, G2/M arrest, and DNA damage in mouse skin fibroblast cells (L929). *Colloids and Surfaces B: Biointerfaces*. 125: 73–81.
54. Javed Ahmad, Rizwan Wahab, Maqsood A. Siddiqui, Javed Musarrat, **Abdulaziz A. Al-Khedhairi** (2015). Zinc oxide quantum dots: a potential candidate to detain liver cancer cells. *Bioprocess and Biosystems Engineering*. 38: 155–163.
55. Khan M, Khan ST, Khan M, Adil SF, Musarrat J, **Al-Khedhairi AA**, AlWarthan A, Siddiqui MR, Alkathlan HZ (2014). Antibacterial properties of silver nanoparticles synthesized using *Pulicaria glutinosa* plant extract as a green bioreductant. *International Journal of Nanomedicine*. 9: 355165.

56. Khan ST, Ahamed M, Musarrat J, **Al-Khedhairi AA** (2014). Anti-biofilm and antibacterial activities of zinc oxide nanoparticles against the oral opportunistic pathogens *Rothia dentocariosa* and *Rothia mucilaginosa*. *European Journal of Oral Sciences*. 122(6):397-403.
- Dwivedi S, Wahab R, Khan F, Mishra YK, Musarrat J, **Al-Khedhairi AA** (2014). Reactive oxygen species mediated bacterial biofilm inhibition via zinc oxide nanoparticles and their statistical determination. *PLoS One*. 9 (11): e111289
57. Shams Tabrez Khan, Javed Musarrat, **Abdulaziz A. Alkhedhairi**, Shinya Kazuo (2014). Diversity of bacteria and polyketide synthase associated with marine sponge *Haliclona* sp. *Annals of Microbiology*. 64: 199–207.
58. Sourabh Dwivedi, Maqsood A Siddiqui, Nida N Farshori, Maqsood Ahamed, Javed Musarrat, **Abdulaziz A. Al-Khedhairi** (2014). Synthesis, characterization and toxicological evaluation of iron oxide nanoparticles in human lung alveolar epithelial cells. *Colloids and Surfaces B: Biointerfaces*. 122: 209–215.
59. Wahab R, Dwivedi S, Khan F, Mishra YK, Hwang IH, Shin HS, Musarrat J, **AlKhedhairi AA** (2014). Statistical analysis of gold nanoparticle-induced oxidative stress and apoptosis in myoblast (C2C12) cells. *Colloids and Surfaces B Biointerfaces*. 123: 664-7.
60. Nida Nayyar Farshori, Ebtesam Saad Al-Sheddi, Mai Mohammad Al-Oqail, Javed Musarrat, **Abdulaziz Ali Al-Khedhairi**, Maqsood Ahmed Siddiqui (2014). Cytotoxicity Assessments of ***Portulaca Oleracea* and *Petroselinum Sativum*** Seed Extra Extracts on Human Hepatocellular Carcinoma Cells (**HepG2**). *Asian Pacific Journal of Cancer Prevention*. 15 (16): 6633-6638.
61. Rizwan Wahab, Maqsood A. Siddiqui, Quaiser Saquib, Sourabh Dwivedi, Javed Ahmad, Javed Musarrat, **Abdulaziz A. Al-Khedhairi**, and HyungShik Shin (2014). ZnO nanoparticles induced oxidative stress and apoptosis in HepG2 and MCF-7 cancer cells and their antibacterial activity. *Colloids and Surfaces B: Biointerfaces*. 117: 267-276.
62. Ebtesam S Al-Sheddi, Nida N Farshori, Mai M Al-Oqail, Javed Musarrat, **Abdulaziz A Al-Khedhairi**, Maqsood A Siddiqui (2014). Cytotoxicity of *Nigella Sativa* Seed Oil and Extract Against Human Lung Cancer Cell Line. *Asian Pacific Journal of Cancer Prevention*. 15 (2): 983-987.
63. Rizwan Wahab, Sourabh Dwivedi, Mohd Shahnawaz Khan, Abdulrahman

- M. Al-Senaïdy, Hyung-Shik Shin, Javed Musarrat, **Abdulaziz A. AlKhedhairi** (2014). Optical Analysis of Zinc Oxide Quantum Dots with Bovine Serum Albumin and Bovine Hemoglobin. *Journal of Pharmaceutical Innovation*. 9:48–52
64. Khan MS, Dwivedi S, Priyadarshini M, Tabrez S, Siddiqui MA, Jagirdar H, Al-Senaïdy AM, **Al-Khedhairi AA**, Musarrat J (2013). Ribosylation of bovine serum albumin induces ROS accumulation and cell death in cancer line (MCF-7). *European Biophysics Journal*. 42 (11-12): 811-818.
 65. Nida N Farshori, Ebtesam S Al-Sheddi, Mai M Al-Oqail, Javed Musarrat, **Abdulaziz A Al-Khedhairi**, Maqsood A Siddiqui (2013). Anticancer Activity of Petroselinum sativum Seed Extracts on the Human Breast Cancer Cells (MCF-7). *Asian Pacific Journal of Cancer Prevention*. 14 (10): 5719-5723.
 66. Alarifi S, Ali D, Al-Doaïss AA, Ali BA, Ahmed M, Al-Khedhairi AA (2013) Histologic and apoptotic changes induced by titanium dioxide nanoparticles in the livers of rats. *INTERNATIONAL JOURNAL OF NANOMEDICINE*, 8: 3937-3943.
 67. Siddiqui MA, Ahmad J, Farshori NN, Saquib Q, Jahan S, Kashyap MP, Ahamed M, Musarrat J, **Al-Khedhairi AA** (2013) Rotenone-induced oxidative stress and apoptosis in human liver HepG2 cells. *MOLECULAR AND CELLULAR BIOCHEMISTRY*, 384 (1-2): 59-69.
 68. Khan ST, Ahamed M, Alhadlaq HA, Musarrat J, **Al-Khedhairi AA** (2013) Comparative effectiveness of NiCl₂, Ni- and NiO-NPs in controlling oral bacterial growth and biofilm formation on oral surface. *ARCHIVES OF ORAL BIOLOGY*, 58: 1804-1811.
 69. Saquib Q, **Al-Khedhairi AA**, Ahmad J, Siddiqui MA, Dwivedi S, Khan ST, Musarrat J (2013) Zinc ferrite nanoparticles activate IL-1b, NFKB1, CCL21 and NOS2 signaling to induce mitochondrial dependent intrinsic apoptotic pathway in WISH cells. *TOXICOLOGY AND APPLIED PHARMACOLOGY*, 273(2): 289–297
 70. Siddiqui MA, Alhadlaq HA, Ahmad J, **Al-Khedhairi AA**, Musarrat J, Ahamed M (2013) Copper oxide Nanoparticles induced Mitochondria Mediated Apoptosis in Human Hepatocarcinoma cells. *PLoS ONE*, 8 (8): e69534.

71. Wahab R, Kaushik NK, Kaushik N, Choi EH, Umar A, Dwivedi S, Musarrat J, **Al-Khedhairi AA** (2013) ZnO nanoparticles induces cell death in malignant human T98G gliomas, KB and non-malignant HEK cells. *JOURNAL OF BIOMEDICAL NANOTECHNOLOGY*, 9(7):1181-1189.
72. Wahab R, Dwivedi S, Umar A, Singh S, Hwang IH, Shin HS, Musarrat J, **AlKhedhairi AA**, Kim YS (2013) ZnO nanoparticles induce oxidative stress in Cloudman S91 melanoma cancer cells. *JOURNAL OF BIOMEDICAL NANOTECHNOLOGY*, 9(3): 441-449.
73. Dwivedi S, **AlKhedhairi AA**, Ahamed M, Musarrat J (2013) Biomimetic Synthesis of Selenium Nanospheres by Bacterial Strain JS-11 and Its Role as a Biosensor for Nanotoxicity Assessment: A Novel Se-Bioassay. *PLoS ONE*, 8(3): e57404.
74. Khan ST, Musarrat J, **Alkhedhairi AA**, Kazuo S (2013). Diversity of bacteria and polyketide synthase associated with marine sponge Haliclona sp. *ANNALS OF MICROBIOLOGY*, DOI 10.1007/s13213-013-0652-7.
75. Tripathy SK, Mishra A, Jha SK, Wahab R, **Al-Khedhairi AA** (2013) Synthesis of thermally stable monodispersed Au@SnO₂ core–shell structure nanoparticles by a sonochemical technique for detection and degradation of acetaldehyde. *ANALYTICAL METHODS*, 5: 1456–1462.
76. Al-Oqail MM, Farshori NN, Al-Sheddi ES, Musarrat J, **Al-Khedhairi AA**, Siddiqui MA. In Vitro cytotoxic activity of seed oil of fenugreek against various cancer cell lines. *ASIAN PACIFIC JOURNAL OF CANCER PREVENTION*, 14 (3):1829-1832.
77. Wahab R, Tripathy SK, Shin H-S, Mohapatra M, Musarrat J, **Al-Khedhairi AA**, Kaushik NK (2013) Photocatalytic oxidation of acetaldehyde with ZnO-quantum dots. *CHEMICAL ENGINEERING JOURNAL*, 226 (2013) 154– 160.
78. Wahab R, Khan ST, Dwivedi S, Ahamed M, Musarrat J, **Al-Khedhairi AA** (2013) Effective inhibition of bacterial respiration and growth by CuO microspheres composed of thin nanosheets. *COLLOIDALS AND SURFACE B: BIOINTERFACES*, 111: 211–217.
79. Ahmad J, Hasnain SE, Siddiqui MA, Ahamed M, Musarrat J, **Al-Khedhairi AA** (2013) MicroRNA in carcinogenesis & cancer diagnostics: A new paradigm. *INDIAN JOURNAL OF MEDICAL RESEARCH*, 137: 680-694.

80. Alarifi S, Ali D, Al Omar SY, Ahemade M, Siddiqui MA, **Al-Khedhairi AA** (2013) Oxidative stress contributes to cobalt oxide nanoparticles-induced cytotoxicity and DNA damage in human hepatocarcinoma cells. *INTERNATIONAL JOURNAL OF NANOMEDICINE*, 8: 189-199.
81. Faisal M, Saquib Q, Alatar AA, **Al-Khedhairi AA**, Hegazy AK, Musarrat J (2013) Phytotoxic hazards of NiO-nanoparticles in tomato: a study on mechanism of cell death. *JOURNAL OF HAZARDOUS MATERIALS*, 250251:318-32.
82. Tripathy SK, Mishra A, Jha SK, Wahab R, **Al-Khedhairi AA** (2013) Microwave assisted hydrothermal synthesis of mesoporous SnO₂ nanoparticles for ethanol sensing and degradation. *JOURNAL OF MATERIAL SCIENCE: MATER ELECTRON*, 24:2082–2090.
83. Khan ST, Ahamed M, **Al-Khedhairi AA**, Musarrat J (2013) Biocidal effect of copper and zinc oxide nanoparticles on human oral microbiome and biofilm formation. *MATERIALS LETTERS*, 97: 67-70.
84. Farshori NN, Al-Sheddi SE, Al-Oqail MM, Hassan WHB, **Al-Khedhairi AA**, Musarrat J, Siddiqui MA (2015) Hepatoprotective potential of Lavandula coronopifolia extracts against ethanol induced oxidative stress-mediated cytotoxicity in HepG2 cells. *TOXICOLOGY AND INDUSTRIAL HEALTH*, 31 (8): 727-737.
85. Al-Sheddi SE, Farshori NN, Al-Oqail MM, Hassan WHB, **Al-Khedhairi AA**, Musarrat J, Siddiqui MA (2013) Evaluation of cytotoxicity and oxidative stress induced by alcoholic extract and oil of Lepidium Sativum seeds in human liver cell line HepG2. *AFRICAN JOURNAL OF BIOTECHNOLOGY*, 12 (24): 3854-3863.
86. Ahmad J, Alhadlaq HA, Siddiqui MA, Saquib Q, **Al-Khedhairi AA**, Musarrat J, Ahamed M (2013) Concentration-dependent induction of reactive oxygen species, cell cycle arrest and apoptosis in human liver cells after nickel nanoparticles exposure. *ENVIRONMENTAL TOXICOLOGY*, doi: 10.1002/tox.21879.
87. Dwivedi S, Saquib Q, **Al-Khedhairi AA**, Ali AY, Musarrat J (2012) Characterization of coal fly ash nanoparticles and induced oxidative DNA damage in human peripheral blood mononuclear cells. *SCIENCE OF THE TOTAL ENVIRONMENT*, 437: 331-338.
88. **Al-Khedhairi AA** (2012) Saudi university policy: King Saud response. *SCIENCE*, 2; 335(6072):1040.

89. Dwivedi S, Saquib Q, **Al-Khedhairi AA** and Musarrat, J (2012). Butachlor induced dissipation of mitochondrial membrane potential, oxidative DNA damage and necrosis in human peripheral blood mononuclear cells. *TOXICOLOGY*, 302(1): 77-87
90. Ahmad J, Dwivedi S, Alarifi S, **Al-Khedhairi AA** and Musarrat, J (2012) Use of beta-galactosidase (lacZ) gene alpha-complementation as a novel approach for assessment of titanium oxide nanoparticles induced mutagenesis. *MUTATION RESEARCH-GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS*, 747(2): 246-252
91. Kang WJ, Cho YL, Chae, JR, Lee JD, Ali BA, **Al-Khedhairi AA**, Lee CH and Kim S (2012) Dual optical biosensors for imaging microRNA-1 during myogenesis. *BIOMATERIALS*, 33(27): 6430-6437
92. Jo MH, Ali BA, **Al-Khedhairi AA**, Lee CH, Kim B, Haam S, Huh YM, Ko HY and Kim, S (2012) A reverse complementary multimodal imaging system to visualize microRNA9-involved neurogenesis using peptide targeting transferrin receptor-conjugated magnetic fluorescence nanoparticles. *BIOMATERIALS*, 33(27): 6456-6467
93. Srivastava AK, Srivastava PK, **Al-Khedhairi AA**, Musarrat J and Shukla, Y (2012) Allethrin-induced genotoxicity and oxidative stress in Swiss albino mice. *MUTATION RESEARCH-GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS*, 747 (1): 22-28
94. Srivastava AK, Ali W, Singh R, Bhui K, Tyagi S, **Al-Khedhairi AA**, Srivastava PK, Musarrat, J, Shukla Y (2012) Mancozeb-induced genotoxicity and apoptosis in cultured human lymphocytes. *LIFE SCIENCES* 90 (21-22): 815-824
95. Jo MH, Lee CH, Ali BA, Alarifi SA, **Al-Khedhairi AA** and Kim S, (2012) A bioinformatics approach for in vivo imaging of endogenous MicroRNA targets during neurogenesis. *TISSUE ENGINEERING AND REGENERATIVE MEDICINE*, 9(3) : 157-169.
96. Choudhary MI, Zafar S, Khan NT, Ahmad S, Noreen S, Marasini BP, **Al-Khedhairi AA**, and Attar-Rahman (2012) Biotransformation of dehydroepiandrosterone with Macrophomina phaseolina and betaglucuronidase inhibitory activity of transformed products. *JOURNAL OF ENZYME INHIBITION AND MEDICINAL CHEMISTRY*, 27(3): 348-355.
97. Saquib Q, Musarrat J, Siddiqui MA, Dutta S, Dasgupta S, Giesy JP and **Al-Khedhairi AA** (2012) Cytotoxic and necrotic responses in human amniotic epithelial (WISH) cells exposed to organophosphate insecticide phorate. *MUTATION RESEARCH-GENETIC TOXICOLOGY AND*

ENVIRONMENTAL MUTAGENESIS, 744 (2): 125-134.

98. Siddiqui MA, Kumar V, Kashyap MP, Agarwal M, Singh AK, Khanna VK, **AlKhedhairi AA**, Musarrat J, Pant AB, and Jahan S (2012) Short-term exposure of 4-hydroxynonenal induces mitochondria-mediated apoptosis in PC12 cells. *HUMAN & EXPERIMENTAL TOXICOLOGY*, 31(4): 336-345.
99. Wahab R, Mishra A, Yun SI, Hwang IH, Musarrat J, **Al-Khedhairi AA**, Kim YS, and Shin, HS (2012) Fabrication, growth mechanism and antibacterial activity of ZnO micro-spheres prepared via solution process. *BIOMASS & BIOENERGY*, 39 Special Issue: SI: 227-236.
100. Siddiqui MA, Ahamed M, Ahmad J, Khan MAM, Musarrat J, **Al-Khedhairi AA** and Alrokayan SA (2012) Nickel oxide nanoparticles induce cytotoxicity, oxidative stress and apoptosis in cultured human cells that is abrogated by the dietary antioxidant curcuma. *FOOD AND CHEMICAL TOXICOLOGY*, 50 (3-4) 641-647.
101. Ahmad J, (Ahmad, Javed); Ahamed M, Akhtar MJ, Alrokayan SA, Siddiqui MA, Musarrat J and **Al-Khedhairi AA**, (2012) Apoptosis induction by silica nanoparticles mediated through reactive oxygen species in human liver cell line HepG2. *TOXICOLOGY AND APPLIED PHARMACOLOGY*, 259 (2): 160-168
102. Su G, Zhang X, Liu H, Giesy JP, Lam MHW, Lam PKS, Siddiqui MA, Musarrat J, **Al-Khedhairi A**, Yu H (2012) Toxicogenomic Mechanisms of 6-HO-BDE- 47, 6-MeO-BDE-47, and BDE-47 in E. coli. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*, 46(2):1185-1191.
103. Saquib Q, **Al-Khedhairi AA**, Siddiqui MA, Abou-Tarboush FM, Azam A, Musarrat J (2012) Titanium dioxide nanoparticles induced cytotoxicity, oxidative stress and DNA damage in human amnion epithelial (WISH) cells. *Toxicology in vitro : an international journal published in association with BIBRA*, 26(2): 351-361.
104. Saquib QA, Sabry M, Siddiqui MA, Aboul-Soud MAM, **Al-Khedhairi AA**, Giesy JP, Musarrat J (2012) Phorate-induced oxidative stress, DNA damage and transcriptional activation of p53 and caspase genes in male Wistar rats. *Toxicology and applied pharmacology*, 259(1): 54-65.
105. Ahmed AM, Shaalan EA, Aboul-Soud MAM, Tripet F, **Al-Khedhairi AA** (2011) Mosquito vectors survey in the AL-Ahsaa district of eastern Saudi Arabia. *JOURNAL OF INSECT SCIENCE*, 11 Article Number: 176.

106. Gupta RK, Yakuphanoglu F, Hasar H, **Al-Khedhairi AA** (2011) p-Si/DNA photoconductive diode for optical sensor applications. *SYNTHETIC METALS*, 161(17-18): 2011-2016.
107. Siddiqui M A, Saquib Q, Ahamed M, Ahmad J, **Al-Khedhairi A A**, AbouTarboush F M, Musarrat, J (2011) Effect of Trans-resveratrol on Rotenoneinduced Cytotoxicity in Human Breast Adenocarcinoma Cells. *Toxicology international*, 18(2): 105-110
108. Bakheet SA, Attia SM, Al-Rasheed NM, Al-Harbi MM, Ashour AE, Korashy HM, Abd-Allah AR, Saquib Q, **Al-Khedhairi AA**, Musarrat J. (2011) Salubrious effects of dexrazoxane against teniposide induced DNA damage and programmed cell death in murine marrow cells, *MUTAGENESIS*, 26(4): 433-543.
109. BinSaeed, AA, **Al-Khedhairi AA**, Mandil, AMA, Shaikh, SA, Qureshi, R, AlKhattaf, AS, Habib, HA, Alam, AA, Al-Ansary, LA, Al-Omran, M. (2011) A validation study comparing the sensitivity and specificity of the new Dr. KSU H1N1 RT-PCR kit with real-time RT-PCR for diagnosing influenza A (H1N1). *ANNALS OF SAUDI MEDICINE*, 31 (4): 351-355.
110. Yahia, IS, **Al-Khedhairi, Abdulaziz A**, Musarrat, Javed, Yakuphanoglu, F. (2011) Optical spectroscopy studies of the interaction between thiophanate methyl and human serum albumin for biosensor applications. *SPECTROCHIMICA ACTA PART A-MOLECULAR AND BIOMOLECULAR SPECTROSCOPY*, 79 (5): 1285-1290.
111. Siddiqui, MA, Kashyap, MP, **Al-Khedhairi AA**, Musarrat, J, Khanna, VK, Yadav, S, Pant, A.B. (2011) Protective potential of 17 beta-estradiol against co-exposure of 4-hydroxynonenal and 6-hydroxydopamine in PC12 cells. *HUMAN & EXPERIMENTAL TOXICOLOGY*, 30 (8): 860-869.
112. Saquib, Q, **Al-Khedhairi AA**, Siddiqui, MA, Roy, AS, Dasgupta, S, Musarrat, J (2011) Preferential binding of insecticide phorate with sub-domain IIA of human serum albumin induces protein damage and its toxicological significance. *FOOD AND CHEMICAL TOXICOLOGY*, 49 (8): 1787-1795.
113. Singh, B.R., Dwivedi, S., **Al-Khedhairi, AA**, Musarrat, J (2011) Synthesis of stable cadmium sulfide nanoparticles using surfactin produced by *Bacillus amyloliquifaciens* strain KSU-109. *COLLOIDS AND SURFACES BBIOINTERFACES*, 85(2): 207-213.
114. Aboul-Soud, MAM, Al-Othman, AM, El-Desoky, GE, Al-Othman, ZA, Yusuf, K, Ahmad, J, **Al-Khedhairi, AA** (2011) Hepatoprotective effects of vitamin E/selenium against malathion-

induced injuries on the antioxidant status and apoptosis-related gene expression in rats. *JOURNAL OF TOXICOLOGICAL SCIENCES*, 36(3): 285-296.

115. Zhang, X W, Chang, H, Wiseman, S, He, YH, Higley, E, Jones, P, Wong, C K C, **Al-Khedhairi, A**, Giesy, JP, Hecker, M. (2011) Bisphenol A Disrupts Steroidogenesis in Human H295R Cells. *TOXICOLOGICAL SCIENCES*, 121(2): 320-327.
116. Ahamed, M., Akhtar, MJ, Siddiqui, MA, Ahmad, J, Musarrat, J, **Al-Khedhairi, AA**, AlSalhi, MS, Alrokayan, SA. (2011) Oxidative stress mediated apoptosis induced by nickel ferrite nanoparticles in cultured A549 cells. *TOXICOLOGY*, 283(2-3):101-108.
117. Ahmad, J, Singh, BR, **Al-Khedhairi, AA**, Alarifi, S, Khan, JA, Musarrat, J (2011) Characterization of Sunn hemp begomovirus and its geographical origin based on in silico structural and functional analysis of recombinant coat protein. *AFRICAN JOURNAL OF BIOTECHNOLOGY* (10(14): 26002610.
118. Dwivedi, S, Singh, BR, **Al-Khedhairi, AA**, Musarrat, J (2011) Biodegradation of isoproturon using a novel *Pseudomonas aeruginosa* strain JS-11 as a multi-functional bioinoculant of environmental significance. *JOURNAL OF HAZARDOUS MATERIALS*, 185 (2-3): 938-944.
119. Liu, CS, Zhang, X, Deng, J, Hecker M, **Al-Khedhairi, A**, Giesy, JP, Zhou, BS (2011) Effects of Prochloraz or Propylthiouracil on the Cross-Talk between the HPG, HPA, and HPT Axes in Zebrafish. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*, 45(2): 769-775.
120. Abd-Elsalam, KA, Bahkali, AH, Moslem, MA, Al-Hazzani, AA, Amin, OE, **AlKhedhairi, A** (2011) Freeze- and Thaw-Based Procedures for Extracting DNA from Activated Sludge. *POLISH JOURNAL OF ENVIRONMENTAL STUDIES*, 20 (3): 643-648.
121. Li, LF, Thorsten, S, Kyoona, SM, Al-Rasheid, KAS, **Adulaziz, AAK**, Song, WB (2010) Protocruzia, a highly ambiguous ciliate (Protozoa, Ciliophora): Very likely an ancestral form for Heterotrichea, Colpodea or Spirotrichea? With reevaluation of its evolutionary position based on multigene analyses. *SCIENCE CHINA-LIFE SCIENCES*, 53(1): 131-138.
122. Liu CS, Zhang XW, Deng J, Hecker M, Al-Khedhairi A, Giesy JP & Zhou BS (2011) Effects of Prochloraz or Propylthiouracil on the Cross-Talk between the HPG, HPA, and HPT Axes in Zebrafish. *ENVIRONMENTAL SCIENCE & TECHNOLOGY*, 45(2): 769-775.

123. Al-Roba AA, Aboul-Soud MAM, Ahmed AM & Al-Khedhairi AA (2011) The gene expression of caspases is up-regulated during the signaling response of *Aedes caspius* against larvicidal bacteria. *AFRICAN JOURNAL OF BIOTECHNOLOGY*, 10(2): 225-233.
124. Saquib Q, **Al-Khedhairi AA**, Alarifi SA, Dutta S, Dasgupta S & Musarrat J (2010) Methyl thiophanate as a DNA minor groove binder produces MTCu(II)-DNA ternary complex preferably with AT rich region for initiation of DNA damage. *INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES*, 47 68-75
125. Siddiqui MA, Kashyap MP, Khanna VK, Yadav S, **Al-Khedhairi AA**, Musarrat J & Pant AB (2010). Association of Dopamine DA-D2 Receptor in Rotenone Induced Cytotoxicity in PC12 cells. *TOXICOLOGY AND INDUSTRIAL HEALTH*, 26 (8): 533-542.
126. Dwivedi S, **Al-Khedhairi AA**, Singh BR, Alarifi S & Musarrat J (2010) Isolation and characterization of butachlor catabolizing bacterial strain *Stenotrophomonas acidaminiphila* JS-1 from soil and assessment of its biodegradation potential. *LETTERS IN APPLIED MICROBIOLOGY*, 51, 54-60.
127. Saquib Q, **Al-Khedhairi AA**, Alarifi SA, Dwivedi S, Mustafa J & Musarrat J (2010) Fungicide methyl thiophanate binding at sub-domain IIA of human serum albumin triggers conformational change and protein damage. *INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES*, 47(1):60-67
128. Siddiqui MA, Kashyap MP, Kumar V, **Al-Khedhairi AA**, Musarrat J & Pant AB (2010). Protective potential of trans-resveratrol against 4hydroxynonenal induced damage in PC12 cells. *TOXICOLOGY IN VITRO*, 24: 1592-1598.
129. Saquib Q, **Al-Khedhairi AA**, Alarifi SA, Mustafa J & Musarrat J (2010) Preferential Binding of a fungicide methyl thiophanate at sub-domain IIA of human serum albumin and induced conformational changes in protein. *INTERNATIONAL JOURNAL OF BIOLOGICAL MACROMOLECULES*, 47: 60-67.
130. Musarrat J, Dwivedi S, Singh BR, **Al-Khedhairi AA**, Azam A & Naqvi A (2010) Production of antimicrobial silver nanoparticles in water Extracts of the fungus *Amylomyces rouxii* strain KSU-09. *BIORESOURCE TECHNOLOGY*, 101: 8772-8776.

131. Singh BR, **Al-Khedhairi AA**, Alarifi SA & Musarrat J (2010) Computational prediction of small non-coding RNA within distal 3' region of 41SrRNA gene of Bacillus sp. strain SJ-101. *International Association for Computer sciences and Information Technology, IACSIT-SC 2009 Proceedings, IEEE, USA*
132. Saquib Q, **Al-Khedhairi AA**, Singh BB, Arif JA & Musarrat J (2010) Genotoxic fungicide methyl thiophanate as an oxidative stressor inducing 8-oxo-7,8-dihydro-4'-deoxyguanosine adducts in DNA and mutagenesis. *JOURNAL OF ENVIRONMENTAL SCIENCE AND HEALTH, PART B PESTICIDES, FOOD CONTAMINANTS, AND AGRICULTURE, USA*, 45(1): 40-45.
133. Ahmed AM, Al-Olayan EM, Aboul-Soud MAM and **Al-Khedhairi AA** (2010) The immune enhancer, thymoquinone, and the hope of utilizing the immune system of *Aedes caspius* against disease agents. *AFRICAN JOURNAL OF BIOTECHNOLOGY*, 9(21): 3183-3195.
134. Saquib Q, **Al-Khedhairi AA**, Al-Arifi S, Dhawan A & Musarrat, J (2009) Assessment of methyl thiophanate-Cu (II) induced DNA damage in human lymphocytes. *TOXICOLOGY IN VITRO*, 23: 848-854.
135. Braj R. Singh, **Abdulaziz A. Al-Khedhairi**, Saud A. Alarifi & Javed Musarrat (2009) Regulatory elements in the 5' region of 16SrRNA gene of Bacillus sp. strain SJ-101. *BIOINFORMATION* 3 (9): 375-380.
136. Musarrat, J., **Al-Khedhairi, A.A.**, Alarifi, S., Khan, M.S. (2009) Role of 1-aminocyclopropane-1-carboxylate deaminase in Rhizobium-legume symbiosis In: Mohammed Saghir Khan, Almas Zaidi & Javed Musarrat (Eds), MICROBIAL STRATEGIES FOR CROP IMPROVEMENT. *Springer-Verlag, Germany*.
137. Singh BR, Aminuddin, **Al-Khedhairi AA**, Al-Qurainy F & Musarrat J (2009) Molecular diagnostics and phylogenetic analysis of Candidatus phytoplasma asteris (16SrI-Aster yellow group) infecting banana (Musa spp.). *AFRICAN JOURNAL OF BIOTECHNOLOGY*, 8(21): 5819-5824.
138. Afify AEMMR, Aboul-Soud MAM, Foda MS, Sadik MWA, Kahil T, Asar AR & **Al-Khedhairi AA** (2009) Production of alkaline protease and larvicidal biopesticides by an Egyptian Bacillus sphaericus isolate. *AFRICAN JOURNAL OF BIOTECHNOLOGY*, 8 (16): 3864-3873.

139. Yi Z, Clamp J, Al-Rasheid, KAS, **Al-Khedhairi AA**, Chen Z & Song W (2009) Evolutionary relationship and species separation of four morphologically similar stichotrichous ciliates (Protozoa, Ciliophora). *PROGRESS IN NATURAL SCIENCE*, 19: 581–586.
140. Yi Z, Song W, Gong J, Warren, A, Al-Rasheid, KAS, Al-Arifi, S & **AlKhedhairi, A.** (2009). Phylogeny of six oligohymenophoreans (Protozoa, Ciliophora) inferred from small subunit rRNA gene sequences. *ZOOLOGICA SCRIPTA*, 38(3): 323–331.
141. Li L, Song W, Shin MK, Warren, A, Al-Rasheid KAS, **Al-Khedhairi AA** & AlArifi, S (2009) Reconsideration of the phylogenetic positions of three stichotrichous genera Holosticha, Anteholosticha and Pseudokeronopsis (Spirotrichea: Ciliophora) inferred from complete SSU rRNA gene sequences. *PROGRESS IN NATURAL SCIENCE*, 19: 769–773.
142. Miao M, Song W, Clamp JC, Al-Rasheid KAS, **Al-Khedhairi AA** & Alarifi S (2009) Further Consideration of the Phylogeny of Some “Traditional” Heterotrichs (Protista, Ciliophora) of Uncertain Affinities, Based on New Sequences of the Small Subunit rRNA Gene. *JOURNAL OF EUKARYOTIC MICROBIOLOGY*, 56(3): 244–250.
143. Li ZC, Yi ZZ, Yang JP, Gong J, Clamp JC, Al-Rasheid KAS, Al-Arifi S, **AlKhedhairi AA** & Song WB (2009) Phylogenetic investigation on five genera of tintinnid ciliates (Ciliophora, Choreotrichia), based on the small subunit ribosomal RNA gene sequences. *PROGRESS IN NATURAL SCIENCE*, 19 (9): 1097-1101.
144. Yi ZZ, Song WB, Stoeck T, Al-Rasheid KAS, **Al-Khedhairi AA**, Gong J, Ma HW & Chen ZG (2009) Phylogenetic analyses suggest that Psammomitra (Ciliophora, Urostylida) should represent an urostylid family, based on small subunit rRNA and alpha-tubulin gene sequence information. *ZOOLOGICAL JOURNAL OF THE LINNEAN SOCIETY*. 157 (2): 227-236.
145. Abd-Elsalam KA, Bahkali HA, **Al-Khedhairi AA** & Verreet HA (2008) Development of a conventional and Lightcycler PCR assay for detection of *Fusarium solani*. *Genes, GENOMES AND GENOMICS*, 2:63-67.
146. **Al-Khedhairi AA** (2005) Molecular Characterization of a Polyubiquitin Gene from Duck, *Anas platyrhynchos* (Aves: Anatidae). *Saudi Journal of Biological Sciences*, 12(1): 17-24.

147. **Al-Khedhairi AA**, Bin Dukhyil A, Arfin M, Alahmadi BA, Al-Rajeh SM, AlJumah MA (2005) Novel presenilin 1 mutation associated with earlyonset Alzheimer's disease in Saudi patient, *NEUROSCIENCES*, 10(4): 301-303.
148. **Al-Khedhairi AA** (2005) Ubiquitin Primer Chip for Identification and Discrimination Genetic Materials. *SAUDI JOURNAL OF BIOLOGICAL SCIENCES* 12(2): 75-80.
149. **Al-Khedhairi AA**, Arfin M, Alahmadi BA, Al-Jumah MA (2005) Single Nucleotide Polymorphism Associated with Late-onset Alzheimer's Disease, *JOURNAL OF MEDICAL SCIENCES* 5(4): 275-279.
150. **Al-Khedhairi AA** (2004) Characterization of nucleotide sequence of a polyubiquitin gene (PUBC1) from Arabian camel, *Camelus dromedarius*. *JOURNAL OF BIOCHEMISTRY AND MOLECULAR BIOLOGY*, 37(2): 144-147.
151. **Al-Khedhairi AA** (2004) Apolipoprotein E polymorphism as a predictor for cognitive decline and dementia in Saudi general population over 65 years old. *GENETICS AND MOLECULAR BIOLOGY*, 27(3): 331-334.
152. **Al-Khedhairi A. A.** (2004) Apolipoprotein E polymorphism in Saudis. *MOLECULAR BIOLOGY REPORTS*, 31(4): 257-260.
153. **Al-Khedhairi AA** (2003) Nucleotide Sequence of Presenilin-1 cDNA Fragment of Arabian Camel, *Camelus dromedaries*. *ARAB JOURNAL OF BIOTECHNOLOGY* 6(2): 165-172.
154. **Al-Khedhairi AA**, Al-Jumah MA, Al-Rajeh SM, Ibrahim ER, Dukhyil A, Arfin M, Alahmadi BA, Hardy J (2003) Screening of PS1 mutations in a referral-based late-onset AD cases in Saudi Arabia. *JOURNAL OF MEDICAL SCIENCES*, 3(3): 209-213.
155. **Al-Khedhairi AA** (2001) Quantitative RT-PCR Analysis of Polyubiquitin Gene Expression in *Biomphalaria arabica* After Exposure to Heat Stress and Cadmium. *PAKISTAN JOURNAL BIOLOGICAL SCIENCES*, 4(1): 103-106.
156. **Al-Khedhairi AA** Al-Rokayan SA & Al-Misned FA (2001) Cadmium Toxicity and Cell Stress Response. *PAKISTAN JOURNAL BIOLOGICAL SCIENCES* 4(8): 1046-1049.
157. **Al-Khedhairi AA** (2000) Analysis of HSP70 Gene Expression in *Biomphalaria arabica* After Exposure to Cadmium. *Egyptian Journal Zoology*, 35: 151-161.

158. **Al-Khedhairi AA** Arfin M & Dukhyil AA (2002) Molecular cloning and sequencing of the rabbit presenilin-1 cDNA fragment. *ACTA BIOCHIMICA POLONICA*, 49(4): 1013-1017.
159. **Al-Khedhairi AA** (1999) Heat Stress Response in Human Foetal Lung MRC-5 Fibroblasts: Characterization of Gene Expression of Polyubiquitins, HSP70 and HSF1. *JOURNAL OF THE EGYPTIAN GERMAN SOCIETY OF ZOOLOGY*, 28(A): 429-440.
160. Mayer RJ, Tipler, C., Arnold, J., Laszlo, L., **Al-khedhairi, A.**, Lowe, J. & Landon, M. (1996) Endosome-Lysosome, Ubiquitin and Neurodegeneration. *ADVANCES IN EXPERIMENTAL MEDICINE & BIOLOGY*, 389:261-269.