STAFF HANDBOOK

(SCOPUS)(SINTA)

Name	*Teguh Budi Prayitno*
Position	*Lecturer in Physics Education, Universitas Negeri Jakarta*
Educational Background	1. *Bachelor's Degree in Physics, Institut Teknologi Bandung (2005)* 2. *Magister's Degree in Physics, Institut Teknologi Bandung (2007)* 3. *Doctoral Degree in Physics, Kanazawa University (2018)*
Academic Career (Employment)	*Lecturer, reviewer*
Research and Development project over the last 5 years	1. *2017-ongoing: Spin spiral and its application* 2. *2019-2020: Bose-Einstein condensation* 3. *2021-ongoing: Thermoelectric materials*
Industry collaboration/ Community Services over the last 5 year	1. *2018-2019: Kanazawa University* 2. *2022-ongoing: National Research and Innovation Agency (BRIN)*
Patents and Intellectual Property Right (IPR)	1. *2018: Code for spin spiral calculation* 2. *2019: Code for producing probability amplitude of harmonic oscillator using Mathematica* 3. *2020: Code for arranging magnetic moment on certain orbitals* 4. *2021: Code for producing phase portrait of relativistic particle under harmonic oscillator potential* 5. *2021: Code for producing phase portrait of relativistic particle under anharmonic oscillator potential for 3rd order* 6. *2021: Code for producing phase portrait of relativistic particle under anharmonic oscillator potential for 4^{th} order*

Important publications over the last 5 years	7. T. B. Prayitno *and F. Ishii, Implementation of generalized bloch theorem using linear combination of pseudo-atomic orbitals, Journal of the Physical Society of Japan 87 (2018) 114709* 8. T. B. Prayitno *and F. Ishii, First-principles Study of Spiral Spin Density Waves in Monolayer $MnCl_2$ Using Generalized Bloch Theorem, Journal of the Physical Society of Japan 88 (2019) 104705* 9. T. B. Prayitno *and F. Ishii, Carrier-induced antisymmetric–symmetric tendencies of spin stiffness in zigzag graphene nanoribbons, Journal of Physics: Condensed Matter 31 (2019) 365801* 10. T. B. Prayitno *and F. Ishii, First-principles Study of Spin-wave Excitations of 3d Transition Metals with Linear Combination of Pseudo-atomic Orbitals, Journal of the Physical Society of Japan 88 (2019) 054701* 11. T. B. Prayitno *and E. Budi, Applied electric field on zigzag graphene nanoribbons: reduction of spin stiffness and appearance of spiral spin density waves, Journal of Physics: Condensed Matter 32 (2019) 105802* 12. T. B. Prayitno, *Electric-field-induced spin spiral state in bilayer zigzag graphene nanoribbons, Journal of Physics: Condensed Matter 33 (2020) 065805* 13. T. B. Prayitno, *Carrier-induced phase transition in metal dichlorides XCl_2 (X: Fe, Co, and Ni), Journal of Magnetism and Magnetic Materials 517 (2020) 167386* 14. T. B. Prayitno, *Spin stiffness of bilayer zigzag graphene nanoribbon for several configurations, Physica E 118 (2020), 113916* 15. T. B. Prayitno, *Controlling phase transition in monolayer metal diiodides XI_2 (X: Fe, Co, and Ni) by carrier doping, Journal of Physics: Condensed Matter 33 (2021) 335803* 16. T. B. Prayitno, *Impossibility of increasing Néel temperature in zigzag graphene nanoribbon by electric field and carrier doping, Physica E 129 (2021), 114641* 17. T. B. Prayitno, *Tuning the magnetic states in AA-stacked bilayer zigzag graphene nanoribbons Communications in Science and Technology 7 (2022), 73*
Activities in Professional organizational over the last 5 years	-