

MAQUSOOD AHAMED Ph.D.

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PROFESSOR

King Abdullah Institute for Nanotechnology
King Saud University
P.O. Box 2454, Riyadh 11451
Saudi Arabia
E-mails: maqusood@gmail.com, mahamed@ksu.edu
Office Phone: 000966-1146-78981
Mobile: 00966-532234878

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ONLINE IDs

ORCID: <https://orcid.org/0000-0001-6025-1950>
Web of Science Researcher ID: [R-8619-2017](https://orcid.org/0000-0001-6025-1950)
Scopus ID: [15041853700](https://orcid.org/0000-0001-6025-1950)
Google Scholar Link: <https://scholar.google.com/citations?user=OBfQYvEAAAAJ&hl=en>

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ACADEMIC/RESEARCH EXPERIENCE (>20 YEARS)

- Nov 2022- Present- Professor**, King Abdullah Institute for Nanotechnology,
King Saud University, Riyadh, Saudi Arabia
- Oct 2017- Oct 2022- Associate Professor**, King Abdullah Institute for Nanotechnology,
King Saud University, Riyadh, Saudi Arabia
- Feb 2010- Sep 2017- Assistant Professor**, King Abdullah Institute for Nanotechnology,
King Saud University, Riyadh, Saudi Arabia
- Oct 2007-Jan 2010- Research Scientist**, Centre for Tissue Regeneration and Engineering,
Department of Biology, University of Dayton, Ohio, USA
- May 2005-Sep 2007 - Senior Research Fellow**, Indian Institute of Toxicology Research (Formerly known
as Industrial Toxicology Research Centre), Lucknow, India
- May 2003-April 2005- Junior Research Fellow**, Indian Institute of Toxicology Research (Formerly known
as Industrial Toxicology Research Centre), Lucknow, India.
- Oct 2002-March 2003-Project Fellow**, Centre for Cellular and Molecular Biology, Hyderabad, India

EDUCATION

- Ph.D.** **Biochemistry** in 2007 from Jamia Hamdard (Hamdard University), New Delhi, India. Thesis title “Environmental exposure to leas and assessment of associated health risks among children”. Supervisor- **Dr. M.K.J. Siddiqui** Co-Supervisor: Waseem Siddiqui
- M.S.** **Biotechnology, 1st Division** in 2001 from V.B.S. Purvanchal University, Jaunpur, India. Thesis title “Genetic diversity within and between two endogamous populations”. Thesis Supervisor: **Dr. Lalji Singh** Co-supervisor: **Dr. D.D. Dubey**
- B.S.** **Chemistry, Zoology and Botany 1st Division** in 1997 from V.B.S. Purvanchal University, Jaunpur, India

INTERNATIONAL AWARDS AND RECOGNITION

- 2024** **Listed in World Top 2% Scientists by Stanford University, USA**
- 2023** **Listed in World Top 2% Scientists by Stanford University, USA**
- 2022** **Listed in World Top 2% Scientists by Stanford University, USA.**
- 2021** **Listed in World Top 2% Scientists by Stanford University, USA**
- 2020** **Listed in World Top 2% Scientists by Stanford University, USA.**
- 2018** **Highly Cited Researcher-2018 by Clarivate Analytics. <https://hcr.clarivate.com/>**
- 2017** **Highly Cited Researcher-2017 by Clarivate Analytics. <https://hcr.clarivate.com/>**
- 2017** **King Saud University Award for Scientific Excellence**
Category: Best Research Quality, Subject: Science and Engineering
- 2007-08** Recipient of **Oakridge Associated Universities (ORAU) Postdoctoral Fellowship, USA**
- 2006** Recipient of **International Travel Grant Award** from Council of Scientific Industrial Research (CSIR), Government of India
- 2005-07** Recipient of **Senior Research Fellowship Award** from Council of Scientific Industrial Research (CSIR), Government India
- 2003-05** Recipient of **Junior Research Fellowship Award** from Council of Scientific Industrial (CSIR), Government of India
- 2004:** Recipient of **Best Poster Award** in International Conference on Health,

Occupation and Environment in Unorganized Sector- Problems and Road Maps, 2004 (ICHOE-2004), Indian Institute of Toxicological Research Centre (IITR), India.

- 2002** Qualified **National Eligibility Test (NET) for Lectureship and Junior Research Fellowship** conducted jointly by Council of Scientific Industrial Research-University Grant Commission (**CSIR-UGC**), Government of India (I was one of the top ranked candidates in this highly competitive national level examination)
- 2002** Second Position in Order of Merit of Master's Degree Program at University Level
- 1994** First Position in Order of Merit of 10+2 Examination at School Level

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TEACHING

Master of Science: Nanotoxicology Courses

Courses Code: NAN522

Section (Girl): 77294 Section (Men): 87665
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SUPERVISION

- Co-supervising one Ph.D. student: **ZabnAllah M. Alzairi (Student ID: 437105687)**, Department of Physics and Astronomy, King Saud University.
 - Supervising several undergraduate and Master Students every year
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INVITED SPEAKER:

INVITED SPEAKER at VBS Purvanchal University 31 July, 2016, Jaunpur, **India**

INVITED SPEAKER at 6th International Conference on Drug Discovery and Therapy. Feb 10-12, 2014. **Dubai, UAE.**

ORAL PRESENTATION at International Conference on Advances in Free radicals, Redox Signaling and Translational Antioxidant Research and XII Annual Meeting of the Society for Free Radical Research-India during Jan30-Feb01, 2013 at CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, **India.**

INVITED SPEAKER at “Halal Food Control Workshop” organized by Saudi Food and Drug Authority (SFDA) on Feb12, 2012, Riyadh, **Saudi Arabia.**

INVITED SPEAKER at the conference “Second World Conference on Nanomedicine and Drug Delivery (WCN-2011) March 11-13, 2011, held at Kottayam, Kerala, **India**

ORAL PRESENTATION at SETAC North America 30th Annual Meeting. Human-Environment Interactions: Understanding Change in Dynamic Systems Hilton Riverside. 19 - 23 November 2009. New Orleans, Louisiana, **USA**,

REGULAR REVIEWER for the Journals: Scientific Reports, Nanomedicine: NBM, Nanomedicine (Lond.), International Journal of Nanomedicine, Environmental Science & Technology, Nanoscale, Toxicology, Environmental Toxicology, Archives of Environmental Contamination & Toxicology, Environmental Health, Archives of Gynecology & Obstetrics, Science of the Total Environment, Clinica Chimica Acta, Clinical Biochemistry, Human and Experimental Toxicology, Toxicology International, Chemosphere and Journal of Nanoparticle Research, etc.

EXTERNAL FUNDING FOR LAB

Project #1

Title: Determination of genotoxicity of engineered nanomaterials

Role: Principal Investigator

Funding agency: National Plan for Science and Technology (NPST), Riyadh, Saudi Arabia

Project Number: 10-NAN1201-02

Duration: August 2011- July 2013.

Budget: Saudi Riyal 1.5 Million

Status: Completed

Project #2

Title: Toxicity of nanomaterials

Role: Co-Investigator

Funding Agency: Deanship of Scientific Research, King Saud University, Riyadh, Saudi Arabia

Research Group Number: RGP-VPP-308

Duration: From 2013- 2017

Budget: Saudi Riyadh 150,000 annually

Project #3

Title: Exploring the mechanisms of preferential killing of cancer cells by engineered zinc oxide nanomaterials: Potential implications in cancer therapy

Role: Principal Investigator

Funding agency: National Plan for Science and Technology (NPST), Riyadh, Saudi Arabia

Project Number: 13-NAN908-02-R

Duration: Recommended

Budget: Saudi Riyal 2.0 Million

Status: Completed

Project #4

Title: Nanobiology

Role: Principle Investigator

Funding Agency: Deanship of Scientific Research, KSU, Riyadh, Saudi Arabia

Research Group Number: RG-1439-72

Budget: SR 150,000 annually

Status: Completed

Project #5

Title: Biomedical application of Nanocomposites

Role: Principle Investigator

Funding Agency: IFKSU-Phase II, Deanship of Scientific Research, KSU, Riyadh, Saudi Arabia

Year: 2022-2023

Status: Completed

Project #6

Title: Anticancer potential of green synthesized nanocomposites

Role: Principle Investigator

Funding Agency: IFKSU-Phase III, Deanship of Scientific Research, KSU, Riyadh, Saudi Arabia

Year: 2023

Status: Continuing

PEER REVIEWED JOURNAL PUBLICATIONS:

Year 2024

188. M. A. Majeed Khan, Manjeet Pawar, Anees A Ansari, **Maqsood Ahamed**, Sushil Kumar, Mohammed Shahabuddin. Boosted photocatalytic and electrochemical activity of hydrothermally synthesized WO₃ nanoparticles co-doped with transition elements (Mn, Co). **Materials Science and Engineering: B Volume 307, September 2024, 117541.** <https://doi.org/10.1016/j.mseb.2024.117541>
187. ZabnAllah M. Alaizeri, Hisham A. Alhadlaq, Saad Aldawood, Mohammed ALSaeedy, **Maqsood Ahamed**. Green hydrothermal synthesis and characterization of Ag₂O-supported MgO/rGO nanocomposites by using Phoenix leaf extract: a promising approach for enhanced photocatalytic and anticancer activities. **Environmental Science and Pollution Research Volume 31, June 2024, 44136-44149.** <https://doi.org/10.1007/s11356-024-33998-0>
186. M. A. Majeed Khan, Kamaldeep Punia, Anees A Ansari, **Maqsood Ahamed**, Sushil Kumar. Enhancement in photocatalytic and electrochemical performance of hydrothermally synthesized β-Bi₂O₃ via Ni incorporation. **Materials Chemistry and Physics Volume 318, May 2024, 129275.** <https://doi.org/10.1016/j.matchemphys.2024.129275>
185. M. A. Majeed Khan, Saruchi Rani, Anees A. Ansari, **Maqsood Ahamed**, Jahangeer Ahmed, Sushil Kumar, Abu ul Hassan S. Rana. Anchoring Ceria Nanoparticles on Reduced Graphene Oxide and Their Enhanced Photocatalytic and Electrochemical Activity for Environmental Remediation. **Journal of Electronic materials.** 53, 930, 2024. <https://doi.org/10.1007/s11664-023-10837-5>
184. Javed Ahmad, Rizwan Wahab, Maqsood A. Siddiqui, **Maqsood Ahamed**. Cytotoxicity and apoptosis induction of zinc ferrite nanoparticle through the oxidative stress pathway in human breast cancer cells. **Journal of King Saud University-Science** Volume 36, Issue 2, February 2024, 103047. <https://doi.org/10.1016/j.jksus.2023.103047>
183. Mohd Abdul Majeed Khan, Manjeet Pawar, Anees Ahmad Ansari, **Maqsood Ahamed**, Sushil Kumar, Saruchi Rani. Hydrothermally produced Mo-doped WO₃ nanoparticles and their enhanced

photocatalytic and electrochemical properties. *Journal of Materials Science: Materials in Electronics*. 35, 1565 (2024). <https://doi.org/10.1007/s10854-024-13336-3>

182. M.A. Majeed Khan, Parul Choudhary, Anees A. Ansari, **Maqusood Ahamed**, Sushil Kumar, Mohammed Shahabuddin, Abu ul Hassan S. Rana. Facile production of Ag-Co₃O₄/rGO nanocomposite and its enhanced photocatalytic and electrochemical activities for practical applications. **Diamond and Related Materials**. Volume 141, January 2024, 110675. <https://doi.org/10.1016/j.diamond.2023.110675>
181. Mohd Javed Akhtar, **Maqusood Ahamed**, Hisham Al. Alhadlaq. Cobalt-based nanoparticles strongly diminish CalceinAM fluorescence independently of their cytotoxic potential in human lung cell line. **Journal of King Saud University-Science** 2024 (January), 36 (1), 102987. <https://doi.org/10.1016/j.jksus.2023.102987>

Year 2023

180. Rashid Lateef, Israr Ahmad, Abbas Ali Mahdi, Pavan Rajanahalli, Mohd Javed Akhtar, **Maqusood Ahamed***. Solanesol alleviates metal oxide nanoparticles generated toxicity in human placental BeWo cells. **Journal of King Saud University-Science**, 2023 (December) 35 (10), 102982. <https://doi.org/10.1016/j.jksus.2023.102982>
179. Sitah Alanazi, ZabnAllah M. Alaizeri, Rashid Lateef, Nawal Madkhali, Abdullah Alharbi, Maqusood Ahamed. Zn Doping Improves the Anticancer Efficacy of SnO₂ Nanoparticles. **Applied Sciences** 2023, 13(22), 12456. <https://doi.org/10.3390/app132212456>
178. **Maqusood Ahamed***, Mohd Javed Akhtar, M.A. Majeed Khan. Green-fabricated MgO nanoparticles: A potent antimicrobial and anticancer agent. **Journal of King Saud University - Science** 2023 (November), 35 (8) 102889. <https://doi.org/10.1016/j.jksus.2023.102889>
177. ZabnAllah M Alaizeri, Hisham A Alhadlaq, Saad Aldawood, Mohd Javed Akhtar, **Maqusood Ahamed***. One-step preparation, characterization, and anticancer potential of ZnFe₂O₄/RGO nanocomposites. **Saudi Pharmaceutical Journal** 2023 (September) 31 (9), 101735. <https://doi.org/10.1016/j.jsps.2023.101735>
176. MA Majeed Khan, Anees A Ansari, Wasi Khan, **Maqusood Ahamed**, Jahangeer Ahmed, Avshish Kumar. Synthesis of nanosized MnO₂ decorated SWCNTs and their photocatalytic improved activity as well as enhanced electrode performance. **Optics & Laser Technology** 2023 (September) 164, 109518. <https://doi.org/10.1016/j.optlastec.2023.109518>
175. **Maqusood Ahamed***, Mohd Javed Akhtar, Hisham A. Alhadlaq. Synergistic toxicity of NiO nanoparticles and benzo[a]pyrene co-exposure in liver cells: Role of free oxygen radicals induced oxidative stress. **Journal of King Saud University - Science** 2023 (August) 35 (6), 102750. <https://doi.org/10.1016/j.jksus.2023.102750>
174. Ekambaram Gayathiri, Palanisamy Prakash, **Maqusood Ahamed**, Saravanan Pandiaraj, Baskar Venkidasamy, Haripriya Dayalan, Pratheep Thangaraj, Kuppusamy Selvam, Somdatta Y Chaudhari, Rajakumar Govindasamy, Muthu Thiruvengadam. Multitargeted pharmacokinetics, molecular docking and network pharmacology-based identification of effective phytochemicals from *Sauropus androgynus* (L.) Merr for inflammation and cancer treatment. **Journal of Biomolecular Structure and Dynamics**. 2023/7/29, 1-14. <https://doi.org/10.1080/07391102.2023.2243335>
174. **Maqusood Ahamed***, Mohd Javed Akhtar, M.A. Majeed Khan. ZrO₂ nanoparticles anchored on RGO sheets: Eco-friendly synthesis from *Acacia nilotica* (L.) fruit extract, characterization, and enhanced

- anticancer activity in different human cancer cells. **Materialstoday Communications** 2023 (August), 36, 106756. <https://doi.org/10.1016/j.mtcomm.2023.106756>
173. Alaizeri ZM, Hisham A. Alhadlaq, Saad Aldawood, Mohd Javed Akhtar, **Maqusood Ahamed***. Bi₂O₃-Doped WO₃ Nanoparticles Decorated on rGO Sheets: Simple Synthesis, Characterization, Photocatalytic Performance, and Selective Cytotoxicity Toward Human Cancer Cells. **ACS Omega** 2023 (July), 8, 28, 25020–25033. <https://doi.org/10.1021/acsomega.3c01644>
172. Ali Alrabie, Nabeel A. Alrabie, Mohammed AlSaeedy, Arwa Al-Adhrai, Inas Al-Qadisy, Sultan A. Al-Horaibi, ZabnAllah M. Alaizeri, Hisham A. Alhadlaq, **Maqusood Ahamed**, and Mazahar Farooqi. An integrative GC–MS and LC–MS metabolomics platform determination of the metabolite profile of *Bombax ceiba* L. root, and in silico & in vitro evaluation of its antibacterial & antidiabetic activities. **Natural Product Research** 2023, 37 (13), 2263–2268. <https://doi.org/10.1080/14786419.2022.2149519>
171. Alaizeri ZM, Alhadlaq HA, Aldawood S, Akhtar MJ, Aziz AA, **Maqusood Ahamed***. Photocatalytic Degradation of Methylene Blue and Anticancer Response of In₂O₃/RGO Nanocomposites Prepared by a Microwave-Assisted Hydrothermal Synthesis Process. **Molecules** 2023 (June), 28, 5153. <https://doi.org/10.3390/molecules28135153>
170. **Maqusood Ahamed***, Khan MAM. Enhanced Photocatalytic and Anticancer Activity of Zn-Doped BaTiO₃ Nanoparticles Prepared through a Green Approach Using Banana Peel Extract. **Catalysts** 2023 (June), 13, 985. <https://doi.org/10.3390/catal13060985>
169. **Maqusood Ahamed***, Mohd Javed Akhtar, M.A. Majeed Khan, Hisham A. Alhadlaq. Improved antimicrobial and anticancer potential of eco-friendly synthesized Co-doped Bi₂O₃/RGO nanocomposites. **Journal of Drug Delivery Science and Technology** 2023 (June), 84, 104525. <https://doi.org/10.1016/j.jddst.2023.104525>
168. **Maqusood Ahamed***, Mohd Javed Akhtar, Hisham A. Alhadlaq. Natural antioxidant curcumin attenuates NiO nanoparticle-induced cytotoxicity in mouse spermatogonia cells: A mechanistic study. **Journal of King Saud University-Science** 2023 (May) 35 (4), 102624. <https://doi.org/10.1016/j.jksus.2023.102624>
167. M.A. Majeed Khan, Bharti Sharma, **Maqusood Ahamed**, Abuul Hassan S. Rana, Sushil Kumar. Ag nanoparticles decorated on rGO sheets: Green synthesis and effective photocatalytic action. **Physica B: Condensed Matter** 2023 (May) 657 (15), 414789. <https://doi.org/10.1016/j.physb.2023.414789>
166. Akhtar MJ, **Maqusood Ahamed**, Alhadlaq H. Bismuth Oxide (Bi₂O₃) Nanoparticles Cause Selective Toxicity in a Human Endothelial (HUVE) Cell Line Compared to Epithelial Cells. **Toxics** 2023 (April), 11, 343. <https://doi.org/10.3390/toxics11040343>
165. **Maqusood Ahamed***, Mohd Javed Akhtar, M.A. Majeed Khan, Hisham A. Alhadlaq. Protocatechuic acid mitigates CuO nanoparticles-induced toxicity by strengthening the antioxidant defense system and suppressing apoptosis in liver cells. **Journal of King Saud University - Science** 2023 (April), 35 (3), 102585. <https://doi.org/10.1016/j.jksus.2023.102585>
164. Mohd Javed Akhtar, **Maqusood Ahamed**, Hisham Alhadlaq. A selective toxicity of Pt-coated Au nanoparticles in cancerous MCF-7 cells over non-cancerous HUVE cells. **Journal of King Saud University – Science** 2023 (April), 35 (3), 02583. <https://doi.org/10.1016/j.jksus.2023.102583>
163. Ali S, Sudha KG, Thirumalaivasan N, **Maqusood Ahamed**, Pandiaraj S, Rajeswari VD, Vinayagam Y, Thiruvengadam M, Govindasamy R. Green Synthesis of Magnesium Oxide Nanoparticles by Using *Abrus precatorius* Bark Extract and Their Photocatalytic, Antioxidant, Antibacterial, and Cytotoxicity Activities. **Bioengineering** 2023 (Feb), 10, 302. <https://doi.org/10.3390/bioengineering10030302>
162. Rashid Lateef, Marhaba, Payal Mandal, Kausar M. Ansari, Mohd Javed Akhtar, **Maqusood Ahamed***. Cytotoxicity and apoptosis induction of copper oxide-reduced graphene oxide nanocomposites in

- normal rat kidney cells. **Journal of King Saud University-Science** 2023 (Feb) 35 (2), 102513. <https://doi.org/10.1016/j.jksus.2022.102513>
161. **Maqsood Ahamed***, Rashid Lateef, M. A. Majeed Khan, Pavan Rajanahalli, Mohd Javed Akhtar. Biosynthesis, Characterization, and Augmented Anticancer Activity of ZrO₂ Doped ZnO/rGO Nanocomposite. **Journal of Functional Biomaterials** 2023 (January), 14(1), 38. <https://doi.org/10.3390/jfb14010038>
160. Alaizeri, Z.M., Alhadlaq, H.A., Aldawood, S., Mohd Javed Akhtar, **Maqsood Ahamed***. Photodeposition mediated synthesis of silver-doped indium oxide nanoparticles for improved photocatalytic and anticancer performance. **Environmental Science and Pollution Research** 2023 (January) 30, 6055-6067. <https://doi.org/10.1007/s11356-022-22594-9>

YEAR 2022

159. Nida N. Farshori, Maqsood A. Siddiqui, Mai M. Al-Oqail, Ebtessam S. Al-Sheddi, Shaza M. Al-Massarani, **Maqsood Ahamed**, Javed Ahmad, Abdulaziz A. Al-Khedhairiet. Copper Oxide Nanoparticles Exhibit Cell Death Through Oxidative Stress Responses in Human Airway Epithelial Cells: A Mechanistic Study. **Biological Trace Element Research** 2022 (December), 200, 5042-51 <https://doi.org/10.1007/s12011-022-03107-8>
158. **Maqsood Ahamed***, Rashid Lateef, Mohd Javed Akhtar, Pavan Rajanahalli. Dietary Antioxidant Curcumin Mitigates CuO Nanoparticle-Induced Cytotoxicity through the Oxidative Stress Pathway in Human Placental Cells. **Molecules** October 2022, 27, 7378. <https://doi.org/10.3390/molecules27217378>
157. Ashok Kumar, Mohammad A. Alfihili, Ahmed Bari, Hanane Ennaji, Maqsood Ahamed, Mohammed Bourhia, Mohamed Chebaibi, Laila Benbacer, Hazem K. Ghneim, Manal Abudawood, Khalid M. Alghamdi, John P. Giesy, Yazeed A. Al-Sheikh, and Mourad A. M. Aboul-Soud. Apoptosis-mediated anti-proliferative activity of *Calligonum comosum* against human breast cancer cells, and molecular docking of its major polyphenolics to Caspase-3. **Front. Cell Dev. Biol.** October 2022. <https://doi.org/10.3389/fcell.2022.972111>
156. M.A. Majeed Khan, Poonam Nain, Jahangeer Ahmed, **Maqsood Ahamed**, Sushil Kumar Characterization and photocatalytic performance of hydrothermally synthesized Cu-doped TiO₂ NPs. **Optical Materials** Volume 133, November 2022, 112983. <https://doi.org/10.1016/j.optmat.2022.112983>
155. **Maqsood Ahamed***, Akhtar, M.J., Alhadlaq, H.A. Combined effect of single-walled carbon nanotubes and cadmium on human lung cancer cells. **Environmental Science and Pollution Research** December 2022, 29, 87844–87857. <https://doi.org/10.1007/s11356-022-21933-0>
154. M. Sivakavinesan, M. Vanaja, Rashid Lateef, Hisham A. Alhadlaq, Raja Mohan, G. Annadurai*, **Maqsood Ahamed***. Citrus limetta Risso peel mediated green synthesis of gold nanoparticles and its antioxidant and catalytic activity. **Journal of King Saud University-Science** 2022, 34 (7), 102235. <https://doi.org/10.1016/j.jksus.2022.102235>
153. **Maqsood Ahamed***, Mohd Javed Akhtar, M.A. Majeed Khan, Ponmurugan Karuppiah. Antibacterial, antifungal, and anticancer potential of two-dimensional Ti₃C₂T_x MXene. **Materials Letters** 2022, 327, 133020. <https://doi.org/10.1016/j.matlet.2022.133020>
152. Mohd Javed Akhtar, **Maqsood Ahamed**, Hisham A. Alhadlaq. Immunotoxic potential of nanoparticles of cerium oxide and gadolinium oxide in human monocyte (THP-1) cells. **Journal of King Saud University-Science** November 2022, 34(8), 102291. <https://doi.org/10.1016/j.jksus.2022.102291>

151. Alaizeri, Z.M., Alhadlaq, H.A., Aldawood, S., Mohd Javed Akhtar, **Maqsood Ahamed***. Photodeposition mediated synthesis of silver-doped indium oxide nanoparticles for improved photocatalytic and anticancer performance. **Environmental Science and Pollution Research** In press August 2022. <https://doi.org/10.1007/s11356-022-22594-9>
150. Priyanka Chatteraj, Parimala Prabhakar, Vishwanath Koti, N. Suganya Natarajan, M. Lakshminarayana, K. Arul, M. Venkatachalapathy, **Maqsood Ahamed**, M. Karnan, S. Praveen Kumar. Optimization on Tribological Behaviour of AA7178/Nano Titanium Diboride Hybrid Composites Employing Taguchi Techniques. **Journal of Nanomaterials**. Volume 2022, Article ID 1619923, 8 pages. <https://doi.org/10.1155/2022/1619923>
149. A.E. Tarabiah, Hisham A. Alhadlaq, ZabnAllah M. Alaizeri, Abdullah A. A. Ahmed, G.M. Asnag, **Maqsood Ahamed***. Enhanced structural, optical, electrical properties and antibacterial activity of PEO/CMC doped ZnO nanorods for energy storage and food packaging applications. **Journal of Polymer Research** (2022) 29:167. <https://doi.org/10.1007/s10965-022-03011-8>
148. **Maqsood Ahamed***, Mohd Javed Akhtar, M.A. Majeed Khan, Hisham A. Alhadlaq. Enhanced Anticancer Performance of Eco-Friendly-Prepared Mo-ZnO/RGO Nanocomposites: Role of Oxidative Stress and Apoptosis. **ACS Omega** 2022, 7, 8, 7103–7115. <https://doi.org/10.1021/acsomega.1c06789>
147. T. Jayakumar, S. Jaanaa Rubavathy, R. Karpagam, S. Diwakaran, S. Arockia Jayadhas, **Maqsood Ahamed**, Shanmugam Sureshkumar. Experimental Analysis of the Thermal Performance of a Latent Heat Energy of Helical Coil for the Application of Solar Energy. **International Journal of Photoenergy** Volume 2022, Article ID 7065940, 9 pages <https://doi.org/10.1155/2022/7065940>
146. Bakeel A. Radman, Bushra Y.H. Al-Khatib, ZabnAllah M. Alaizeri, AbdulHaleem S. Al-Tamimi, Waleed E. Al-Thahibi, Raja Mohan, Hisham A. Alhadlaq, **Maqsood Ahamed***. Histology and radiography studies of effects of *Lepidium sativum* seeds on bone healing in male albino rats. **Journal of King Saud University-Science**. 2022 34(5), 102062. <https://doi.org/10.1016/j.jksus.2022.102062>
145. Mohd Javed Akhtar, **Maqsood Ahamed**, Hisham Alhadlaq. CeO₂-Zn Nanocomposite Induced Superoxide, Autophagy and a Non-Apoptotic Mode of Cell Death in Human Umbilical-Vein-Derived Endothelial (HUVE) Cells. **Toxics** 2022, 10(5), 250. <https://doi.org/10.3390/toxics10050250>
144. Nandagopal Kaliappan, Venkatesan Govindarajan, T CH Anil Kumar, R. Vishnu Kumar, S. Muthukumaran, **Maqsood Ahamed**, Mahadeo A. Mahadik, Mebratu Markos. Investigation of Mechanical and Physical Behaviours of Polyester Resin Matrix from Recycled Polyethylene Terephthalate with Bamboo Fibre. **Advances in Materials Science and Engineering** 2022, Volume 2022, Article ID 4233302, 8 pages. <https://doi.org/10.1155/2022/4233302>
143. G. Sabeena. S. Rajaduraipandian, S.P. Manobala, T. Manju, Hisham A. Alhadlaq, Raja Mohan, G. Annadurai*, **Maqsood Ahamed***. In vitro antidiabetic and anti-inflammatory effects of Fe-doped CuO-rice husk silica (Fe-CuO-SiO₂) nanocomposites and their enhanced innate immunity in zebrafish. 2022. **Journal of King Saud University-Science** 2022, 34(5), 102121. <https://doi.org/10.1016/j.jksus.2022.102121>
142. Mourad AM Aboul-Soud, Hanane Ennaji, Ashok Kumar, Mohammad A Alfhili, Ahmed Bari, **Maqsood Ahamed**, Mohamed Chebaibi, Mohammed Bourhia, Farid Khallouki, Khalid M Alghamdi, John P Giesy. Antioxidant, Anti-Proliferative Activity and Chemical Fingerprinting of *Centaurea calcitrapa* against Breast Cancer Cells and Molecular Docking of Caspase-3. **Antioxidants** 2022, 11(8), 1514; <https://doi.org/10.3390/antiox11081514>
140. Sabeena G, Rajaduraipandian S, Pushpalakshmi E, Hisham A. Alhadlaq, Raja Mohan, Annadurai G*, **Maqsood Ahamed***. Green and chemical synthesis of CuO nanoparticles: A comparative study for

- several in vitro bioactivities and in vivo toxicity in zebrafish embryos. **Journal of King Saud University-Science**. 2022, 34(5), 102092. <https://doi.org/10.1016/j.jksus.2022.102092>
139. Arwa AL-Adhrai, Mohammed ALSaedy, Ali Alrabie, Inas Al-Qadsy, Sam Dawbaa, ZabnAllah M. Alaizeri, Hisham A. Alhadlaq, Abdulrahman Al-Kubati, **Maqusood Ahamed***, Mazahar Farooqui. Design and synthesis of novel enantiopure Bis(5-Isoxazolidine) derivatives: insights into their antioxidant and antimicrobial potential via in silico drug-likeness, pharmacokinetic, medicinal chemistry properties, and molecular docking studies. **Heliyon** 2022, 8(6), e09746. <https://doi.org/10.1016/j.heliyon.2022.e09746>
138. Rajadurai Pandian Subramanian, Amutha Eswaran, Sabeena G. Kathirason, Sivagurusundar Ramar, Gandhimathi Sivasubramanian, Hisham A. Alhadlaq, Raja Mohan, Annadurai Gurusamy*, **Maqusood Ahamed***. Green synthesized chitosan modified platinum-doped silver nanocomposite: An investigation for biomedical and environmental applications. **Journal of King Saud University-Science** 2022, 34(7), 102220. <https://doi.org/10.1016/j.jksus.2022.102220>
137. Mohammed O. Farea*, Hisham A. Alhadlaq, ZabnAllah M. Alaizeri, Abdullah A. A. Ahmed, Mohyedine O. Sallam, **Maqusood Ahamed***. High Performance of Carbon Monoxide Gas Sensor Based on a Novel PEDOT:PSS/PPA Nanocomposite. **ACS Omega** 2022, 7, 22492–22499. <https://doi.org/10.1021/acsomega.2c01664>

YEAR 2021

136. Yadav VK, Gnanamoorthy G, Cabral-Pinto, MS, Alam J, **Maqusood Ahamed**, Gupta N, Singh B, Choudhary N, Inwati GK, Yadav KK. Variations and similarities in structural, chemical, and elemental properties on the ashes derived from the coal due to their combustion in open and controlled manner. *Environmental Science and Pollution Research* (2021) 28:32609–32625. <https://doi.org/10.1007/s11356-021-12989-5>
135. Sahabjada Siddiqui, Qamar Zia, Mohd Abbas, Sushma Verma, Asif Jafri, Deepika Misra, Suaib Luqman, **Maqusood Ahamed**, Mohd S Ahmad, Mohd Arshad. Antimicrobial activity of green synthesized biodegradable alginate–silver (Alg-Ag) nanocomposite films against selected foodborne pathogens. **Anticancer Agents Med Chem** 2021;21(18):2536-2545. DOI: [10.2174/1871520621666210210103729](https://doi.org/10.2174/1871520621666210210103729)
134. Javed Ahmad, Rizwan Wahab, Mohd Javed Akhtar, **Maqusood Ahamed**. Cytotoxicity and apoptosis response of hexagonal zinc oxide nanorods against human hepatocellular liver carcinoma cell line. **Journal of King Saud University-Science** 2021, 33, 101658. <https://doi.org/10.1016/j.jksus.2021.101658>
133. Sri Shaila Purna Kanagaraj, Shyam Kumar Rajaram, **Maqusood Ahamed**, Shajahan Subedhar, Karthikumar Sankar, Ganesh Moorthy Innasimuthu, Ponmurugan Karuppiah. Antimicrobial activity of green synthesized biodegradable alginate–silver (Alg-Ag) nanocomposite films against selected foodborne pathogens. **Applied Nanoscience** (2021). <https://doi.org/10.1007/s13204-021-01882-9>
132. ZabnAllah M. Alaizeri, Hisham A. Alhadlaq, Saad Aldawood, Mohd Javed Akhtar, Mabrook S. Amer, **Maqusood Ahamed**. Facile Synthesis, Characterization, Photocatalytic Activity, and Cytotoxicity of Ag-Doped MgO Nanoparticles. **Nanomaterials** 2021, 11(11), 2915. <https://doi.org/10.3390/nano11112915>
131. **Maqusood Ahamed**, Akhtar MJ, Khan MAM, Alhadlaq HA. A Novel Green Preparation of Ag/RGO Nanocomposites with Highly Effective Anticancer Performance. **Polymers** 2021, 13(19), 3350. <https://doi.org/10.3390/polym13193350>

130. Gangalla R, Gattu S, Palaniappan S, **Maqusood Ahamed**, Macha B, Thampu RK, Fais A, Cincotti A, Gatto G, Dama M, Kumar A. Structural Characterisation and Assessment of the Novel *Bacillus amyloliquefaciens* RK3 Exopolysaccharide on the Improvement of Cognitive Function in Alzheimer's Disease Mice. **Polymers** 2021, 13(17), 2842. <https://doi.org/10.3390/polym13172842>
129. Akhtar MJ, **Maqusood Ahamed**, Hisham Alhadlaq. Anti-Inflammatory CeO₂ Nanoparticles Prevented Cytotoxicity Due to Exogenous Nitric Oxide Donors via Induction Rather Than Inhibition of Superoxide/Nitric Oxide in HUVE Cells. **Molecules** 2021, 26(17), 5416; <https://doi.org/10.3390/molecules26175416>
128. Rezanía S, Korraní ZS, Gabris MA, Cho J, Yadav KK, Cabral-Pinto MMS, Alam J, **Maqusood Ahamed**, Nodeh HR. Lanthanum phosphate foam as novel heterogeneous nanocatalyst for biodiesel production from waste cooking oil. **Renewable Energy** 2021, 176, 228-236. <https://doi.org/10.1016/j.renene.2021.05.060>
127. **Maqusood Ahamed**, Akhtar MJ, Khan, MAM, Alaizeri ZM, Alhadlaq H. Facile Synthesis of Zn-Doped Bi₂O₃ Nanoparticles and Their Selective Cytotoxicity toward Cancer Cells. **ACS Omega** 2021; 6(27):17353-17361. <https://doi.org/10.1021/acsomega.1c01467>
126. **Maqusood Ahamed**, Akhtar MJ, Khan MAM, Alhadlaq H. Facile green synthesis of ZnO-RGO nanocomposites with enhanced anticancer efficacy. **Methods** 2021; S1046-2023(21)00112-2. <https://doi.org/10.1016/j.ymeth.2021.04.020>
125. Akhtar MJ, **Maqusood Ahamed**, Alhadlaq H, Alrokayan S. Pt-Coated Au Nanoparticle Toxicity Is Preferentially Triggered Via Mitochondrial Nitric Oxide/Reactive Oxygen Species in Human Liver Cancer (HepG2) Cells. **ACS Omega** 2021; 6(23):15431-15441. <https://doi.org/10.1021/acsomega.1c01882>
124. Sahabjada Siddiqui, Shivbrat Upadhyay, Imran Ahmad, Arshad Hussain, **Maqusood Ahamed**. Cytotoxicity of *Moringa oleifera* fruits on human liver cancer and molecular docking analysis of bioactive constituents against caspase-3 enzyme. **Journal of Food Biochemistry** 2021; 45(5): e13720. <https://doi.org/10.1111/jfbc.13720>
123. Khalid M. Alotaibi, Abdurrahman A. Almethen, Abeer M. Beagan, Latifah H. Alfheid, **Maqusood Ahamed**, Ahmed M. El-Toni, Abdullah M. Alswieleh. Poly(oligo(ethylene glycol) methyl ether methacrylate) Capped pH-Responsive Poly(2-(diethylamino)ethyl methacrylate) Brushes Grafted on Mesoporous Silica Nanoparticles as Nanocarrier. **Polymers** 2021, 13(5), 823; <https://doi.org/10.3390/polym13050823>
122. **Maqusood Ahamed***, Mohd Javed Akhtar, Mohd Abdul Majeed Khan, Hisham Abdulaziz Alhadlaq. Co-exposure of Bi₂O₃ nanoparticles and bezo[a]pyrene-enhanced in vitro cytotoxicity of mouse spermatogonia cells. **Environmental Science and Pollution Research** (2021). <https://doi.org/10.1007/s11356-020-12128-6>
121. Priyada V. Rajeev, Subashini Gnanasekar, Kannan Gothandapani, Raja Sellappan, George Jacob, Vimala Raghavan, Sudhagar Pitchaimuthu, Prasanat Sonar, N. Krishna Chandar, Soon Kwan Jeong, **Maqusood Ahamed**, Saravanan Pandiaraj, Muthumareeswaran Ramamoorthy, Andrews Nirmala Grace. Thermal decomposition derived nano molybdenum nitride for robust counter electrode in dye-sensitized solar cells. **Materials Today Communications** 26 (2021) 102070. <https://doi.org/10.1016/j.mtcomm.2021.102070>
120. **Maqusood Ahamed***, Mohd Javed Akhtar, M A Majeed Khan, Hisham A Alhadlaq. SnO₂-Doped ZnO/Reduced Graphene Oxide Nanocomposites: Synthesis, Characterization, and Improved Anticancer Activity via Oxidative Stress Pathway. **International Journal of Nanomedicine** 2021; 16: 89–104. <https://doi.org/10.2147/IJN.S285392>

119. M.A. Majeed Khan, Sushil Kumar, Jahangeer Ahmed, **Maqusood Ahamed**, Avshish Kumar. Influence of silver doping on the structure, optical and photocatalytic properties of Ag-doped BaTiO₃ ceramics. **Materials Chemistry and Physics** 2021, 259, 124058. <https://doi.org/10.1016/j.matchemphys.2020.124058>
118. Aditya K. Padhi, Aniruddha Seal, Javed Masood Khan, **Maqusood Ahamed**, Timir Tripathi. Unraveling the mechanism of arbidol binding and inhibition of SARS-CoV-2: Insights from atomistic simulations. **European Journal of Pharmacology** 2021, 894, 173836. <https://doi.org/10.1016/j.ejphar.2020.173836>

YEAR 2020

117. M.A. Majeed Khan, Rahul Siwach, Sushil Kumar, **Maqusood Ahamed**, Jahangeer Ahmed. Frequency and temperature dependence of dielectric permittivity/electric modulus, and efficient photocatalytic action of Fe-doped CeO₂ NPs. **Journal of Alloys and Compounds** 2021, 856, 158127. <https://doi.org/10.1016/j.jallcom.2020.158127>
116. **Maqusood Ahamed***, Mohd Javed Akhta, M.A. Majeed Khan, Hisham A. Alhadlaq, Aws Alshamsan. Barium Titanate (BaTiO₃) Nanoparticles Exert Cytotoxicity through Oxidative Stress in Human Lung Carcinoma (A549) Cells. **Nanomaterials** 2020, 10(11), 2309. <https://doi.org/10.3390/nano10112309>
115. **Maqusood Ahamed***, Mohd Javed Akhtar and M. A. Majeed Khan Single-Walled Carbon Nanotubes Attenuate Cytotoxic and Oxidative Stress Response of Pb in Human Lung Epithelial (A549) Cells. **International Journal of Environmental Research and Public Health** 2020, 17(21), 8221. <https://doi.org/10.3390/ijerph17218221>
114. Sahabjada Siddiqui, Shivbrat Upadhyay, Rumana Ahmad, Anamika Gupta, Aditi Srivastava, Anchal Trivedi, Ishrat Husain, Bilal Ahmad, **Maqusood Ahamed**, Mohsin Ali Khan. Virtual screening of phytoconstituents from miracle herb *nigella sativa* targeting nucleocapsid protein and papain-like protease of SARS-CoV-2 for COVID-19 treatment. **Journal of Biomolecular Structure and Dynamics** 2022 40(9); 3928-3948. <https://doi.org/10.1080/07391102.2020.1852117>
113. Chinnadurai, R Subramanian, **Maqusood Ahamed**. Fish mucus mediated biosynthesis of copper oxide nanoparticles: spectral characterization, morphology and biological activity. **Materials Research Express**, Volume 7, Number 12, 125012. <https://doi.org/10.1088/2053-1591/abcee7>
112. M. A. Majeed Khan, Wasi Khan, Maqusood Ahamed, Jahangeer Ahmed, M. A. Al-Gawati, Abdulaziz N. Alhazaa. Silver-Decorated Cobalt Ferrite Nanoparticles Anchored onto the Graphene Sheets as Electrode Materials for Electrochemical and Photocatalytic Applications. **ACS Omega** 2020, 5, 48, 31076–31084. <https://pubs.acs.org/doi/10.1021/acsomega.0c04191>
111. Khan MAM, Kumar S, **Maqusood Ahamed**, Ahmed J, Kumar A, Shar MA. BaTiO₃@rGO nanocomposite: enhanced photocatalytic activity as well as improved electrode performance. **Journal of Materials Science: Materials in Electronics** (2020). <https://doi.org/10.1007/s10854-020-04514-0>
110. **Maqusood Ahamed***, Akhtar MJ, Khan MAM, Alhadlaq HA. Reduced graphene oxide mitigates cadmium-induced cytotoxicity and oxidative stress in HepG2 cells. **Food and Chemical Toxicology** 2020 (September), 143, 111515. <https://doi.org/10.1016/j.fct.2020.111515>
109. Horvat S, Vogel P, Kampf T, Brandl A, Alshamsan A, Alhadlaq HA, **Maqusood Ahamed**, Albrecht K, Behr VC, Beilhack A, Groll J. Crosslinked Coating Improves the Signal-to-Noise Ratio of Iron Oxide Nanoparticles in Magnetic Particle Imaging (MPI). **CHEMNANOMAT** 2020 (May); 6: 755-758. <https://doi.org/10.1002/cnma.202000009>

108. Akhtar MJ, **Maqsood Ahamed**, Alhadlaq HA. Gadolinium Oxide Nanoparticles Induce Toxicity in Human Endothelial HUVECs via Lipid Peroxidation, Mitochondrial Dysfunction and Autophagy Modulation. **Nanomaterials** (Basel) 2020 (Aug) 26;10(9): E1675. <https://doi.org/10.3390/nano10091675>
107. Khan MAM, Siwach R, Kumar S, Ahmed J, **Maqsood Ahamed**. Hydrothermal preparation of Zn-doped In₂O₃ nanostructure and its microstructural, optical, magnetic, photocatalytic and dielectric behaviour. **Journal of Alloys and Compounds** 2020 (December); 846: 156479. <https://doi.org/10.1016/j.jallcom.2020.156479>
106. **Maqsood Ahamed***, Akhtar MJ, Khan MAM, Alhadlaq HA. Alleviating effects of reduced graphene oxide against lead-induced cytotoxicity and oxidative stress in human alveolar epithelial (A549) cells. **Journal of Applied Toxicology** 2020 Sep;40(9):1228-1238. <https://doi.org/10.1002/jat.3980>
105. M. A. Majeed Khan, Rahul Siwach, Sushil Kumar, **Maqsood Ahamed**, Jahangeer Ahmed. Investigations on microstructure, optical, magnetic, photocatalytic, and dielectric behaviours of pure and Co-doped ZnO NPs. **Journal of Materials Science: Materials in Electronics** 2020; 31: 6360-6371. <https://doi.org/10.1007/s10854-020-03192-2>
104. **Maqsood Ahamed***, Akhtar MJ, Alhadlaq HA. Influence of silica nanoparticles on cadmium-induced cytotoxicity, oxidative stress, and apoptosis in human liver HepG2 cells. **Environmental Toxicology** 2020; 35: 599-608. <https://doi.org/10.1002/tox.22895>
103. **Maqsood Ahamed***, Akhtar MJ, Alaizeri ZM, Alhadlaq HA. TiO₂ nanoparticles potentiated the cytotoxicity, oxidative stress and apoptosis response of cadmium in two different human cells. **Environmental Science and Pollution Research** 2020; 27: 10425-10435. <https://doi.org/10.1007/s11356-019-07130-6>
102. Akhtar MJ, **Maqsood Ahamed**, Alrokayan SA, Ramamoorthy MM, Alaizeri ZM. High Surface Reactivity and Biocompatibility of Y₂O₃ NPs in Human MCF-7 Epithelial and HT-1080 Fibroblast Cells. **Molecules** 2020; 25: 1137. <https://doi.org/10.3390/molecules25051137>
101. **Maqsood Ahamed***, Akhtar MJ, Khan MAM. Investigation of Cytotoxicity, Apoptosis, and Oxidative Stress Response of Fe₃O₄-RGO Nanocomposites in Human Liver HepG2 cells. **Materials** 2020, 13: 660. <https://doi.org/10.3390/ma13030660>
100. Akhtar MJ, **Maqsood Ahamed**, Alhadlaq HA, Kumar S, Alrokayan SA. Mitochondrial dysfunction, autophagy stimulation and non-apoptotic cell death caused by nitric oxide-inducing Pt-coated Au nanoparticle in human lung carcinoma cells. **Biochimica et Biophysica Acta (BBA)-General Subjects** 2020; 1864: 129452. <https://doi.org/10.1016/j.bbagen.2019.129452>

YEAR 2019

99. **Maqsood Ahamed***, Akhtar MJ, Khan MAM, Alaizeri ZM, Alhadlaq HA. Evaluation of the cytotoxicity and oxidative stress response of CeO₂-RGO nanocomposites in human lung epithelial A549 cells. **Nanomaterials** 2019, 9, 1709. <https://doi.org/10.3390/nano9121709>
98. **Maqsood Ahamed***, Akhtar MJ, Alhadlaq HA. Co-exposure to SiO₂ nanoparticles and arsenic induced augmentation of oxidative stress and mitochondria-dependent apoptosis in human cells. **International Journal of Environmental Research and Public Health** 2019; 16: 3199. <https://doi.org/10.3390/ijerph16173199>
97. Khan ST, Saleem S, **Maqsood Ahamed**, Ahmad J. Survival of probiotic bacteria in the presence of food grade nanoparticles from chocolates: an in vitro and in vivo study. **Applied Microbiology and Biotechnology** 2019; 103: 6689-6700. <https://doi.org/10.1007/s00253-019-09918-5>

96. Akhtar MJ, **Maqusood Ahamed**, Alhadlaq H, Alrokayan S. Toxicity Mechanism of Gadolinium Oxide Nanoparticles and Gadolinium Ions in Human Breast Cancer Cells. **Current Drug Metabolism** 2019; 20: 907-917. DOI : [10.2174/1389200220666191105113754](https://doi.org/10.2174/1389200220666191105113754)
95. **Maqusood Ahamed***, Akhtar MJ, Alhadlaq HA. Preventive effect of TiO₂ nanoparticles on heavy metal Pb-induced toxicity in human lung epithelial (A549) cells. **Toxicology in Vitro** 2019; 57: 18-27. <https://doi.org/10.1016/j.tiv.2019.02.004>
94. Khan MAM, Khan W, **Maqusood Ahamed**, Alhazaa AN. Investigation on the structure and physical properties of Fe₃O₄/RGO nanocomposites and their photocatalytic application. **Materials Science in Semiconductor Processing** 99 (2019) 44–53. <https://doi.org/10.1016/j.mssp.2019.04.005>
93. **Maqusood Ahamed***, Akhatr MJ, Alrokayan SA, Alhadlaq HA. Oxidative stress mediated cytotoxicity and apoptosis response of bismuth oxide (Bi₂O₃) nanoparticles in human breast cancer (MCF-7) cells. **Chemosphere** 2019; 216: 823-831. <https://doi.org/10.1016/j.chemosphere.2018.10.214>
92. Alhadlaq HA, Akhtar MJ, **Maqusood Ahamed***. Different cytotoxic and apoptotic responses of MCF-7 and HT1080 cells to MnO₂ nanoparticles are based on similar mode of action. **Toxicology** 2019; 411: 78-80. <https://doi.org/10.1016/j.tox.2018.10.023>
91. Ansari AA, Khan A, Labis JP, Alam M, Manthrammel MA, **Maqusood Ahamed**, Akhtar MJ, Aldalbahi A, Ghaithan H. Mesoporous multi-silica layer-coated Y₂O₃:Eu core-shell nanoparticles: Synthesis, luminescent properties and cytotoxicity evaluation. **Materials Science and Engineering: C** 2019; 96: 365-373. <https://doi.org/10.1016/j.msec.2018.11.046>

YEAR 2018

90. Ansari AA, Aldalbahi A, Labis JP, El-Toni AM, **Maqusood Ahamed**, Manthrammel MA. Highly biocompatible, monodispersed and mesoporous La(OH)₃:Eu@mSiO₂ core-shell nanospheres: Synthesis and luminescent properties. **Colloids and Surfaces B: Biointerfaces** 2018; 163: 133-139. <https://doi.org/10.1016/j.colsurfb.2017.12.026>
89. Khan A, Khan TH, **Maqusood Ahamed**, El-Toni AM, Aldalbahi A, Alam J, Ahamad T. Temperature-Responsive Polymer Microgel-Gold Nanorods Composite Particles: Physicochemical Characterization and Cytocompatibility. **Polymers** 2018; 10: 99. <https://doi.org/10.3390/polym10010099>
88. Khan ST, Ahmad J, **Maqusood Ahamed**, Jousset A. Sub-lethal doses of widespread nanoparticles promote antifungal activity in *Pseudomonas protegens* CHA0. **Science of the Total Environment** 2018; 627: 658-662. <https://doi.org/10.1016/j.scitotenv.2018.01.257>
87. Ahmad J, Siddiqui MA, Akhtar MJ, Alhadlaq HA, Alshamsan A, Khan ST, Wahab R, Al-Khedhairi AA, Al-SalimA, Musarrat J, Saquib Q, Fareed M, **Maqusood Ahamed**. Copper doping enhanced the oxidative stress-mediated cytotoxicity of TiO₂ nanoparticles in A549 cells. **Human and Experimental Toxicology** 2018; 37: 496-507. <https://doi.org/10.1177/0960327117714040>
86. Akhtar MJ, **Maqusood Ahamed**, Alhadlaq HA, Alrokayan SA. MgO nanoparticles cytotoxicity caused primarily by GSH depletion in human lung epithelial cells. **Journal of Trace Elements in Medicine and Biology** 2018; 50: 283-290. <https://doi.org/10.1016/j.jtemb.2018.07.016>
85. **Maqusood Ahamed***, Akhtar MJ, Khan MAM, Alhadlaq HA. Oxidative stress mediated cytotoxicity of tin (IV) oxide (SnO₂) nanoparticles in human breast cancer (MCF-7) cells. **Colloids and Surfaces B: Biointerfaces** 2018; 172: 152-160. <https://doi.org/10.1016/j.colsurfb.2018.08.040>

84. Akhtar MJ, **Maqusood Ahamed**, Alhadlaq HA. Challenges facing nanotoxicology and nanomedicine due to cellular diversity. **Clinica Chimica Acta** 2018; 487: 186-196. <https://doi.org/10.1016/j.cca.2018.10.004>

YEAR 2017

83. Tawfik E, **Maqusood Ahamed**, Almalik A, Alfaqeeh M, Alshamsan A. Prolonged exposure of colon cancer cells to 5-fluorouracil nanoparticles improves its anticancer activity. **Saudi Pharmaceutical Journal** 2017; 25: 206-213. <https://doi.org/10.1016/j.jsps.2016.05.010>
82. **Maqusood Ahamed***, Khan MAM, Akhtar MJ, Alhadlaq HA, Alshamsan A. Ag-doping regulates the cytotoxicity of TiO₂ nanoparticles *via* oxidative stress in human cancer cells. **Scientific Reports** 2017; 7: 17662. <https://doi.org/10.1038/s41598-017-17559-9>
81. Akhtar MJ, **Maqusood Ahamed**, Alhadlaq HA, Alshamsan A. Nanotoxicity of cobalt induced by oxidant generation and glutathione depletion in MCF-7 cells. **Toxicology in Vitro** 2017; 40: 94-101. <https://doi.org/10.1016/j.tiv.2016.12.012>
80. Akhtar MJ, **Maqusood Ahamed**, Alhadlaq HA, Alshamsan A. Mechanism of ROS scavenging and antioxidant signalling by redox metallic and fullerene nanomaterials: Potential implications in ROS associated degenerative disorders. **Biochimica et Biophysica Acta (BBA) - General Subjects**. 2017; 1861: 802-813. <https://doi.org/10.1016/j.bbagen.2017.01.018>
79. Akhtar MJ, **Maqusood Ahamed**, Alhadlaq HA. Therapeutic targets in the selective killing of cancer cells by nanomaterials. **Clinica Chimica Acta** 2017; 469: 53-62. <https://doi.org/10.1016/j.cca.2017.03.020>
78. **Maqusood Ahamed***, Akhtar MJ, Khan MAM, Alhadlaq HA, Aldalbahi A. Nanocubes of indium oxide induce cytotoxicity and apoptosis through oxidative stress in human lung epithelial cells. **Colloids and Surfaces B: Biointerfaces** 2017; 156: 157-164. <https://doi.org/10.1016/j.colsurfb.2017.05.020>
77. Khan MAM, Khan W, **Maqusood Ahamed**, Alhazaa AN. Microstructural properties and enhanced photocatalytic performance of Zn doped CeO₂ nanocrystals. **Scientific Reports** 2017; 7: 12560. <https://doi.org/10.1038/s41598-017-11074-7>
76. Shams T. Khan, Ajmaluddin Malik, Rizwan Wahab, Omar H. Abd-Elkader, **Maqusood Ahamed**, Javed Ahmad, Javed Musarrat, Maqsood A. Siddiqui, Abdulaziz A. Al-Khedhairi. Synthesis and characterization of some abundant nanoparticles, their antimicrobial and enzyme inhibition activity. **Acta Microbiologica et Immunologica Hungarica** 2017; 64: 203-216. <https://doi.org/10.1556/030.64.2017.004>

YEAR 2016

75. Akhtar MJ, Alhadlaq HA, Kumar S, Alrokayan SA, **Maqusood Ahamed***. Selective cancer-killing ability of metal-based nanoparticles: implications for cancer therapy. **Archives of Toxicology** 2015; 89 (11): 1895-1907. <https://doi.org/10.1007/s00204-015-1570-1>
74. Akhtar MJ, Alrokayan SA, Alhadlaq HA, **Maqusood Ahamed***. Dose-dependent toxicity of copper oxide nanoparticles in human lung epithelial cells. **Toxicology and Industrial Health** 2016; 32(5): 809-821. <https://doi.org/10.1177/0748233713511512>

73. **Maqusood Ahamed***, Akhtar MJ, Alhadlaq HA, Alshamsan A. Copper ferrite nanoparticle-induced cytotoxicity and oxidative stress in human breast cancer MCF-7 cells. **Colloids and Surfaces B: Biointerfaces** 2016, 142: 46-54. <https://doi.org/10.1016/j.colsurfb.2016.02.043>
72. Ahmad J, Alhadlaq HA, Alshamsan A, Siddiqui MA, Saquib Q, Khan ST, Wahab R, Al-Khedhairi AA, Musarrat J, Akhtar MJ, **Maqusood Ahamed***. Differential cytotoxicity of copper ferrite nanoparticles in different human cells. **Journal of Applied Toxicology** 2016, 36: 1284-1293. <https://doi.org/10.1002/jat.3299>
71. Khan ST, Ahmad J, **Maqusood Ahamed**, Musarrat J, Al-Khedhairi AA. Zinc oxide and titanium dioxide nanoparticles induce oxidative stress, inhibit growth, and attenuate biofilm formation activity of *Streptococcus mitis*. **Journal of Biological Inorganic Chemistry** 2016; 21: 295-303. <https://doi.org/10.1007/s00775-016-1339-x>
70. Ahamad T, Khan MAM, Kumar S, **Maqusood Ahamed**, Shahabuddin M, Alhazaa AN. CdS quantum dots: growth, microstructural, optical and electrical characteristics. **Applied Physics B: Laser and Optics** 2016; 122: 179. <https://doi.org/10.1007/s00340-016-6455-3>
69. **Maqusood Ahamed***, Khan MAM, Akhtar MJ, Alhadlaq HA, Alshamsan A. Role of Zn doping in oxidative stress mediated cytotoxicity of TiO₂ nanoparticles in human breast cancer MCF-7 cells. **Scientific Reports** 2016; 6: 30196. <https://doi.org/10.1038/srep30196>
68. **Maqusood Ahamed***, Akhtar MJ, Khan MA, Alhadlaq HA, Alrokayan SA. Cytotoxic response of platinum-coated gold nanorods in human breast cancer cells at very low exposure levels. **Environmental Toxicology** 2016, 31(1): 1344-1356. <https://doi.org/10.1002/tox.22140>
67. **Maqusood Ahamed***, Akhtar MJ, Khan MAM, Alhadlaq HA, Alshamsan A. Cobalt iron oxide nanoparticles induce cytotoxicity and regulate theapoptotic genes through ROS in human liver cells (HepG2). **Colloids and Surfaces B: Biointerfaces** 2016, 148: 665-673. <https://doi.org/10.1016/j.colsurfb.2016.09.047>

YEAR 2015

66. Ahmad J, Alhadlaq HA, Siddiqui MA, Saquib Q, Al-Khedhairi AA, Musarrat J, **Maqusood Ahamed***. Concentration-dependent induction of reactive oxygen species, cell cycle arrest and apoptosis in human liver cells after nickel nanoparticles exposure. **Environmental Toxicology** 2015; 30(2): 137-148. <https://doi.org/10.1002/tox.21879>
65. Khan MAM, Kumar S, **Maqusood Ahamed**. Structural, electrical and optical properties of nanocrystalline silicon thin films deposited by pulsed laser ablation. **Materials Science in Semiconductor Processing** 2015; 30: 169-174. <https://doi.org/10.1016/j.mssp.2014.09.028>
64. Siddiqui MA, Saquib S, **Maqusood Ahamed**, Farshori NN, Ahmad J, Wahab R, Khan ST, Alhadlaq HA, Musarrat J, Al-Khedhairi AA, Pant AB. Molybdenum nanoparticles-induced cytotoxicity, oxidative stress, G2/M arrest, and DNA damage in mouse skin fibroblast cells (L929). **Colloids and Surfaces B: Biointerfaces** 2015; 125: 73-81. <https://doi.org/10.1016/j.colsurfb.2014.11.014>
63. **Maqusood Ahamed***, Alhadlaq HA, Ahmad J, Siddiqui MA, Khan ST, Musarrat J, Al-Khedhairi AA. Comparative cytotoxicity of dolomite nanoparticles in human larynx HEp2 and liver HepG2 cells. **Journal of Applied Toxicology** 2015; 35: 640-650. <https://doi.org/10.1002/jat.3097>
62. **Maqusood Ahamed***, Akhtar MJ, Alhadlaq HA, Khan MAM, Alrokayan SA. Comparative cytotoxic response of nickel ferrite nanoparticles in human liver HepG2 and breast MFC-7 cancer cells. **Chemosphere** 2015; 135: 278-288. <https://doi.org/10.1016/j.chemosphere.2015.03.079>
61. Akhtar MJ, **Maqusood Ahamed**, Alhadlaq HA, Khan MAM, Alrokayan SA. Glutathione replenishing potential of CeO₂ nanoparticles in human breast and fibrosarcoma cells. **Journal of Colloid & Interface Science** 2015; 453: 21-27. <https://doi.org/10.1016/j.jcis.2015.04.049>

60. Khan MAM, Kumar S, **Maqusood Ahamed**, Alrokayan SA. Fe-doping induced tailoring in the microstructure and optical properties of ZnO nanoparticles synthesized via sol-gel route. **Journal of Materials Science: Materials in Electronics** 2015; 26: 6113–6118. <https://doi.org/10.1007/s10854-015-3190-1>
59. Akhtar MJ, **Maqusood Ahamed**, Alhadlaq HA, Khan MAM, Alrokayan SA. Antioxidative and cytoprotective response elicited by molybdenum nanoparticles in human cells. **Journal of Colloid & Interface Science** 2015; 457: 370-377. <https://doi.org/10.1016/j.jcis.2015.07.034>
58. **Maqusood Ahamed***, Akhtar MJ, Alhadlaq HA, Alrokayan SA. Assessment of the lung toxicity of copper oxide nanoparticles: Current status. **Nanomedicine (Lond.)** 2015; 10(15); 2365-2377. <https://doi.org/10.2217/nmm.15.72>
57. Akhtar MJ, Alhadlaq HA, Alrokayan SA, **Maqusood Ahamed***. Aluminum doping tunes band gap energy level as well as oxidative stress-mediated cytotoxicity of ZnO nanoparticles in MCF-7 cells. **Scientific Reports** 2015; 5: 13876. <https://doi.org/10.1038/srep13876>
56. Alhadlaq HA, Akhtar MJ, **Maqusood Ahamed***. Zinc ferrite nanoparticles induced cytotoxicity and oxidative stress in different human cells. **Cell & Bioscience** 2015; 5: 55. <https://doi.org/10.1186/s13578-015-0046-6>

YEAR 2014

55. **Maqusood Ahamed***, Khan MAM, Karuppiyah P, Aldhabi NA, Alhadlaq HA. Synthesis, characterization and antimicrobial activity of copper oxide nanoparticles. **Journal of Nanomaterials**. Volume 2014, Article ID 637858, 4 pages. <https://doi.org/10.1155/2014/637858>
54. **Maqusood Ahamed***, Hisham A. Alhadlaq. Nickel nanoparticle-induced dose-dependent cytotoxicity in human breast carcinoma MCF-7 cells. **OncoTargets and Therapy** 2014; 7: 269-280. <https://doi.org/10.2147/OTT.S58044>
53. Akhtar MJ, **Maqusood Ahamed***, MAM Khan, Alrokayan SA, Ahmad I, Kumar S. Cytotoxicity and apoptosis induction by nanoscale talc particles from two different geographical regions in human lung epithelial cells. **Environmental Toxicology** 2014; 29: 394-406. <https://doi.org/10.1002/tox.21766>
52. Khan MAM, Kumar S, **Maqusood Ahamed**. Microstructure and optical characterization of nanometric silicon films prepared by pulsed laser ablation. **Journal of Modern Optics** 2014; 61(6): 504-508. <https://doi.org/10.1080/09500340.2014.899402>
51. Akhtar MJ, **Maqusood Ahamed**, Alhadlaq HA, Alrokayan SA, Kumar S. Targeted anticancer therapy: overexpressed receptors and nanotechnology. **Clinica Chimica Acta** 2014; 436: 78-92. <https://doi.org/10.1016/j.cca.2014.05.004>
50. Khan MAM, Kumar S, Khan MN, **Maqusood Ahamed**, Al-Dwayyan AS. Microstructure and blue-shift in optical band gap of nanocrystalline $Al_xZn_{1-x}O$ thin films. **Journal of Luminescence** 2014; 155: 275-281. <https://doi.org/10.1016/j.jlumin.2014.06.007>
49. Dwivedi S, Siddiqui MA, Farshori NN, **Maqusood Ahamed**, Musarrat J, Al-Khedhairi AA. Synthesis, characterization and toxicological evaluation of iron oxide nanoparticles in human lung alveolar epithelial cells. **Colloids and Surfaces B: Biointerfaces** 2014; 122: 209-215. <https://doi.org/10.1016/j.colsurfb.2014.06.064>
48. Khan ST, **Maqusood Ahamed**, Musarrat J, Al-Khedhairi AA. Antibiofilm and antibacterial activities of zinc oxide nanoparticles against the oral opportunistic pathogens *Rothia dentocariosa* and *Rothia mucilaginosa*. **European Journal of Oral Sciences** 2014; 1-7. <https://doi.org/10.1111/eos.12152>

YEAR 2013

47. Alarifi S, Ali D, Sulimany AO, Siddiqui MA, **Maqusood Ahamed**, AlKhedhairi, AA. Oxidative stress contributes to cobalt oxide nanoparticles-induced cytotoxicity and DNA damage in human hepatocarcinoma cells. **International Journal of Nanomedicine** 2013; 8: 189-199. <https://doi.org/10.2147/IJN.S37924>
46. **Maqusood Ahamed***. Silica nanoparticles induced cytotoxicity, oxidative stress and apoptosis in A549 and A431 cells. **Human and Experimental Toxicology** 2013; 32(2): 186-195. <https://doi.org/10.1177/0960327112459206>
45. Khan MAM, Khan W, **Maqusood Ahamed**, Alsalhi MS, Ahmed T. Crystallite structural, electrical and luminescent characteristics of thin films of In₂O₃ nanocubes synthesized by spray pyrolysis. **Electronic Materials Letters** 2013; 9(1): 53-57. <https://doi.org/10.1007/s13391-012-2088-9>
44. **Maqusood Ahamed***, Alhadlaq HA, Kham MAM, Akhtar MJ, Alrokayan SA. Selective killing of cancer cells by iron oxide nanoparticles mediated through reactive oxygen species via p53 pathway. **Journal of Nanoparticle Research** 2013; 15: 1225. <https://doi.org/10.1007/s11051-012-1225-6>
43. Alarifi S, Ali D, Alkahtani S, Verma A, **Maqusood Ahamed**, Alhadlaq HA. Induction of oxidative stress, DNA damage and apoptosis in human skin malignant melanoma cell line after exposure to zinc oxide nanoparticles. **International Journal of Nanomedicine** 2013; 8: 983-993. <https://doi.org/10.2147/IJN.S42028>
42. Khan ST, **Maqusood Ahamed**, Al-Khedhairi A, Musarrat J. Biocidal effect of copper and zinc oxide nanoparticles on human oral microbiome and biofilm formation. **Materials Letters** 2013; 97: 67-70. <https://doi.org/10.1016/j.matlet.2013.01.085>
41. Dwivedi S, Al-Khedhairi AA, **Maqusood Ahamed**, Musarrat J. 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** 2013; 8(3): e57404. <https://doi.org/10.1371/journal.pone.0057404>
40. Ahmad J, Hasnain SE, Siddiqui MA, **Maqusood Ahamed**, Musarrat J, Al-Khedhairi AA. MicroRNA in carcinogenesis and cancer diagnostics: A new paradigm. **Indian Journal of Medical Research** 2013; 137: 680-694.
39. **Maqusood Ahamed***, Alhadlaq HA, Khan MAM, Alam J, Ali D, Alarafi S. Iron oxide nanoparticles induce oxidative stress mediated genotoxicity in two different human cell lines. **Current Pharmaceutical Design** 2013; 19(37): 6681-6690. [doi: 10.2174/1381612811319370011](https://doi.org/10.2174/1381612811319370011)
38. Siddiqui MA, Ahmad J, Al-Khedhairi AA, Musarrat J, Alhadlaq HA, **Maqusood Ahamed***. Copper oxide nanoparticles induced mitochondria mediated apoptosis in human hepatocellular carcinoma cells. **PLOS ONE** 2013; 8(8): e69534. <https://doi.org/10.1371/journal.pone.0069534>
37. Wahab R, Khan ST, Dwivedi S, **Maqusood Ahamed**, Musarrat J, Al-Khedhairi AA. Effective inhibition of bacterial respiration and growth by CuO microspheres composed of thin nanosheets. **Colloids and Surfaces B: Biointerfaces** 2013; 111C: 211-217. <https://doi.org/10.1016/j.colsurfb.2013.06.003>
36. Siddiqui MA, Ahmad J, Farshori NN, Saquib Q, Jahan S, Kashyap MP, **Maqusood Ahamed**, Musarrat J, Al-Khedhairi AA. Rotenone-induced oxidative stress and apoptosis in human liver HepG2 cells. **Molecular and Cellular Biochemistry** 2013; 384: 59-69. <https://doi.org/10.1007/s11010-013-1781-9>
35. **Maqusood Ahamed***, Ali D, Akhtar MJ, Alhadlaq HA. Nickel oxide nanoparticles exert cytotoxicity *via* oxidative stress and induce apoptotic response in human liver cells (HepG2). **Chemosphere** 2013; 93(10): 2514-2422. <https://doi.org/10.1016/j.chemosphere.2013.09.047>

34. Khan ST, **Maqusood Ahamed**, Musarrat J, Alhadlaq HA, Abdulaziz Al-Khedhairi. Comparative effectiveness of NiCl₂, Ni- and NiO-NPs in controlling oral bacterial growth and biofilm formation on oral surfaces. **Archives of Oral Biology** 2013; 58(12): 1804-1811. <https://doi.org/10.1016/j.archoralbio.2013.09.011>

YEAR 2012

33. Akhtar MJ, **Maqusood Ahamed**, Fareed M, Alrokayan SA, Kumar S. Protective effect of sulphoraphane against oxidative stress mediated toxicity induced by CuO nanoparticles in mouse embryonic fibroblasts BALB 3T3. **Journal of Toxicological Sciences** 2012; 37: 139-148.
32. Ahmad J, **Maqusood Ahamed***, Siddiqui MA, Musarrat J, Al-Khedhairi AA, Siddiqui MKJ, Alrokayan SA. Apoptosis induction by amorphous silica nanoparticles mediated through reactive oxygen species generation in human liver cell line HepG2. **Toxicology and Applied Pharmacology** 2012; 259-160-168. <https://doi.org/10.1016/j.taap.2011.12.020>
31. Akhtar MJ, **Maqusood Ahamed***, Kumar S, Ahmad J, Khan MAM, Alrokayan SA. Zinc oxide nanoparticles selectively induces apoptosis in cancer cells through reactive oxygen species. **International Journal of Nanomedicine** 2012; 7: 845-857. <https://doi.org/10.2147/IJN.S29129>
30. Siddiqui MA, **Maqusood Ahamed***, Ahmad J, Khan MAM, Musarrat J, Al-Khedhairi AA, Alrokayan SA. Nickel oxide nanoparticles induce cytotoxicity, oxidative stress and apoptosis in cultured human cells that is abrogated by the dietary antioxidant curcumin. **Food and Chemical Toxicology** 2012; 50: 641-647. <https://doi.org/10.1016/j.fct.2012.01.017>
29. Khan MAM, Kumar S, Alsalhi MS, **Maqusood Ahamed**, Alhoshan M, Alrokayan SA, Ahmed T. Morphology and non-isothermal crystallization kinetics of CuInS₂ nanocrystals synthesized by solvo-thermal method. **Materials Characterization** 2012; 65: 109-114. <https://doi.org/10.1016/j.matchar.2012.01.009>
28. Khan MAM, Khan W, **Maqusood Ahamed**, Alhoshan M. Structural and optical properties of In₂O₃ nanostructured thin film. **Materials Letters** 2012; 79: Pages 119-121. <https://doi.org/10.1016/j.matlet.2012.03.110>
27. Khan MAM, Kumar S, **Maqusood Ahamed**, AlSalhi MS. Structural and electrical properties of spray deposited thin films of CuS₂ nanocrystals. **Materials Letters** 2012; 68: 497-500. <https://doi.org/10.1016/j.matlet.2011.11.033>
26. Ali D, Alarifi S, Kumar S, **Maqusood Ahamed**, Siddiqui MA. Oxidative stress and genotoxic effect of zinc oxide nanoparticles in freshwater snail Lymnaea luteola L. **Aquatic Toxicology** 2012; 124-125: 83-90. <https://doi.org/10.1016/j.aquatox.2012.07.012>

YEAR 2011

25. **Maqusood Ahamed***, Verma S, Kumar A, Siddiqui MKJ. Environmental lead exposure as a risk for childhood aplastic anemia. **Bioscience Trends** 2011; 5: 38-43. <https://doi.org/10.5582/bst.2011.v5.1.38>
24. Siddiqui MA, Saquib Q, **Maqusood Ahamed**, Ahmad J, Al-Khedhairi AA, Abou-Tarboush FM, Musarrat J. Effect of trans-resveratrol on rotenone-induced cytotoxicity in human breast adenocarcinoma cells. **Toxicology International** 2011; 18: 105-110. [doi:10.4103/0971-6580.84261](https://doi.org/10.4103/0971-6580.84261)

23. **Maqusood Ahamed***. Toxic response of nickel nanoparticles in human lung epithelial A549 cells. **Toxicology in Vitro** 2011; 25: 930-936. <https://doi.org/10.1016/j.tiv.2011.02.015>
22. **Maqusood Ahamed***, Akhtar MJ, Siddiqui MA, Ahmad J, Musarrat J, Al-Khedhairy AA, AlSalhi MS, Alrokayan SA. Oxidative stress mediated apoptosis induced by nickel ferrite nanoparticles in cultured A549 cells. **Toxicology** 2011; 283: 101-108. <https://doi.org/10.1016/j.tox.2011.02.010>
21. **Maqusood Ahamed***, Khan MAM, Siddiqui MKJ, AlSalhi MS, Alrokayan SA. Green synthesis, characterization and evaluation of biocompatibility of silver nanoparticles. **Physica E: Low-dimensional Systems and Nanostructures** 2011; 43: 1266-1271. <https://doi.org/10.1016/j.physe.2011.02.014>
20. Khan MAM, Kumar S, **Maqusood Ahamed**, Alrokayan SA, AlSalhi MS. Structural and thermal studies of silver nanoparticles and electrical transport study of their thin films. **Nanoscale Research Letter** 2011; 6: 434. <https://doi.org/10.1186/1556-276X-6-434>
19. Khan MAM, Kumar S, **Maqusood Ahamed**, Alrokayan SA, AlSalhi MS, Alhoshan M, Aldwayyan AS. Structural and spectroscopic studies of thin film of silver nanoparticles. **Applied Surface Science** 2011; 257: 10607-10612. <https://doi.org/10.1016/j.apsusc.2011.07.058>
18. Meyer K, Rajanahalli P, **Maqusood Ahamed**, Rowe JJ, Hong Y. ZnO nanoparticles induce apoptosis in human dermal fibroblasts via p53 and p38 pathways. **Toxicology in Vitro** 2011; 25: 1721-1726. <https://doi.org/10.1016/j.tiv.2011.08.011>
17. **Maqusood Ahamed***, Akhtar MJ, Raja M, Ahmad I, Siddiqui MKJ, AlSalhi MS, Alrokayan SA. Zinc oxide nanorod induced apoptosis via p53, bax/bcl-2 and survivin pathways in human lung cancer cells: Role of oxidative stress. **Nanomedicine: Nanotechnology, Biology and Medicine** 2011; 7: 904-913. <https://doi.org/10.1016/j.nano.2011.04.011>

YEAR 2010

16. **Maqusood Ahamed***, AlSalhi, MS, Siddiqui MKJ. Silver nanoparticle applications and human health. **Clinica Chimica Acta** 2010; 411: 1841-1848. <https://doi.org/10.1016/j.cca.2010.08.016>
15. Akhtar MJ, **Maqusood Ahamed**, Kumar S, Siddiqui S, Patil G, Ashquin M, Ahmad I. Nanotoxicity of pure silica mediated through oxidant generation rather than glutathione depletion in human lung epithelial cells. **Toxicology** 2010; 276: 95-102. <https://doi.org/10.1016/j.tox.2010.07.010>
14. **Maqusood Ahamed**, Posgai R, Gorey TM, Nielson M, Hussain SM, Rowe J. Silver nanoparticles induced heat shock protein 70, oxidative stress and apoptosis in Drosophila melanogaster. **Toxicology and Applied Pharmacology** 2010; 242: 263-269. <https://doi.org/10.1016/j.taap.2009.10.016>
13. **Maqusood Ahamed***, Siddiqui MA, Akhtar MJ, Ahmad I, Pant AB, Alhadlaq HA. Genotoxic potential of copper oxide nanoparticles in human lung epithelial cells. **Biochemical and Biophysical Research Communication** 2010; 396: 578-583. <https://doi.org/10.1016/j.bbrc.2010.04.156>
12. **Maqusood Ahamed***, Verma S, Kumar A, Siddiqui MKJ. Blood lead levels in children of Lucknow, India. **Environmental Toxicology** 2010; 25: 48-54. <https://doi.org/10.1002/tox.20476>

YEAR 2009

11. Posgai R, **Maqusood Ahamed**, Hussain SM, Rowe J, Nielson M. Rapid inhalation method for systemic introduction of nanoparticles to Drosophila melanogaster for toxicity testing. **Science of the Total Environment** 2009; 408: 439-443. <https://doi.org/10.1016/j.scitotenv.2009.10.008>

10. Maqusood Ahamed*, Mehrotra PK, Kumar P, Siddiqui MKJ. Placental lead-induced oxidative stress and preterm delivery. **Environmental Toxicology and Pharmacology** 2009; 27: 70-74. <https://doi.org/10.1016/j.etap.2008.08.013>

YEAR 2008

9. Maqusood Ahamed, Michael Karns, Michael Goodson, John Rowe, Saber M. Hussain, John J. Schlager, Yiling Hong. DNA damage response to different surface chemistry of silver nanoparticles in mammalian cells. **Toxicology and Applied Pharmacology** 233 (2008) 404-410. <https://doi.org/10.1016/j.taap.2008.09.015>
8. Maqusood Ahamed*, Kumar A, Siddiqui WA, Siddiqui MKJ. Oxidative stress and some neurological disorders in relation to blood lead levels in children. **Redox Report** 2008; 13: 117-122. <https://doi.org/10.1179/135100008X259213>

YEAR 2007

7. Maqusood Ahamed, Singh S, Behari JR, Kumar A, Siddiqui MKJ. Interaction of lead with some essential trace metals in the blood of anemic children from Lucknow, India. **Clinica Chimica Acta** 2007; 377: 92-97. <https://doi.org/10.1016/j.cca.2006.08.032>
6. Maqusood Ahamed and Siddiqui MKJ. Low levels lead exposure and oxidative stress: Current opinions. **Clinica Chimica Acta** 2007; 383: 57-64. <https://doi.org/10.1016/j.cca.2007.04.024>
5. Maqusood Ahamed and Siddiqui MKJ. Environmental lead toxicity and nutritional factors. **Clinical Nutrition** 2007; 26: 400-408. <https://doi.org/10.1016/j.clnu.2007.03.010>

YEAR 2006

4. Maqusood Ahamed, Verma S, Kumar A, Siddiqui MKJ. Delta-aminolevulinic acid dehydratase inhibition and oxidative stress in relation to blood lead among urban adolescents. **Human and Experimental Toxicology** 2006; 25: 547-553. <https://doi.org/10.1191%2F0960327106het657oa>
3. Maqusood Ahamed, Anand M, Kumar A, Siddiqui MKJ. Childhood aplastic anemia in Lucknow, India: Incidence, organochlorines in the blood and review of case reports following to pesticides exposure. **Clinical Biochemistry** 2006; 39: 762-766. <https://doi.org/10.1016/j.clinbiochem.2006.03.021>
2. Maqusood Ahamed, Kumar A, Siddiqui MA. Lipid peroxidation and antioxidants status in the blood of children with aplastic anemia (letter to the editor). **Clinica Chimica Acta** 2006; 374: 176-177. <https://doi.org/10.1016/j.cca.2006.06.029>

YEAR 2005

1. Maqusood Ahamed, Verma S, Kumar A, Siddiqui MKJ. Environmental exposure to lead and its correlation with biochemical indices in children. **Science of the Total Environment** 2005; 346: 48-55. <https://doi.org/10.1016/j.scitotenv.2004.12.019>

*Corresponding author

TEACHING EXPERIENCE

- Served as **Private Teacher** for introductory courses of **Biochemistry, Cell Biology, Genetics and Physiology** during the course of B.S. and M.S. study.
- Conducted lectures and practical classes for master students (Biochemistry, Biotechnology, Environmental Science and Toxicology) offered by **Indian Institute of Toxicological Research (IITR), Lucknow, India.**
- Participated in Summer Student Training Program at **Indian Institute of Toxicological Research (IITR), Lucknow, India.**
- Participated in Summer Student Training program at **University of Dayton, OH, USA.**

LECTURES DELIVERED

- **Ahamed M.** The fifth class of G α proteins. February, 2009. **Department of Biology, University of Dayton, OH, USA**
- **Ahamed M.** Toxicity of engineered nanomaterials. September, 2008. **Department of Biology, University of Dayton, OH, USA**
- **Ahamed M.** DNA damage response to different surface chemistry of silver nanoparticles in mammalian cells. April, 2008. **Department of biology, University of Dayton, OH, USA**
- **Ahamed M.** Placental lead-induced oxidative stress and preterm delivery. August, 2006. **Indian Institute of Toxicological Research, Lucknow, India**
- **Ahamed M.** Interaction of lead with some essential trace metals in the blood of anemic children. December, 2005. **Indian Institute of Toxicological Research, Lucknow, India**
- **Ahamed M.** Environmental lead exposure and associated health risks in children. May, 2004. **Indian Institute of Toxicological Research, Lucknow, India**
- **Ahamed M.** Blood lead levels and its correlation with biochemical indices in general population children. March, 2005. **Indian Institute of Toxicological Research, Lucknow, India**

SELECTED CONFERENCE ABSTRACTS

1. **Ahamed M,** Verma S, Kumar A, Siddiqui M. K. J. Environmental exposure to lead and its impact on somatic growth, neurobehavioral function and biochemical indices in children from Lucknow. International conference on health, occupation and environment in unorganized sector- Problems and road maps (ICHOE 2004). Indian Institute of Toxicological Research (IITR), **Lucknow, India.** November 1-3, 2004.
2. **Ahamed M,** Siddiqui MKJ. Lead exposure and children's health. *Vish Vigyan Sandesh*, 2004; 10: 47-48.

3. **Ahamed M.** Training Workshop on Scientific Communication. Indian Institute of Toxicological Research (IITR), **Lucknow, India.** July 24-25, 2004.
4. **Ahamed M,** Mehrotra PK, Kumar P, Siddiqui MKJ. Enhanced antioxidant enzymes activity and lipid peroxidation in placental tissue of women with preterm deliveries. All India Cell Biology Conference-2006 (AICBC-2006). Indian Institute of Toxicological Research (IITR), **Lucknow, India.** January 18-20, 2006.
5. Anand M, Jyoti, **Ahamed M,** Kumar A, Siddiqui MKJ. Oxidative stress and childhood aplastic anemia in relation to blood organochlorines. All India Cell Biology Conference-2006 (AICBC-2006). Indian Institute of Toxicological Research (IITR), **Lucknow, India.** January 18-20, 2006.
6. Goodson M, **Ahamed M,** Ramasamy R, DesJardins A, Goubeaux D, Karns M, Murdock R, Posgai R, Vahrenhold C, Hong Y, Nielsen M, Robinson J, Hussain S, Rowe J. Assessing the toxicity of antimicrobial nanoparticles. 108th General Meeting of American Society for Microbiology, **Boston, USA,** June 1-5, 2008.
7. Goodson M, **Ahamed M,** Ramasamy R, DesJardins A, Goubeaux D, Karns M, Murdock R, Posgai R, Vahrenhold C, Hong Y, Nielsen M, Robinson J, Hussain S, Rowe J. Assessing the toxicity of antimicrobial nanoparticles. First US Air Force Workshop on Biological Interaction of Nanomaterials, **Dayton, Ohio, USA,** June 24-25, 2008.
8. **Ahamed M,** Karns M, Goodson M, Rowe J, Hussain S, Schlager J, Hong Y. Assessment of genotoxicity of different surface chemistry of silver nanoparticles in mammalian cells. First US Air Force Workshop on Biological Interaction of Nanomaterials, **Dayton, Ohio, USA,** June 24-25, 2008.
9. **Ahamed M,** Posgai R, Neilson M, Hussain SM, Rowe JJ. Silver nanoparticles-induced heat shock protein70, oxidative stress and apoptosis in *Drosophila melanogaster* (**Oral Presentation**), SETAC North America 30th Annual Meeting. Human-Environment Interactions: Understanding Change in Dynamic Systems Hilton Riverside, **New Orleans, Louisiana, USA,** 19 - 23 November 2009.
10. Rowe JJ, **Ahamed M.** Model systems for rapid assessment of long and short term effects of nanomaterials on biological systems. Interagency Nanotechnology Implications Grantees Workshop—EPA, NSF, NIH/NIEHS, NIOSH, and DOE Embassy Suites Hotel **Las Vegas, Nevada, USA** November 9-10, 2009.
11. **Ahamed M,** Maqsood A Siddiqui, Javed Ahmad, Javed Musarrat, Abdulaziz A. Al-Khedhairi, Mohamad S. AlSalhi, Salman A. Alrokayan. “Nickel ferrite nanoparticles induced oxidative stress and apoptosis in human lung epithelial cells” in “26th Annual Meeting of Saudi Biological Sciences” and a symposium on "Climate Change and Biodiversity" during May 10-12, 2011 at College of Science, Taif University, Taif, **Saudi Arabia.**
12. MA Siddiqui, **Ahamed M,** J Ahmad, Q Saquib, AA Al-Khedhairi, FM Abou-Tarboush, J Musarrat. “Trans-resveratrol protects MCF-7 cells against Rotenone-induced Cytotoxicity” in “26th Annual Meeting of Saudi Biological Sciences” and a symposium on "Climate Change and Biodiversity" during May 10-12, 2011 at College of Science, Taif University, Taif, **Saudi Arabia.**

13. **Ahamed M (Invited Speaker)**. DNA damage and apoptotic response of ZnO and CuO nanoparticles in Human alveolar adenocarcinoma cells. Second World Conference on Nanomedicine and Drug Delivery (WCN-2011) held on March 11-13, 2011 organized by Institute for Holistic Medical Sciences (IHMS), Kerala, **India** and Ayurved-Und Venen-Klinik Dr. Mathew, **Austria**.
14. MA Siddiqui, **Ahamed M**, J Ahmad, Q Saquib, R Wahab, ST Khan, S Dwivedi, A Al-Salem, AA Al-Khedhairi, J Musarrat, AB Pant. "4-Hydroxynonenal induced apoptotic changes in PC12 cells: Protection by trans- resveratrol" in "27th Annual Meeting of Saudi Biological Sciences" and a symposium on "Economics of Environment and Natural Resources" during March 6-8, 2012 at College of Science, Jazan University, Jazan, **Saudi Arabia**.
15. Rizwan Wahab, Maqsood A Siddiqui, **Ahamed M**, Javed Ahmad, Abdullah Al-Salem Abdulaziz A Al-Khedhairi, Javed Musarrat. "Use of zinc oxide nanoparticles as an anti-microbial Nanomedicine" in "27th Annual Meeting of Saudi Biological Sciences" and a symposium on "Economics of Environment and Natural Resources" during March 6-8, 2012 at College of Science, Jazan University, Jazan, **Saudi Arabia**.
16. MA Siddiqui, NN Farshori, **Ahamed M**, J Ahmad, AA Al-Khedhairi, J Musarrat and AB Pant. Ameliorative effects of trans-resveratrol on 4-hydroxynonenal induced apoptosis in cultured neuronal cells in "The XXXII Annual Conference of Society of Toxicology (STOX), India and International Symposium on New Frontiers in Toxicology" on "New Paradigms in Toxicology (NPT-2012)" during December, 5-7, 2012 at CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, **India**.
17. **Ahamed M (Oral presentation)**. ROS mediated apoptosis in human liver cell line HepG2 induced by silica nanoparticles. International Conference on Advances in Free radicals, Redox Signaling and Translational Antioxidant Research and XII Annual Meeting of the Society for Free Radical Research-India during Jan30-Feb01, 2013 at CSIR-Indian Institute of Toxicology Research (CSIR-IITR), Lucknow, **India**.
18. **Ahamed M**, Alhadlaq HA, Kham MAM. Selective killing of cancer cells by iron oxide nanoparticles mediated through reactive oxygen species. Nanoscience and Nanotechnology International Conference-2013 Nano-Portugal during Feb 13-15, **Porto**.
19. **Ahamed M (Invited Speaker)**. Preferential killing of cancer cells using nanoparticles. 6th International Conference on Drug Discovery and Therapy. Feb 10-12, 2014. **Dubai, UAE**.