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A. Journal Papers

1. **M. Y. Wei*,** "Modeling and predictive control of electromechanical actuators for all-electric nose landing gear systems," *IET Electric Power Applications,* vol. 19, no. 1, pp. 1-17, Apr. 2025. (SCI)
2. **M. Y. Wei*,** and W. H. Cai, "Design and implementation of multi-axis motion control in flight simulator systems," *J. CMSE,* vol. 46, no. 1, pp. 1-15, Feb. 2025. (SCI)
3. **M. Y. Wei*,** and Y. P. Chiang, "Empirical validation of large-angle and long-distance helicopter training scenarios," *IEEE Access,* vol. 12, pp. 151876-151892, Oct. 2024. (SCI)
4. **M. Y. Wei*,** and H. C. Yuan, "Advanced servo control and AI Integration in 3-DoF platforms for enhanced simulation interactivity," *Appl. Syst. Innov.,* vol. 7, no. 4, pp. 57, June 2024. (SCI)
5. **M. Y. Wei*,** "Design and implementation of an encoder calibration system for improved resolution and accuracy in IPMSM drive with embedded software," *Journal of the Chinese Institute of Engineers,* vol. 47, no. 6, pp. 719-731, June 2024. (SCI)
6. **M. Y. Wei*,** "Design and control of a three-axis motion servo control system based on a CAN bus," *Energies,* vol. 16, no. 10, pp. 4408, May 2023. (SCI)
7. **M. Y. Wei,** S. A. Fang, and J. W. Liu, "Design and implementation of a new training flight simulator system," *Sensors, vol. 22,* pp. 7933, Oct. 2022. (SCI)
8. **M. Y. Wei*,** Y. L. Yeh, J. W. Liu, and H. M. Wu, "Design and control of a multi-axis servo motion chair system based on a microcontroller," *Energies, vol. 15,* pp. 4401, June 2022. (SCI)

9. **M. Y. Wei***, “Design of a DSP-based motion-cueing algorithm using the kinematic solution for the 6-DoF motion platform,” *Aerospace, vol. 9,* pp. 203, Oct. 2022. (SCI)
10. **M. Y. Wei***, Y. L. Yeh, S. W. Chen, H. M. Wu, and J. W. Liu, “Design, analysis, and implementation of a four-DoF chair motion mechanism,” *IEEE Access, vol. 9,* pp. 124986-124999, Sep. 2021. (SCI)
11. **M. Y. Wei***, “Design and implementation of inverse kinematics and monitoring motion system for 6Dof platform,” *Applied Science, vol. 11,* pp. 9330, Oct. 2021. (SCI)
12. **M. Y. Wei**, and T. H. Liu*, “Design and implementation of an on-line tuning adaptive controller for synchronous reluctance motor drives,” *IEEE Transactions on Industrial Electronics*, vol. 60, no. 9, pp. 3644-3657, Sep. 2013. (SCI)
13. **M. Y. Wei**, T. H. Liu*, and P. C. Pan, “Rotor position estimator and adaptive controller design for wide-range adjustable speed synchronous reluctance motor drive systems,” *International Journal of Electrical Engineering*, vol. 20, no. 1, pp. 1-14, Sep. 2013. (EI)
14. **M. Y. Wei**, and T. H. Liu*, “A novel adaptive controller for a synchronous reluctance motor position control system,” *Electronic Monthly,* vol. 11, no. 1, pp. 72-83, Jan. 2013.
15. **M. Y. Wei**, and T. H. Liu*, “A high-performance sensorless position control system of a synchronous reluctance motor using dual current-slope estimating technique,” *IEEE Transactions on Industrial Electronics*, vol. 59, no. 9, pp. 3411-3426, Sep. 2012. (SCI)
16. C. K. Lin, T. H. Liu*, **M. Y. Wei**, L. C. Fu, and C. F. Hsiao, “Design and implementation of a chattering-free non-linear sliding-mode controller for interior permanent synchronous drive systems,” *IET*

Proceedings Electric Power Applications, vol. 6, no. 6, pp. 332-344, Jun. 2012. (SCI)

17. **M. Y. Wei**, T. H. Liu*, and C. K. Lin, "Design and implementation of a passivity-based controller for sensorless synchronous reluctance motor drive systems," *IET Proceedings Electric Power Applications*, vol. 5, no. 4, pp. 335-349, Apr. 2011. (SCI)
18. **M. Y. Wei**, and T. H. Liu*, "Design and implementation of a passive controller for sensorless synchronous reluctance motor control systems," *Electronic Monthly,* vol. 8, no. 6, pp. 58-68, Nov. 2010.

B. Conference Papers:

1. **M. Y. Wei***, and B. H. Wu, "Application of autonomous mobile robots with visual guidance, energy-saving navigation, and electric lifting devices in the smart industry," *in Proc. IEEE IPEC-2026*, Nagasaki, Japan, pp. 1-5, May. 2026. (Accepted)
2. **M. Y. Wei***, and W. X. Chen, "A study on frequency-domain feature diagnosis technology for interior permanent magnet synchronous motor control systems based on PCB design," *in Proc. IEEE 20th* International *Microsystems, Packaging, Assembly and Circuits Technology Conference (IMPACT 2025)*, Taipei, Taiwan, pp. 467-470, Oct. 2025.
3. **M. Y. Wei***, and Y. P. Chiang, "Implementation of a dual-DoF force feedback joystick control system based on DSP," *in Proc. IEEE PEDS-2025*, Penang, Malaysia, pp. 1-5, Jul. 2025.
4. **M. Y. Wei***, Y. Y. Chen, and W. H. Cai, "Design and dynamic response optimization of electromechanical actuator drive system," *in Proc. IEEE ECICE-2024*, Yunlin, Taiwan, pp. 1-5, Jul. 2024.

5. **M. Y. Wei***, and S. W. Chen, “Optimal control-based motion cueing algorithm design for 6DoF motion platform,” *in Proc. IEEE ICKII-2021*, Taichung, Taiwan, pp. 216-222, Jul. 2021.
6. **M. Y. Wei***, “Design and implementation of the inverse kinematics and monitoring module for six-axis crank arm platform,” *in Proc. IEEE ICKII-2021*, Taichung, Taiwan, pp. 210-215, Jul. 2021.
7. **M. Y. Wei**, and T. H. Liu*, “On-line tuning adaptive controller design for a synchronous reluctance motor drive system,” *in Proc. IEEE IPEMC-2012*, Harbin, China, pp. 64-68, Jun. 2012.
8. **M. Y. Wei**, and T. H. Liu*, “Rotor position and speed estimation for a synchronous reluctance motor using dual current-slope technique, ” *in Proc. IEEE ICIT-2011*, Alabama, USA, pp. 176-181, Mar. 2011.

C. Book

1. **M. Y. Wei**, “Chapter 2: Design and Development of Servo Drive Control System Based on DSP,” in *PID Control - New Design Methods and Applications*, London, UK: IntechOpen, Jan. 2025. (ISBN 978-0-85466-477-1)