

Abdullah S Alhomida Pulications (January 2022-January 2024)

1. Prairna Balyan, Mohammad Shamsul Ola, **Abdullah S. Alhomida**, Ahmad Ali. D-Ribose Induced Glycation and Its Attenuation by The Aqueous Extract of Nigella Sativa Seeds. *Endocrinology*. 2022 (Accepted)
2. Mohammad S. Ola, **Adullah S. Alhomida**. Analysis of Oxidative Stress in Diabetic Rat Retina and in Cultured Retinal Cells Under Hyperglycemic Conditions. 2022 (Accepted)
3. Mohammad Shamsul Ola, Abeebe Oyesiji, **Abdullah S. Alhomida**
Influence of diabetes induced activation of renin angiotensin system (RAS) on neurodegeneration in rat brain cortex .2nd International Conference on Human Implications of Biotechnology (manuscript submitted, 2022)
4. **Abdullah Alhomida**; Javed Masood Khan and Ajamaluddin Malik. Bovine liver catalase turns into three different conformations after exposure to an anionic surfactant. *Journal of Molecular Liquids* (Submitted 2022)
5. Ajamaluddin Malik, Ghada Obeid Almutairi, Javed Masood Khan, Mona Alonazi, Sundus Mohammed AlRusaini, **Abdullah S. Alhomida**. Non-enzymatic glycation enhances anionic surfactant induced aggregation and myloidogenesis.
6. *Journal of Molecular Liquids* Volume 359, 1 August 2022, 119249
<https://doi.org/10.1016/j.molliq.2022.119249>
7. Ajamaluddin Malik, Javed Masood Khan, **Abdullah S. Alhomida**, Mohammad Shamsul Ola, Mohammed Abdulkarim Alshehri, Aqeel Ahmad
8. Metal nanoparticles: biomedical applications and their molecular mechanisms of toxicity. *Chemical Papers* 2022: 17 July 2022
9. <https://doi.org/10.1007/s11696-022-02351-5>
10. Dalia I. Aldosari, Ajamaluddin Malik, **Abdullah S. Alhomida**, and Mohammad S. Ola
Implications of Diabetes-Induced Altered Metabolites on Retinal Neurodegeneration *Front Neurosci*. 2022; 16: 1-10.
11. <https://doi.org/10.3389/fnins.2022.938029>
12. Ajamaluddin Malik, Javed Masood Khan, **Abdullah S. Alhomida**, Mohammad Shamsul Ola
Modulation of the Structure and Stability of Novel Camel Lens Alpha-Crystallin by pH and Thermal Stress *Gels* 2022, 8, 273. *Gels* 2022, 8, 273. <https://doi.org/10.3390/gels8050273>
13. Ghada Obeid Almutairi, Ajamaluddin Malik, Mona Alonazi, Javed Masood Khan, **Abdullah S. Alhomida**, Mohd Shahnawaz Khan, Amal M. Alenad, Nojood Altwaijry, Nouf Omar Alafaleq. Expression, purification, and biophysical characterization of recombinant MERS-CoV main (Mpro) protease *International Journal of Biological Macromolecules* Volume 209, Part A, 1 June 2022, Pages 984-990 <https://doi.org/10.1016/j.ijbiomac.2022.04.077>
14. Javed Masood Khan, Ajamaluddin Malik, Fohad Mabood Husain, Mohammed J. Hakeem, **Abdullah S. Alhomida**. Sunset Yellow Dye Induces Amorphous Aggregation in β -Lactoglobulin at Acidic pH: A Multi-Techniques Approach. *Polymers* 2022, 14, 395. <https://doi.org/10.3390/polym14030395>
15. Mohammad Shamsul Ola, Ahmed Z. Alanazi, Ajamaluddin Malik, Abdul Malik, Mohammed Ahmed, Salim S. Al-Rejaie, **Abdullah S. Alhomida**.
Loranthus regularis Ameliorates Neurodegenerative Factors in the Diabetic Rat Retina. *Applied Sciences*. 2022, 12, 2875. <https://doi.org/10.3390/app12062875>
16. Ajamaluddin Malik, Javed Masood Khan, Malik Hisamuddin, **Abdullah S. Alhomida**, Anwar Ahmed, Hamza Odeibat, Rizwan Hasan Khan, Rafat Ali, Mohammad Tarique Taxon-specific

zeta-crystallin of camel eye lens: A comparative in silico studies. Journal of King Saud University – Science Volume 34, Issue 4, June 2022, 101973
<https://doi.org/10.1016/j.jksus.2022.101973>

17. Khan HA, Al-Hoshani A, Isab AA, **Alhomida AS**. A gold (III) complex with potential anticancer properties. Chem Select. 2022; 7 (45): e202202956.
18. MS Ola, SS Al-Rejaie, **AS Alhomida**. Loranthus regularis inhibits neurodegenerative factors in the diabetic rat retina Applied Sciences. Applied Sciences 2022, 12 (06), 2875
19. Ajamaluddin Malik, Javed Masood Khan, Abdulaziz M. Al-Amri, Nojood Altwaijry, **Abdullah S Alhomida**, Mohammad Shamsul Ola. A common food additive (E452), hexametaphosphate, denatures the digestive enzyme trypsin. Journal of King Saud University – Science Volume 35, Issue 10, December 2023, 102968.
20. Ajamaluddin Malik, **Abdullah Alhomida**, Javed Masood Khan. SDBS induces multiple catalase conformations in a dose-dependent manner. International Journal of Biological Macromolecules Volume 253, Part 8, 31 December 2023, 127606.
21. Ajamaluddin Malik, Javed Masood Khan, Abdulaziz M. Al-Amri, Nojood Altwaijry, Perna Sharma, **Abdullah Alhomida**, and Priyankar Sen. Hexametaphosphate, a Common Food Additive, Aggregated the Hen Egg White Lysozyme. ACS Omega 2023, 8, 46, 44086–44092.
22. Ajamaluddin Malik, Javed Masood Khan, **Abdullah S Alhomida**, Mohammad Shamsul Ola. Perturbation of surfactant-induced amyloids by abolishing electrostatic interactions. Journal of Molecular Liquids Volume 385, 1 September 2023, 122440
23. Ajamaluddin Malik, Abdulaziz M Al-Amri, **Abdullah Alhomida**, Javed Masood Khan. Bovine liver catalase turns into three conformational states after exposure to an anionic surfactant. Colloids Surf B Biointerfaces. 2023 Sep; 229:113481.
24. Sundus AlResaini, Ajamaluddin Malik, Mona Alonazi, **Abdullah Alhomida**, Javed Masood Khan. SDS induces amorphous, amyloid-fibril, and alpha-helical structures in the myoglobin in a concentration-dependent manner. International Journal of Biological Macromolecules 231 (2023) 123237.
25. Ajamaluddin Malik, Javed Masood Khan, **Abdullah S. Alhomida**, Mohammad Shamsul Ola, Majed S. Alokail, Mohd Shahnawaz Khan, Amal M. Alenad, Nojood Altwaijry, Nouf Omar Alafaleq, Hamza Odeibat. Agitation does not induce fibrillation in reduced hen egg-white lysozyme at physiological temperature and pH. J Mol Recognit. 2023 Feb 26; e3009.
26. Khan HA, Isab AA, **Alhomida AS**, Gatashah M, Al-Hoshani A, Aldhafeeri BA, Prasad NR. Synthesis of a novel gold (I) complex and evaluation of its anticancer properties in breast cancer cells. Anticancer Agent Med Chem. 2023. DOI: 10.2174/0118715206281182231127113608
27. Sabrina Lekmine, Ouided Benslama, Kenza Kadi, Antonio Ignacio Martín-García, Mustafa Abdullah Yilmaz, Salah Akkal, Ali Boumegoura, **Abdullah S Alhomida**, Mohammad Shamsul Ola, Ahmad Ali. LC/MS-MS analysis of phenolic compounds in Hyoscyamus albus L. extract: In vitro antidiabetic activity, in silico molecular docking, and in vivo investigation against STZ-induced diabetic mice. Pharmaceuticals, 2023, 16(7), 1015.
28. A Malik, JM Khan, **AS Alhomida**, MS Ola, MA Alshehri, A Ahmad. Metal nanoparticles: biomedical applications and their molecular mechanisms of toxicity Chemical. Chemical Papers 2023, 76 (10), 6073-6095

29. P Balyan, MS Ola, **AS Alhomida**, A Ali-ribose-induced glycation and its attenuation by the aqueous extract of nigella sativa seeds. *Medicina* 2023, 58 (12), 1816D.
30. Khan HA, **Alhomida AS**, Isab AA, Gatasheh MK, Alhoshani A, Aldhafeeri BA, Prasad NR. Anticancer activity of a newly synthesized gold (I) complex and potential mechanisms of its action. *Proceeding of American Advanced Materials Congress, USA. 2004 (Accepted).*