

Staff Handbook

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| Name | Titin Sunarti | | |
| Post | Doctoral degree | | |
| Academic career | | | |
| Academic | Institution | Year | |
| Initial Academic Appointed as lecturer/instructor in Physics Educations | | | |
| Doctoral | <i>Universitas Airlangga</i> | 2018 | |
| Magister of Science | Universitas Gadjah Mada | 1995 | |
| Doctoranda | Universitas Surabaya | 1986 | |
| Employment | | | |
| Position | Employer | Period | |
| Professor | <i>Universitas Negeri Surabaya</i> | | |
| Associate Professor | Universitas Negeri Surabaaya | | |
| 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 |
| 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 (€ 1,020) |
| A LEARNING TOOL MODEL TO IMPROVE ECO-RELIGIOUS-BASED SCIENTIFIC CREATIVITY IN SUPPORTING SCIENCE LEARNING TOWARDS THE ERA OF SUSTAINABLE DEVELOPMENT GOALS (SDGS) | 2024 | | IDR 30.000.000 (€ 1,530) |
| DEVELOPMENT OF EDUPRENEURSHIP SCIENCE TEXTBOOKS AS A MEANS OF IMPROVING THE QUALITY OF LECTURES IN THE S2 STUDY PROGRAM OF SCIENCE EDUCATION, FMIPA UNESA | 2024 | | IDR 20.000.000 (€ 1,020) |

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| LITERACY-NUMERACY STUDY IN HIGH SCHOOL PHYSICS LEARNING AND ITS ASSESSMENT | 2024 | | IDR 20.000.000 (€ 1,020) |
| Automation of Essay Response Scoring Using Artificial Intelligence and Machine Learning to Improve the Accuracy and Efficiency of Educational Assessment in the Digital Era | 2024 | | IDR 20.000.000 (€ 1,020) |
| Development of Augmented Reality Inclusive Science (ARIS) for Children with Learning Disabilities in Independent Learning-Based Middle Schools | 2024 | | IDR 125.790.000 (€ 6.415.43) |
| Internalization of Local Wisdom Values through the Development of Ethnoscience-Based Learning Tools to Improve Students' Scientific Literacy and Problem-Solving Skills | 2024 | | IDR 137.870.000 (€ 7,031.52) |
| ANALYSIS OF TRENDS AND IMPACT OF CHATGPT IMPLEMENTATION IN PHYSICS EDUCATION | 2024 | | IDR 75.000.000 (€ 3,825,08) |
| ALTERNATIVE ASSESSMENT MODELS IN THE MILLENNIAL ERA TO ASSESS HIGHER ORDER THINKING SKILLS (HOTS) IN THE FIELD OF PHYSICS-SCIENCE | 2024 | | IDR 100.000.000 (€ 5,100.11) |
| Dhysning Application-Assisted Inquiry Model to Improve Students' Science Literacy Skills in Physics Learning | 2025 | | IDR 25.330.000 (€ 1,291.86) |
| Industry collaborations over the last 5 years | | | |
| Project title | | Partners | |
| - | | | |
| Patents and proprietary rights | | | |
| Title | | | Year |
| Local Wisdom Based on Ethnoscience to Improve Science Literacy and Problem Solving in Energy Business Material for 8th Grade Junior High School | | | 2024 |
| Improving Science Literacy and Problem Solving Through Integrated Problem-Based Learning (TPACK): Observation and Evaluation Guide | | | 2024 |
| Global Warming & Climate Change | | | 2024 |
| Problem-Solving Test Sheet: Exploring the Issue of Global Warming | | | 2024 |

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| Student Worksheet on Heat Transfer and Global Warming Using the Scientific Creativity Ecoreligious Learning (SCEL) Model | 2024 | | |
| Eco-religious Attitude Questionnaire Instrument | 2024 | | |
| Student Worksheet 2 (Eco-Friendly House) | 2024 | | |
| Lecture Program Unit on Heat Transfer and Global Warming Using the Scientific Creativity Ecoreligious Learning (SCEL) Model | 2024 | | |
| Designing Innovative and Effective Physics Learning on Global Warming Material | 2024 | | |
| Important publications over the last 5 years | Total number= 179 publications total publications since the las 5 year= 107 publications | | |
| Title and Author | Publisher/ Journal name | Publication date | Vol/Issue/ Page Number |
| Need assessment of physics learning evaluation course on COVID-19 pandemic era in Bloom's Taxonomy topic MNR Jauhariyah, W Wasis, T Sunarti, W Setyarsih, A Zainuddin | Berkala Ilmiah Pendidikan Fisika | 2021 | 9 (1), 57 |
| Teachers' views about nature of science (NOS) using reconceptualised family resemblance approach to nature of science (RFN) questionnaire H Azninda, T Sunarti | Journal of Physics: Conference Series Journal of Physics: Conference Series | 2021 | 1747 (1), 012019 |
| Train the skills of making HOTS-based physics questions to physics teachers in Mojokerto T Sunarti, MNR Jauhariyah | Journal of Physics: Conference Series | 2021 | 1805 (1), 012027 |
| Analysis of physics questions based on HOTS criteria: the result of physics teacher training MNR Jauhariyah, T Sunarti, W Setyarsih, A Zainuddin | Journal of Physics: Conference Series | 2021 | 1805 (1), 012023 |
| Growing Science Process Skills and Student's Understanding of Physics Concepts on Bernoulli's Law Using Aeromodelling Props SI Kholida, S Suprianto, T Sunarti | Kasuari: Physics Education Journal (KPEJ) | 2021 | 4 (1), 21-31 |
| The Impact of Discovery Learning Model Assisted of Mind Mapping Media Based on Zooming Presentation on | Kasuari: Physics Education Journal (KPEJ) | 2022 | 5 (2), 88-94 |

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| Understanding of Students' Concepts in Dynamic Electricity Materials SI Kholida, F Qori'ah, S Suprianto, T Sunarti | | | |
| Research trends for masters of science education at the State University of Surabaya: Case studies E Hariyono, T Sunarti, HN Hidaayatullaah, D Wulandari | The 8th SEA DR and the 2nd STEACH international Conference 2021 | 2022 | |
| Research Analysis on Multi Representation in Physical Materials in The Year of 2014 to 2021 T Sunarti | IJORER: International Journal of Recent Educational Research | 2022 | 3 (3), 259-268 |
| Production Analysis and Scientific Mapping on Flipped Classroom Research During Covid-19 HN Hidaayatullaah, N Suprpto, T Sunarti, TH Cheng | Studies in Learning and Teaching | 2022 | 3 (2), 132-146 |
| Profile of Toulmin's Scientific Arguments Students and Technological Utilities in Global Warming Topic AR Hakim, W Widodo, T Sunarti | JPPS (Jurnal Penelitian Pendidikan Sains) | 2022 | 12 (1), 85-99 |
| Analysis multi representation ability and learning outcomes of optical materials T Sunarti, MZB Amiruddin | Journal of Physics: Conference Series | 2022 | 2392 (1), 012009 |
| Implementation of Continuous-Assessment on Postgraduate Program W Wasis, T Sunarti, MNR Jauhariyah | IJORER: International Journal of Recent Educational Research | 2023 | 4 (3), 254-270 |
| Effectiveness of contextual phenomena-based learning to improve science literacy AN Santoso, T Sunarti, W Wasis | International Journal of Current Educational Research | 2023 | 2 (1), 17-26 |
| Validity of scientific literacy-based test instruments to measure high school students' critical thinking skills on renewable energy material NF Karira, T Sunarti, MN RJ, W Setyasih | Inovasi Pendidikan Fisika | 2023 | 12 (2), 118-125 |

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| 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 |
| A case study of how digital competencies affect Pre-Service Physics Teachers' Professional growth: Realizing SDG 4 IA Rizki, T Sunarti, NF Salsabila | E3S Web of Conference | 2024 | 513, 04007 |
| Bibliometric Network Analysis T Sunarti, N Suprpto, M Suliyannah, HN Hidaayatullaah | | 2024 | |
| RESEARCH TREND OF RASCH MODEL IN THE DEVELOPMENT OF SCIENTIFIC LITERACY ASSESSMENT THROUGH BIBLIOMETRICS IR DAWANA, R ARRAHMANIYYAH, T SUNARTI, M MADLAZIM, W WASIS | JURNAL IPA & PEMBELAJARAN IPA Учредители: LPPM Unsyiah | 2024 | 8 (4), 413-429 |
| Research Trends on Ethnoscience in Physics Learning (EPL): A Bibliometric Network Analysis T Sunarti, N Suprpto, M Satriawan, HN Hidaayatullaah | Studies in Learning and Teaching | 2024 | 5 (1), 268-281 |
| Thermoelectric generator in STEM education NE Agustya, BK Prahani, T Sunarti, FC Wibowo, LA Sanjaya | AIP Conference Proceedings | 2024 | 3116 (1), 060035 |
| Analysis of Scientific Literacy Ability Based on Energy Conservation Socio-Scientific Issues (ECSSI) of High School Students. | SAR Journal | 2025 | (2619-9955) 8 (1) |

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| FK Ratnaning Santoso, B Jatmiko, T Sunarti, M Satriawan | | | |
| Evaluating student responses to ethnophysics learning: Improving scientific literacy and problem-solving skills using a PLS-SEM approach T Sunarti, N Suprpto, HN Hidaayatullaah, S Admoko, MNR Jauhariyah | Multidisciplinary Science Journal | 2025 | 7 (10), 2025454-2025454 |
| Trends, Methods, and Perspectives of Education Curriculum in Indonesia Towards the Quality and Outcomes of Physics Learning Using the Bibliometric Approach HZ Alhusni, A Iswardani, T Sunarti, HV Saphira, MA Kurtuluş | Journal of Law and Bibliometrics Studies | 2025 | 1 (1), 41-41 |
| Mapping the Landscape of Physics Education Research on Local Wisdom: A Bibliometric Study HZ Alhusni, BK Prahani, T Sunarti, AU Utami, JPG da Costa Moniz | Journal of Law and Bibliometrics Studies | 2025 | 1 (1), 44-44 |
| Activities in specialist bodies over the last 5 years | | | |
| Organization | Role | Period | |
| - | | | |