

DAFTAR PUSTAKA

- Ali, M. (2004) ‘Pembelajaran Perancangan Sistem Kontrol PID Dengan Software Matlab’, *Jurnal Edukasi Elektro*, 1(1), pp. 1–8.
- Amin, M. and Syahputra Novelan, M. (2020) ‘Sistem Kendali Obstacle Avoidance Robot sebagai Prototype Social Distancing Menggunakan Sensor Ultrasonic dan Arduino’, *InfoTekJar : Jurnal Nasional Informatika dan Teknologi Jaringan*, 5(1), pp. 148–153. Available at: <https://doi.org/10.30743/infotekjar.v5i1.3003>.
- Bomfim, M. et al. (2021) ‘A novel hybrid (pid + mrac) adaptive controller for an air levitation system’, *IEEE Latin America Transactions*, 19(8), pp. 1400–1409. Available at: <https://doi.org/10.1109/tla.2021.9475871>.
- Chacon, J. et al. (2017) ‘Design of a low-cost air levitation system for teaching control engineering’, *Sensors (Switzerland)*, 17(10), pp. 1–18. Available at: <https://doi.org/10.3390/s17102321>.
- Chacón, J. et al. (2018) ‘Experimental Study of Nonlinear PID Controllers in an Air Levitation System’, *IFAC-PapersOnLine*, 51(4), pp. 304–309. Available at: <https://doi.org/10.1016/j.ifacol.2018.06.082>.
- Cholodowicz, E. and Orlowski, P. (2017) ‘Low-cost air levitation laboratory stand using MATLAB Simulink and Arduino’, *Pomiary, Automatyka, Robotyka*, pp. 33–39. Available at: <https://doi.org/10.14313/PAR>.
- Christopher and Justin, K. (2018) ‘Development,control and testing of an air levitation system for educational purpose’, *POLITesi*, pp. 1–41. Available at: <https://hdl.handle.net/10589/140083>.
- Howimanporn, S., Chookaew, S. and Chaiyaporn, S. (2021) ‘Experimental and Implementation of Robust Control Via Floating Air Levitation and Balancing Rotary Inverted Pendulum’, *Journal of Physics: Conference Series*, 1733(1), pp. 1–7. Available at: <https://doi.org/10.1088/1742-6596/1733/1/012013>.
- Masciocchi, G., Mirshokraee, A. and Stefan, S. (2019) ‘Air Flow Ball Levitation and Light Controller’, *Project for the course Computing Systems for Engineering Physics*, pp. 1–16.
- Muhammad, H., Ramdhani, M.S. and Surya Wibowo, A.S. (2017) ‘Desain dan Implementasi Kendali PID pada Bam and Ball System’, *e-Proceeding of Engineering*, 4(3), pp. 3286–3293.
- Mursyitah, D., Faizal, A. and Kurniawan, R.A. (2018) ‘Desain Pengendali PID – Gain Schedulling Untuk Pengendalian Posisi Pada Sistem Magnetic Levitation Ball’, *Jurnal ECOTIPE*, 5(2), pp. 26–36. Available at: <https://doi.org/10.33019/ecotipe.v5i2.650>.
- Nguyen, V.N. et al. (2022) ‘PLC-based PID control system design for an air levitation system’, *2022 7th International Scientific Conference on Applying New*

Technology in Green Buildings, ATiGB 2022, (November), pp. 83–87. Available at: <https://doi.org/10.1109/ATiGB56486.2022.9984101>.

Nugraha, M.I. et al. (2017) ‘Penerapan Advanced Pid Tuning Pada Plant Yang Critically Stable: Height Levitation Pingpong Ball’, *Manutech : Jurnal Teknologi Manufaktur*, 9(01), pp. 41–46. Available at: <https://doi.org/10.33504/manutech.v9i01.31>.

Saputro, J.S. and Latifa, U. (2018) ‘Perancangan Kendali Keseimbangan Posisi Bola Menggunakan Metode Kendali PID’, *Barometer*, 3(2), pp. 147–151.

Schaefer, M.S., Escobar, D. and Roth, H. (2019) ‘Nonlinear identification and controller design for the air levitation system’, *Proceedings - 2019 22nd International Conference on Control Systems and Computer Science, CSCS 2019*, pp. 18–23. Available at: <https://doi.org/10.1109/CSCS.2019.00011>.

Taha, H.A. et al. (2021) ‘Modeling of Nonlinear Enhanced Air Levitation System using NARX Neural Networks’, *NILES 2021 - 3rd Novel Intelligent and Leading Emerging Sciences Conference, Proceedings*, pp. 416–420. Available at: <https://doi.org/10.1109/NILES53778.2021.9600486>.

Takács, G. et al. (2020) ‘FloatShield: An Open Source Air Levitation Device for Control Engineering Education’, *IFAC-PapersOnLine*, 53(2), pp. 17288–17295. Available at: <https://doi.org/10.1016/j.ifacol.2020.12.1807>.

Tamaji, Utama, Y.A.K. and Raffel, A. (2021) ‘Analisa Performansi Beberapa Metode Kontroler PID Pada Magnetic Ball’, *Electronic Control, Telecommunication, Computer Information and Power Systems*, 6(2), pp. 66–71.

Tkáčik, T. et al. (2021) ‘Design of aerodynamic ball levitation laboratory plant’, *Processes*, 9(11), pp. 1–19. Available at: <https://doi.org/10.3390/pr9111950>.

Tootchi, A., Amirkhani, S. and Chaibakhsh, A. (2019) ‘Modeling and Control of an Air Levitation Ball and Pipe Laboratory Setup’, *ICRoM 2019 - 7th International Conference on Robotics and Mechatronics*, (ICRoM), pp. 29–34. Available at: <https://doi.org/10.1109/ICRoM48714.2019.9071827>.

Utama, I.C. and Kharis, A. (2016) ‘Kontrol PID Untuk Keseimbangan Bola Ping-Pong Dengan Sensor Ultrasonik Dan Motor Servo Berbasis Labview’, *Telekontran*, 4(02), pp. 68–77.

Winarto, B.W.T. and Rusimamto, P.W. (2018) ‘Rancang Bangun Sistem Levitasi Magnet Menggunakan Kontrol PID’, *Jurnal Teknik Elektro*, 8(1), pp. 63–70