



**Diah Hari Kusumawati,
S.Si.,M.Si.**

Position	<i>Materials Physics Lecturer in Physics Study Program</i>		
	Assistant Professor in Materials Physics		
	Degree/Non Degree	University/Institution	Year
Academic Career	Graduate program at Departemen of Physics (S-1 Program)	Institut Teknologi Sepuluh Nopember Surabaya, Indonesia	1991-1995
	Postgraduate Program in Physics (Master program)	Institut Teknologi Bandung, Bandung, Indonesia	1999-2002
	Internal Quality Audit Training ISO 9001:2008 &19011:2011	Unesa, Indonesia	2015
	Workshop e-OFFICE dan Kearsipan	Unesa, Indonesia	2015
	Workshop Elektrosinning	ITB, Bandung	2017
Employment	Unesa's Institution		
	Position	Employer	Periode
	Assistant Professor on Physics Study Program	Unesa, Indonesia	2011-Now
	Heat of Laboratory on Physics Study Program	Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Negeri Surabaya- Indonesia	2016-2019
	Quality Assurance Unit Team	Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Negeri Surabaya- Indonesia	2019-Now
	Kasublab Karakterisasi	Department of Physics, Faculty of Mathematics and Natural Sciences, Universitas Negeri Surabaya- Indonesia	2019-Now
Research and Development project over the last 5 Years	2021: Karakteristik Nanopartikel Fe ₃ O ₄ dari Pasir Mineral Tulungagung sebagai Material Antibakteri pada Gigi, IDR 20.000.000 (Member)		
	2021: Membran Mikropori Barbasis NPS untuk Aplikasi Sparator Baterai Lithium-Ion, IDR 35.000.000 (Member)		
	2020: Nanokomposite Grafen (Rgo/Fe ₃ O ₄ -Sio ₂) Sebagai Kandidat Material Filter Pada Proses Desalinasi Air Laut (Dr. Munasir, M.Si., Diah Hari Kusumawati, M.Si), Penelitian Dasar, IDR. 122.933.000		

	2020: Pengaruh Proses Double Boiler Pada Pengolahan Daun Sirih (Piper Betle L.) Untuk Menjaga Kandungan Zat Tanin Sebagai Antiseptik Alami Dalam Pembuatan Hand Sanitizer Untuk Mencegah Penyebaran Covid-19, UNESA, IDR 12.000.000 (Member)	
	2019: Pengaruh Waktu Ultrasonikasi Terhadap Karakteristik rGO Tempurung Kelapa sebagai Elektroda Superkapasitor, UNESA, IDR 10,000,000 (Head)	
	2018: Sintesis Reduced Graphene Oxide Berbahan Dasar Limbah Tempurung Kelapa, UNESA, IDR 10,000,000 (Member)	
	2017: Pemanfaatan Enceng Gondok sebagai Sensor Kelembaban, UNESA, IDR 10.000.000 (member)	
	2017: Karbon Sekam Padi Sebagai Bahan Alternatif Katoda Baterai Rechargeable , UNESA, IDR 10,000,000 (Head)	
	2016: Optimasi Pemurnian Nanokalsit Berbahan Dasar Batu Gamping dengan Metode Kopresipitasi, Unesa IDR 10,000,000 (Member)	
	2015 and 2016 (2 years): Karakterisasi Komposit Polianilin/Oksida Logam Sebagai Bahan Penyerap Gelombang Mikro, Hibah Bersaing, Ministry of Research and Higher Education Project IDR 115,000,000 (Head)	
Patent and Proprietary Right	Title	Year
	No. Paten: P00202010640 Title: Uji Aktivitas Antibakteri Ekstrak Sirih Hijau (Piper Betle Linn) Asal Nganjuk, Sidoarjo dan Batu Terhadap Pertumbuhan Bakteri Escherichia Coli (Atcc 8739), Salmonella Sp. (Atcc 14028), Staphylococcus Aureus (Atcc 6538) dan Pseudomonas Aeruginosa (Atcc 9027)	2020
Potential Articles over last 5 years	Title	Year
	Internat Nanosized Fe ₃ O ₄ /SiO ₂ core-shells fabricated from natural sands, magnetic properties, and their application for dye adsorption. Munasir, Ahmad Taufiq, Ambar Teraningsih, Diah Hari Kusumawati , Zainul Imam Supardi Engineering and Applied Science Research 2022;49(3):340-352. DOI: 10.14456/easr.2022.35. Scopus Index (Q3), Sjr: 2,0.	2021-2022
	Synthesis of Nanofiber Polyvinyl Alcohol (PVA) with Electrospinning Method DH Kusumawati , KVN Istiqomah, I Husnia, N Fathurin - Journal of Physics: Conference Series, 2021	2021
	Development of rGO/Fe ₃ O ₄ Composites as Glucose Biosensors Diah Hari Kusumawati , Rahayu Yudia Mufida - Jurnal Penelitian dan Pengkajian Ilmu Pendidikan: e-Saintika, 2021	2021

	Antimicrobial activity analysis of Piper betle Linn leaves extract from Nganjuk, Sidoarjo and Batu against Escherichia coli, Salmonella sp., Staphylococcus aureus and Pseudomonas aeruginosa FU Ermawati, R Sari, NP Putri, L Rohmawati, DH Kusumawati, ZAI Supardi - Journal of Physics: Conference Series, 2021	2021
	E-LS on The Subject of Temperature: The First Work of a Science-Physics Teacher at Siti Aminah Junior High School Surabaya A Kholiq, I Sucahyo, T Sunarti, DH Kusumawati, MNR Jauhariyah- Journal of Physics: Conference Series, 2021	2021
	ORNE Learning Model to Improve Problem-Solving Skills of Physics Bachelor Candidates: An Alternative Learning in the Covid-19 Pandemic Binar Kurnia Prahani, Ali Hasbi Ramadani, Diah Hari Kusumawati, Nadi Suprpto, Madlazim Madlazim, Budi Jatmiko, Zainul Arifin Imam Supardi, Husni Mubarak, Shabrina Safitri, Utama Alan Deta- Jurnal Penelitian Fisika dan Aplikasinya (JPFA), 2020	2020
	. Characterization of Fe₃O₄/rGO composites from natural sources: Application for dyes color degradation in aqueous solution. Munasir, N., Kusumawati, R.P., Kusumawati, D.H., Supardi, Z.A.I., Taufiq, A., Darminto. 2020 International Journal of Engineering, Transactions A: Basics, Volume 33, Issue 1, 2020, Pages 18-27 http://www.ije.ir/article_101143.html	2020
	Magnetic Properties of Fe₃O₄@Graphene: Preparation from Natural Material. Munasir, R.P. Kusumawati, D.H. Kusumawati. 2020. Journal of Physics: Conference Series 1569 (2020) 042087 IOP Publishing doi:10.1088/1742-6596/1569/4/042087	2020
	Amorphous-SiO₂ nanoparticles for water treatment materials. Munasir Munasir , Nurul Hidayat , Diah Hari Kusumawati , Nugrahi Primary Putri , Ahmad Taufiq , and Sunaryono Sunaryono. 2020 AIP Conf. Proc. 2251, 040030-1–040030-7; https://doi.org/10.1063/5.0015673	2020
	Graphene from glucose coated silica sand for water purification applications Moch. Saifur Rijal, Antony Mahendra , Kusuma Dwi Lestari, Aprillia Nurcahya Putri, Munasir Munasir, Diah Hari Kusumawati, Nugrahani Primary Putri, Zainul Arifin Imam, Nurul Hidayat , Ahmad Taufiq, and Sunaryono Sunaryono. 2020.. AIP Conf. Proc. 2251, 040010-1–040010-6; https://doi.org/10.1063/5.0015680	2020

	D H Kusumawati , N P Putri, Asnawi, T S Dewi and Munasir. 2020. Porosity Characteristics and Electrochemical Performance of rGO Coconut Shell as Supercapacitor Electrodes. Journal of Physics: Conference Series Vol 1491. https://iopscience.iop.org/article/10.1088/1742-6596/1491/1/012058	2020
	The Effect of Addition Fe ₃ O ₄ on the rGO/Fe ₃ O ₄ Composite on Glucose Biosensor Performance. R Y Mufida and D H Kusumawati . 2020. Journal of Physics: Conference Series Vol 1491. https://iopscience.iop.org/article/10.1088/1742-6596/1491/1/012059	2020
	Effect of calcination temperature on characteristics of reduced Graphene Oxide (rGO) made from old coconut shell N P Putri, D H Kusumawati , L Agustina and Munasir <u>Journal of Physics: Conference Series, Volume 1171,</u>	2019
	Pemurnian Batu Kapur Berbasis Nano Kalsit dengan Metode Kopresipitasi Nugrahany Primary Putri, Diah Hari Kusumawati Jurnal Sains & Matematika	2019
	Phase Transition of SiO ₂ Nanoparticles Prepared from Natural Sand: The Calcination Temperature Effect Munasir, Zainul Arifin Imam Supardi, Mashadi, Zumrotun Nisa, Diah Hari Kusumawati , Nugrahani Primary Putri, Ahmad Taufiq, Sunaryono, Nurul Hidayat and Darminto <u>Journal of Physics: Conference Series, Volume 1093</u>	2018
	Synthesis of polyaniline/cellulose composite as humidity sensor N P Putri, D H Kusumawati , N Widiyanti and Munasir <u>Journal of Physics: Conference Series, Volume 997</u>	2018
	Synthesis and Characterization of γ -Al ₂ O ₃ /SiO ₂ Composite Materials Munasir, Diah Hari Kusumawati , Sunaryono, Nugrahani Primary Putri, Nurul Hidayat, Ahmad Taufiq and Zainul Arifin Imam Supardi <u>Journal of Physics: Conference Series, Volume 1093</u>	2018
	Synthesis of PANi-SiO ₂ Nanocomposite with In-Situ Polymerization Method: Nanoparticle Silica (NPS) Amorphous and Crystalline Phase Munasir, N R D Luvita, D H Kusumawati , N P Putri, Triwikantoro and Z A I Supardi <u>Journal of Physics: Conference Series, Volume 997</u>	2018
	Structure Analysis of Fe ₃ O ₄ @SiO ₂ Core Shells Prepared from Amorphous and Crystalline SiO ₂ Particles Munasir, A. S. Dewanto, D. H. Kusumawati , N. P. Putri, A. Yulianingsih, I. K. F. Sa'adah, A. Taufiq, N. Hidayat, S. Sunaryono and Z. A. I. Supardi	2018

	IOP Conference Series: Materials Science and Engineering, Volume 367,		
	Karakteristik Transmittansi dan Absorbansi Komposit Epoksi/TiO ₂ sebagai Bahan Anti Ultraviolet Diah Hari Kusumawati , Dian Ayu Rachmawati Jurnal Sains & Matematika		2017
	Mechanical Properties of Polymer Concrete Epoxy Filler Particles with Nanocalcite-silica Nugrahani Primary Putri, Diah Hari Kusumawati , Lydia Rohmawati Jurnal Sains & Matematika		2016
	Karakterisasi Sifat Listrik dan Magnetik PANi/HCl/Fe ₃ O ₄ akibat Penambahan Fe ₃ O ₄ pada Komposit PANi/HCl Purwanto Purwanto, Diah Hari Kusumawati Jurnal Sains & Matematika		2016
Profesional Organization	Organization	Position	Period
	PSI	Member	2018-Now