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- Google Scholar: https://scholar.google.com/citations?user=1qXGrXwAAAAJ&hl=en
- ResearchGate: https://www.researchgate.net/profile/Faruk-Hossen?ev=hdr_xprf

Publications

PUBLICATIONS

- **CRISPR and Gene Augmentation Rescue Trabecular Meshwork Dysfunction in iPSC Models of Lowe Syndrome.** *Advanced science (Weinheim, Baden-Wurttemberg, Germany)*
  Chen, S., Liu, Z., Wang, W., Wang, Q., Kowal, T. J., Zhang, F., Walkiewicz, G., Hossen, F., Lachman, H. M., Zhou, J., Wang, Y., Sun, Y.
  2026: e77704

- **TIGRa: An ultra-compact programmable activator enabling multiplexed and efficient gene regulation.** *Cell stem cell*
  Liu, Z., Chen, S., Wang, W., Zhang, F., Wang, Q., Walkiewicz, G., Hossen, F., Zhou, J., Wang, Y., Sun, Y.
  2026

- **Endothelial Nucleoporin93 (Nup93) Maintains Vascular Homeostasis via Sun1-Dependent Regulation of RhoA/ROCK Activity** *ARTERIOSCLEROSIS THROMBOSIS AND VASCULAR BIOLOGY*
  Nguyen, T. D., Eckrich, M. D., Khan, Y. Z., Hossen, F., Makim, R., Durr, H. A., Michalkiewicz, J., Rao, M. K., Banks, J. M., Ren, A. X., Winek, M. A., de Moraes, L. O., Lee, et al
  2026; 46 (8): e324964

- **Ionic regulation of cancer cell stiffness and metastatic colonization via the MRTFA-KCNMB1 axis.** *Developmental cell*
  Gajda, A. M., Haloul, M., Pai, V., Mollaeian, K., Patel, K. J., Rodríguez-López, R., Beverley, K. M., Sanborn, M. A., Lee, K., Castillo, C. C., Wilk, S. M., Wolska, B. M., Hossen, et al
  2026

- **Ionic Regulation of Mechanosurveillance and Metastasis via the MRTFA/KCNMB1 Axis.** *bioRxiv : the preprint server for biology*
  Gajda, A. M., Haloul, M., Pai, V., Mollaeian, K., Patel, K. J., Rodriguez-Lopez, R., Beverley, K. M., Sanborn, M. A., Lee, K., Castillo, C. C., Wilk, S. M., Wolska, B. M., Hossen, et al
  2026

- **Cytosolic phospholipase A2 links tau pathology to insulin signaling impairment in Alzheimer's disease.** *Frontiers in aging neuroscience*
  Hossen, F., Hung, J., Odeh, H., Sun, G. Y., Lee, J. C.
  2025; 17: 1671986

- **Endothelial Nucleoporin93 (Nup93) Maintains Vascular Function via Sun1-Dependent Regulation of RhoA-eNOS Signaling.** *bioRxiv : the preprint server for biology*
  Nguyen, T. D., Khan, Y. Z., Hossen, F., Makim, R., Banks, J. M., Michalkiewicz, J., Winek, M. A., de Moraes, L. H., Lee, J. C., Phillips, S. A., Lee, M. Y.

2025

- **Oligomeric Amyloid-β and Tau Alter Cell Adhesion Properties and Induce Inflammatory Responses in Cerebral Endothelial Cells Through the RhoA/ROCK Pathway.** *Molecular neurobiology*
  Hossen, F., Geng, X., Sun, G. Y., Yao, X., Lee, J. C.
  2024; 61 (11): 8759-8776

- **Oligomeric Tau-induced oxidative damage and functional alterations in cerebral endothelial cells: Role of RhoA/ROCK signaling pathway.** *Free radical biology & medicine*
  Hossen, F., Sun, G. Y., Lee, J. C.
  2024; 221: 261-272

- **FAK regulates tension transmission to the nucleus and endothelial transcriptome independent of kinase activity.** *Cell reports*
  Akhter, M. Z., Yazbeck, P., Tauseef, M., Anwar, M., Hossen, F., Datta, S., Vellingiri, V., Chandra Joshi, J., Toth, P. T., Srivastava, N., Lenzini, S., Zhou, G., Lee, et al
  2024; 43 (6): 114297

- **Moringa oleifera is a Prominent Source of Nutrients with Potential Health Benefits.** *International journal of food science*
  Islam, Z., Islam, S. M., Hossen, F., Mahtab-Ul-Islam, K., Hasan, M. R., Karim, R.
  2021; 2021: 6627265

- **T helper 2-driven immune dysfunction in chronic arsenic-exposed individuals and its link to the features of allergic asthma.** *Toxicology and applied pharmacology*
  Rahman, A., Islam, M. S., Tony, S. R., Siddique, A. E., Mondal, V., Hosen, Z., Islam, Z., Hossain, M. I., Rahman, M., Anjum, A., Paul, S. K., Hossen, F., Sarker, et al
  2021; 420: 115532

- **Arsenic exposure-related hyperglycemia is linked to insulin resistance with concomitant reduction of skeletal muscle mass.** *Environment international*
  Mondal, V., Hosen, Z., Hossen, F., Siddique, A. E., Tony, S. R., Islam, Z., Islam, M. S., Hossain, S., Islam, K., Sarker, M. K., Hasibuzzaman, M. M., Liu, L. Z., Jiang, et al
  2020; 143: 105890

- **Association between chronic arsenic exposure and the characteristic features of asthma.** *Chemosphere*
  Siddique, A. E., Rahman, M., Hossain, M. I., Karim, Y., Hasibuzzaman, M. M., Biswas, S., Islam, M. S., Rahman, A., Hossen, F., Mondal, V., Banna, H. U., Huda, N., Hossain, et al
  2020; 246: 125790

- **Dose-dependent relationships between chronic arsenic exposure and cognitive impairment and serum brain-derived neurotrophic factor.** *Environment international*
  Karim, Y., Siddique, A. E., Hossen, F., Rahman, M., Mondal, V., Banna, H. U., Hasibuzzaman, M. M., Hosen, Z., Islam, M. S., Sarker, M. K., Nikkon, F., Saud, Z. A., Xin, et al
  2019; 131: 105029