

## DR. RAJWALI KHAN

### Publications

Total Publications	100+
Total IF	350+
Total Citations	1500+Google Scholar, i10 index 53 and h-index 24 ( <a href="https://scholar.google.com/citations?user=3YaHo64AAAAJ&amp;hl=en">https://scholar.google.com/citations?user=3YaHo64AAAAJ&amp;hl=en</a> )

### First and first equal contributing author

1. Khan R, Li A, Raza SHA. Editorial: Genetic Regulation of Meat Quality Traits in Livestock Species. *Front Genet.* 2023 Jan 4;13:1092562. doi:10.3389/fgene.2022.1092562. PMID: 36685874; PMCID: PMC9845273.
2. Nurgulsim K, **Khan R**, Raza SHA, Ayari-Akkari A, Jeridi M, Ahmad I, Arain UM, Abd El-Aziz AH, Khan H, Zan L. Bioinformatics and genetic variants analysis of FGF10 gene promoter with their association at carcass quality and body measurement traits in Qin-chuan beef cattle. *Anim Biotechnol.* 2022 Apr 21:1-10. doi: 10.1080/10495398.2022.2059667. (**First Equal Contributing Author**) IF 2.9
3. Guo H, **Khan R**, Abbas Raza SH, Suhail SM, Khan H, Khan SB, Abd El-Aziz AH, Zan L. RNA-Seq Reveals Function of Bta-miR-149-5p in the Regulation of Bovine Adipocyte Differentiation. *Animals.* 2021; 11(5):1207. https://doi.org/10.3390/ani11051207. (**First Equal Contributing Author**) IF 3.2
4. Hongfang. G, **R. Khan**, S.H.A. Raza, K. Nurgulsim, S.M. Suhail, A. Rahman, I. Ahmed, A. Ijaz, I. Ahmad, Z. Linsen, Transcriptional regulation of adipogenic marker genes for the improvement of intramuscular fat in Qin-chuan beef cattle, *Animal biotechnology*, (2020) 1-20. (**First Equal Contributing Author**) IF 2.9
5. Raza S H A, Khan R, Gui L, Schreurs N M, Wang X, Mei C, Yang X, Gong C, Zan L. 2020. Bioinformatics analysis and genetic polymorphisms in genomic region of the bovine SH2B2 gene and their associations with molecular breeding for body size traits in qinchuan beef cattle. *Bioscience Reports*, 40 1–13 (**First Author**) IF 2.535
6. **R. Khan**, S.H.A. Raza, H. Guo, W. Xiaoyu, W. Sen, S.M. Suhail, A. Rahman, I. Ullah, A.H. Abd El-Aziz, Z. Manzari, A. Alshawi, L. Zan, Genetic variants in the TORC2 gene promoter and their association with body measurement and carcass quality traits in Qin-chuan cattle, *PloS one*, 15 (2020) e0227254. (**First Author**) IF 2.776.
7. **Khan, R.**, Raza, S. H. A., Junjvlieke, Z., Wang, X., Wang, H., Cheng, G., . . . Zan, L. (2020). Bta-miR-149-5p inhibits proliferation and differentiation of bovine adipocytes through targeting CRTCs at both transcriptional and posttranscriptional levels. *J Cell Physiol.* <https://doi.org/10.1002/jcp.29513>. (**First Author**) IF 6.384
8. Shijun, L., **Khan, R.**, Raza, S. H. A., Jieyun, H., Chugang, M., Kaster, N., . . . Linsen, Z. (2020). Function and characterization of the promoter region of perilipin 1 (PLIN1): Roles of E2F1, PLAG1, C/EBPbeta, and SMAD3 in bovine adipocytes. *Genomics.* doi:10.1016/j.ygeno.2020.01.012. (**First Author**) IF 6.205.
9. Junjvlieke, Z., **Khan, R.**, Mei, C., Cheng, G., Wang, S., Raza, S. H. A., . . . Zan, L. (2019). Effect of ELOVL6 on the lipid metabolism of bovine adipocytes. *Genomics.* doi:10.1016/j.ygeno.2019.12.024. (**First Author**) IF 6.205.
10. **Khan, R.**, Raza, S. H. A., Junjvlieke, Z., Wang, H., Cheng, G., Smith, S. B., . . . Zan, L. (2019). RNA-seq reveal role of bovine TORC2 in the regulation of adipogenesis. *Arch Biochem Biophys.* 680, 108236. doi:10.1016/j.abb.2019.108236 (**First Author**) IF 3.60.
11. **Khan, R.**; Raza, S.H.A.; Schreurs, N.; Xiaoyu, W.; Hongbao, W.; Ullah, I.; Rahman, A.; Suhail, S.M.; Khan, S.; Linsen, Z. (2019). Bioinformatics analysis and transcriptional regulation of TORC1 gene through transcription factors NRF1 and Smad3 in bovine preadipocytes. *Genomics.* 10.1016/j.ygeno.2019.09.007, doi:10.1016/j.ygeno.2019.09.007 (**First Author**) IF 6.205.

12. Khan, R.; Raza, S.H.A.; Junjvlieke, Z.; Wang, X.; Garcia, M.; Elnour, I.E.; Wang, H.; Zan, L. Function and Transcriptional Regulation of Bovine TORC2 Gene in Adipocytes: Roles of C/EBP gamma, XBP1, INSM1 and ZNF263. *International journal of molecular sciences* 2019, 20, doi:10.3390/ijms20184338 **(First Author) IF 4.556.**
13. Raza, S.H.A.; Khan, R.; Schreurs, N.M.; Guo, H.; Gui, L.-S.; Mei, C.; Zan, L. Expression of the bovine KLF6 gene polymorphisms and their association with carcass and body measures in Qin-chuan cattle (*Bos Taurus*). *Genomics* 2019, 10.1016/j.ygeno.2019.03.005, doi:10.1016/j.ygeno.2019.03.005 **(First Author) IF 6.205**
14. Khan, R.; Guo, H.; Raza, S.H.A.; Rahman, A.; Ayaz, M.; Zan, L. (2018). Halal slaughtering, welfare, and empathy in farm animals: a review. *Tropical animal health and production*, 50, 1733-1738, doi:10.1007/s11250-018-1644-1 **(First Author) IF 1.08**
15. Guo, H.; Khan, R.; Raza, S.H.A.; Ning, Y.; Wei, D.; Wu, S.; Hosseini, S.M.; Ullah, I.; Garcia, M.D.; Zan, L. (2018). KLF15 promotes transcription of KLF3 gene in bovine adipocytes. *Gene*, 659, 77-83, doi:10.1016/j.gene.2018.03.049 **(First Author) IF 2.984.**
16. Raza, S.H.A.; Gui, L.; Khan, R.; Schreurs, N.M.; Wang, X.; Wu, S.; Mei, C.; Wang, L.; Ma, X.; Wei, D., et al. Association between FASN gene polymorphisms ultrasound carcass traits and intramuscular fat in Qin-chuan cattle. *Gene* 2018, 645, 55-59, doi:10.1016/j.gene.2017.12.034 **(First Author) IF 2.984**
17. Rajwali Khan, Ghufranullah, Sajjad Ahmad, Bahkt Daraz Khan, M. Iqbal, Pervez, Kamran Farid, and Hayazuddin. 2012. Effect of commercially available milk replacer on calf's performance. *Pakistan Journal of Nutrition* 11 (12): 1190-1193 **(Main & Corresponding Author).**
18. Rajwali Khan, Muhammad Subhan Qureshi, Anila Mushtaq, Ghufranullah and Ahmad Naveed. 2012. Effect of Quality and Frequency of Drinking Water on Productivity and Fertility of Dairy Buffaloes. *J Anim Plant Sci*, 22(2 Supp.): 96-101 **IF 0.75.**
19. Rajwali Khan, Farhan Anwar Khan, Kamran Farid, Izhar Khan and Muhammad Tariq. 2009. Prevalence of Infectious Bursal Disease in Broiler in District Peshawar. *J. Agri. Bio. Sci* 4 (1) 1-5 ISSN 1990-6145 **(Main Author)**

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20. Kinkpe L, Khan R, Suhail SM, Ahmad I, Khan FA, Ayari-Akkari A, Siddiqui S. Polymorphism and association study of lactoferrin (LF) gene with milk yield, milk composition, and somatic cell count in Beetal goats. *Trop Anim Health Prod.* 2023 Nov 23;55 (6):415. doi: 10.1007/s11250-023-03834-7. PMID: 37996555.
21. Hongfang G, Khan R, El-Mansi AA. Bioinformatics Analysis of miR-181a and Its Role in Adipogenesis, Obesity, and Lipid Metabolism through Review of Literature. *Mol Biotechnol.* 2023 Sep 29. doi: 10.1007/s12033-023-00894-w. Epub ahead of print. PMID: 37773313.
22. Ullah A, Khan R, Suhail SM, Ahmad I, Anwar Khan F, Subhan Qureshi M, Khan NA, Ayari-Akkari A, Ahmed DAEM. Bioinformatics analysis and the association of polymorphisms within the caprine *GDF9* gene promoter with economically useful traits in Damani goats. *Anim Biotechnol.* 2022 Dec 28:1-12. doi: 10.1080/10495398.2022.2154676. Epub ahead of print. PMID: 36576034.
23. Shifa U, Khan R, Suhail SM, Ahmad I, Rahman A, Akkari AA, Yassin HM. The efficiency of boric acid as an alternative to NaCl for the preservation of cattle hides. *Trop Anim Health Prod.* 2023 May 26;55(3):228. doi: 10.1007/s11250-023-03631-2. PMID: 37233849.
24. Ayaz M, Khan R, Khan S, Suhail SM, Khan K, Ahmad I, Wahab A, Ayari-Akkari A, Othman G. Effect of dietary inclusion of mealworm frass on growth, hematology, and serum biochemistry of sheep. *Trop Anim Health Prod.* 2023 Mar 7;55(2):106. doi: 10.1007/s11250-023-03518-2. PMID: 36881277.
25. Zhao X, Khan R, Hongfang G, Abbas Raza SH, Ayari-Akkari A, Othman G, Alshammari AM, Aloufi BH, Alabbosh KF, Alshammari WB, Linsen Z. Genetic variants of TORC1 gene promoter and their association with carcass quality and body measurement traits in Qin-chuan beef cattle. *Anim Biotechnol.* 2022 Aug 2:1-9. doi: 10.1080/10495398.2022.2105226. Epub ahead of print. PMID: 35916659.

26. Ayaz, Suhail SM, Ahmad, Zeb MT, **Khan R**, Ijaz A, Ahmad, Riaz MH, Ali F, Khan K, Khan A. Detection of A2A2 genotype of beta casein protein (CSN2) gene in local, exotic and cross bred cattle in Pakistan. *Anim Biotechnol.* 2022 Mar 2:1-12. doi: 10.1080/10495398.2022.2031204. Epub ahead of print. PMID: 35235484 **IF 2.4**
27. Kamran Khan, Sarzamin Khan, **Rajwali Khan**, Asad Sultan, Nazir Ahmad Khan, Naseer Ahmad. 2016. Growth performance and meat quality of rabbits under different feeding regimes. *Tropical Animal Health and Production.* 48 (6) 1:8 DOI 10.1007/s11250-016-1140-4 **IF 1.33**
28. Muhammad Ubaidullah Qureshi, Muhammad Subhan Qureshi, Rajwali Khan, Syed Muhammad Sohail, Abdur Rahman, Kamran Farid and Asim Ijaz Relationship of blood metabolites with reproductive cyclicity in dairy cows. 2016. *Indian Journal Animal Research.* 50 (3): 338-348 **IF 0.42**
29. Mudeer Gul, Iftikhar Ahmad, **Rajwali Khan**, Syed Muhammad Sohail, Sohail Akhtar, Abdur Rahman, Asim Ijaz and Ali Gohar. 2016. Effect of Different Feeding Times on the Performance of Cross Bred Dairy Cattle during Summer Stress. *Iranian Journal of Applied Animal Science.* 2 (6):327-334.
30. Hayaz Uddin, Abdur Rehman, Rajwali Khan, Din Muhammad and Kamran Fareed, Khurshaid Anwar, Sibghat Ullah and Zubair Ali. 2013. Effect of Cotton Seed Cake on Cattle Milk Yield and Composition at Livestock Research and Development Station Surezai, Peshawar. *Pakistan Journal of Nutrition* 12 (5): 468-475
31. Zia ur Rehaman, K. B Mirbahar, Rajwali khan, Ahmad Naveed, Pervez Shah and Kamran Fareed. 2012. Environmental Effect on Chemical Quality of Kundhi Buffalo Bull Semen. *Life Sci. Int. J.*, 6 (2): 2501-2506.
32. Zia ur Rehaman, K. B Mirbahar, Rajwali khan, Kamran Fareed, Pervez Shah and Din Muhammad. 2012. Effect of Environmental Temperature on Physical Quality of Kundhi Buffalo Bull Semen. *Life Sci. Int. J.*, 6 (2): 2554-2559
33. Muhammad Usman Ghani, Din Muhammad, Rajwali Khan, Zia Ur Rehman, Naila Chand, Muhammad Rizwan, Kamran Farid and Abdul Hafeez. 2012. Effect of Liquorice (*Glycyrrhiza Glabra*) Root Extract as Immunostimulant Anticoccidial And Growth Promotant In Broiler Chicks. *Life Sci. Int. J.*, 6 (2): 2534-2545.
34. Rajwali Khan, Sajjad Ahmad, Khisro Kaleem, Muhammad Shahid, Pervez, Muhammad Irshad, Muhammad Rizwan, Din Muhammad and Bakht Daraz Khan .2010. Growth Rate of Various Indigenous Bovine Breed Fed on Shandar Wanda at Livestock Research and Development Station Surezai Peshawar. *J. Agri. Bio. Sci.* 5 (6) 35-38 ISSN 1990-6145
35. Zafar Khan, Asad Sultan, Rajwali Khan, Sarzamin Khan, Imranullah and Kamran Farid 2016. Concentrations of Heavy Metals and Minerals in Poultry Eggs Produced in Khyber Pakhtunkhwa. *Meat Science and Veterinary Public Health.* 1(1):1-7
36. Inamullah Khan, Muhammad Subhan Qureshi, Rajwali Khan, Syed Muhammad Sohail, Ijaz Ahmad and Muhammad Shoaib.2016. Sero-Prevalence and Risk Factors for Bovine brucellosis in Cattle and Human in District Swat, Pakistan. *Meat Science and Veterinary Public Health.* 1(1):1-12

### **Co-author**

37. Khan MM, Suhail SM, Majid HA, Ahmad I, Sadique U, Khan R, Ahmad I, Ijaz A, Khan K, Ali F, Khan MS, El-Mansi AA. Morpometric and molecular characterization of Surguli goat through CO1 gene in district Kohat. *Anim Biotechnol.* 2023 Dec 23:1-10. doi: 10.1080/10495398.2023.2290528. Epub ahead of print. PMID: 38142270.
38. Guo Y, Fan Z, Zhao F, Ge S, Chu H, Wei Z, Khan R, Faisal M, Ayari-Akkari A, Yassin HM, Zhao X. Assessment of semen quality and anti-oxidative enzyme activity between bovine sex-sorted and non-sex-sorted frozen-thawed semen. *Reprod Domest Anim.* 2023 May;58(5):657-661. doi: 10.1111/rda.14333. Epub 2023 Mar 9. PMID: 36808762.
39. Ali S, Nabi F, Awais M, Fareed SK, Hussain J, Adeola AC, Khan R, Ahmed N, Quan G. Genetic Diversity Relationship in Azakheli Buffalo Inferred from mtDNA and *MC1R* Sequences Comparison.

- Biomed Res Int. 2022 Dec 13;2022:5770562. doi: 10.1155/2022/5770562. PMID: 36601617; PMCID: PMC9806686.
- 40. Wei D, Wang J, Jiupan Z, Khan R, Abbas Raza SH, Yaping S, Chao J, Ayari-Akkari A, Ahmed DAEM. Roles of MEF2A and HOXA5 in the transcriptional regulation of the bovine *FoxO1* gene. Anim Biotechnol. 2022 Nov 30;1:1-13. doi: 10.1080/10495398.2022.2150632. Epub ahead of print. PMID: 36449378.
  - 41. Wang X, Liang C, Li A, Cheng G, Long F, Khan R, Wang J, Zhang Y, Wu S, Wang Y, Qiu J, Mei C, Yang W, Zan L. RNA-Seq and lipidomics reveal different adipogenic processes between bovine perirenal and intramuscular adipocytes. Adipocyte. 2022 Dec;11(1):448-462. doi: 10.1080/21623945.2022.2106051. PMID: 35941812; PMCID: PMC9367662.
  - 42. Shoaib M, Rashid MI, Akbar H, Sheikh AA, Farooqi SH, Ayari-Akkari A, Yassin HM, Khan R. Molecular epidemiology and characterization of Babesia bovis in cattle of Khyber Pakhtunkhwa province, Pakistan. Trop Anim Health Prod. 2022 Oct 8;54(6):337. doi: 10.1007/s11250-022-03346-w. PMID: 36208348.
  - 43. Hengwei Y, Raza SHA, Wang S, Khan R, Ayari-Akkari A, El Moneim Ahmed DA, Ahmad I, Shaoib M, Abd El-Aziz AH, Rahman SU, Jahejo AR, Zan L. The growth curve determination and economic trait correlation for Qinchuan bull population. Anim Biotechnol. 2022 Aug 18:1-8. doi: 10.1080/10495398.2022.2111309. Epub ahead of print. PMID: 35980325.
  - 44. Ma, Boyan, Chunmei Zhang, Sayed Haidar Abbas Raza, Baochun Yang, Bandar Hamad Aloufi, Ahmed Mohajja Alshammari, Qwait AlGabbani, Rajwali Khan, Shengzhen Hou, and Linsheng Gui. "Effects of Dietary Non-Fibrous Carbohydrate (NFC) to Neutral Detergent Fiber (NDF) Ratio Change on Rumen Bacterial Community and Ruminal Fermentation Parameters in Chinese Black Tibetan Sheep (*Ovis aries*).". Small Ruminant Research (2022): 106793.
  - 45. Wei D, Raza SHA, Wang X, **Khan R**, Lei Z, Zhang G, Zhang J, Luoren Z, Ma Y, Alamoudi MO, Aloufi BH, Alshammari AM, Abd El-Aziz AH, Alhomrani M, Alamri AS. Tissue Expression Analysis, Cloning, and Characterization of the 5'-Regulatory Region of the Bovine LATS1 Gene. Front Vet Sci. 2022 May 26;9:853819. doi: 10.3389/fvets.2022.853819.
  - 46. Memon AM, Chen F, Khan SB, Guo X, **Khan R**, Khan FA, Zhu Y, He Q. Development and evaluation of polyclonal antibodies based antigen capture ELISA for detection of porcine rotavirus. Anim Biotechnol. 2022 May 20:1-8. doi: 10.1080/10495398.2022.2052304. **IF 2.984**
  - 47. Raza SHA, Liang C, Alshammari AM, Aloufi BH, Gui L, **Khan R**, Zan L. Genetic variants in the serum amyloid A2 (SAA2) gene as a potential marker for milk production traits in Chinese Holstein cows. Vet Med Sci. 2022 Apr 26. doi: 10.1002/vms3.796. **IF 1.772**
  - 48. Raza SHA, Liang C, Guohua W, Pant SD, Mohammedsalem ZM, Shater AF, Alotaibi MA, **Khan R**, Schreurs N, Cheng G, Mei C, Zan L. Screening and Identification of Muscle-Specific Candidate Genes via Mouse Microarray Data Analysis. Front Vet Sci. 2021 Dec 13;8:794628. doi: 10.3389/fvets.2021.794628. PMID: 34966817; PMCID: PMC8710720. **IF 3.412**.
  - 49. Ma B, **Khan R**, Raza SHA, Gao Z, Hou S, Ullah F, Hassan MM, Hassan MM, AlGabbani Q, Alotaibi MA, Shah MA, Gui L. Determination of the relationship between class IV sirtuin genes and growth traits in Chinese black Tibetan sheep. Anim Biotechnol. 2021 Dec 17:1-7. doi: 10.1080/10495398.2021.2016434. Epub ahead of print. PMID: 34918617. **IF 2.4**
  - 50. Sayed Haidar Abbas Raza, **Rajwali Khan**, Gong Cheng, Feng Long, Sun Bing, Nicola M. Schreurs, Sameer D. Pant, Wenzhen Zhang, Anning Li, Linsen Zan. RNA-Seq Reveals the potential molecular mechanisms of Bovine KLF6 gene in the Regulation of Adipogenesis. International Journal of Biological Macromolecules. <https://doi.org/10.1016/j.ijbiomac.2021.11.202> (SCI) **IF 6.95**.
  - 51. Raza SHA, **Khan R**, Pant SD, Shah MA, Quan G, Feng L, Cheng G, Gui LS, Zan L. Genetic variation in the OPN gene affects milk composition in Chinese Holstein cows. Anim Biotechnol. 2021 Nov 15:1-7. doi: 10.1080/10495398.2021.2001343. Epub ahead of print. PMID: 34779705. **IF 2.4**
  - 52. Gui L, Raza SHA, Ma B, Easa AA, Althobaiti F, Shukry M, Alotaibi MA, Al Hazani TMI, Dawood MAO, **Khan R**, Jahejo AR, Shater AF, Abd El-Aziz AH, Quan G, Alanbari KH, Wang L. CEBP $\beta$  binding directly to the promoter region drives CEBP $\alpha$  transcription and improves FABP4 transcriptional

- activity in adipose tissue of yak (*Bos grunniens*). *Res Vet Sci.* 2021 Dec;141:174-179. doi: 10.1016/j.rvsc.2021.10.018. Epub 2021 Oct 30. PMID: 34749102. **IF 2.534**
53. Ali F, Ahmad I, Ali MI, Riaz MH, Khan N, Ullah O, Hassan F, Suhail SM, **Khan R**, Khan MT, Ahmad I, Zeb MT. Mitochondrial phylogenetic and diversity analysis in Azi-Kheli buffalo. *Trop Anim Health Prod.* 2021 Oct 12;53(5):512. doi: 10.1007/s11250-021-02949-z. PMID: 34637013.
  54. Shater, A.F., AlGabbani, Q., Mohammedsaleh, Z.M., Saleh, F.M., AbouLaila, M., Noreldin, A.E., Raza, S.H.A., Ullah, H., Khan, R. and Menshawy, S., 2022. Expression of immune-related genes in parasite-infected Tilapia nilotica (*Oreochromis niloticus*) from Egypt and molecular characterization of the parasites. *Gene Reports* 26, 101451.
  55. Raza, S.H.A., Hassanin, A.A., Dhshan, A.I.M., Abdelnour, S.A., Khan, R., Mei, C. and Zan, L., 2021. In silico genomic and proteomic analyses of three heat shock proteins (HSP70, HSP90- $\alpha$ , and HSP90- $\beta$ ) in even-toed ungulates. *Electronic Journal of Biotechnology* 53, 61-70.
  56. Akhatayeva Z, Bi Y, He Y, Khan R, Li J, Li H, Pan C, Lan X. Survey of the relationship between polymorphisms within the *BMPR1B* gene and sheep reproductive traits. *Anim Biotechnol.* 2021 Sep 29:1-10. doi: 10.1080/10495398.2021.1979023.
  57. Raza SHA, Khan R, Pant SD, Shah MA, Quan G, Feng L, Cheng G, Gui LS, Zan L. Genetic variation in the *OPN* gene affects milk composition in Chinese Holstein cows. *Anim Biotechnol.* 2021 Nov 15:1-7. doi: 10.1080/10495398.2021.2001343.
  58. Gui L, Raza SHA, Ma B, Easa AA, Althobaiti F, Shukry M, Alotaibi MA, Al Hazani TMI, Dawood MAO, Khan R, Jahejo AR, Shater AF, Abd El-Aziz AH, Quan G, Alanbari KH, Wang L. CEBP $\beta$  binding directly to the promoter region drives CEBP $\alpha$  transcription and improves FABP4 transcriptional activity in adipose tissue of yak (*Bos grunniens*). *Res Vet Sci.* 2021 Dec;141:174-179. doi: 10.1016/j.rvsc.2021.10.018.
  59. Raza SHA, Abd El-Aziz AH, Abdelnour SA, Easa AA, Alagawany M, Farag MR, Al-Mutary MG, Elfadadny A, Khan R, Quan G, Cheng G, Zan L. The role of forskolin as a lipolytic stimulator during in vitro oocyte maturation and the in vitro embryo production of livestock. *Reprod Domest Anim.* 2021 Sep 30. doi: 10.1111/rda.14021.
  60. Raza SHA, Naqvi SRZ, Abdelnour SA, Schreurs N, Mohammedsaleh ZM, Khan I, Shater AF, Abd El-Hack ME, Khafaga AF, Quan G *et al*: **Beneficial effects and health benefits of Astaxanthin molecules on animal production: A review.** *Research in Veterinary Science* 2021, **138**:69-78.
  61. Liang, C., Raza, S.H.A., Naqvi, M.A.R. *et al*. Construction of Adipogenic ceRNA Network Based on lncRNA Expression Profile of Adipogenic Differentiation of Human MSC Cells. *Biochem Genet* (2021). <https://doi.org/10.1007/s10528-021-10115-1>.
  62. Cheng G, Raza SHA, Khan R, Wang H, Shater AF, Mohammedsaleh ZM, Wang L, Tian Y, Long F, Zan L: **C/EBP $\beta$  converts bovine fibroblasts to adipocytes without hormone cocktail induction.** *Electronic Journal of Biotechnology* 2021, **52**:67-75.
  63. Nurgulsim, K., Raza, S.H.A., Khan, R., Shah, M.A., Jahejo, A.R., Batool, U., Hongbao, W., Zhigerbayevich, K.N., Schreurs, N. and Zan, L., 2021. Identification of genetic variants the CCKAR gene and based on body measurement and carcass quality characteristics in Qinchuan beef cattle (*Bos taurus*). *Electronic Journal of Biotechnology* 51, 1-7.
  64. Gui L, Raza SHA, Sun Y, Sabek A, Abbas SQ, Shah MA, Khan R, Abdelnour SA. Molecular characterization and analysis of the association of growth hormone 1 gene with growth traits in Chinese indigenous yak (*Bos grunniens*). *Trop Anim Health Prod.* 2021 Mar 22;53(2):221. doi: 10.1007/s11250-021-02671-w. PMID: 33754201.
  65. Guo Hongfang, Cui Guanghui, Rajwali Khan, Jia Huanxia, Zhang Jianxin, Sayed Haidar Abbas Raza, Muhammad Ayaz, Muhammad Shafiq and Linsen Zan. 2020 Molecular structure and functions of zinc binding metallothionein-1 protein in mammalian body system. *Pak. J. Pharm. Sci.*,33(4):1719-1726. **(Corresponding Author) IF 0.596.**
  66. S.H. Abbas Raza, S. Khan, M. Amjadi, S.A. Abdelnour, H. Ohran, K.M. Alanazi, M.E. Abd El-Hack, A.E. Taha, R. Khan, C. Gong, N.M. Schreurs, C. Zhao, D. Wei, L. Zan, Genome-wide association studies

- reveal novel loci associated with carcass and body measures in beef cattle, *Arch Biochem Biophys*, (2020) 108543. **IF 3.60.**
67. S.H.A. Raza, G.Y. Liu, L. Zhou, L.S. Gui, R. Khan, Y. Jinmeng, M. Chugang, N.M. Schreurs, R. Ji, L. Zan, Detection of polymorphisms in the bovine leptin receptor gene affects fat deposition in two Chinese beef cattle breeds, *Gene*, 758 (2020) 144957. **IF 2.99.**
  68. Raza SHA, Shijun L, **Khan R**, et al. Polymorphism of PLIN1 gene and their association with body measures and ultrasound carcass traits in Qinchuan beef cattle [published online ahead of print, 2020 Jul 2]. *Genome*. 2020;10.1139/gen-2019-0184. doi:10.1139/gen-2019-0184. **IF 2.037.**
  69. Gui LS, Haidar Abbas Raza S, Zhou L, et al. Association of Hormone-sensitive lipase (HSL) gene polymorphisms with the intramuscular fat content in two Chinese beef cattle breeds [published online ahead of print, 2020 Jun 30]. *Genomics*. 2020;S0888-7543(20)30346-3. doi:10.1016/j.ygeno.2020.06.037. **IF 6.205**
  70. Zhao C, Raza S H A, **Khan R**, Sabek A, Khan S, Ullah I, Memon S, El-Aziz A H A, Shah M A, Shijun L, Wang L, Liu X, Zhang Y, Gui L, Zan L. 2020. Genetic variants in MYF5 affected growth traits and beef quality traits in Chinese Qinchuan cattle. *Genomics*, <https://doi.org/10.1016/j.ygeno.2020.03.018>. **IF 6.205**
  71. Chen Y, Cai G H, Xia B, Wang X, Zhang C C, Xie B C, Shi X C, Liu H, Lu J F, Zhang R X, Zhu M Q, Liu M, Yang S Z, Yang Zhang D, Chu X Y, **Khan R**, Wang Y L, Wu J W. 2020. Mitochondrial aconitase controls adipogenesis through mediation of cellular ATP production. *Faseb j*, <https://doi.org/10.1096/fj.201903224RR>. **IF 5.391.**
  72. Raza, S.H.A.; Kaster, N.; **Khan, R.**; Abdelnour, S.A.; El-Hack, M.E.A.; Khafaga, A.F.; Taha, A.; Ohran, H.; Swelum, A.A.; Schreurs, N.M.; Zan, L. The Role of MicroRNAs in Muscle Tissue Development in Beef Cattle. *Genes* **2020**, *11*, 295. **IF 3.331.**
  73. Wang, L., Zhang, S., Zhang, W., Cheng, G., **Khan, R.**, Junjvlieke, Z., . . . Zan, L. (2020). miR-424 Promotes Bovine Adipogenesis Through an Unconventional Post-Transcriptional Regulation of STK11. *Frontiers in Genetics*, *11*, 145. **IF 3.517.**
  74. Wei, D., Raza, S. H. A., Zhang, J., Wang, X., **Khan, R.**, Ma, Y., . . . Zan, L. (2020). Characterization of the promoter region of the bovine IRX3 gene: roles of SREBF2 and PPARG. *Physiol Genomics*, *52*(3), 160-167. doi:10.1152/physiolgenomics.00091.2019. **IF 2.581.**
  75. Elsaied Elnour, I., Dong, D., Wang, X., Zhansaya, T., **Khan, R.**, Jian, W., . . . Chen, H. (2020). Bta-miR-885 promotes proliferation and inhibits differentiation of myoblasts by targeting MyoD1. *J Cell Physiol*. doi:10.1002/jcp.29559. **IF 4.522**
  76. Hong, J., Mei, C., Abbas Raza, S. H., **Khan, R.**, Cheng, G., & Zan, L. (2020). SIRT6 cooperates with SIRT5 to regulate bovine preadipocyte differentiation and lipid metabolism via the AMPK alpha signaling pathway. *Arch Biochem Biophys*, *681*, 108260. doi:10.1016/j.abb.2020.108260. **IF 3.559.**
  77. Hong, J., Mei, C., Raza, S. H. A., **Khan, R.**, Cheng, G., & Zan, L. (2019). SIRT5 inhibits bovine preadipocyte differentiation and lipid deposition by activating AMPK and repressing MAPK signal pathways. *Genomics*. doi:10.1016/j.ygeno.2019.12.004. **IF 6.205.**
  78. Liang, C., Li, A., Raza, S. H. A., **Khan, R.**, Wang, X., Wang, S., . . . Zan, L. (2019). The Molecular Characteristics of the FAM13A Gene and the Role of Transcription Factors ACSL1 and ASCL2 in Its Core Promoter Region. *Genes (Basel)*, *10*(12). doi:10.3390/genes10120981. **IF 3.331.**
  79. El-Aziz, A. H. A., El-Kasrawy, N. I., Abo Ghanima, M. M., Alsenosy, A., Raza, S. H. A., Khan, S., Memon S, **Khan R**, Ullah, I. (2019). Influence of multi-enzyme preparation supplemented with sodium butyrate on growth performance blood profiles and economic benefit of growing rabbits. *J Anim Physiol Anim Nutr (Berl)*. doi:10.1111/jpn.13227. **IF 1.70.**
  80. Raza, S. H. A., **Khan, R.**, Abdelnour, S. A., Abd El-Hack, M. E., Khafaga, A. F., Taha, A., . . . Zan, L. (2019). Advances of Molecular Markers and Their Application for Body Variables and Carcass Traits in Qinchuan Cattle. *Genes (Basel)*, *10*(9). doi:10.3390/genes10090717. **IF 3.331.**
  81. Chen, C., Yang, B., Abbas Raza, S. H., Zhang, D., Wu, T., Zhang, Z., Ullah I, **Khan R**, Yang G . . . Qian, A. (2019). Role of Myeloperoxidase of northern snakehead (*Channa argus*) in *Aeromonas veronii* infection. *Microb Pathog*, *135*, 103622. doi:10.1016/j.micpath.2019.103622. **IF 2.914.**

82. Junjvlieke, Z.; Mei, C.-G.; **Khan, R.**; Zhang, W.-Z.; Hong, J.-Y.; Wang, L.; Li, S.-J.; Zan, L.-S. Transcriptional regulation of bovine elongation of very long chain fatty acids protein 6 in lipid metabolism and adipocyte proliferation. *Journal of cellular biochemistry* 2019, 120, 13932-13943, doi:10.1002/jcb.28667. **IF 3.448**.
83. Gui, L.-s.; Raza, S.H.A.; Sun, Y.-g.; **Khan, R.**; Ullah, I.; Han, Y.-c. (2019), Detection of polymorphisms in the promoter of bovine SIRT1 gene and their effects on intramuscular fat content in Chinese indigenous cattle. *Gene*, 700, 47-51, doi:10.1016/j.gene.2019.03.022. **IF 2.984**.
84. Ahmadipour, B., Kalantar, M., Schreurs, N. M., Raza, S. H. A., **Khan, R.**, Khan, S., . . . Samira, A. (2019). Flavonoid bioactive compounds of hawthorn extract can promote growth, regulate electrocardiogram waves, and improve cardiac parameters of pulmonary hypertensive chickens. *Poultry Science*. doi:<https://doi.org/10.1016/j.psj.2019.10.022>. **IF 2.027**.
85. Mahdi Khojastekey, Majid Kalantar, Jam Zaheer Ahmed, Samiullah Khan, Muhammad Altaf Hussain, **Rajwali Khan** and Sayed Haidar Abbas Raza, 2020. Promoting the Reproductive Performance and Economic Indices of Zandi Ewes under an Accelerated Lambing System. *Pakistan J. Zool.*, 52: 97-105. DOI: <https://dx.doi.org/10.17582/journal.pjz/2020.52.1.97.105>. **IF 0.80**.
86. Wang, X., **Khan, R.**, Raza, S. H. A., Li, A., Zhang, Y., Liang, C., . . . Zan, L. (2019). Molecular characterization of ABHD5 gene promoter in intramuscular preadipocytes of Qin-chuan cattle: Roles of Evi1 and C/EBPalpha. *Gene*, 690, 38-47. doi:10.1016/j.gene.2018.12.030. **IF 2.984**.
87. Mei, C., Wang, H., Liao, Q., **Khan, R.**, Raza, S. H. A., Zhao, C., . . . Zan, L. (2019). Genome-wide analysis reveals the effects of artificial selection on production and meat quality traits in Qin-chuan cattle. *Genomics*, 111(6), 1201-1208. doi:10.1016/j.ygeno.2018.09.021. **IF 6.205**.
88. Guo, H.; Raza, S.H.A.; Schreurs, N.M.; **Khan, R.**; Wei, D.; Wang, L.; Zhang, S.; Zhang, L.; Wu, S.; Ullan, I., et al. (2018). Genetic variants in the promoter region of the KLF3 gene associated with fat deposition in Qin-chuan cattle. *Gene*, 672, 50-55, doi:10.1016/j.gene.2018.06.022. **IF 2.984**.
89. Wu, S.; Wang, Y.; Ning, Y.; Guo, H.; Wang, X.; Zhang, L.; **Khan, R.**; Cheng, G.; Wang, H.; Zan, L. (2018). Genetic Variants in STAT3 Promoter Regions and Their Application in Molecular Breeding for Body Size Traits in Qin-chuan Cattle. *International journal of molecular sciences*, 19, doi:10.3390/ijms19041035. **IF 4.183**.
90. Wei, D.; Raza, S.H.A.; Zhang, J.; Gui, L.; Rahman, S.U.; **Khan, R.**; Hosseini, S.M.; Kaleri, H.A.; Zan, L. (2018). Polymorphism in promoter of SIX4 gene shows association with its transcription and body measurement traits in Qin-chuan cattle. *Gene*, 656, 9-16, doi:10.1016/j.gene.2018.02.059. **IF 2.984**.
91. Wei, D.; Li, A.; Zhao, C.; Wang, H.; Mei, C.; **Khan, R.**; Zan, L. (2018). Transcriptional Regulation by CpG Sites Methylation in the Core Promoter Region of the Bovine SIX1 Gene: Roles of Histone H4 and E2F2. *International journal of molecular sciences*, 19, doi:10.3390/ijms19010213. **IF 4.183**.
92. Wei, D.-W.; Gui, L.-S.; Raza, S.H.A.; Zhang, S.; **Khan, R.**; Wang, L.; Guo, H.-F.; Zan, L.-S. (2017). NRF1 and ZSCAN10 bind to the promoter region of the SIX1 gene and their effects body measurements in Qin-chuan cattle. *Scientific reports*, 7, doi:10.1038/s41598-017-08384-1. **IF 4.122**.
93. Performance, Immune, and Carcass Characteristics of Broiler Chickens as Affected by Thyme and Licorice or Enzyme Supplemented Diets. 2017. Majid Kalantar1, Seyed Mahdi Hosseini, Liguo Yang, Sayed Haider Abbas Raza, Linsheng Gui, Mostafa Rezaie, Mahdi Khojastekey, Dawei Wei, **Rajwali Khan**, Sulhattin Yasar, Shahid Faraz Syed, Allah Bux Kachiwal, Mohamed Elkhairey, Qijing Lei, Rameez Raja Kaleri, Ayman Hassan Abd El-Aziz. Open Journal of Animal Sciences. 7, 105-109.
94. Comparison of Weight Gain, Milk Production, and Milk Composition of Iranian Mamasani Goat and its Cross with Saanen. Seyed Mahdi Hosseini, Li Guo Yang, Sayed Haidar Abbas Raza, **Rajwali Khan**, Majid Kalantar, Shahid Faraz Syed, Mohib Ullah Kakar and Robina Manzoor. *J Vet Sci Ani Husb* 5(2): 203.
95. Effect of Urea Treated Groundnut Shells on Feed Intake, Digestibility, Nitrogen Retention and Economic Value in Growing Rabbits. 2017. Muhammad Tahir Khan, Muhammad Idrees Khan, Sayed Haider Abbas Raza, Muhammad Adnan, **Rajwali Khan**, Seyed Mahdi Hosseini, Shahid Faraz Syed, Shahzada Khurram Adrian shah, Muhammad Atif Khan, Abrar Ahmad. *Int J Poul Fish Sci* .1(1):1-7.

96. Abdur Rahman, M. Y. Khan, M. S. Qureshi, N. Ahmad, N. Shaheen, S. Din, T. Ali, **Rajwali Khan**.2015. Washing of Animal Body Coat Effects on Salmonella Load on Hide and In Post slaughter Carcasses. *SYLWAN*. 159 (3) 400-415. **IF 0.263**
97. Kamran Farid, Altaf Ur Rahman, Ahmad Naveed, Muhammad Iqbal, **Rajwali Khan** and Shakir Khan. 2014. Effect of Different Levels of Probiotic in Aflatoxin B1 Contaminated Feed on Feed Intake, Feed Conversion Ratio and Growth in Broilers. *J. Anim. Health.Produc.*22 (1)
98. Hayaz Uddin, Hamid Ullah Khan, Muhammad Ilyas Khan, **Rajwali Khan** and Ahmad Naveed. 2014. Productive and Reproductive Performance of Achai Cattle Maintained At Livestock Research & Development Station Surezai Peshawar, Pakistan, *J.Anim.Health.Produc.*22 (1)13-19.
99. Hayaz Uddin, Hamid Ullah Khan, Imtiaz Ali Shah, Ahmad Naveed, Sajid Khan, Rajwali Khan, Muhammad Irshad, Khurshaid Anwer, Hamayun khan. 2014. Study of Phenotypic & Morphometric Characteristics of Achai Cattle at Livestock Research and Development Station Surezai Peshawar. *J.Anim.Health.Produc.*22 (1)37-45.
100. Muhammad Shahid, Naveed Sabir, Ishtiaq Ahmed, Rajwali Khan, Muhammad Irshad, Muhammad Rizwan3 and Sajjad Ahmed. 2011. Diagnosis of subclinical mastitis in bovine Using conventional methods and Electronic detector. *J. Agri. Bio. Sci.* 6 (11) 18-22. ISSN 1990-6145.
101. Zahid Ur Rehman, Din Muhammad, Rajwali Khan, M. Iqbal, Pervez and Ghani Ur Rehman. 2010. Biochemical, Hematological role of feed added milk thistle (*Silybum Marianum*) in broiler. *Life Sci. Int. J.* 4 (2): 1776-1780. ISSN 1992-1705.

#### **iv. Abstract Publication**

- i. Bakht Daraz Khan, Muhammad Subhan Qureshi, Rajwali khan, Sohail Akhtar, Muhammad Iqbal and Nazir Ahmad. 2011. Changes in Milk Fat Percentage with Advancement in Pregnancy and Lactation. Proceedings of International Workshop on Dairy Science Park, Nov 21-23, 2011, Agricultural University Peshawar, Pakistan FT-62.
- ii. Rajwali Khan and Muhammad Subhan Qureshi. 2011. Effect of heavy metal and mineral contents in drinking water on buffalo milk production and quality in urban, peri urban and rural dairy farms of Peshawar. Proceedings of national seminar and workshop on environmental toxicology and health march 8-9, 2011 University of veterinary and animal sciences Lahore. Pakistan.
- iii. Rajwali Khan, M. Subhan Qureshi, Sarzamin Khan, Muhammad Jamal Khan and Rasool Khan. 2010. Drinking water affects heavy metals profiles of milk produced in peri urban dairy farms in Peshawar. Proceedings of 13th National Health Symposium on Impact of Water Quality and Sanitation on Public Health October 27-28, 2009" at Aga Khan University Karachi-Pakistan. (NS2009) Poster presentation
- iv. Ikramullah Khan, Muhammad Subhan Qureshi, Sohail Akhtar, Ijaz Ali, Ghufranullah and Rajwali Khan. 2015. Effect of thermal stress on physiological and reproductive parameters in bos indicus, cross-bred and bos taurus dairy cows a preliminary study. Proc 3<sup>rd</sup> International Workshop Dairy Science Park, Nov 16-18, 2015

#### **Books Published**

1. **Qureshi, M.S. and Rajwali Khan**, 2011. Heavy Metals in Drinking Water of Dairy Buffaloes. VDM Verlag, Germany. ISBN: 978-3-639-32799-1.
2. **Bakht Daraz Khan, Rajwali Khan and Muhammad Subhan Qureshi**, 2013. Effect of Breed, Physiological States & Storage Condition on Milk Fat. Lambert Academic Publishers Germany. ISBN: 978-3-659-41786-3