

List of publications

1. Skowroński, W., Łazarski, S., **Mojsiejuk, J.**, Chęciński, J., Frankowski, M., Nozaki, T., Yakushiji, K., Yuasa, S., “High frequency voltage-induced ferromagnetic resonance in magnetic tunnel junctions”. *Applied Physics Letters* 115.7 (Aug. 2019), p. 072401. DOI: 10.1063/1.5113681
2. **Mojsiejuk, J.**, Kulig, P., Chęciński, J., Frankowski, M., “Visualization for Micromagnetics With Synchronized Plotting”. *IEEE Transactions on Magnetics* 56.2 (Feb. 2020), pp. 1–6. DOI: 10.1109/TMAG.2019.2949515
3. Ziętek, S., **Mojsiejuk, J.**, Grochot, K., Łazarski, S., Skowroński, W., Stobiecki, T., “Numerical model of harmonic Hall voltage detection for spintronic devices”. *Physical Review B* 106.2 (July 2022), p. 024403. DOI: 10.1103/PhysRevB.106.024403
4. **Mojsiejuk, J.**, Ziętek, S., Grochot, K., Skowroński, W., Stobiecki, T., “cmtj: Simulation package for analysis of multilayer spintronic devices”. *npj Computational Materials* 9.1 (Apr. 2023), p. 54. DOI: 10.1038/s41524-023-01002-x
5. Rzeszut, P., **Mojsiejuk, J.**, Skowroński, W., Tsunegi, S., Kubota, H., Yuasa, S., *Towards mutual synchronization of serially connected Spin Torque Oscillators based on magnetic tunnel junctions*. arXiv:2306.11608 [physics]. June 2023
6. Grochot, K., Ogrodnik, P., **Mojsiejuk, J.**, Mazalski, P., Guzowska, U., Skowroński, W., Stobiecki, T., “Influence of ferromagnetic interlayer exchange coupling on current-induced magnetization switching and Dzyaloshinskii–Moriya interaction in Co/Pt/Co multilayer system”. *Scientific Reports* 14.1 (Apr. 2024), p. 9938. DOI: 10.1038/s41598-024-60492-x
7. Safeer, C., Keatley, P. S., Skowroński, W., **Mojsiejuk, J.**, Yakushiji, K., Fukushima, A., Yuasa, S., Bedau, D., Casanova, F., Hueso, L. E., Hicken, R. J., Pinna, D., Van Der Laan, G., Hesjedal, T., “Magnetization dynamics driven by displacement currents across a magnetic tunnel junction”. *Physical Review Applied* 22.2 (Aug. 2024), p. 024019. DOI: 10.1103/PhysRevApplied.22.024019
8. **Mojsiejuk, J.**, Ziętek, S., Skowroński, W., “Reinforcement learning for spin torque oscillator tasks”. *Journal of Physics: Conference Series* 3161.1 (Jan. 2026), p. 012025. DOI: 10.1088/1742-6596/3161/1/012025
9. Cierpień, M., Maślanka, D., Gubała, K., **Mojsiejuk, J.**, Grochot, K., Wrona, J., Langer, J., Nan, T., Skowroński, W., “Magnetic tunnel junction made of abundant materials for memory and dynamic applications”. *Scientific Reports* 15.1 (Oct. 2025), p. 35227. DOI: 10.1038/s41598-025-20842-9
10. Cierpień, M., Grochot, K., **Mojsiejuk, J.**, Pawlak, J., Kanak, J., Wrona, J., Nan, T., Skowronski, W., “Spin-orbit-torque-induced magnetization switching in alpha-W-based magnetic tunnel junction”. *Journal of Physics D: Applied Physics* (Dec. 2025). DOI: 10.1088/1361-6463/ae2edc