



Dr. Zainul Arifin Imam Supardi

Position	<i>Materials Science, Physical Mathematics, and Quantum Physics Lecturer in Physics Study Program</i>		
	Associate Professor in Materials Science, Physical Mathematics, and Quantum Physics		
	<i>Degree or Non Degree</i>	<i>University or Institution</i>	<i>Year</i>
Academic career	Bachelor at Physics Education	IKIP Negeri Surabaya – Indonesia	1983-1988
	Master at Physics	Institut Teknologi Bandung – Indonesia	1992-1995
	Doctor at Science and Materials Engineering	Institut National Polytechnique de Grenoble – France	1998-2001
	Summer School on Superconducting Materials	SCENET, Community European, Karlsruhe Institute of Technology - Germany	2001
	BATAN Accelerator School	BATAN Yogyakarta	2002
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	Lecturer on Physics Education Study Program, Bachelor Degree	Universitas Negeri Surabaya - Indonesia	1990 - Now
	Lecturer on Physics Study Program, Bachelor Degree	Universitas Negeri Surabaya - Indonesia	1998 - Now
	Lecturer on Science Education Study Program, Master Degree	Universitas Negeri Surabaya - Indonesia	2002 - Now
	Lecturer on Science Education Study Program, Doctor Degree	Universitas Negeri Surabaya - Indonesia	2009 - Now
	Secretary on Science Education Study Program (Master and Doctor)	Universitas Negeri Surabaya - Indonesia	2011 - 2016
	Head of Physics Department	Universitas Negeri Surabaya - Indonesia	2016 – 2019
	Academic Senat	Faculty of Mathematics and Science, UNESA	2019 - 2022
Research and development projects over the last 5 years	2019: Doping Aluminium Hidroksida (Al(OH) ₃) Pada Komposit Polyviniliden Fluoride – Cellulose Acetate (PVDF-CA) Sebagai Separator untuk Baterai Lithium Ion, Penelitian Kebijakan FMIPA UNESA, IDR: 10,000,000 (head)		
	2017-2018: Fabrikasi Core-shell Fe ₃ O ₄ @SiO ₂ Nano partikel dan Aplikasinya sebagai Filter Air, Penelitian Strategis Nasional Institusi, IDR: 120,000,000 (member)		
	2017: Keefektifan Model Pembelajaran “Orientasi IPA” dan Model PBL untuk Meningkatkan Keterampilan Berpikir Kritis Mahasiswa Calon Guru Pendidikan IPA, Penelitian Kebijakan Pasca Sarjana UNESA, IDR: 60,000,000 (member)		

	2016: Karakterisasi Material Li ₅ FeO ₄ sebagai Bahan Katoda Baterai, Penelitian Kebijakan FMIPA UNESA, IDR: 10,000,000 (head)	
	2016: Pengembangan Nano Partikel Porous (SiO ₂) sebagai Material Sparator dan Elektrolit Baterai Lithium Ion Polymer, Penelitian Kebijakan Pasca Sarjana UNESA, IDR: 70,000,000 (head)	
	2015: Fabrikasi nanokomposit PANi-SiO ₂ /Acrylic Paint sebagai Prototipe Material Pelapis Anti-Korosi pada Pipa Power Plant Energi Geotermal, Penelitian Produk Terapan, IDR: 80,000,000 (member)	
Patents and proprietary rights	Title	Year
	Francois Weiss, Philip Odier, and Zainul Arifin Imam Supardi, In-situ fabrication of YBCO thick - films using spray pyrolysis method at high temperature (Fr-0202217 expand CE, USA, and Japan)	2002 - Now
Important Publication	Title	Year
	Synthesis under in situ pressure control of (Hg,Re)-1223 thick films by aerosol technique, page: 341-348, Physica C: Super-conductivity and its Applications	2000
	Thick Films of (Hg, Re)-1223 by aerosol deposition at high temperature, vol. 13 page: 617-621, Superconductor Science and Technology	2000
	Synthesis by aerosol process of superconductor films and buffer layer materials, vol. 11, (March 2001), IEEE Transactions on Applied Superconductivity	2001
	Synthesis of Hg _{0.75} Re _{0.25} Ba ₂ Ca ₂ Cu ₃ O _{8+i} ' bi-axially textured thin film by the aerosol process, vol. 388, (1 June 2001), Thin Solid Films	2001
	Preparation of Tl-1223 and Tl-2223 superconducting films by spray pyrolysis, vol. 11, (December 2001), Journal De Physique IV: JP	2001
	Critical parameters for the preparation of Tl-1223 superconducting films by spray pyrolysis, vol. 11, (December 2001)	2001
	Tl- and (Hg,Re)-1223 oxide films by spray pyrolysis for practical applications, Physica C: Superconductivity and its Applications, page: 372-376 (August 2002)	2002
	Epitaxial thick film of YBCO by high temperature spray pyrolysis for coated conductors, Physica C Superconductivity and its Application, vol. 386, page: 296- 299 (April 2003)	2003
	Spray pyrolysis for high Tc superconductors films, Superconductor Science and Technology, vol. 17 (November 2004)	2004
	Using science oriented self regulated learning to improve student s writing skill in science and concept, Man in India, vol. 96, (2016)	2016
	Composites of Fe ₃ O ₄ /SiO ₂ from Natural Material Synthesized by Co-Precipitation, IOP Conference Series: Materials Science and Engineering, vol. 202, (31 May 2017)	2017
	Feasibility of Creative Exploration, Creative Elaboration, Creative Modeling, Practice Scientific Creativity, Discussion, Reflection (C3PDR) Teaching Model to Improve Students' Scientific Creativity of Junior High School, Journal of Baltic Science Education, vol. 16(6), (December 2017)	2017
	Composites of Fe ₃ O ₄ /SiO ₂ from Natural Material Synthesized by Co-Precipitation Method, IOP Conference Series: Materials Science and Engineering, vol. 202 (1), 012057	2017
	Synthesis of Nano SiO ₂ Powders from Lusi with Continuous Method, Advanced Science Letters 23 (12), 12002-12006	2017

	The Comparison of OR-IPA Teaching Model And Problem Based Learning Model Effectiveness To Improve Critical Thinking Skills of Pre-Service Physics Teachers, Journal of Baltic Science Education, vol. 17(2), (April 2018)	2018	
	Electrical Performances of Lithium-Ion Coin Cell Based on Reduced Graphene Oxide (RGO), Atlantis Press, Atlantis Highlights in Engineering (AHE), vol.1 page: 785-787 (2018)	2018	
	Morphology and Porosity of Fe ₃ O ₄ @SiO ₂ Core-Shell Adsorption for Heavy Metal Pb(II), Atlantis Press, Atlantis Highlights in Engineering (AHE), vol.1 page: 788-792 (2018)	2018	
	The development of metacognition-based learning media for the industrial electronics field in a vocational high school, World Trans. on Engineering and Technology Education, vol. 16 (2), page: 179-185	2018	
	Structure Analysis of Fe ₃ O ₄ @ SiO ₂ Core Shells Prepared from Amorphous and Crystalline SiO ₂ Particles, IOP Conference Series: Materials Science and Engineering, vol. 367 (1), 012010	2018	
	Phase Transition of SiO ₂ Nanoparticles Prepared from Natural Sand: The Calcination Temperature Effect, Journal of Physics: Conference Series 1093 (1), 012025	2018	
	The Development of Inquiry Learning Materials to Complete Content Life System Organization in Junior High School Students, Journal of Physics: Conference Series 947 (1), 012034	2018	
	Synthesis and Characterization of γ -Al ₂ O ₃ /SiO ₂ Composite Materials, Journal of Physics: Conference Series 1093 (1), 012015	2018	
	THE ROLE OF KNOWLEDGE MASTERY AND SCIENCE PROCESS SKILLS TO INCREASE THE SCIENTIFIC CREATIVITY, Unnes Science Education Journal 7 (2)	2018	
	Application of Inquiry Learning to Exercise Critical Thinking Skills in Light Material of Elementary School Students, MISEIC 2018	2018	
	The effect of multiple external representations (MERs) worksheets toward complex system reasoning achievement, Journal of Physics: Conference Series 983 (1), 012202	2018	
	Synthesis of PANi-SiO ₂ Nanocomposite with In-Situ Polymerization Method: Nanoparticle Silica (NPS) Amorphous and Crystalline Phase, Journal of Physics: Conference Series 997 (1), 012052	2018	
	The effectiveness of OR-IPA teaching model to improve students' critical thinking skills on senior high school physics subject, Journal of Physics: Conference Series, vol. 1157 (3), 032011	2019	
	Phase and Magnetic Properties of Fe ₃ O ₄ /SiO ₂ Natural Materials-Based Using Polyethylene Glycol Media, IOP Conference Series: Materials Science and Engineering 515 (1), 012017	2019	
	Complexity of student's argument in reasoning plant tissue system through multiple representations, Journal of Physics: Conference Series 1157 (2), 022068	2019	
Professional Organization	Organization	Position	Period
	Physical Society of Indonesia (PSI)	Member	2018 – Now
	Perkumpulan Pendidik IPA Indonesia (PPII)	Member	2018 – Now