

Staff Handbook

Name	Woro Setyarsih		
Post	Master degree in science education		
Academic career			
Academic	Institution	Year	
Initial Academic Appointed as lecturer/instructor in Physics Educations			
Doctoral			
Master of Science Education	Institut Teknologi Bandung	1998-2000	
Bachelor of Physics Education	Institut Keguruan dan Ilmu Pendidikan	1988-1993	
Employment			
Position	Employer	Period	
Professor			
Associate Professor	Universitas Negeri Surabaya		
Assistant Professor	Universitas Negeri Surabaya		
Lecturer/ Instructor	Universitas Negeri Surabaya		
Research and development projects over the last 5 years			
Name of Project or Research	Period	Partner (Mitra/ if applicable)	Amount of Financing
HIGHER-LEVEL THINKING SKILLS (HOTS) PROFILE OF PHYSICS DEPARTMENT STUDENTS	2022		IDR 20.000.000 (€ 1,040)
Formulation of Teeth Whitening Gel Based on TiO ₂ from Tulungagung Sand	2022		IDR 210.000.000 (€ 10,920)
APPLICATION OF REAL WORLD PROBLEMS TO TRAIN THE PROBLEM-SOLVING ABILITIES OF FIRST-YEAR STUDENTS OF THE PHYSICS EDUCATION STUDY PROGRAM	2023		IDR 20.000.000 (€ 1,040)
Formulation of Teeth Whitening Gel Based on TiO ₂ from Tulungagung Sand	2023		IDR 265.560.000 (€13,809.12)
ALTERNATIVE ASSESSMENT MODELS IN THE MILLENNIAL ERA TO ASSESS HIGHER	2024		IDR 100.000.000 (€ 5,200)

ORDER THINKING SKILLS (HOTS) IN THE FIELD OF PHYSICS-SCIENCE			
Exploration of Bangkalan Dolomite Sand Caco3 Nanoparticles as Raw Smart Photocatalysts to Create Sustainable Materials	2024		IDR 45.000.000 (€ 2,340)
ECO-SUSTAINABLE ABSORBENT FORMULATION OF PINEAPPLE PEEL ZNO ON MICROPLASTIC WASTE IN URBAN ENVIRONMENTS	2024		IDR 45.000.000 (€ 2,340)
LITERACY-NUMERACY STUDY IN HIGH SCHOOL PHYSICS LEARNING AND ITS ASSESSMENT	2024		IDR 20.000.000 (€ 1,040)
ZnO/MgO Natural Material Nanocomposites as Sustainable Smart Materials: Photocatalytic and Antibacterial	2024		IDR 128.190.000 (€ 6,665)
Cu-Doped ZnO Nano Formulation from Pineapple Peel Extract with Modified Natural Dye Solution for Green Energy DSSC Application	2024		IDR 136.240.000 (€ 7,084)
Industry collaborations over the last 5 years			
Project title		Partners	
-			
Patents and proprietary rights			
Title			Year
Buku Ajar Bahan Paduan (Berbasis Experiential Learning)			2021
Flipbook Lembar Kerja Mahasiswa Berbasis Masalah Dunia Nyata: Seri Fisika Dasar - Kinematika			2023
Flipbook Bahan Ajar Mahasiswa Berbasis Masalah Dunia Nyata: Seri Fisika Dasar - Kinematika			2023
Contoh Instrumen Asesmen Penguatan Kompetensi Literasi Numerasi Fisika: Suplemen Pendampingan Asesmen Literasi Numerasi Fisika			2024
Important publications over the last 5 years		Total number= 146 publications total publications since the las 5 year= 52 publications	
Title and Author	Publisher/ Journal name	Publication date	Vol/Issue/ Page Number
Need Assessment of Physics Learning Evaluation Course on COVID-19	Berkala Ilmiah Pendidikan Fisika	2021	9 (1), 57-71

Pandemic Era in Bloom's Taxonomy Topic MNR Jauhariyah, W Wasis, T Sunarti, W Setyarsih, A Zainuddin			
Prototype Profile of Supercapactors with Activated Carbon/Fe ₃ O ₄ Electrodes Natural Materials and Celgard Li-Ion Battery Separators L Rohmawati, D Alfarisi, SH SP, W Setyarsih, T Tukiran, A Subhan	E3S Web of Conferences	2021	328, 02012
Making a Solar Panel Powered Hydroponic System for Residents of RT 57 RW 12, Kebonagung Subdistrict, Sukodono, Sidoarjo L Rohmawati, W Setyarsih, NP Putri	Proceedings of the Universitas Negeri Surabaya Physics Seminar	2021	5, 184-191
Literature study: analysis of physics learning practices in high school to practice problem solving skills C Ayudha, W Setyarsih	C Ayudha, W Setyarsih	2021	11 (1), 16-28
Profile of High School Students' High-Order Thinking Skills in Problem Solving on Newton's Laws L Ayumniyya, W Setyarsih	Inovasi Pendidikan Fisika	2021	10 (1), 50-58
Profile of Science Literacy Skills of High School Students in Pamekasan Regency in the Discussion of Static Fluids S Milanto, A Zainuddin, W Setyarsih	Inovasi Pendidikan Fisika	2021	10 (1), 59-65
Application Titanium Dioxide Nanotube from Natural Source as Tooth Whitening L Rohmawati, W Setyarsih, A Hefdea, E Wulancahayani	Journal of Physics: Conference Series	2021	1805 (1), 012012
Analysis of Students' Scientific Literacy Skills and The Relationship with Critical Thinking Skills on Global Warming Materials D Lestari, W Setyarsih	Journal of Physics: Conference Series	2021	1805 (1), 012040
Analysis of physics questions based on HOTS criteria: the result of physics teacher training	Journal of Physics: Conference Series	2021	1805 (1), 012023

MNR Jauharyah, T Sunarti, W Setyarsih, A Zainuddin			
Effect of polyaniline mass composition on electrochemical of active carbon/polyaniline as supercapacitor electrode L Rohmawati, N Anggraini, SH SP, SH Intifadhah, W Setyarsih	IOP Conference Series: Materials Science and Engineering	2021	1125 (1), 012001
Literature Review of Isomorphic Instruments as an Assessment of Physics Learning IS Ningsari, A Zainuddin, W Setyarsih	ORBITA: Jurnal Pendidikan dan Ilmu Fisika	2021	7 (1), 54-64
Literature review on the development of high-order thinking skills (HOTS) assessment instruments for physics in high school E Desiriah, W Setyarsih	ORBITA: Jurnal Pendidikan dan Ilmu Fisika	2021	7 (1), 79-89
Literature study: Analysis of physics learning practices in high school to train problem-solving skills CFH Ayudha, W Setyarsih	Jurnal Pendidikan Fisika Undiksha	2021	11 (1), 16-28
Literature review on the development of problem solving ability instruments in physics material U Kusuma, W Setyarsih	Inovasi Pendidikan Fisika	2021	10 (2), 16-127
Literature review of high school students' physics misconceptions and diagnostic instruments AN Santoso, W Setyarsih	JPFT (Jurnal Pendidikan Fisika Tadulako Online)	2021	9 (1), 34-44
Experiments and student responses to non-laboratory physics practicums using video analysis tracker applications for motion kinematics experiments IA Rizki, NF Citra, HV Saphira, W Setyarsih, NP Putri	Journal of Teaching and Learning Physics	2021	6 (2), 77-89
Prezi mind mapping media in physics learning: A bibliometric analysis I Zakhiyah, N Suprpto, W Setyarsih	Journal of Physics: Conference Series	2021	2110 (1), 012015

Literature Review of Multirepresentational Learning in High School Physics Material D Rahmawati, W Setyarsih	Inovasi Pendidikan Fisika	2021	10 (2), 1-10
Analysis of the development of critical thinking instruments test in physics T Sunarti, W Wasis, W Setyarsih, A Zainudin, MNR Jauhariyah	International Joint Conference on Science and Engineering 2021 (IJCE 2021)	2021	627-634
Scientific Research Trend on Creativity in Physics Learning MNR Jauhariyah, T Sunarti, W Setyarsih, A Zainuddin, S Fatimah	International Joint Conference on Science and Engineering 2021 (IJCE 2021)	2021	560-567
Analysis of Fill Weight, Water Absorption and Density of Plasterboard Ceiling Made of Banana Midrib Fiber A Komariyah, SAA Aska, AI Navalia, L Rohmawati, W Setyarsih	JURNAL ILMU FISIKA UNIVERSITAS ANDALAS	2022	14 (1), 21-27
Track video analysis as physics media research during 2016 To 2020 a bibliometric analysis HV Saphira, N Suprpto, W Setyarsih	Inovasi Pendidikan Fisika	2022	10 (3), 32-39
The effectiveness of virtual class-based e-learning with video-assisted google classroom as a physics learning media (2016-2020) IR Dawana, W Setyarsih, N Suprpto, D Dwikoranto	Momentum: Physics Education Journal	2022	6 (2), 188-198
The characteristics of TiO₂ anatase from tulungagung sand as an antibacterial material L Rohmawati, AA Pratama, W Setyarsih, NP Putri	Наносистемы: физика, химия, математика	2022	13 (6), 640-648
Making a Solar Panel-Powered Biofloc Pond for Catfish Cultivation L Rohmawati, NP Putri, W Setyarsih, DH Kusumawati	Proceedings of the Universitas Negeri Surabaya Physics Seminar	2022	6, 57-63

A bibliometric study of the project-based learning-STEAM model on students' critical thinking and scientific literacy IA Rizki, W Setyarsih, N Suprpto	Jurnal Penelitian Ilmu Pendidikan	2022	15 (1), 79-89
Identification of Student Misconceptions and Their Causes in Elasticity Material Using the Three-Tier Diagnostic Test C Rizki, W Setyarsih	Inovasi Pendidikan Fisika	2022	11 (3), 32-43
LITERATURE REVIEW STUDENT'S METACOGNITIVE ABILITY: BIBLIOMETRIC ANALYSIS EF Khoir, N Suprpto, W Setyarsih, UA Deta	Journal of Teaching and Learning Physics	2022	7 (1), 11-22
Project-based learning-STEAM model on students' critical thinking and scientific literacy: A bibliometric analysis IA Rizki, W Setyarsih, N Suprpto	Jurnal Penelitian Ilmu Pendidikan	2022	15 (1), 79-89
Development of Google Form-Based Five-Tier E-Diagnostic Test to Identify Conception Levels and Track Students' Misconceptions on Thermodynamics Materials A Royani, W Setyarsih	Prisma Sains: Jurnal Pengkajian Ilmu dan Pembelajaran Matematika dan IPA IKIP Mataram	2022	10 (3), 450-465
Information spectrum over twelve public Teaching Universities in Indonesia N Suprpto, W Setyarsih, H Mubarak	DESIDOC Journal of Library & Information Technology	2022	42 (4), 265
Characteristics of instruments and profile of creative thinking ability of students on work and energy material AS Muflikhun, W Setyarsih	Prisma Sains: Jurnal Pengkajian Ilmu Dan Pembelajaran Matematika Dan IPA IKIP Mataram	2022	10 (3), 726-739
Dolomite Characteristic from Natural Material and its Application as an Antibacterial L Rohmawati, SP Sholicha, W Setyarsih	Science & Technology Asia	2022	121-131

Implementation of the Problem Based Learning (PBL) Model Integrated Al-Qur'an in Global Warming Material L Nafisah, W Setyarsih	Inovasi Pendidikan Fisika	2023	12 (3), 119-125
Characteristics of Instruments and Profile of Students' Critical Thinking Abilities in Dynamic Fluid Material SH Nugroho, W Setyarsih	Inovasi Pendidikan Fisika	2023	12 (1), 1-12
Validitas instrumen tes berbasis literasi sains untuk mengukur keterampilan berpikir kritis siswa SMA pada materi energi terbarukan Validitas instrumen tes berbasis literasi sains untuk mengukur keterampilan berpikir kritis siswa SMA pada materi energi terbarukan NF Karira, T Sunarti, MN RJ, W Setyasih	Inovasi Pendidikan Fisika	2023	12 (2), 118-125
Discussion of learning: Implementation and effect on critical thinking skills of students in general physics courses T Sunarti, MZB Amiruddin, W Setyarsih, MNR Jauhariyah, A Zainuddin	Studies in Learning and Teaching	2023	4 (2), 260-272
The Relationship between Multiple Representational Skills and Understanding of Physics Concepts in the Pre-Service Science Teacher W Widodo, T Sunarti, W Setyarsih, MNR Jauhariyah, A Zainuddin	Journal of Physics: Conference Series	2023	2623 (1), 012031
Identification of High School Students' Misconceptions Using a Contextual Problem-Based Four-Tier Diagnostic Test Assisted by Quizizz on Straight Motion Material NME Rossa, W Setyarsih	Jurnal Arjuna: Publikasi Ilmu Pendidikan, Bahasa dan Matematika	2024	2 (1), 252-259
Basic characteristics teeth whitening of TiO₂ from tulongagung sand modification of polydopamine L Rohmawati, AA Pratama, DRP Pratiwi, FT Alfina, W Setyarsih, Munasir	AIP Conference Proceedings	2024	2982 (1), 030009

Irradiation Time Optimization on Photocatalytic Activity of Nanoparticles MgO from Dolomite Bangkalan L Rohmawati, SN Fathoni, W Setyarsih, NP Putri, D Darminto	Trends in Sciences	2024	21 (5), 7442-7442
Analysis of Question Items for Students' Critical Thinking Ability Test Instrument on the Theme of Culinary Business Application of Temperature and Heat Material NR Mahmudah, W Setyarsih	Inovasi Pendidikan Fisika	2024	13 (1), 6-13
Implementation of the Problem Based Learning (PBL) Model Integrated Al-Qur'an in Global Warming Material L Nafisah, W Setyarsih	Inovasi Pendidikan Fisika	2024	13 (1), 57-62
Effect of Bleaching Containing Polydopamine and Chitosan-Modified TiO₂ on the Level of Brightness and Microhardness of Teeth L Rohmawati, FT Alfina, DRP Pratiwi, AA Pratama, FI Muadhif, W Setyarsih	Current Applied Science and Technology	2024	e0260818-e0260818
The effect of ZnO nanoparticle mass from pineapple peel via green synthesis on degradation of methylene blue by photocatalytic activity W Setyarsih, FF Ardiansyah, MS Ma'arif, SP Ferdianto, L Rohmawati	Journal of Physics: Conference Series	2024	2900 (1), 012007
Numeracy literacy ability in atomic wave physics spectrum practicum activities among prospective physics teachers T Sunarti, MNR Jauhariyah, W Setyarsih, A Zainuddin, A Zakaria	Journal of Physics: Conference Series	2024	2900 (1), 012037
Analysis of Students' Physics Numeracy Literacy Ability and Its Learning Implementation: Case Study in Nganjuk City T Sunarti, W Wasis, W Setyarsih, A Zainuddin, MNR Jauhariyah	Studies in Learning and Teaching	2024	5 (3), 770-790

Photocatalytic activity of ZnO nanoparticles from pineapple skin for degradation of Congo red dye W Setyarsih, L Rohmawati, FF Ardiansyah, MS Maarif, D Darminto	Trends in Sciences	2024	22 (2), 9042-9042
Analysis of Problem-Solving Skills in Completing Minimum Competency Assessment (AKM) Questions EF Rahmawati, T Sunarti, W Setyarsih	Inovasi Pendidikan Fisika	2025	14 (1), 34-41
Fabrication of anatase titanium dioxide with polydopamine modification as tooth whitener L Rohmawati, DRP Pratiwi, AA Pratama, FT Alfina, Munasir, W Setyarsih	AIP Conference Proceedings	2025	3166 (1), 020034
ENHANCED EFFICIENCY OF DYE-SENSITIZED SOLAR CELLS USING ZNO NANOPARTICLE DOPING CU FROM PINEAPPLE PEEL EXTRACT WITH MODIFIED NATURAL DYE SOLUTION L Rohmawati, SP Ferdianto, MS Ma'arif, FF Ardiansyah, FI Muadhif, W Setyarsih	Eurasian Physical Technical Journal	2025	22 (2 (52)), 42-53
Penerapan CTL Berbantuan Liveworksheets Dalam Meningkatkan Motivasi Belajar dan Literasi Numerasi Peserta Didik Pada Pembelajaran Fisika A Nuryani, W Setyarsih, MNR Jauhariyah, M Satriawan	novasi Pendidikan Fisika	2025	14 (2), 91-99
Activities in specialist bodies over the last 5 years			
Organization	Role	Period	
-			