



(SCOPUS) (SINTA)

<b>Name</b>	Prof. Dr. I Made Astra, M.S
<b>Position</b>	Lecturer in Physics Education
<b>Educational Background</b>	<ol style="list-style-type: none"> <li>1. Bachelor's degree (Physics Education), IKIP Jakarta.</li> <li>2. Master's degree (Physics), UGM Yogyakarta.</li> <li>3. Doctoral degree (Environmental education), IKIP Jakarta.</li> </ol>
<b>Academic Career (Employment)</b>	Lecturer, Master of Physics Study Program, Faculty Mathematics and Natural Sciences, Jakarta State University, Jakarta 13220, Indonesia.
<b>Research and Development project over the last 5 years</b>	<ol style="list-style-type: none"> <li>1. 2019 - Development Electronic Module With Discovery Learning Models To Improve High Order Thinking Skills (Hots) Senior High School Student.</li> </ol>
<b>Industry collaboration/ Community Services over the last 5 year</b>	<ol style="list-style-type: none"> <li>1. 2021 - Ppm Training In The Making Of Smart Orbital Gangsing Media (Gso) With Kahoot Assistance For Physics Teacher At Sma N 1 Pebayuran Kab. Bekasi.</li> <li>2. 2021 - Ppm Improvement Of The Quality Of Learning Smas Kartika Viii-1 In Kel. Srengseng sawah kec. Jagakarsa city of jakarta selatan through the implementation of wopi (website of physics instructional).</li> </ol>

	<ol style="list-style-type: none"> <li>3. 2021 - Science Literacy Development Training At Sman 3 Ciledug, Tangerang, Banten.</li> <li>4. 2020 - Physics Problem Development Training For Divergenic Thinking Ability.</li> </ol>
<b>Patents and Intellectual Property Right (IPR)</b>	<ol style="list-style-type: none"> <li>1. 2021 - Metacognitive Knowledge (Valid Theory and Example Problems).</li> <li>2. 2021 - Learning Motivation (Theory and Examples of Valid Instruments).</li> <li>3. 2021 - Simple Electrical Circuit.</li> <li>4. 2020 - High School Physics Theory and Problems Divergent Thinking and High School Physics HOTS Theory and Problems.</li> <li>5. 2020 - Divergent Thinking High School Physics Theory and Problems.</li> <li>6. 2020 - Android Application Of Ibnu Haitham Biography Comics.</li> <li>7. 2020 - Basic Physics Practicum Worksheet 1 Science-Based Writing Heuristic (SWH).</li> <li>8. 2018 - Sir Isaac Newton Biography Comic Book.</li> </ol>
<b>Important publications over the last 5 years</b>	<ol style="list-style-type: none"> <li>1. 2022 - The Relationship Between Personality And Environmentally Responsible Behavior In Green High School</li> <li>2. 2022 - The Development E-Learning Assisted By Flashcard To Improve Students Scientific Literacy In High School On The Kinetic Theory Of Gases Materials</li> <li>3. 2022 - Analysis Of Distance Learning Physics During The Covid-19 Pandemic</li> <li>4. 2022 - The Effectiveness Of Using Quizizz In Fundamental Physics Learning In The Era Of The Covid-19 Pandemic</li> <li>5. 2021 - Phet-Assisted Electronic Student Worksheets Of Physics (Eswop) On Heat For Inquiry Learning During Covid</li> <li>6. 2021 - Identifying High School Students' Misconceptions Using Digital Four-Tier Diagnostic Tests In Distance Learning</li> <li>7. 2021 - The Development Of Digital Comic As Learning Media Based On Picture-And-Picture Learning Model On Global Warming Materials During Distance Learning</li> <li>8. 2021 - Project Based Learning (Pjbl) Learning Model In Science Learning: Literature Review</li> <li>9. 2021 - Review Of Trends Project Based Learning (Pjbl) Integrated STEM In Physics Learning</li> <li>10. 2021 - Design Of Virtual Physics Laboratory (VPL) On Collision Topic</li> <li>11. 2021 - Trends Of Flipped Classroom Studies For Physics Learning: A Systematic Review</li> <li>12. 2021 - A Review Of Research On The Use Of Augmented Reality In Physics Learning</li> <li>13. 2021 - Enhancing Students' Learning Activities Using Problem-Based Learning Model On Temperature And Heat Concept</li> </ol>

	<p>14. 2021 - Flipped Learning Models And Students' Scientific Literacy On Physics Achievement Test</p> <p>15. 2021 - Project Based Blended Learning And Independent Learning On Critical Thinking Skill</p> <p>16. 2021 - Development Of Virtual Reality-Based Learning Media On Electromagnetic Wave Radiation Material</p> <p>17. 2021 - Implementation Of Think Pair Share Model In Physics Learning To Determine Cognitive, Affective And Psychomotor Learning Outcomes And Student Responses</p> <p>18. 2021 - Massive Open Online Simulation (MOOS) Of Physics Concepts Microscopic For Improving Creative Thinking</p> <p>19. 2021 - Development Of Learning Material In The Form Of A Smartphone Application On The Subject Of Temperature And Heat By Inquiry-Based Learning (IBL) For Physics High School Subject</p> <p>20. 2021 - Dynamical System Of Relativistic Particle Under One Dimensional Harmonic Oscillator Potential</p> <p>21. 2021 - The Use Of Google Classroom As ICT Literacy To Improve Physics Students Collaboration Skill In Industrial Revolution 4.0</p> <p>22. 2021 - The Effect Of Inquiry Learning Model And Logical Mathematical Intelligence On The Learning Outcomes Of High School Students</p> <p>23. 2021 - Hots And The 21st Century Learning Skills: Formed With Practicum-Based Physics Learning Worksheets</p> <p>24. 2021 - Essay Questions On Dynamic Fluid Physics Material To Measure Intellection Thinking Ability Of Grade XI High School Students</p> <p>25. 2021 - The Analysis Of Cognitive Abilities And Critical Thinking Skills With Contextual Approaches On Heat Transfer Concepts For Junior High School Students</p> <p>26. 2021 - Worksheets, Discovery Learning, And 3d Media Based On Qr-Code: The Ability To Analyze Is Formed In Physics Practicum</p> <p>27. 2021 - Comparison Of Problem-Based Learning Strategies Assisted By Animated Video And Non-Assisted By Animated Video Against Metacognitive Abilities Of High School Students</p> <p>28. 2021 - Development Of Basic Physics I Practicum Worksheet With Science Writing Heuristic (Swh) Approach To Improve Science Process Skills</p> <p>29. 2021 - The Effects Of Active Learning Model Team Quiz Type Assisted By Animation Video On Critical Thinking Ability Of High School Students</p> <p>30. 2021 - Imposed Conditions To Make Gauge Invariance In Gross-Pitaevskii Equation With Time-Dependent Potential</p> <p>31. 2021 - The Influence Of Inquiry Learning Model Using Phet And Learning Motivation On Metacognition Of Class XI High School Students</p>
--	---

	<p>32. 2021 - Project Based Learning: Model Electric Power Plants Mas Wawi (Biomass, Sun, Water, And Wind) To Improve Student Energy Literacy</p> <p>33. 2021 - EFFECT OF NATURAL DISASTER-BASED VIDEO MEDIA TO INCREASE STUDENT'S ENVIRONMENTAL SENSITIVITY</p> <p>34. 2020 - The Implementation Of Collaborative Learning Models Using Worksheet To Increase Student Learning Outcomes At Senior High School The Subject Of Light Waves</p> <p>35. 2020 - The Development Of Guided Inquiry Student Worksheet Using Tracker Video Analysis For Kinematics Motion Topics</p> <p>36. 2020 - The Effects Of Cooperative Learning Model Think Pair Share Assisted By Animation Media On Learning Outcomes Of Physics In High School</p> <p>37. 2020 - The Effects Of Active Learning Model Guided Note Taking On Student's Critical Thinking Ability In High School</p> <p>38. 2020 - The Differences In Physics Learning Outcomes Based On Gender After Using Blended Problem-Based Learning Model</p> <p>39. 2020 - Specialized Social Media Platform For Integrated Thematic Based Science Learning</p> <p>40. 2019 - Theremin As Teaching Aid To Improve Student Understanding Of Waves</p> <p>41. 2019 - Development Of Sound Wave And Light Wave E-Book Physics Based On Scientific Approach To Improve Science Process Skills For Secondary School Students</p> <p>42. 2019 - Renewable Energy Props Development</p> <p>43. 2019 - Effect Of Project Based Learning Model Assisted By Student Worksheet On Critical Thinking Abilities Of High School Students</p> <p>44. 2019 - Improvement Of Students' Critical Thinking Ability Through Problem-Based Learning (PBL) Model Class XI MIPA 3 On Temperature And Heat Material</p> <p>45. 2019 - The Effect Of Flipped Classroom Model On Student's Physics Learning Outcome In Work And Energy Concept</p> <p>46. 2019 - Development Of E-Handout Materials Physics Based Android For Improvement Learning Outcomes Senior High School Student</p> <p>47. 2019 - Developing Optical Instruments Encyclopedia Based On Problem Based Learning</p> <p>48. 2019 - The Development Of Newton's Law Encyclopedia Based On Advance Organizer</p> <p>49. 2019 - Development Of Work And Energy Encyclopedia Based On Science Technology Society</p> <p>50. 2019 - Developing Of Modified Inquiry-Based Laboratory Worksheet On Optical Topic</p> <p>51. 2019 - The Development Of The Physics Practicum Worksheet In Electricity Based On Modified Inquiry Approach</p>
--	---

	<p>52. 2019 - Developing E-Module For Fluids Based On Problem-Based Learning (PBL) For Senior High School Students</p> <p>53. 2019 - Augmented Reality Water Rocket: Develop An Enrichment Book Of Physics</p> <p>54. 2019 - Development Of Work And Energy Encyclopedia Based On Science Technology Society [Desarrollo De Enciclopedia De Trabajo Y Energía Basada En La Ciencia, La Sociedad Tecnológica]</p> <p>55. 2019 - Validation Of Environmental Personality (Conscientiousness, Agreeableness, Neuroticism, Openness, Extraversion) And Its Effect On Students' Pro-Eco Behavior Mediated By Intention To Act</p> <p>56. 2018 - Character Building In Physics Learning For Indonesia Children</p> <p>57. 2018 - The Development Of A Physics Knowledge Enrichment Book "Optical Instrument Equipped With Augmented Reality" To Improve Students' Learning Outcomes</p> <p>58. 2018 - Relationship Between Time Management And Students' Learning Outcomes At Grade XI - Science On Fluid Statics Subject</p>
<p><b>Activities in Professional organizational over the last 5 years</b></p>	