

### List of Publications:

- Horoub, M. M., Horoub, A. M., Khan, S., **Albalasie, A.**, Ali, S., Ajamieh, I. A., & Alzaydi, A. (2023). Study the effect of changing Cables' pattern on the workspace of a six DOF floating parallel marine robot (FPMR). *Alexandria Engineering Journal*, 64, 847-858.
- Hussain, I., **Albalasie, A.**, Awad, M. I., Tamizi, K., Niu, Z., Seneviratne, L., & Gan, D. (2021). Design and control of a discrete variable stiffness actuator with instant stiffness switch for safe human-robot interaction. *IEEE Access*, 9, 118215-118231
- Abu Hanieh, A., & **Albalasie**, A. (2021). Noise and vibrations reduction of stone cutting factories. *International Journal of Mechanical & Mechatronics Engineering*.
- Ali, S., Khan, S., Horoub, M. M., Ali, S., **Albalasie, A.**, & Jamal, A. (2020, June). Effect of Baffles Location on the Rollover Stability of Partially Filled Road Container. In *2020 International Conference on Electrical, Communication, and Computer Engineering (ICECCE)* (pp. 1-6). IEEE.
- Khan, S., Jamal, A., Ali, S., Horoub, M. M., **Albalasie, A.**, & Ali, S. (2020, June). Dynamic modeling and analysis of a four-bar mechanism for automobile applications. In *2020 international conference on electrical, communication, and computer engineering (ICECCE)* (pp. 1-6). IEEE.
- Ahmad, R., Khan, F., Jamal, A., Khan, S., Ali, S., Horoub, M. M., & **Albalasie, A.** (2020, June). Simulation and breakdown characteristics of China clay and silica sand for improved grounding system. In *2020 International Conference on Electrical, Communication, and Computer Engineering (ICECCE)* (pp. 1-6). IEEE.
- **Albalasie, A.**, Hussain, I., Horoub, M., Khan, S., Ali, S., & Gan, D. (2019, July). Design, prototype, and control design based on computed torque control of selective compliance assembly robot arm. In *2019 IEEE 9th Annual International Conference on CYBER Technology in Automation, Control, and Intelligent Systems (CYBER)* (pp. 70-75). IEEE.
- Hussain, I., **Albalasie, A.**, Awad, M. I., & Gan, D. (2019, June). Modeling, identification, and control of a discrete variable stiffness actuator (DVSA). In *Actuators* (Vol. 8, No. 3, p. 50). MDPI.
- Hussain, I., **Albalasie, A.**, Awad, M. I., Seneviratne, L., & Gan, D. (2018). Modeling, Control, and Numerical Simulations of a Novel Binary-Controlled Variable Stiffness Actuator (BcVSA). *Front. Robot. AI* 5: 68.
- Hanieh, A. A., & **Albalasie, A.** (2019). Comparison between elastomeric passive isolators and LQR active control in stone cutting process: modelling and simulation. *Procedia Manufacturing*, 33, 770-777.
- **Albalasie, A.** (2016). Modelling, kinematics, dynamics and control design for under-actuated manipulators.
- **Albalasie, A.**, Seliger, G., & Hanieh, A. A. (2016). Using adaptive model predictive technique to control underactuated robot and minimize energy consumption. *Procedia CIRP*, 40, 407-412.
- **Albalasie, A.**, Glodde, A., Seliger, G., & Hanieh, A. A. (2015). Quasi-linearization Approach for the Under-actuated Robots. *Procedia CIRP*, 26, 223-228.