



**IPB University**  
— Bogor Indonesia —

# STAFF HANDBOOK

**Department of Physics**

Faculty of Mathematics and Natural Sciences  
IPB University



Document version : July 2024

Name	<i>Abdul Djamil Husin, S.Si, M.Si.</i>		
Post	<i>Theoretical Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Master (Physics)</i>	<i>Gadjah Mada University</i>	<i>2002</i>
	<i>Undergraduate degree (Physics)</i>	<i>Gadjah Mada University</i>	<i>1995</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Assistant Professor</i>	<i>IPB University</i>	<i>2006 –present</i>
Research and development projects over the last 5 years			
Industry collaborations over the last 5 years			
Patents and proprietary rights	<i>Title</i>	<i>Year</i>	
Important publications over the last 5 years			
Activities in specialist bodies over the last 5 years	<i>Organization</i>	<i>Role</i>	<i>Period</i>
Website	<i><a href="https://physics.ipb.ac.id/adh/">https://physics.ipb.ac.id/adh/</a></i>		

Name	<i>Ardian Arif Setiawan, S.Si., M.Si.</i>		
Post	<i>Applied Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Master (Physics)</i>	<i>University of Indonesia</i>	<i>2006</i>
	<i>Undergraduate degree (Physics)</i>	<i>Brawijaya University</i>	<i>1997</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Assistant Professor</i>	<i>IPB University</i>	<i>2011–Present</i>
Research and development projects over the last 5 years	<p><b><i>Title: Growth of Ferroelectric Thin Film Ruthenium (LRN) doped LiNBO3 and its application as Photonic crystal assisted Solar Cell</i></b></p> <p><i>Period: 2017-2019</i></p> <p><i>Amount of Financing: IDR. 442.852.075 (EUR. 26921,46)</i></p>		
Industry collaborations over the last 5 years			
Patents and proprietary rights	<i>Title</i>		<i>Year</i>
	<i>Metode Pembuatan fFilm Tipis Berbasis Barium Titanat (BaTiO<sub>3</sub>)</i>		<i>2021</i>
	<i>Alat Ukur Kadar Gula Dalam Darang Secara Non-Invasive</i>		<i>2015</i>
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (1 Published article since 2019):</i></p> <p><i>Authors: Agus Kartono, Iim Abdul Mafahir, Setyanto Tri Wahyudi, Ardian Arif Setiawan, Tony Sumaryada</i></p> <p><b><i>Title: A New Method for Estimating Diagnostic Parameters in the Dynamics Model of Modified Glucose-Insulin Homeostasis from the Oral Glucose Tolerance Test Using a Gravitational Search Algorithm</i></b></p>		

	<i>Springer, Arabian Journal for Science and Engineering, 13 July 2021,47, 989-1001, <a href="https://doi.org/10.1007/s13369-021-05945-5">https://doi.org/10.1007/s13369-021-05945-5</a></i>						
Activities in specialist bodies over the last 5 years	<table border="1"> <thead> <tr> <th><i>Organization</i></th> <th><i>Role</i></th> <th><i>Period</i></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	<i>Organization</i>	<i>Role</i>	<i>Period</i>			
<i>Organization</i>	<i>Role</i>	<i>Period</i>					
Websites	<i><a href="https://physics.ipb.ac.id/aas/">https://physics.ipb.ac.id/aas/</a></i>						

Name	<i>Dr. Agus Kartono, M.Si.</i>		
Post	<i>Biophysics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (physics)</i>	<i>Bandung Institute of Technology</i>	<i>2006</i>
	<i>Master (Physics)</i>	<i>Bandung Institute of Technology</i>	<i>1998</i>
	<i>Undergraduate degree (Physics)</i>	<i>Bandung Institute of Technology</i>	<i>1995</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Associate Professor</i>	<i>IPB University</i>	<i>2017–Present</i>
Research and development projects over the last 5 years	<p><b><i>Title: Synergy of the Microbial Consortium of <i>Saccharomyces Cerevisiae</i> and <i>Bacillus</i>, Sp. As Ethanol Biosensor.</i></b></p> <p><i>Period: 2022</i></p> <p><i>Amount of Financing: IDR. 50.000.000 (EUR. 3039,55)</i></p> <p><b><i>Title: Aboveground Biodiversity Patterns and Processes Across Rainforest Transformation Landscapes (Efforts)</i></b></p> <p><i>Period: 2020</i></p> <p><i>Amount of Financing: IDR. 320.000.000 (EUR. 19453,15)</i></p> <p><b><i>Title: Potential Screening of Medicinal Plant Compounds as Anti-Malaria with <i>P. falciparum</i> Signal Peptide Peptidase and Hexose Transporter as a Target Through Docking Method and Molecular Dynamics Simulation.</i></b></p> <p><i>Period: 2018-2019</i></p> <p><i>Amount of Financing: IDR. 410.355.000 (EUR. 24945,93)</i></p>		

	<p><b>Title: <i>Design and Software Development of Pharmacokinetic/pharmacodynamics based on diagnosis and therapy of type-2 Pre-Diabetes</i></b></p> <p><i>Period: 2017-2018</i></p> <p><i>Amount of Financing: IDR. 283.887.000 (EUR. 17257,80)</i></p>				
<p>Industry collaborations over the last 5 years</p>					
<p>Patents and proprietary rights</p>	<table border="0"> <thead> <tr> <th data-bbox="528 656 1244 694"><i>Title</i></th> <th data-bbox="1244 656 1437 694"><i>Year</i></th> </tr> </thead> <tbody> <tr> <td colspan="2" data-bbox="528 694 1437 913" style="height: 80px;"></td> </tr> </tbody> </table>	<i>Title</i>	<i>Year</i>		
<i>Title</i>	<i>Year</i>				
<p>Important publications over the last 5 years</p>	<p><i>Selected recent publications from a total of approx. (23 Published articles since 2019):</i></p> <p><i>Authors: Agus Kartono, Iim Abdul Mafahir, Setyanto Tri Wahyudi, Ardian Arif Setiawan , Tony Sumaryada</i></p> <p><b><i>Title: A New Method for Estimating Diagnostic Parameters in the Dynamics Model of Modified Glucose-Insulin Homeostasis from the Oral Glucose Tolerance Test Using a Gravitational Search Algorithm</i></b></p> <p><i>Springer, Arabian Journal for Science and Engineering, 13 July 2021,47, 989-1001, <a href="https://doi.org/10.1007/s13369-021-05945-5">https://doi.org/10.1007/s13369-021-05945-5</a></i></p> <p><i>Authors: Agus Kartono, Siti Solekha, Tony Sumaryada, Irmansyah</i></p> <p><b><i>Title: Foreign currency exchange rate prediction using non-linear Schrödinger equations with economic fundamental parameters</i></b></p> <p><i>Elsevier, Chaos, Solitons &amp; Fractals, November 2021, 152, 111320, <a href="https://doi.org/10.1016/j.chaos.2021.111320">https://doi.org/10.1016/j.chaos.2021.111320</a></i></p> <p><i>Authors: Agus Kartono, Marina Febriyanti, Setyanto Tri Wahyudi</i></p> <p><b><i>Title: Predicting foreign currency exchange rates using the numerical solution of the incompressible Navier–Stokes equations.</i></b></p>				

	<i>North-Holland, Physica A: Statistical Mechanics and its Applications, 2020/12/15, 560, 125191, <a href="https://doi.org/10.1016/j.physa.2020.125191">https://doi.org/10.1016/j.physa.2020.125191</a>.</i>						
Activities in specialist bodies over the last 5 years	<table border="1"> <thead> <tr> <th><i>Organization</i></th> <th><i>Role</i></th> <th><i>Period</i></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	<i>Organization</i>	<i>Role</i>	<i>Period</i>			
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<i>Website</i>	<i><a href="https://physics.ipb.ac.id/aka/">https://physics.ipb.ac.id/aka/</a></i>						

Name	<i>Dr. Erus Rustami, M.Si.</i>		
Post	<i>Biophysics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (Chemistry)</i>	<i>Nara Institute of Science and Technology</i>	<i>2020</i>
	<i>Master (Biophysics)</i>	<i>IPB University</i>	<i>2012</i>
	<i>Undergraduate degree (Physics)</i>	<i>IPB University</i>	<i>2008</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Assistant Professor</i>	<i>IPB University</i>	<i>2018–Present</i>
Research and development projects over the last 5 years	<p><b>Title: <i>Internet of Things (IoT) based Sound and Temperature Detection System for Apis Cerana Beehive colony health monitoring</i></b></p> <p><i>Period: 2022 - present</i></p> <p><i>Partner: Indonesia National Ministry of Research and innovation</i></p> <p><i>Amount of Financing: IDR. 30.000.000 (EUR. 1833,15)</i></p> <p><b>Title: <i>Sustainable Bee Smart System Development of Bee Biodiversity as an Ecosystem and Health Service</i></b></p> <p><i>Period: 2020</i></p> <p><i>Partner: Indonesia National Ministry of Research and innovation</i></p> <p><i>Amount of Financing: IDR. 59.000.000 (EUR. 3605,19)</i></p>		
Industry collaborations over the last 5 years			
Patents and proprietary rights	<i>Title</i>	<i>Year</i>	
	<i>Non-Invasive Blood sugar concentration monitoring device</i>	<i>2015</i>	



	<p><i>Sensor Optik Berbasis Kristal Fotonik Untuk Kendali Mutu Larutan Secara Waktu Nyata dan Kontinu (Photonic Crystal-Based Optical Sensors For Real and Continuous time Solution Quality Control)</i> 2013</p> <p><i>Sistem Pendeteksi Nirkabel Gas Nitrogen Dioksida (NO<sub>2</sub>) Berbasis Sensor Kristal Fotonik dan Efek Beer Lambert (Nitrogen Dioxide (NO<sub>2</sub>) Gas Wireless Detection System Based on Photonic Crystal Sensors and the Beer Lambert Effect)</i> 2012</p>
<p>Important publications over the last 5 years</p>	<p><i>Selected recent publications from a total of approx. (11 Published articles since 2019):</i></p> <p><i>Authors: Erus Rustami, Kiyotaka Sasagawa, Kenji Sugie, Yasumi Ohta, Makito Haruta, Toshihiko Noda, Takashi Tokuda, Jun Ohta</i></p> <p><b><i>Title: Needle-Type Imager Sensor with Band-Pass Composite Emission Filter and Parallel Fiber-Coupled Laser Excitation</i></b></p> <p><i>IEEE Transactions on Circuits and Systems I: Regular Papers, 27 February 2020, Vol 67(4), 1082-1091, <a href="https://doi.org/10.1109/TCSI.2019.2959592">https://doi.org/10.1109/TCSI.2019.2959592</a></i></p> <p><i>Authors: Erus Rustami, Kiyotaka Sasagawa, Kenji Sugie, Yasumi Ohta, Hironari Takehara, Makito Haruta, Hiroyuki Tashiro, Jun Ohta</i></p> <p><b><i>Title: Thin and Scalable Hybrid Emission Filter via Plasma Etching for Low-Invasive Fluorescence Detection.</i></b></p> <p><i>MDPI, Sensors, 3 April 2023, Vol.23(7), 3695, <a href="https://doi.org/10.3390/s23073695">https://doi.org/10.3390/s23073695</a></i></p> <p><i>Authors: Mohamad Izzat Azmer, Kiyotaka Sasagawa, Erus Rustami, Kenji Sugie, Yasumi Ohta, Makito Haruta, Hironari Takehara, Hiroyuki Tashiro, Jun Ohta</i></p> <p><b><i>Title: Miniaturized LED light source with an excitation filter for fluorescent imaging</i></b></p>

	<i>IOP Publishing, Japanese Journal of Applied Physics, 2 March 2021, vol 60(SB), pages SBBG07, <a href="https://doi.org/10.35848/1347-4065/abe5bf">https://doi.org/10.35848/1347-4065/abe5bf</a></i>						
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<i>Organization</i>	<i>Role</i>	<i>Period</i>					
Website	<i><a href="https://physics.ipb.ac.id/ers/">https://physics.ipb.ac.id/ers/</a></i>						

Name	<i>Dr. Faozan, M.Si.</i>		
Post	<i>Theoretical and Computational Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (Engineering Physics)</i>	<i>Bandung Institute of Technology</i>	<i>2019</i>
	<i>Master (Physics)</i>	<i>University of Indonesia</i>	<i>2007</i>
	<i>Undergraduate degree (Physics)</i>	<i>IPB University</i>	<i>2003</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Lecturer</i>	<i>IPB University</i>	<i>2009 – present</i>
Research and development projects over the last 5 years	<p><b><i>Title: Riset kolaborasi Indonesia - the refinement model of acetylcholine hydrolysis: a computational approach for understanding Alzheimer's disease through density-functional calculations</i></b></p> <p><i>Period:2020</i></p> <p><i>Amount of Financing: IDR. 50.000.000 (EUR. 3058,17)</i></p>		
Industry collaborations over the last 5 years	<p><i>Project title</i></p> <p><i>Partners</i></p>		
Patents and proprietary rights	<i>Title</i>	<i>Year</i>	
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (12 published articles since 2019):</i></p> <p><i>Authors: Faozan Ahmad, Mohammad Kemal Agusta, Ryo Maezono, Hermawan Kresno Dipojono</i></p>		

	<p><b>Title: DFT + U study of H<sub>2</sub>O adsorption and dissociation on stoichiometric and nonstoichiometric CuO(1 1 1) surfaces</b></p> <p><i>IOP Publishing, Journal of Physics: Condensed Matter, 2019/10/25, Vol 32(4), Pages 045001, Doi: 10.1088/1361-648X/ab4b34</i></p> <p><i>Authors: Hendradi Hardhienata, Faozan Ahmad, Mimin Aminah, Djulia Onggo, Lina J Diguna, Muhammad D Birowosuto, Marcin E Witkowski, Michal Makowski, Winicjusz Drozdowski</i></p> <p><b>Title: Optical and x-ray scintillation properties of X<sub>2</sub>MnCl<sub>4</sub>(X = PEA, PPA) perovskite crystals</b></p> <p><i>IOP Publishing, Journal of Physics D: Applied Physics, 2020/8/13, Volume 53(45), Pages 455303, Doi: 10.1088/1361-6463/aba461</i></p> <p><i>Authors: Permono Adi Putro, Akhiruddin Maddu, Hendradi Hardhienata, Isnaeni Isnaeni, Faozan Ahmad, Hermawan Kresno Dipojono</i></p> <p><b>Title: Revealing the incorporation of an NH<sub>2</sub> group into the edge of carbon dots for H<sub>2</sub>O<sub>2</sub> sensing via the C–N⋯H hydrogen bond interaction</b></p> <p><i>Physical Chemistry Chemical Physics, 2023, vol 25 (3), 2606-2617, Doi: <a href="https://doi.org/10.1039/D2CP04097B">https://doi.org/10.1039/D2CP04097B</a></i></p>						
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<i>Organization</i>	<i>Role</i>	<i>Period</i>					
Websites	<a href="https://physics.ipb.ac.id/fao/">https://physics.ipb.ac.id/fao/</a>						

Name	<i>Dr. Hendradi Hardhienata, M.Si.</i>		
Post	<i>Theoretical and Computational Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (Physics)</i>	<i>Johannes Kepler University Linz</i>	<i>2015</i>
	<i>Master (Physics)</i>	<i>Bandung Institute of technology</i>	<i>2008</i>
	<i>Undergraduate degree (Physics)</i>	<i>IPB University</i>	<i>2005</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Assistant Professor</i>	<i>IPB University</i>	<i>2019 – present</i>
Research and development projects over the last 5 years	<p><b><i>Title: Kajian Dinamika dan Karakteristik Sistem Kompleks Berdasarkan Pemodelan Berbasis Agen dan Teori Kerapatan Fungsional (Study of Dynamics and Characteristics of Complex Systems Based on Agent-Based Modeling and Density Functional Theory)</i></b></p> <p><i>Period: 2021-2023</i></p> <p><i>Amount of Financing: IDR. 341.986.000 (EUR. 20969,78)</i></p> <p><b><i>Title: Optimisasi dan Karakterisasi Permukaan Film Tipis Sel Surya menggunakan Metode nano optik berbasis Simplified Bond Hyperpolarizability Model (SBHM) (Optimization and Characterization of Thin Film Solar Cell Surfaces using the Simplified Bond Hyperpolarizability Model (SBHM) based nano-optical method)</i></b></p> <p><i>Period: 2019</i></p> <p><i>Amount of Financing: IDR. 161.972.000 (EUR. 9856,84)</i></p>		

	<p><b>Title: Pembuatan Sensor Spektrum Warna Berbasis Film Tipis Litium Tantalate (LiTaO3) Didadah Indium Oksida (In2O3) (Manufacture of Color Spectrum Sensors Based on Thin Film Lithium Tantalate (LiTaO3) Doped Indium Oxide (In2O3))</b></p> <p>Period: 2019</p> <p>Amount of Financing: IDR. 149.250.000 (EUR. 9082,64)</p>				
Industry collaborations over the last 5 years					
Patents and proprietary rights	<table border="1"> <thead> <tr> <th>Title</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td colspan="2"> </td> </tr> </tbody> </table>	Title	Year		
Title	Year				
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (18 published articles since 2019):</i></p> <p><i>Authors: Hendradi Hardhienata, Faozan Ahmad, Mimin Aminah, Djulia Onggo, Lina J Diguna, Muhammad D Birowosuto, Marcin E Witkowski, Michal Makowski, Winicjusz Drozdowski</i></p> <p><b>Title: Optical and x-ray scintillation properties of X2MnCl4 (X= PEA, PPA) perovskite crystals</b></p> <p><i>IOP Publishing, Journal of Physics D: Applied Physics, 2020/8/13, Vol 53(45), pages 455303, Doi: 10.1088/1361-6463/aba461</i></p> <p><i>Authors: Hendradi Hardhienata, Adalberto Alejo-Molina, Muhammad Danang Birowosuto, Amirreza Baghbanpourasl, Husin Alatas</i></p> <p><b>Title: Spatial dispersion contribution to second harmonic generation in inversion-symmetric materials.</b></p> <p><i>American Physical Society, Physical Review B, 2021/3/8, Vol 103(12), Pages 125410, Doi: <a href="https://doi.org/10.1103/PhysRevB.103.125410">https://doi.org/10.1103/PhysRevB.103.125410</a></i></p> <p><i>Authors: Hendradi Hardhienata, Faozan Ahmad, Mimin Aminah, Djulia Onggo, Lina J Diguna, Muhammad D Birowosuto, Marcin E Witkowski, Michal Makowski, Winicjusz Drozdowski</i></p>				

	<p><b>Title: <i>Optical and x-ray scintillation properties of X<sub>2</sub>MnCl<sub>4</sub>(X = PEA, PPA) perovskite crystals.</i></b></p> <p><i>American Physical Society, Physical Review B, 2021/3/8, Vol 103(12), Pages 125410, Doi: 10.1088/1361-6463/aba461</i></p>						
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<p>Website</p>	<p><a href="https://physics.ipb.ac.id/hhd/">https://physics.ipb.ac.id/hhd/</a></p>						

Name	<i>Dr. Heriyanto Syafutra, M.Si.</i>		
Post	<i>Applied Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (Physics)</i>	<i>Nara University of Science and Technology</i>	<i>2021</i>
	<i>Master (Physics)</i>	<i>IPB University</i>	<i>2010</i>
	<i>Undergraduate degree (Physics)</i>	<i>IPB University</i>	<i>2008</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Lecturer</i>	<i>IPB University</i>	<i>2014–Present</i>
Research and development projects over the last 5 years	<p><b><i>Title: Penumbuhan Film Tipis Bahan Ferroelektrik LiNbO<sub>3</sub> yang Didadah Rutenium (LRN) dan Penerapannya sebagai Sel Surya berbantuan Fotonik Kristal. (Growth of Ruthenium-Doped LiNbO<sub>3</sub> Ferroelectric Materials (LRN) and Their Application as Photonic Crystal-Assisted Solar Cells.)</i></b></p> <p><i>Period: 2017-2019</i></p> <p><i>Amount of Financing: IDR. 442.852.075 (EUR. 26921,46)</i></p>		
Industry collaborations over the last 5 years			
Patents and proprietary rights	<i>Title</i>		<i>Year</i>
	<i>Metode Pembuatan fFilm Tipis Berbasis Barium Titanat (BaTiO<sub>3</sub>) (Method for Preparation of Barium Titanate (BaTiO<sub>3</sub>) Based Thin Films)</i>		<i>2021</i>
			<i>2021</i>



	<p><i>Alat Pengumpul Ikan Menggunakan Larutan Cumi Cumi (Fish Collecting Tool Using Squid Squid Solution)</i></p>
<p>Important publications over the last 5 years</p>	<p><i>Selected recent publications from a total of approx. (11 Published articles since 2019):</i></p> <p><i>Authors: Manish Pandey, Heriyanto Syafutra, Nikita Kumari, Shyam S Pandey, Ryo Abe, Hiroaki Benten, Masakazu Nakamura</i></p> <p><i>Title: <b>Extreme orientational uniformity in large-area floating films of semiconducting polymers for their application in flexible electronics.</b></i></p> <p><i>American Chemical Society, ACS Applied Materials &amp; Interfaces, 2021/8/6, 13(32), 38534-38543, <a href="https://doi.org/10.1021/acsami.1c09671">https://doi.org/10.1021/acsami.1c09671</a></i></p> <p><i>Authors: Heriyanto Syafutra, Jung-Ho Yun, Yuya Yoshie, Miaoqiang Lyu, Sakura Nishino Takeda, Masakazu Nakamura, Lianzhou Wang, Min-Cherl Jung</i></p> <p><i>Title: <b>Surface Degradation Mechanism on CH<sub>3</sub>NH<sub>3</sub>PbBr<sub>3</sub> Hybrid Perovskite Single Crystal by a Grazing E-Beam Irradiation.</b></i></p> <p><i>MDPI, Nanomaterials, 2020/6/28, 10(7), 1253, <a href="https://doi.org/10.1021/acsami.1c09671">https://doi.org/10.1021/acsami.1c09671</a></i></p> <p><i>Author: Heriyanto Syafutra, Jumpei Toyoda, Manish Pandey, Nikita Kumari, Hiroaki Benten, Masakazu Nakamura</i></p> <p><i>Title: <b>Perfectness of the main-chain alignment in the conjugated polymer films prepared by the floating film transfer method.</b></i></p> <p><i>AIP Publishing LLC,], Applied Physics Letters, 2022/5/16, 120(20), 203301, <a href="https://doi.org/10.1063/5.0088011">https://doi.org/10.1063/5.0088011</a></i></p> <p><i>Author: Irzaman, Nurul Khomariah N, Heriyanto Safutra, Muhammad Nur Aidi, Husin Alatas &amp; Hendradi Hardhienata</i></p> <p><i>Title: <b>The structure and optical properties of lithium niobate thin film (LiNbO<sub>3</sub>) grown on silicon for various lanthanum concentrations and molarity</b></i></p>

	<p><i>Ferroelectrics</i>, 589:1, 12-21, DOI: 10.1080/00150193.2021.1984768</p> <p>Author: Irzaman, Ridwan Siskandar, Renan Prasta Jenie, Heriyanto Syafutra, Muhammad Iqbal, Brian Yulianto, Mochammad Zakki Fahmi, Ferdiansjah, Khairurrijal,</p> <p><b>Title: Ferroelectric sensor BaxSr1-xTiO3 integrated with android smartphone for controlling and monitoring smart street lighting,</b></p> <p><i>Journal of King Saud University - Science</i>, Volume 34, Issue 6, 2022, 102180, ISSN 1018-3647, <a href="https://doi.org/10.1016/j.jksus.2022.102180">https://doi.org/10.1016/j.jksus.2022.102180</a>.</p> <p>Author: Heriyanto Syafutra, Manish Pandey, Nikita Kumari, Shyam S. Pandey, Hiroaki Benten, Masakazu Nakamura,</p> <p><b>Title: Assisted alignment of conjugated polymers in floating film transfer method using polymer blend,</b></p> <p><i>Thin Solid Films</i>, Volume 734, 2021, 138814, ISSN 0040-6090, <a href="https://doi.org/10.1016/j.tsf.2021.138814">https://doi.org/10.1016/j.tsf.2021.138814</a>.</p> <p>Author: Nikita Kumari, Manish Pandey, Heriyanto Syafutra, Shuichi Nagamatsu, Masakazu Nakamura, and Shyam S. Pandey</p> <p><b>Title: Solvent-Assisted Friction Transfer Method for Fabricating Large-Area Thin Films of Semiconducting Polymers with Edge-On Oriented Extended Backbones</b></p> <p><i>ACS Applied Materials &amp; Interfaces</i> 2020 12 (49), 55033-55043</p> <p>DOI: 10.1021/acsami.0c14874</p> <p>Author: Sumaryada, T.; Fitriansyah, P.; Sofyan, A.; Syafutra, H.</p> <p><b>Title: Modeling the Output Performance of Al0.3Ga0.7As/InP/Ge Triple-Junction Solar Cells for a Venus Orbiter Space Station.</b></p> <p><i>Photonics</i>, 2019, 6, 46. <a href="https://doi.org/10.3390/photonics6020046">https://doi.org/10.3390/photonics6020046</a></p>						
Activities in specialist bodies over the last 5 years	<table border="1"> <thead> <tr> <th data-bbox="534 1671 826 1711">Organization</th> <th data-bbox="826 1671 1118 1711">Role</th> <th data-bbox="1118 1671 1418 1711">Period</th> </tr> </thead> <tbody> <tr> <td data-bbox="534 1711 826 1854"></td> <td data-bbox="826 1711 1118 1854"></td> <td data-bbox="1118 1711 1418 1854"></td> </tr> </tbody> </table>	Organization	Role	Period			
Organization	Role	Period					
Website	<a href="https://physics.ipb.ac.id/hsy/">https://physics.ipb.ac.id/hsy/</a>						

Name	<i>Dr. Ir. Irmansyah, M.Si.</i>		
Post	<i>Applied Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (Mechanical Engineering)</i>	<i>IPB University</i>	<i>2009</i>
	<i>Master (Physics)</i>	<i>University of Indonesia</i>	<i>2000</i>
	<i>Undergraduate degree (Physics)</i>	<i>IPB University</i>	<i>1992</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Associate Professor</i>	<i>IPB University</i>	<i>2007–Present</i>
Research and development projects over the last 5 years	<p><i>Title: <b>Pengembangan untuk Hilirisasi Rompi Anti Peluru Berbahan Biomass Tandan Sawit (Development for Downstreaming of Bulletproof Vests Made from Palm Bunch Biomass)</b></i></p> <p><i>Period: 2022</i></p> <p><i>Amount of Financing: IDR. 250.000.000 (EUR. 15238,49)</i></p> <p><i>Title: <b>Optimasi Hingga Implementasi Pengolahan Limbah Padat Sawit Sebagai Material Filler Polimer Aplikasi Komponen Otomotif Dan Bahan Anti Peluru Untuk Diversifikasi Produk (Optimization to Implementation of Palm Solid Waste Treatment as Polymer Filler Material Application of Automotive Components and Bulletproof Materials for Product Diversification)</b></i></p> <p><i>Period: 2020</i></p> <p><i>Amount of Financing: IDR. 1.500.000.000 (EUR. 91430,91)</i></p> <p><i>Title: <b>Eksplorasi Dan Pemanfaatan Eksoskeleton Undur-Undur Laut Tropika (Crustacea: Emerita Sp.) Untuk Menghasilkan Material Biomedis Terbaru (Exploration and Utilization of Tropical Ocean</b></i></p>		

	<p><b><i>Grasshopper (Crustacea: Emerita Sp.) Exoskeletons to Produce Renewable Biomedical Materials</i></b></p> <p><i>Period: 2019</i></p> <p><i>Amount of Financing: IDR. 160.000.000 (EUR. 9752,63)</i></p>								
Industry collaborations over the last 5 years									
Patents and proprietary rights	<table border="0"> <thead> <tr> <th><i>Title</i></th> <th><i>Year</i></th> </tr> </thead> <tbody> <tr> <td><i>Alat Penyemprot Disinfektan Otomatis yang Dilengkapi Aromaterapi untuk Mencegah Penularan Virus Melalui Udara (Automatic Disinfectant Sprayer Equipped with Aromatherapy to Prevent Virus Transmission Through the Air)</i></td> <td><i>2021</i></td> </tr> <tr> <td><i>Komposisi Biokomposit Filler Serat Tandan Kosong Kelapa Sawit Sebagai Pengganti Komponen Otomotif Berpenguat Serat Sintesis (Biocomposite Composition of Oil Palm Empty Bunch Fiber Filler as a Substitute for Synthetic Fiber Reinforced Automotive Components)</i></td> <td><i>2020</i></td> </tr> <tr> <td><i>Alat Ekstraksi Minyak Serai Wangi Dengan Metode Ohmic Heating (Fragrant Lemongrass Oil Extraction Tool With Ohmic Heating Method)</i></td> <td><i>2017</i></td> </tr> </tbody> </table>	<i>Title</i>	<i>Year</i>	<i>Alat Penyemprot Disinfektan Otomatis yang Dilengkapi Aromaterapi untuk Mencegah Penularan Virus Melalui Udara (Automatic Disinfectant Sprayer Equipped with Aromatherapy to Prevent Virus Transmission Through the Air)</i>	<i>2021</i>	<i>Komposisi Biokomposit Filler Serat Tandan Kosong Kelapa Sawit Sebagai Pengganti Komponen Otomotif Berpenguat Serat Sintesis (Biocomposite Composition of Oil Palm Empty Bunch Fiber Filler as a Substitute for Synthetic Fiber Reinforced Automotive Components)</i>	<i>2020</i>	<i>Alat Ekstraksi Minyak Serai Wangi Dengan Metode Ohmic Heating (Fragrant Lemongrass Oil Extraction Tool With Ohmic Heating Method)</i>	<i>2017</i>
<i>Title</i>	<i>Year</i>								
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<i>Alat Ekstraksi Minyak Serai Wangi Dengan Metode Ohmic Heating (Fragrant Lemongrass Oil Extraction Tool With Ohmic Heating Method)</i>	<i>2017</i>								
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (25 Published articles since 2019):</i></p> <p><i>Authors: Rezeki, Mila Seri, Idham Sakti Harahap, Dewi Sartiami, Irmansyah Irmansyah, And Gillian W. Watson.</i></p> <p><b><i>Title: Identification key to nymphal and adult mealybugs (Hemiptera: Pseudococcidae) associated with dragon fruits in indonesia</i></b></p> <p><i>Biodiversitas Journal of Biological Diversity 22(8),</i>  <a href="https://doi.org/10.13057/biodiv/d220804">https://doi.org/10.13057/biodiv/d220804</a></p>								

	<p>Authors: Siti Nikmatin; Irmansyah Irmansyah; Endah Kinarya Palupi; Rofiqul Umam; Tarun Agarwal</p> <p>Title: <b>Characteristics of Bulletproof Vests Made from COPEFB Fiber: Implications on Mechanical, Electrical, and Physical Resistance.</b></p> <p>International Journal of Biomaterilas, 12 may 2023, 2003, 9475956, <a href="https://doi.org/10.1155/2023/9475956">https://doi.org/10.1155/2023/9475956</a></p> <p>Authors: Agus Kartono, Siti Solekha, Tony Sumaryada, Irmansyah</p> <p>Title: <b>Foreign currency exchange rate prediction using non-linear Schrödinger equations with economic fundamental parameters</b></p> <p>Elsevier, Chaos, Solitons &amp; Fractals, November 2021, Vol 152, 111320, <a href="https://doi.org/10.1016/j.chaos.2021.111320">https://doi.org/10.1016/j.chaos.2021.111320</a></p>						
Activities in specialist bodies over the last 5 years	<table border="1"> <thead> <tr> <th data-bbox="528 909 826 949">Organization</th> <th data-bbox="826 909 1125 949">Role</th> <th data-bbox="1125 909 1426 949">Period</th> </tr> </thead> <tbody> <tr> <td data-bbox="528 949 826 1093"></td> <td data-bbox="826 949 1125 1093"></td> <td data-bbox="1125 949 1426 1093"></td> </tr> </tbody> </table>	Organization	Role	Period			
Organization	Role	Period					
Website	<a href="https://physics.ipb.ac.id/irm/">https://physics.ipb.ac.id/irm/</a>						

Name	Prof. Dr. Ir. Irzaman, M.Si.		
Post	Applied Physics		
Academic career	Initial academic appointment	Institute	Year
	Doctorate (Physics)	Bandung Institute of Technology	2005
	Master (Physics)	University of Indonesia	1997
	Undergraduate degree (Agrometeorology)	IPB University	1988
Employment	Position	Employer	Period
	Professor of Physics	IPB University	2023–Present
Research and development projects over the last 5 years	<p><b>Title: Implementasi Sensor <math>Ba_{0.5}Sr_{0.5}TiO_3</math> (BST) Yang Didadah <math>RuO_2</math> Sebagai Pendeteksi Dini Diabetes Militus Dengan Metode Non-Invasive Berbasis Hembusan Bau Mulut (Implementation of <math>Ba_{0.5}Sr_{0.5}TiO_3</math> (BST) Sensor Infused with <math>RuO_2</math> as Early Detector of Diabetes Militus Using Non-Invasive Methods Based on Bad Breath)</b></p> <p>Period: 2022 - 2024</p> <p>Amount of Financing: IDR. 575.000.000 (EUR.35014,06)</p> <p><b>Title: Pengembangan Material Sensor Selektif Limbah Ion Emas Berbasis Carbon Dots Asam Humat Terfungsionalisasi Asam Amino Sistein (Development of Gold Ion Selective Sensor Material Based on Carbon Dots Humic Acid Functionalized Amino Cysteine)</b></p> <p>Period: 2023</p> <p>Amount of Financing: IDR. 49.000.000 (EUR. 2983,81)</p> <p><b>Title: Kemandirian Bangsa dalam Teknologi Proses Pembuatan Alat Pengukuran Kadar HB Darah Non-invasif. (The Independence of the</b></p>		

***Nation in the Manufacturing Process of Non-Invasive HB Blood Level Measuring Instruments)***

*Period: 2021-2022*

*Amount of Financing: IDR. 3.403.400.000 (EUR. 207246,68)*

***Title: Pengembangan Biosensor Elektrokimia Berbasis Metal Oragnik Framework (MOF) Untuk Deteksi Cepat dan Akurat Salmonella pada Pangan (Development of Electrochemical Biosensor Based on Metal-Organic Framework (MOF) for Fast and Accurate Detection of Salmonella in Food)***

*Period: 2022*

*Amount of Financing: IDR. 50.000.000 (EUR.3044,70)*

***Title: Smart Sensor Suhu Berbasis Film Tipis Pyroelektrik Barium Titanat ( $BATiO_3$ ) Didadah Litium (1) Asetat ( $Li(CH_3COO)$ ) (Pyroelectric Thin Film Based Smart Temperature Sensor Barium Titanate ( $BATiO_3$ ) Doped Lithium (1) Acetate ( $Li(CH_3COO)$ ))***

*Period: 2022*

*Amount of Financing: IDR.70.000.000 (EUR. 4262,58)*

***Title: Pembuatan sensor tekanan berbasis bahan piezoelektrik film tipis barium stronsium titanat ( $Ba_{0,5}Sr_{0,5}TiO_3$ ) didadah cerium (studi kasus detak jantung janin) (synthesis of a pressure sensor based on a thin film piezoelectric material of barium strontium titanate ( $Ba_{0,5}Sr_{0,5}TiO_3$ ) doped with cerium (case study of fetal heartbeat))***

*Period: 2022*

*Amount of Financing: IDR. 119.325.000 (EUR. 7266,18)*

***Title: Pengembangan Material Sensor Selektif Limbah Ion Emas Berbasis Carbon Dots Asam Humat Terfungsionalisasi Asam Amino Sistein (Development of Gold Ion Selective Sensor Material Based on Carbon Dots Humic Acid Functionalized Amino Cysteine)***

	<i>Period: 2022</i>	
	<i>Amount of Financing: IDR. 49.500.000 (EUR.3014,25)</i>	
Industry collaborations over the last 5 years		
Patents and proprietary rights	<i>Title</i>	<i>Year</i>
	<i>Metode Pengukuran Kadar Hemoglobin Darah Secara Non Invasif (Non-Invasive Method of Measuring Blood Hemoglobin Levels)</i>	<i>2022</i>
	<i>Metode Pembuatan Film Tipis Berbasis Litium Niobat (LiNbO<sub>3</sub>) (Methods for Manufacturing Thin Films Based on Lithium Niobate (LiNbO<sub>3</sub>))</i>	<i>2021</i>
	<i>Metode Pembuatan Film Tipis Berbasis Barium Titanat (BaTiO<sub>3</sub>) (Barium Titanate (BaTiO<sub>3</sub>) Based Thin Film Method)</i>	<i>2021</i>
	<i>Metode Pembuatan Film Tipis Berbasis Barium Titanat (BaTiO<sub>3</sub>) (Barium Titanate (BaTiO<sub>3</sub>) Based Thin Film Method)</i>	<i>2021</i>
	<i>Proses Sintesis Keramik Barium Stronsium Titanat Dengan Metode Solid Solution (Barium Strontium Titanate Ceramic Synthesis Process Using Solid Solution Method)</i>	<i>2021</i>
	<i>Probe Alat Ukur Hemoglobin Non-Invasive (Non-Invasive Hemoglobin Measurement Probe)</i>	<i>2021</i>
	<i>Alat Ukur Kadar Glukosa Darah Non-Invasive Portabel (Portable Non-Invasive Blood Glucose Level Measuring Instrument)</i>	<i>2020</i>
	<i>Probe Tutup Penuh Untuk Alat Pengukuran Kadar Biomarker Darah Non Invasif (Full Cover Probe For Non-Invasive Blood Biomarker Level Measurement Tool)</i>	<i>2020</i>
	<i>Probe Biomarker Glukosa Darah Non-Invasif dengan Metode Reflektansi (Non-Invasive Blood Glucose Biomarker Probe with Reflectance Method)</i>	<i>2020</i>



	<p><i>V-Probe Untuk Alat Pengukuran Kadar Biomarker Darah Non Invasif (V-Probe For Non-Invasive Blood Biomarker Levels Measurement)</i> 2020</p>						
<p>Important publications over the last 5 years</p>	<p><i>Selected recent publications from a total of approx. (88 Published articles since 2019):</i></p> <p><i>Authors: Ahmad, Musbahu Adam, Yu-yu Aung, Alfa Akustia Widati, Satya Candra Wibawa Sakti, Sri Sumarsih, Irzaman Irzaman, Brian Yuliarto, Jia-yaw Chang, and Mochamad Zakki Fahmi.</i></p> <p><b><i>Title: A Perspective on Using Organic Molecules Composing Carbon Dots for Cancer Treatment.</i></b></p> <p><i>Nanotheranostic, 2023, 7(2):187-201, <a href="https://doi.org/10.7150%2Fntno.80076">https://doi.org/10.7150%2Fntno.80076</a></i></p> <p><i>Authors: Sabara, Zakir, Alfirah Mutmainnah, Ummu Kalsum, Irma Nur Afiah, Ismalia Husna, Antomi Saregar, and Rofiqul Umam.</i></p> <p><b><i>Title: Sugarcane Bagasse as the Source of Nanocrystalline Cellulose for Gelatin-Free Capsule Shell</i></b></p> <p><i>International Journal of Biomaterials, 2022, <a href="https://doi.org/10.1155/2022/9889127">https://doi.org/10.1155/2022/9889127</a></i></p> <p><i>Authors: Irzaman, Irzaman, Irmansyah Irmansyah, Siti Aisyah, Nazopatul Patonah Har, and Aminullah Aminullah</i></p> <p><b><i>Title: Effect of Different Hydrothermal Temperatures on the Properties on Nano-Silica (SiO<sub>2</sub>) of Rice Husk</i></b></p> <p><i>International Journal of Renewable Energy Development, 11(3): 640-646, <a href="https://doi.org/10.14710/ijred.2022.43904">https://doi.org/10.14710/ijred.2022.43904</a></i></p>						
<p>Activities in specialist bodies over the last 5 years</p>	<table border="1"> <thead> <tr> <th><i>Organization</i></th> <th><i>Role</i></th> <th><i>Period</i></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	<i>Organization</i>	<i>Role</i>	<i>Period</i>			
<i>Organization</i>	<i>Role</i>	<i>Period</i>					
<p>Website</p>	<p><a href="https://physics.ipb.ac.id/irz/">https://physics.ipb.ac.id/irz/</a></p>						

Name	<i>Dr. Mersi Kurniati, M.Si.</i>		
Post	<i>Biophysics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (Chemistry)</i>	<i>IPB University</i>	<i>2014</i>
	<i>Master (Physics)</i>	<i>University of Indonesia</i>	<i>2000</i>
	<i>Undergraduate degree (Physics)</i>	<i>University of Indonesia</i>	<i>1994</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Associate Professor</i>	<i>IPB University</i>	<i>2017–Present</i>
Research and development projects over the last 5 years	<p><b><i>Title: Optimasi Formulasi Pelepasan Pupuk Terkendali Pada Hidrogel Berbahan Karagenan-Aam Sebagai Agen Pembawa Pupuk (Optimization of Controlled Fertilizer Release Formulation on Hydrogels Made from Carrageenan-Aam As Fertilizer Carrier Agent)</i></b></p> <p><i>Period: 2022</i></p> <p><i>Amount of Financing: IDR. 150.000.000 (EUR. 9160,41)</i></p> <p><b><i>Title: Formulasi Hidrogel Super Absorben Polimer Berbasis Selulosa Tongkol Jagung dengan Metode Ikat Silang Fisika dan Kimia (Formulation of Super Absorbent Polymer Hydrogel Based on Corn Cob Cellulose with Physical and Chemical Crosslinking Method)</i></b></p> <p><i>Period : 2020</i></p> <p><i>Amount of Financing: IDR. 170.827.000 (EUR. 10432,31)</i></p> <p><b><i>Title: Pengaruh Penambahan Anti-UV terhadap Sifat Optik dan Konduktivitas Termal pada Biomulsa (Effect of Anti-UV Addition on Optical Properties and Thermal Conductivity of Biomulch)</i></b></p> <p><i>Period : 2018-2019</i></p>		

	<p><i>Amount of Financing: IDR. 277.640.000 (EUR. 16955,32) IDR. 200.000.000 (EUR. 12213,89)</i></p>				
Industry collaborations over the last 5 years					
Patents and proprietary rights	<table border="0"> <thead> <tr> <th style="text-align: left;"><i>Title</i></th> <th style="text-align: right;"><i>Year</i></th> </tr> </thead> <tbody> <tr> <td><i>Lembaran Bioplastik Yang Dapat Dimakan Berbahan Dasar Protein Sorgum Manis, Karagenan Dan Sorbitol Sebagai Pengemas Pangan Dan Proses Pembuatannya (Edible Bioplastic Sheets Made from Sweet Sorghum Protein, Carrageenan and Sorbitol as Food Packaging And Manufacturing Process)</i></td> <td style="text-align: right; vertical-align: top;">2017</td> </tr> </tbody> </table>	<i>Title</i>	<i>Year</i>	<i>Lembaran Bioplastik Yang Dapat Dimakan Berbahan Dasar Protein Sorgum Manis, Karagenan Dan Sorbitol Sebagai Pengemas Pangan Dan Proses Pembuatannya (Edible Bioplastic Sheets Made from Sweet Sorghum Protein, Carrageenan and Sorbitol as Food Packaging And Manufacturing Process)</i>	2017
<i>Title</i>	<i>Year</i>				
<i>Lembaran Bioplastik Yang Dapat Dimakan Berbahan Dasar Protein Sorgum Manis, Karagenan Dan Sorbitol Sebagai Pengemas Pangan Dan Proses Pembuatannya (Edible Bioplastic Sheets Made from Sweet Sorghum Protein, Carrageenan and Sorbitol as Food Packaging And Manufacturing Process)</i>	2017				
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (11 Published articles since 2019):</i></p> <p><i>Authors: Yessie W Sari, Sumaya Yulia Putri, Noor Intan, Abdurrahman Bahtiar, Mersi Kurniati</i></p> <p><b><i>Title: The effect of sorbitol and sweet sorghum to carrageenan ratio on the physicochemical properties of sweet sorghum/carrageenan bioplastics.</i></b></p> <p><i>Springer Link, Biomass Conv. Bioref. 13, 2719–2728 (2023).  <a href="https://doi.org/10.1007/s13399-020-01254-3">https://doi.org/10.1007/s13399-020-01254-3</a></i></p> <p><i>Authors: Istie Rahayu, Esti Prihatini, Akhiruddin Maddu, Mersi Kurniati, Wayan Darmawan</i></p> <p><b><i>Title: Density and Dimensional Stability of a Wood-polymer Nano-Composite from Fast-growing Wood</i></b></p> <p><i>NORTH CAROLINA STATE UNIV DEPT WOOD &amp; PAPER SCI, BioResources, 2022/2/1, Vol17(1), pages 750-762, <a href="https://doi.org/10.15376/biores.17.1.750-762">https://doi.org/10.15376/biores.17.1.750-762</a></i></p>				

Activities in specialist bodies over the last 5 years	<i>Organization</i>	<i>Role</i>	<i>Period</i>
Website	<a href="https://physics.ipb.ac.id/msk/">https://physics.ipb.ac.id/msk/</a>		

Name	<i>Dr. Setyanto Tri Wahyudi, M.Si.</i>		
Post	<i>Biophysics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (Chemistry)</i>	<i>Institute of Technology Bandung</i>	<i>2014</i>
	<i>Master (Physics)</i>	<i>University of Indonesia</i>	<i>2007</i>
	<i>Undergraduate degree (Physics)</i>	<i>IPB University</i>	<i>2000</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Assistant Professor</i>	<i>IPB University</i>	<i>2010–Present</i>

<p>Research and development projects over the last 5 years</p>	<p><b>Title: <i>Biomimetik Mineralisasi Tulang dan Gigi Menggunakan Nanokomposit Hidroksiapatit/Asam Amino Terkonjugasi Partikel Emas (Biomimetic Mineralization of Bones and Teeth Using Hydroxyapatite/Conjugated Amino Acid Nanocomposites of Gold Particles)</i></b></p> <p>Period: 2021-2023</p> <p>Amount of Financing: IDR. 756.857.000 (EUR. 46220,82)</p> <p><b>Title: <i>Screening Potensi Senyawa Tanaman Obat Sebagai Anti Malaria Dengan Target P. falciparum Signal Peptida Peptidase dan Hexose Transporter Melalui Metode Docking Dan Simulasi Dinamika Molekul (Screening Potential of Medicinal Plant Compounds As Anti-Malaria Targeting P. falciparum Signal Peptide Peptidase and Hexose Transporter Through Docking Method and Molecular Dynamics Simulation)</i></b></p> <p>Period: 2019</p> <p>Amount of Financing: IDR. 194.105.000 (EUR. 11853,88)</p> <p><b>Title: <i>Senyawa Pada Bawang Putih (Allium Sativum L.) Dan Bawang Hitam Sebagai Antigout Berdasarkan Analisis In Silico (Compounds In Garlic (Allium Sativum L.) And Black Garlic As Antigout Based On In Silico Analysis)</i></b></p> <p>Period: 2022</p> <p>Amount of Financing: IDR. 27.500.000 (EUR. 1679,81)</p> <p><b>Title: <i>Pengembangan Tumbuhan Obat Indonesia Sebagai Antiinflamasi Dan Antivirus SARS Cov-2 (Development of Indonesian Medicinal Plants as Anti-Inflammation and Antivirus for SARS Cov-2)</i></b></p> <p>Period: 2021</p> <p>Amount of Financing: IDR. 65.000.000 (EUR.3970,46)</p> <p><b>Title: <i>Studi Enatioselektivitas Enzim Lipase Pada Bahan Racemix Untuk Bahan Baku Farmasi Melalui Pendekatan Komputasi (Study of</i></b></p>
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	<p><b><i>Enantioselectivity of Lipase Enzymes in Racemix Materials for Pharmaceutical Raw Materials Using a Computational Approach</i></b></p> <p><i>Period: 2020</i></p> <p><i>Amount of Financing: IDR. 29.715.000 (EUR. 1815,11)</i></p> <p><b><i>Title: Senyawa Aktif Bahan Alam Sebagai Kandidat Antivirus COVID-19 Menggunakan Studi Penambatan Molekul (Active Compounds of Natural Materials as Antivirus Candidates for COVID-19 Using Molecular Docking Studies)</i></b></p> <p><i>Period: 2020</i></p> <p><i>Amount of Financing: IDR. 10.000.000 (EUR. 610.84)</i></p> <p><b><i>Sintesis Blokomposit CHA/PVA/ALGINAT Sebagai Biomaterial Substitusi Tulang (Synthesis of CHA/PVA/ALGINATE Biocomposites as Bone Substitution Biomaterials)</i></b></p> <p><i>Period: 2019</i></p> <p><i>Amount of Financing: IDR. 57.726.000 (EUR.3526.14)</i></p>						
Industry collaborations over the last 5 years							
Patents and proprietary rights	<table border="1"> <thead> <tr> <th data-bbox="539 1323 1300 1355"><i>Title</i></th> <th data-bbox="1300 1323 1418 1355"><i>Year</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="539 1395 1300 1644"><i>Formula Obat Herbal Antiinflamasi Dari Ekstrak Wedelia (Sphagneticola trilobata) Dan Ekstrak Sembung Rambat (Mikania micrantha (Formula of Anti-inflammatory Herbal Medicine From Wedelia Extract (Sphagneticola trilobata) and Sembung Vines (Mikania micrantha) Extract)</i></td> <td data-bbox="1300 1395 1418 1426">2021</td> </tr> <tr> <td data-bbox="539 1684 1300 1984"><i>Formula Obat Herbal Antiinflamasi Berbasis Ekstrak Legetan Warak (Adenostemma Lavenia), Kersen (Muntingia Calabura) dan Kenikir (Cosmos Caudatus) (Anti-inflammatory Herbal Medicine Formula Based on Legetan Warak (Adenostemma Lavenia), Kersen (Muntingia Calabura) and Kenikir (Cosmos Caudatus) Extracts)</i></td> <td data-bbox="1300 1684 1418 1715">2020</td> </tr> </tbody> </table>	<i>Title</i>	<i>Year</i>	<i>Formula Obat Herbal Antiinflamasi Dari Ekstrak Wedelia (Sphagneticola trilobata) Dan Ekstrak Sembung Rambat (Mikania micrantha (Formula of Anti-inflammatory Herbal Medicine From Wedelia Extract (Sphagneticola trilobata) and Sembung Vines (Mikania micrantha) Extract)</i>	2021	<i>Formula Obat Herbal Antiinflamasi Berbasis Ekstrak Legetan Warak (Adenostemma Lavenia), Kersen (Muntingia Calabura) dan Kenikir (Cosmos Caudatus) (Anti-inflammatory Herbal Medicine Formula Based on Legetan Warak (Adenostemma Lavenia), Kersen (Muntingia Calabura) and Kenikir (Cosmos Caudatus) Extracts)</i>	2020
<i>Title</i>	<i>Year</i>						
<i>Formula Obat Herbal Antiinflamasi Dari Ekstrak Wedelia (Sphagneticola trilobata) Dan Ekstrak Sembung Rambat (Mikania micrantha (Formula of Anti-inflammatory Herbal Medicine From Wedelia Extract (Sphagneticola trilobata) and Sembung Vines (Mikania micrantha) Extract)</i>	2021						
<i>Formula Obat Herbal Antiinflamasi Berbasis Ekstrak Legetan Warak (Adenostemma Lavenia), Kersen (Muntingia Calabura) dan Kenikir (Cosmos Caudatus) (Anti-inflammatory Herbal Medicine Formula Based on Legetan Warak (Adenostemma Lavenia), Kersen (Muntingia Calabura) and Kenikir (Cosmos Caudatus) Extracts)</i>	2020						

	<p><i>Proses Pembuatan Hidroksiapatit dari Cangkang Telur Ayam 2013 Dengan Teknik Presipitasi Sekali Tuang (The Process of Making Hydroxyapatite from Chicken Eggshells Using One Pour Precipitation Technique)</i></p>						
<p>Important publications over the last 5 years</p>	<p><i>Selected recent publications from a total of approx. (46 Published articles since 2019):</i></p> <p><i>Authors: Muhammad Arba, Setyanto Tri Wahyudi, Dylan J Brunt, Nicholas Paradis, Chun Wu</i></p> <p><b><i>Title: Mechanistic insight on the remdesivir binding to RNA-Dependent RNA polymerase (RdRp) of SARS-cov-2</i></b></p> <p><i>Elsevier, Computers in Biology and Medicine, February 2021, 129, 104156, <a href="https://doi.org/10.1016/j.combiomed.2020.104156">https://doi.org/10.1016/j.combiomed.2020.104156</a>.</i></p> <p><i>Authors: Amgad Muneer, Suliman Mohamed Fati, Nur Arifin Akbar, David Agustriawan, Setyanto Tri Wahyudi</i></p> <p><b><i>Title: iVaccine-Deep: Prediction of COVID-19 mRNA vaccine degradation using deep learning</i></b></p> <p><i>Elsevier, Computer and Information Sciences, October 2022, 24(9), 7419-7432. <a href="https://doi.org/10.1016/j.jksuci.2021.10.001">https://doi.org/10.1016/j.jksuci.2021.10.001</a>.</i></p> <p><i>Authors: Aditya Wibawa Sakti, Setyanto Tri Wahyudi, Faozan Ahmad, Noviyani Darmawan, Hendradi Hardhienata, Husin Alatas</i></p> <p><b><i>Title: Effects of Salt Concentration on the Water and Ion Self-Diffusion Coefficients of a Model Aqueous Sodium-Ion Battery Electrolyte.</i></b></p> <p><i>American Chemical Society, The Journal of Physical Chemistry B, 10 March 2022, Vol 126(11), 2256-2264, <a href="https://doi.org/10.1021/acs.jpcc.1c09619">https://doi.org/10.1021/acs.jpcc.1c09619</a></i></p>						
<p>Activities in specialist bodies over the last 5 years</p>	<table border="1"> <thead> <tr> <th data-bbox="536 1787 826 1827"><i>Organization</i></th> <th data-bbox="826 1787 1114 1827"><i>Role</i></th> <th data-bbox="1114 1787 1418 1827"><i>Period</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="536 1827 826 1964"></td> <td data-bbox="826 1827 1114 1964"></td> <td data-bbox="1114 1827 1418 1964"></td> </tr> </tbody> </table>	<i>Organization</i>	<i>Role</i>	<i>Period</i>			
<i>Organization</i>	<i>Role</i>	<i>Period</i>					

Websites	<a href="https://physics.ipb.ac.id/stw/">https://physics.ipb.ac.id/stw/</a>
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Name	<i>Dr. Siti Nikmatin, M.Si.</i>		
Post	<i>Applied Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (Mechanical Engineering)</i>	<i>IPB University</i>	<i>2012</i>
	<i>Master (Physics)</i>	<i>University of Indonesia</i>	<i>2004</i>
	<i>Undergraduate degree (Physics)</i>	<i>IPB University</i>	<i>1998</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Associate Professor</i>	<i>IPB University</i>	<i>2018–Present</i>
Research and development projects over the last 5 years	<p><b><i>Title: Inovasi Benang dan Kain Dari Biomass Sawit Untuk Aplikasi Produk Industri Kreatif Fashion (Innovation of Yarn and Fabric from Palm Biomass for the Application of Fashion Creative Industry Products)</i></b></p> <p><i>Period: 2021-2022</i></p> <p><i>Amount of Financing: IDR. 5.700.000.000 (EUR. 347437,48)</i></p> <p><b><i>Title: Rekayasa Material Peredam Getaran Jenis Viskoelastik dari Komposit Partikulat-Kompon Karet Alam (Viscoelastic Type Viscoelastic Vibration Damper Material Engineering from Particulate-Natural Rubber Compounds)</i></b></p> <p><i>Period: 2022</i></p> <p><i>Amount of Financing: IDR. 50.000.000 (EUR. 3047.70)</i></p> <p><b><i>Title: Pengembangan untuk Hilirisasi Rompi Anti Peluru Berbahan Biomass Tandan Sawit (Development for Downstreaming of Bulletproof Vests Made from Palm Bunch Biomass)</i></b></p>		

	<p>Period: 2022</p> <p>Amount of Financing: IDR. 250.000.000 (EUR. 15238,49)</p> <p>Title: <b>Optimasi Hingga Implementasi Pengolahan Limbah Padat Sawit Sebagai Material Filler Polimer Aplikasi Komponen Otomotif Dan Bahan Anti Peluru Untuk Diversifikasi Produk. (Optimization to Implementation of Palm Solid Waste Treatment as Polymer Filler Material Application of Automotive Components and Bulletproof Materials for Product Diversification.)</b></p> <p>Period: 2020</p> <p>Amount of Financing: IDR. 1.500.000.000 (EUR. 91430,91)</p>										
Industry collaborations over the last 5 years	<p>Balai besar standarisasi dan pelayanan jasa industri selulosa (2021 - 2022)</p> <p>PT. Interstisi Material Maju (2018 - 2019)"</p>										
Patents and proprietary rights	<table border="1"> <thead> <tr> <th>Title</th> <th>Year</th> </tr> </thead> <tbody> <tr> <td>Komposisi Biokomposit Filler Serat Tandan Kosong Kelapa Sawit Sebagai Pengganti Komponen Otomotif Berpenguat Serat Sintesis (Biocomposite Composition of Oil Palm Empty Bunch Fiber Filler as a Substitute for Synthetic Fiber Reinforced Automotive Components)</td> <td>2020</td> </tr> <tr> <td>Alat Ekstraksi Minyak Serai Wangi Dengan Metode Ohmic Heating (Fragrant Lemongrass Oil Extraction Tool With Ohmic Heating Method)</td> <td>2017</td> </tr> <tr> <td>Helm Berpenguat Serat Pendek Atau Mikropartikel Tandan Kosong Kelapa Sawit Dan Metode Pembuatannya (Short Fiber Reinforced Helmets Or Palm Oil Empty Fruit Bunch Microparticles And Their Manufacturing Methods)</td> <td>2026</td> </tr> <tr> <td>Komposisi Lembaran Anti Peluru Berbahan Baku Serat Tandan Kosong Kelapa Sawit Non-Anyam (Composition of</td> <td>2019</td> </tr> </tbody> </table>	Title	Year	Komposisi Biokomposit Filler Serat Tandan Kosong Kelapa Sawit Sebagai Pengganti Komponen Otomotif Berpenguat Serat Sintesis (Biocomposite Composition of Oil Palm Empty Bunch Fiber Filler as a Substitute for Synthetic Fiber Reinforced Automotive Components)	2020	Alat Ekstraksi Minyak Serai Wangi Dengan Metode Ohmic Heating (Fragrant Lemongrass Oil Extraction Tool With Ohmic Heating Method)	2017	Helm Berpenguat Serat Pendek Atau Mikropartikel Tandan Kosong Kelapa Sawit Dan Metode Pembuatannya (Short Fiber Reinforced Helmets Or Palm Oil Empty Fruit Bunch Microparticles And Their Manufacturing Methods)	2026	Komposisi Lembaran Anti Peluru Berbahan Baku Serat Tandan Kosong Kelapa Sawit Non-Anyam (Composition of	2019
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Komposisi Lembaran Anti Peluru Berbahan Baku Serat Tandan Kosong Kelapa Sawit Non-Anyam (Composition of	2019										

	<p><i>Bulletproof Sheets Made from Non-Woven Palm Empty Fruit Bunch Fiber)</i></p>						
<p>Important publications over the last 5 years</p>	<p><i>Selected recent publications from a total of approx. (24 Published articles since 2019):</i></p> <p><i>Authors: Siti Nikmatin, Irmansyah Irmansyah, Endah Kinarya Palupi, Rofiqul Umam.</i></p> <p><b><i>Title: Oil palm empty fruit bunches as raw material of dissolving pulp for viscose rayon fiber in making textile products.</i></b></p> <p><i>Hindawi, International Journal of Biomaterials, 31 May 2023, 2023, <a href="https://doi.org/10.1155/2023/9475956">https://doi.org/10.1155/2023/9475956</a>.</i></p> <p><i>Authors: Marwanto Marwanto, Muhammad Iqbal Maulana, Fauzi Febrianto, Nyoman J Wistara, Siti Nikmatin, Nanang Masruchin, Lukmanul Hakim Zaini, Seung-Hwan Lee, Nam Hun Kim</i></p> <p><b><i>Title: Characteristics of nanocellulose crystals from balsa and kapok fibers at different ammonium persulfate concentrations</i></b></p> <p><i>Springer Berlin Heidelberg, Wood Science and Technology, September 2021, 55:1319-1335, <a href="https://doi.org/10.1007/s00226-021-01319-0">https://doi.org/10.1007/s00226-021-01319-0</a></i></p> <p><i>Authors: Maulana, Muhammad Iqbal, Rio Ardiansyah Murda, Byantara Darsan Purusatama, Rita Kartika Sari, Deded Sarip Nawawi, Siti Nikmatin, Wahyu Hidayat, Seung Hwan Lee, Fauzi Febrianto, and Nam Hun Kim.</i></p> <p><b><i>Title: Effect of Alkali-Washing at Different Concentration on the Chemical Compositions of the Steam Treated Bamboo Strand.</i></b></p> <p><i>Journal of the Korean Wood Science and Technology, 2021, 49(1): 14-22, <a href="https://doi.org/10.5658/WOOD.2021.49.1.14">https://doi.org/10.5658/WOOD.2021.49.1.14</a></i></p>						
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Website	<a href="https://physics.ipb.ac.id/sni/">https://physics.ipb.ac.id/sni/</a>
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Name	<i>Dr. Sitti Yani, M.Si.</i>		
Post	<i>Theoretical and Computational Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (Medical Physics)</i>	<i>Bandung Science and Technology Institute</i>	<i>2017</i>
	<i>Master (Biophysics)</i>	<i>IPB University</i>	<i>2009</i>
	<i>Undergraduate degree (Physics)</i>	<i>Halu Oleo University</i>	<i>2008</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Assistant Professor</i>	<i>IPB University</i>	<i>2019 – present</i>
	<i>Lecturer</i>	<i>Akademi Kebidanan Pelita Ibu</i>	<i>2011-2019</i>
Research and development projects over the last 5 years	<p><b>Title: <i>Elektron dan Neutron Kontaminasi pada Varian Clinac iX 6 dan 10 MV Foton Beam (Electron and Neutron Contamination in the Clinac iX 6 and 10 MV Variants of the Photon Beam)</i></b></p> <p><i>Period:2016</i></p> <p><i>Amount of Financing:IDR. 50.000.000 (EUR.</i></p>		
Industry collaborations over the last 5 years	<p><i>Project title</i></p> <p><i>Partners</i></p>		
Patents and proprietary rights	<i>Title</i>	<i>Year</i>	
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (21 published articles since 2019):</i></p>		

	<p><i>Authors: Sitti Yani, Yosia Adityo Noviantoro, Mohamad Fahdillah Rhani, Tony Sumaryada, Freddy Haryanto</i></p> <p><b><i>Title: Verification of 3D-CRT dose distribution in ArcCheck phantom using Monte Carlo code</i></b></p> <p><i>Additional information: Pergamon, Radiation Physics and Chemistry, 1 September 2023, Vol 210, Pages 111019</i></p> <p><i>Doi: <a href="https://doi.org/10.1016/j.radphyschem.2023.111019">https://doi.org/10.1016/j.radphyschem.2023.111019</a></i></p> <p><i>Authors: Sitti Yani, Ilmi Rizkia, Mohamad Fahdillah Rhani, Mohammad Haekal, Freddy Haryanto</i></p> <p><b><i>Title: EGSnrc application for IMRT planning</i></b></p> <p><i>Additional information: Reports of Practical Oncology and Radiotherapy, 2020, Vol 25(2), Pages 217-226</i></p> <p><i>Doi: <a href="https://doi.org/10.1016/j.rpor.2020.01.004">10.1016/j.rpor.2020.01.004</a></i></p> <p><i>Authors: Sitti Yani, Indra Budiansah, Mohamad Fahdillah Rhani, Freddy Haryanto</i></p> <p><b><i>Title: Study of efficiency in five-field and field-by-field intensity modulated radiation therapy (IMRT) plan using DOSXYZnrc Monte Carlo code</i></b></p> <p><i>Additional Information: Reports of Practical Oncology and Radiotherapy, 2020, Vol 25(3), Page 428-435</i></p> <p><i>Doi: <a href="https://doi.org/10.1016/j.rpor.2020.03.022">10.1016/j.rpor.2020.03.022</a></i></p>						
<p>Activities in specialist bodies over the last 5 years</p>	<table border="1"> <thead> <tr> <th data-bbox="539 1576 794 1608"><i>Organization</i></th> <th data-bbox="842 1576 896 1608"><i>Role</i></th> <th data-bbox="1139 1576 1216 1608"><i>Period</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="539 1630 794 1742"></td> <td data-bbox="842 1630 896 1742"></td> <td data-bbox="1139 1630 1216 1742"></td> </tr> </tbody> </table>	<i>Organization</i>	<i>Role</i>	<i>Period</i>			
<i>Organization</i>	<i>Role</i>	<i>Period</i>					
<p>Website</p>	<p><a href="https://physics.ipb.ac.id/sya/">https://physics.ipb.ac.id/sya/</a></p>						

Name	<i>Dr. Yessie Widya Sari, M.Si.</i>		
Post	<i>Biophysics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (Biobased Science)</i>	<i>Wageningen University, Netherlands</i>	<i>2015</i>
	<i>Master (Physics)</i>	<i>University of Indonesia</i>	<i>2006</i>
	<i>Undergraduate degree (Physics)</i>	<i>IPB University</i>	<i>2002</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Associate Professor</i>	<i>IPB University</i>	<i>2014–Present</i>
	<i>Visiting Lecturer</i>	<i>University of Indonesia</i>	<i>2016-Present</i>
Research and development projects over the last 5 years	<p><b>Title: <i>Development of 3D Porous Microspheres for Bone Tissue Engineering: Applications in Radiotherapy and Orthobiology</i></b></p> <p><i>Period:2023-Present</i></p> <p><i>Partners: Persahabatan Hospital, Indonesia National Research and Innovation Agency</i></p> <p><i>Amount of Financing: IDR. 460.000.000 (EUR. 28111,60)</i></p> <p><b>Title: <i>Toothpaste Fortified with Nanohydroxyapatite and Active Compounds of Temu Hitam Rhizome: Efforts to Minimize Dental Caries Incidence in Indonesia</i></b></p> <p><i>Period:2019-2023</i></p> <p><i>Partners: PT. Alesha Berkah Utama</i></p> <p><i>Amount of Financing: IDR. 4.499.000.000 (EUR. 274943,68)</i></p>		
Industry collaborations over the last 5 years	<p><i>PT. Pertiwi Technology</i></p> <p><i>2018-present</i></p>		

	<p><i>PT.Alesha Berkah Utama</i></p> <p>2022-present</p>	
Patents and proprietary rights	<p><i>Title</i></p> <p><i>Hydroxyapatite Synthesis Method Based on Duck Eggshells uses microwave irradiation technology.</i></p> <p><i>Edible Bioplastic Sheets Made From Sweet Sorghum Protein, Carrageenan And Sorbitol As Food Packaging And Manufacturing Processes</i></p> <p><i>Production Method of Calcium Nanoparticles from Chicken Eggshells for Applications to Increase Biogas Production from Liquid Waste</i></p>	<p><i>Year</i></p> <p>2019</p> <p>2020</p> <p>2021</p>
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (41 Published articles since 2019):</i></p> <p><i>Authors: Yessie W Sari, Annisa Tsalsabila, Angga Saputra, Nur Aisyah Nuzulia, Yuliati Herbani</i></p> <p><b><i>Title: Hydroxyapatite nucleation and growth modulated by amino acid-capped gold nanoparticles: An in vitro study</i></b></p> <p><i>Elsevier, Ceramics International, 1 June 2023, 49(11), 17166-17173.</i>  <a href="https://doi.org/10.1016/j.ceramint.2023.02.08">https://doi.org/10.1016/j.ceramint.2023.02.08</a></p> <p><i>Authors: Yessie Widya Sari, Eka Listiani, Sumaya Yulia Putri, Zaenal Abidin</i></p> <p><b><i>Title: Prospective of eggshell nano calcium in improving biogas production from palm oil mill effluent.</i></b></p> <p><i>Springer, Waste Biomass Valor 11, 14 August 2019, 4631–4638 (2020).</i>  <a href="https://doi.org/10.1007/s12649-019-00786-8">https://doi.org/10.1007/s12649-019-00786-8</a></p> <p><i>Authors: Afrinal Firmanda, Khaswar Syamsu, Yessie Widya Sari, Jaydee Cabral, Daniel Pletzer, Bhushan Mahadik, John Fisher, Farah Fahma</i></p> <p><b><i>Title: 3D printed cellulose-based product applications</i></b></p>	



	<i>Royal Society of Chemistry, Materials Chemistry Frontiers, 2022, 6(3), 254-279, <a href="https://doi.org/10.1039/D1QM00390A">https://doi.org/10.1039/D1QM00390A</a></i>		
Activities in specialist bodies over the last 5 years	<i>Organization</i>	<i>Role</i>	<i>Period</i>
	<i>Indonesian Young Academy of Sciences</i>	<i>Program Director</i>	<i>2022-2024</i>
	<i>Indonesian Young Academy of Sciences</i>	<i>Vice Chairman of Science and Policy Working Group</i>	<i>2020-2022</i>
Website	<i><a href="https://physics.ipb.ac.id/yws/">https://physics.ipb.ac.id/yws/</a></i>		

Name	<i>Drs. Mahfuddin Zuhri, M.Si.</i>		
Post	<i>Applied Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Master (Physics)</i>	<i>University of Indonesia</i>	<i>2004</i>
	<i>Undergraduate degree (Physics)</i>	<i>University of Indonesia</i>	<i>1994</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Assistant Professor</i>	<i>IPB University</i>	<i>2013 - present</i>
Research and development projects over the last 5 years			
Industry collaborations over the last 5 years			
Patents and proprietary rights	<i>Title</i>		<i>Year</i>
	<i>Metode Pembuatan Film Tipis Berbasis Litium Niobat (LiNbO<sub>3</sub>) (Methods for Manufacturing Thin Films Based on Lithium Niobate (LiNbO<sub>3</sub>))</i>		<i>2021</i>
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (4 Published articles since 2019):</i></p> <p><i>Authors: H Alatas, Y Suryana, S Pambudi, T Widayanti, R P Jenie, R Zaheri, A Aridarma, S K Rahayu, T S Riadhie, V Rahmawaty, N P Har, M Zuhri, T Sumaryada and Irzaman</i></p>		

	<p><b>Title: <i>Fourier Transform Infra-Red spectrophotometry observation to find appropriate wavelength for non-invasive blood glucose level measurement optical device</i></b></p> <p><i>IOP Science, Journal of Physics: Conference Series, 2021, 1882(1):012009, <a href="https://doi.org/10.1088/1742-6596/1882/1/012009">https://doi.org/10.1088/1742-6596/1882/1/012009</a></i></p>						
<p>Activities in specialist bodies over the last 5 years</p>	<table border="1"> <thead> <tr> <th data-bbox="533 512 826 539"><i>Organization</i></th> <th data-bbox="826 512 1120 539"><i>Role</i></th> <th data-bbox="1120 512 1420 539"><i>Period</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="533 539 826 698"></td> <td data-bbox="826 539 1120 698"></td> <td data-bbox="1120 539 1420 698"></td> </tr> </tbody> </table>	<i>Organization</i>	<i>Role</i>	<i>Period</i>			
<i>Organization</i>	<i>Role</i>	<i>Period</i>					
<p>Website</p>	<p><a href="https://physics.ipb.ac.id/mhz/">https://physics.ipb.ac.id/mhz/</a></p>						

Name	<i>Nur Aisyah Nuzulia, S.Si., M.Si.</i>		
Post	<i>Biophysics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Master (Biophysics)</i>	<i>IPB University</i>	<i>2014</i>
	<i>Undergraduate degree (Physics)</i>	<i>IPB University</i>	<i>2010</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Assistant Professor</i>	<i>IPB University</i>	<i>2019</i> <i>–present</i>
Research and development projects over the last 5 years	<p><b><i>Title: Development of 3D Porous Microspheres for Bone Tissue Engineering: Applications in Radiotherapy and Orthobiology</i></b></p> <p><i>Period:2023-Present</i></p> <p><i>Partners: Persahabatan Hospital, Indonesia National Research and Innovation Agency</i></p> <p><i>Amount of Financing: IDR. 460.000.000 (EUR. 28111,60)</i></p> <p><b><i>Title: Toothpaste Fortified with Nanohydroxyapatite and Active Compounds of Temu Hitam Rhizome: Efforts to Minimize Dental Caries Incidence in Indonesia</i></b></p> <p><i>Period:2019-2023</i></p> <p><i>Partners: PT. Alesha Berkah Utama</i></p> <p><i>Amount of Financing: IDR. 4.499.000.000 (EUR. 274943,68)</i></p>		
Industry collaborations over the last 5 years	<p><i>PT. Pertiwi Technology</i></p> <p><i>2018-present</i></p> <p><i>PT.Alesha Berkah Utama</i></p>		

	2022-present										
Patents and proprietary rights	<table border="0"> <thead> <tr> <th style="text-align: left;"><i>Title</i></th> <th style="text-align: right;"><i>Year</i></th> </tr> </thead> <tbody> <tr> <td><i>Synthesis of 3D Calcium Phosphate Scaffold With Alginate And Collagen Porosifiers As Biomedical Materials to Accelerate Bone Damage Recovery</i></td> <td style="text-align: right;">2020</td> </tr> <tr> <td><i>Toothpaste Formulation Fortified with Nanohydroxyapatite and Black Ginger Rhizome Oil</i></td> <td style="text-align: right;">2023</td> </tr> <tr> <td><i>Nanohydroxyapatite and Collagen Based Supplement Composition for Bone Health and Their Manufacturing Process</i></td> <td style="text-align: right;">2023</td> </tr> <tr> <td><i>Manufacturing Process and Composition of Hydroxyapatite Serum</i></td> <td style="text-align: right;">2023</td> </tr> </tbody> </table>	<i>Title</i>	<i>Year</i>	<i>Synthesis of 3D Calcium Phosphate Scaffold With Alginate And Collagen Porosifiers As Biomedical Materials to Accelerate Bone Damage Recovery</i>	2020	<i>Toothpaste Formulation Fortified with Nanohydroxyapatite and Black Ginger Rhizome Oil</i>	2023	<i>Nanohydroxyapatite and Collagen Based Supplement Composition for Bone Health and Their Manufacturing Process</i>	2023	<i>Manufacturing Process and Composition of Hydroxyapatite Serum</i>	2023
<i>Title</i>	<i>Year</i>										
<i>Synthesis of 3D Calcium Phosphate Scaffold With Alginate And Collagen Porosifiers As Biomedical Materials to Accelerate Bone Damage Recovery</i>	2020										
<i>Toothpaste Formulation Fortified with Nanohydroxyapatite and Black Ginger Rhizome Oil</i>	2023										
<i>Nanohydroxyapatite and Collagen Based Supplement Composition for Bone Health and Their Manufacturing Process</i>	2023										
<i>Manufacturing Process and Composition of Hydroxyapatite Serum</i>	2023										
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (13 Published articles since 2019):</i></p> <p><i>Authors: NA Nuzulia, MT Islam, A Saputra, T Sudiro, GE Timuda, YW Sari, I Ahmed</i></p> <p><b><i>Title: Developing Highly Porous Glass Microspheres via a Single-Stage Flame Spheroidisation Process</i></b></p> <p><i>Journal of Physics: Conference Series, 2022/6, Vol2243(1).  <a href="https://doi.org/10.1088/1742-6596/2243/1/012005">https://doi.org/10.1088/1742-6596/2243/1/012005</a></i></p> <p><i>Authors: MT Islam, NA Nuzulia, L Macri-Pellizzeri, F Nigar, YW Sari, I Ahmed</i></p> <p><b><i>Title: Evolution of silicate bioglass particles as porous microspheres with a view towards ortho-biologics</i></b></p> <p><i>SAGE Publications, Journal of Biomaterials Applications, 2022/3, Vol36(8). <a href="https://doi.org/10.1177_08853282211059294">https://doi.org/10.1177_08853282211059294</a></i></p> <p><i>Authors: Yessie W Sari, Annisa Tsalsabila, Angga Saputra, Nur Aisyah Nuzulia, Yulianti Herbani</i></p>										

	<p><b>Title: Hydroxyapatite nucleation and growth modulated by amino acid-capped gold nanoparticles: An in vitro study</b></p> <p>Elsevier, <i>Ceramics International</i>, 1 June 2023, 49(11), 17166-17173.  <a href="https://doi.org/10.1016/j.ceramint.2023.02.080">https://doi.org/10.1016/j.ceramint.2023.02.080</a></p> <p>Authors: YW Sari, A Saputra, A Bahtiar, NA Nuzulia</p> <p><b>Title: Effects of Microwave Processing Parameters on The Properties of Nanohydroxyapatite: Structural, spectroscopic, hardness, and toxicity studies</b></p> <p><i>Ceramics International</i>, 1 November 2021, 47(21), 30061-30070.  <a href="https://doi.org/10.1016/j.ceramint.2021.07.182">https://doi.org/10.1016/j.ceramint.2021.07.182</a></p>						
<p>Activities in specialist bodies over the last 5 years</p>	<table border="1"> <thead> <tr> <th data-bbox="528 835 826 875"><i>Organization</i></th> <th data-bbox="826 835 1125 875"><i>Role</i></th> <th data-bbox="1125 835 1426 875"><i>Period</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="528 875 826 1019"></td> <td data-bbox="826 875 1125 1019"></td> <td data-bbox="1125 875 1426 1019"></td> </tr> </tbody> </table>	<i>Organization</i>	<i>Role</i>	<i>Period</i>			
<i>Organization</i>	<i>Role</i>	<i>Period</i>					
<p>Website</p>	<p><a href="https://physics.ipb.ac.id/nan/">https://physics.ipb.ac.id/nan/</a></p>						

Name	<i>Prof. Dr. Akhiruddin, M.Si.</i>		
Post	<i>Biophysics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institute</i>	<i>Year</i>
	<i>Doctorate (Electrical Engineering, Laser and Optoelectronics)</i>	<i>University of Indonesia</i>	<i>2007</i>
	<i>Master (Physics)</i>	<i>Bandung Institute of Technology</i>	<i>1997</i>
	<i>Undergraduate degree (Physics)</i>	<i>Hasanuddin University</i>	<i>1993</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Professor of Physics</i>	<i>IPB University</i>	<i>2022</i> <i>–present</i>
Research and development projects over the last 5 years	<p><b><i>Title: Optimasi Formulasi Pelepasan Pupuk Terkendali Pada Hidrogel Berbahan Karagenan-Aam Sebagai Agen Pembawa Pupuk (Optimization of Controlled Fertilizer Release Formulation on Hydrogels Made from Carrageenan-Aam As Fertilizer Carrier Agent)</i></b></p> <p><i>Period: 2022</i></p> <p><i>Amount of Financing: IDR. 150.000.000 (EUR. 9165,75)</i></p> <p><b><i>Title: Kajian Struktur Dan Pemanfaatan Karbon Aktif Sebagai Material Elektroda Untuk Pengembangan Sistem Microgrid (Study of Structure and Utilization of Activated Carbon as Electrode Material for Development of Microgrid Systems)</i></b></p> <p><i>Period: 2022</i></p> <p><i>Amount of Financing: IDR. 50.000.000 (EUR. 3055,25)</i></p>		

	<p><b>Title: Sustainable Bee Smart System Pengembangan Biodiversitas Lebah Sebagai Layanan Ekosistem Dan Kesehatan (Sustainable Bee Smart System Development of Bee Biodiversity as an Ecosystem and Health Service)</b></p> <p>Period: 2022</p> <p>Amount of Financing: IDR. 59.000.000 (EUR. 3605,19)</p> <p><b>Title: Modifikasi Kayu Cepat Tumbuh Menggunakan Partikel Nano Dalam Rangka Meningkatkan Kualitas Kayu Rakyat (Modification of Fast-Growing Wood Using Nanoparticles in Order to Improve the Quality of People's Wood)</b></p> <p>Period: 2021</p> <p>Amount of Financing: IRD. 161.100.000 (EUR. 9844.01)</p>										
Industry collaborations over the last 5 years											
Patents and proprietary rights	<table border="1"> <thead> <tr> <th data-bbox="536 1102 1300 1131"><i>Title</i></th> <th data-bbox="1300 1102 1418 1131"><i>Year</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="536 1173 1300 1317"><i>Sistem Pendeteksi Rayap Berbasis Sinyal Akustik dan Suhu (Termite Detection System Based on Acoustic and Temperature Signals)</i></td> <td data-bbox="1300 1173 1418 1202">2020</td> </tr> <tr> <td data-bbox="536 1359 1300 1603"><i>Pembuatan Elektroda Enzymatic Fuel Cell Pasta Karbon Termodifikasi Nanoserat Polianilin Untuk Meningkatkan Konduktivitas Arus Listrik (Manufacture of Enzymatic Fuel Cell Electrodes Modified Carbon Paste Polyaniline Nanofibers to Increase Electrical Conductivity)</i></td> <td data-bbox="1300 1359 1418 1388">2019</td> </tr> <tr> <td data-bbox="536 1646 1300 1731"><i>Proses Pembuatan Elektroda Enzimatis Untuk Biolistrik (The process of making enzymatic electrodes for bioelectricity)</i></td> <td data-bbox="1300 1646 1418 1675">2017</td> </tr> <tr> <td data-bbox="536 1774 1300 1917"><i>Proses Produksi Serbuk Hidroksiapatit Berbasis Cangkang Telur Bebek Menggunakan Teknologi Iradiasi Gelombang Mikro (Production Process of Duck Egg Shell Based</i></td> <td data-bbox="1300 1774 1418 1803">2017</td> </tr> </tbody> </table>	<i>Title</i>	<i>Year</i>	<i>Sistem Pendeteksi Rayap Berbasis Sinyal Akustik dan Suhu (Termite Detection System Based on Acoustic and Temperature Signals)</i>	2020	<i>Pembuatan Elektroda Enzymatic Fuel Cell Pasta Karbon Termodifikasi Nanoserat Polianilin Untuk Meningkatkan Konduktivitas Arus Listrik (Manufacture of Enzymatic Fuel Cell Electrodes Modified Carbon Paste Polyaniline Nanofibers to Increase Electrical Conductivity)</i>	2019	<i>Proses Pembuatan Elektroda Enzimatis Untuk Biolistrik (The process of making enzymatic electrodes for bioelectricity)</i>	2017	<i>Proses Produksi Serbuk Hidroksiapatit Berbasis Cangkang Telur Bebek Menggunakan Teknologi Iradiasi Gelombang Mikro (Production Process of Duck Egg Shell Based</i>	2017
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	<p><i>Hydroxyapatite Powder Using Microwave Irradiation Technology)</i></p> <p><i>Panel Akustik Dari Kayu Akasia (Acoustic Panels From Acacia Wood) 2013</i></p>						
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (40 Published articles since 2019):</i></p> <p><i>Authors: Permono Adi Putro, Akhiruddin Maddu, Hendradi Hardhienata, Isnaeni Isnaeni, Faozan Ahmad, Hermawan Kresno Dipojono</i></p> <p><i>Title: Revealing the incorporation of an NH 2 group into the edge of carbon dots for H2O2 sensing via the C–N··· H hydrogen bond interaction</i></p> <p><i>Physical Chemistry Chemical Physics, 2023, vol 25 (3), 2606-2617, Doi: <a href="https://doi.org/10.1039/D2CP04097B">https://doi.org/10.1039/D2CP04097B</a></i></p> <p><i>Authors: Muhammad Achirul Nanda, Kudang Boro Seminar, Dodi Nandika, Akhiruddin Maddu</i></p> <p><i>Title: Development of termite detection system based on acoustic and temperature signals</i></p> <p><i>Elsevier, Measurement, December 2019, Vol 147, page 106902, Doi: <a href="https://doi.org/10.1016/j.measurement.2019.106902">https://doi.org/10.1016/j.measurement.2019.106902</a></i></p> <p><i>Authors: Akhiruddin Maddu, Reny Meliafatmah, Erus Rustami</i></p> <p><i>Title: Enhancing Photocatalytic Degradation of Methylene Blue Using ZnO/Carbon Dots Nanocomposite Derived From Coffee Grounds.</i></p> <p><i>Polish Journal of Environmental Studies, 2021/1/1, Vol30(1), Doi: 10.15244/pjoes/120156</i></p>						
Activities in specialist bodies over the last 5 years	<table border="1"> <thead> <tr> <th><i>Organization</i></th> <th><i>Role</i></th> <th><i>Period</i></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	<i>Organization</i>	<i>Role</i>	<i>Period</i>			
<i>Organization</i>	<i>Role</i>	<i>Period</i>					
Website	<i><a href="https://physics.ipb.ac.id/akh/">https://physics.ipb.ac.id/akh/</a></i>						



Name	<i>Prof. Dr. Husin Alatas, M.Si.</i>		
Post	<i>Theoretical Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institution</i>	<i>Year</i>
	<i>post-doctoral (Physics)</i>	<i>Bandung Institute of Technology</i>	<i>2011</i>
	<i>Doctorate (Physics)</i>		<i>2005</i>
	<i>Master (Physics)</i>	<i>Bandung Institute of Technology</i>	<i>1998</i>
	<i>Undergraduate degree (Physics)</i>	<i>Bandung Institute of Technology</i>	<i>1995</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Professor</i>	<i>IPB University</i>	<i>2018- Present</i>
Research and development projects over the last 5 years	<p><b><i>Title: Kajian Dinamika dan Karakteristik Sistem Kompleks Berdasarkan Pemodelan Berbasis Agen dan Teori Kerapatan Fungsional. (Study of Dynamics and Characteristics of Complex Systems Based on Agent-Based Modeling and Density Functional Theory.)</i></b></p> <p><i>Period: 2021 - 2023</i></p> <p><i>Partners: Indonesia National Research and innovation agency</i></p> <p><i>Amount of financing: IDR. 341.986.000,00 (EUR. 20864,77)</i></p> <p><b><i>Title: Simulasi, Fabrikasi, dan Karakterisasi Substrat surface Enhanced Raman Spectroscopy (SERS) Untuk Deteksi Bahan Peledak. (Simulation, Fabrication, and Characterization of Substrate Surface Enhanced Raman Spectroscopy (SERS) for Explosives Detection.)</i></b></p> <p><i>Period: 2022</i></p> <p><i>Amount of Financing: IDR. 75.000.000 (EUR. 4575,79)</i></p> <p><b><i>Tittle: Peningkatan Kinerja dan Kepekaan Sensor Cahaya berbasis Ferroelektrik <math>BaxSr_{1-x}TiO_3</math> (<math>x = 0; 0,125; 0,25; 0,375; 0,5; 0,625; 0,75; 0,875; 1</math>) yang Terintegrasi dengan Smartphone Android serta</i></b></p>		

	<p><b>Penerapannya sebagai Pengendalian dan Pemantauan Lampu Jalan Pinta (Improved Performance and Sensitivity of BaxSr1-xTiO3 Ferroelectric-based Light Sensors (x = 0; 0.125; 0.25; 0.375; 0.5; 0.625; 0.75; 0.875; 1) Integrated with Android Smartphones and Their Application as Control and Monitoring of Lights)</b></p> <p>Period: 2021</p> <p>Partners: Indonesia's national research and innovation agency</p> <p>Amount of financing: IDR: 276.200.000,00 (EUR. 16851,12)</p> <p><b>Title: Kemandirian Bangsa Dalam teknologi Proses Pembuatan Alat Deteksi Dini Pengukuran Kadar HB Darah Non-Invasif (The Nation Independence in the Manufacturing Process of Non-Invasive HB Blood Levels Early Detection Devices)</b></p> <p>Period:2020</p> <p>Amount of Financing: IDR. 1.701.700.000 (EUR.103821.71)</p>								
Industry collaborations over the last 5 years	<p>Project title</p> <p>Partners</p>								
Patents and proprietary rights	<table border="1"> <thead> <tr> <th data-bbox="529 1240 1141 1288">Title</th> <th data-bbox="1141 1240 1426 1288">Year</th> </tr> </thead> <tbody> <tr> <td data-bbox="529 1288 1141 1489">Metode Pengukuran Kadar Hemoglobin Darah Secara Non Invasif (Non-Invasive Method of Measuring Blood Hemoglobin Levels)</td> <td data-bbox="1141 1288 1426 1489">2022</td> </tr> <tr> <td data-bbox="529 1489 1141 1780">Metode Elemen Hingga Ranah Frekuensi untuk Simulasi Pandu Gelombang Dalam Matlab/Octave (Frequency Domain Finite Element Method for Waveguide Simulation in Matlab/Octave)</td> <td data-bbox="1141 1489 1426 1780">2019</td> </tr> <tr> <td data-bbox="529 1780 1141 1966">Metode Pembuatan Film Tipis Berbasis Barium Titanat (BaTiO3) (Barium Titanate (BaTiO3) Based Thin Film Method)</td> <td data-bbox="1141 1780 1426 1966">2021</td> </tr> </tbody> </table>	Title	Year	Metode Pengukuran Kadar Hemoglobin Darah Secara Non Invasif (Non-Invasive Method of Measuring Blood Hemoglobin Levels)	2022	Metode Elemen Hingga Ranah Frekuensi untuk Simulasi Pandu Gelombang Dalam Matlab/Octave (Frequency Domain Finite Element Method for Waveguide Simulation in Matlab/Octave)	2019	Metode Pembuatan Film Tipis Berbasis Barium Titanat (BaTiO3) (Barium Titanate (BaTiO3) Based Thin Film Method)	2021
Title	Year								
Metode Pengukuran Kadar Hemoglobin Darah Secara Non Invasif (Non-Invasive Method of Measuring Blood Hemoglobin Levels)	2022								
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Metode Pembuatan Film Tipis Berbasis Barium Titanat (BaTiO3) (Barium Titanate (BaTiO3) Based Thin Film Method)	2021								

	<p><i>Alat Pelindung Pintar Dan Anti Air Untuk Sensor Ultrasonik HC-SR04 (Smart Protective And Waterproof Device For Ultrasonic Sensor HC-SR04)</i> 2021</p> <p><i>Probe Alat Ukur Hemoglobin Non-Invasive (Non-Invasive Hemoglobin Measurement Probe)</i> 2021</p> <p><i>Ekstrak Bidara Laut Sebagai Obat Antimalaria (Sea Bidara Extract As Antimalarial Medicine)</i> 2020</p> <p><i>Probe Tutup Penuh Untuk Alat Pengukuran Kadar Biomarker Darah Non Invasif (Full Cover Probe For Non-Invasive Blood Biomarker Level Measurement Tool)</i> 2020</p> <p><i>Probe Biomarker Glukosa Darah Non-Invasif dengan Metode Reflektansi (Non-Invasive Blood Glucose Biomarker Probe with Reflectance Method)</i> 2020</p> <p><i>V-Probe Untuk Alat Pengukuran Kadar Biomarker Darah Non Invasif (V-Probe Measurement For Non-Invasive Blood Biomarker Level Measurement)</i> 2020</p>
<p>Important publications over the last 5 years</p>	<p><i>Selected recent publications from a total of approx. (47 articles have been published since 2019):</i></p> <p><i>Authors: Aditya Wibawa Sakti, Setyanto Tri Wahyudi, Faozan Ahmad, Noviyani Darmawan, Hendradi Hardhienata, Husin Alatas</i></p> <p><b><i>Title: Effects of Salt Concentration on the Water and Ion Self-Diffusion Coefficients of a Model Aqueous Sodium-Ion Battery Electrolyte</i></b></p> <p><i>Taylor&amp;Francis, Ferroelectrics, 17 February 2019, Vol 540(1), Pages 227-237, <a href="https://doi.org/10.1080/00150193.2019.1611116">https://doi.org/10.1080/00150193.2019.1611116</a>.</i></p> <p><i>Authors: Yaya Suryana, Sabar Pambudi, Tika Widayanti, Renan Prasta Jenie, Bayu Prastowo, Nazopatul Patonah Har, Vania Rahmawaty,</i></p>

	<p>Muhammad Dahrul, Ade Kurniawan, Ridwan Siskandar, Ichsan Hardyanto, Johan Iskandar, Naufal Muharram Nurdin, Arga Ardidarma, Sri Kristiana Rahayu, Husin Alatas</p> <p><b>Title: Development of blood hemoglobin level early detection device based on a noninvasive optical platform</b></p> <p>Elsevier, Heliyon, 1 November 2022, Vol.8(11), pages e11260, <a href="https://doi.org/10.1016/j.heliyon.2022.e11260">https://doi.org/10.1016/j.heliyon.2022.e11260</a>.</p> <p>Authors: Rady Purbakawaca, Arief Sabdo Yuwono, I Dewa Made Subrata, Husin Alatas</p> <p><b>Title: Ambient Air Monitoring System With Adaptive Performance Stability</b></p> <p>IEEE Access, 14 November 2022, Vol 10, Pages 120086-120105, <a href="https://doi.org/10.1109/ACCESS.2022.3222329">https://doi.org/10.1109/ACCESS.2022.3222329</a></p>						
<p>Activities in specialist bodies over the last 5 years</p>	<table border="1"> <thead> <tr> <th data-bbox="528 1014 826 1055"><i>Organization</i></th> <th data-bbox="826 1014 1125 1055"><i>Role</i></th> <th data-bbox="1125 1014 1426 1055"><i>Period</i></th> </tr> </thead> <tbody> <tr> <td data-bbox="528 1055 826 1361"> <p>Pusat Kajian Transdisiplin Dan Sains Keberlanjutan</p> </td> <td data-bbox="826 1055 1125 1361"> <p>Secretary</p> </td> <td data-bbox="1125 1055 1426 1361"> <p>2022 - present</p> </td> </tr> </tbody> </table>	<i>Organization</i>	<i>Role</i>	<i>Period</i>	<p>Pusat Kajian Transdisiplin Dan Sains Keberlanjutan</p>	<p>Secretary</p>	<p>2022 - present</p>
<i>Organization</i>	<i>Role</i>	<i>Period</i>					
<p>Pusat Kajian Transdisiplin Dan Sains Keberlanjutan</p>	<p>Secretary</p>	<p>2022 - present</p>					
<p>Website</p>	<p><a href="https://physics.ipb.ac.id/hal/">https://physics.ipb.ac.id/hal/</a></p>						

Name	<i>Prof. Dr. R. Tony Ibnu Sumaryada Wijaya Puspita, M.Si.</i>		
Post	<i>Theoretical and Computational Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institution</i>	<i>Year</i>
	<i>Doctorate (Physics)</i>	<i>Florida State University</i>	<i>2007</i>
	<i>Master (Physics)</i>	<i>University of Indonesia</i>	<i>2000</i>
	<i>Undergraduate degree (Physics)</i>	<i>University of Indonesia</i>	<i>1996</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Professor of Physics</i>	<i>IPB University</i>	<i>2021-present</i>
	<i>Visiting Assistant of Professor of Physics</i>	<i>Frostburg State University</i>	<i>2009-2011</i>
	<i>Temporary Assistant Professor of Physics</i>	<i>Amstrong State University</i>	<i>2008 - 2009</i>
Research and development projects over the last 5 years	<p><b><i>Title: Deteksi air dan kontaminan bahan pangan berskala nano menggunakan molecular dynamics dan optika nonlinier (Nanoscale detection of water and food contaminants using molecular dynamics and nonlinear optics)</i></b></p> <p><i>Period : 2023 - present</i></p> <p><i>Amount of financing: IDR. 128.600.000 (EUR. 7742,51)</i></p> <p><b><i>Title: Sustainable Bee Smart System Pengembangan Biodiversitas Lebah Sebagai Layanan Ekosistem Dan Kesehatan (Sustainable Bee Smart System Development of Bee Biodiversity as an Ecosystem and Health Service)</i></b></p> <p><i>Period: 2021</i></p> <p><i>Amount of financing: IDR 59.000.000 (EUR 3599,62)</i></p>		

	<p><b>Title: Optimisasi dan Karakterisasi Permukaan Film Tipis Sel Surya menggunakan Metode nano optik berbasis Simplified Bond Hyperpolarizability Model (SBHM) (Optimization and Characterization of Thin Film Solar Cell Surfaces using a nano-optical method based on the Simplified Bond Hyperpolarizability (SBHM) Model</b></p> <p>Period: 2019</p> <p>Amount of financing: IDR. 161.972.000 (EUR. 9882,01)</p> <p><b>Title: Pengembangan Perangkat Lunak Design dan Analisis Keselamatan Bahan Bakar RDE (Reaktor Daya Eksperimental) (RDE (Experimental Power Reactor) Fuel Safety Design and Analysis Software Development)</b></p> <p>Period: 2019</p> <p>Amount of financing: IDR. 100.000.000 (EUR. 6101,06)</p> <p><b>Title: Penambatan Molekuler Katekin, Kamperol, dan Kursetin terhadap Aktivitas Inhibisi Protein Tirosin Fosfatase 1B (Catechin, Camphorol, and Curcetin Molecular Binding of Protein Tyrosine Phosphatase 1B Inhibitory Activity)</b></p> <p>Period: 2019</p> <p>Amount of financing: IDR. 30.000.000 (EUR. 1830,32)</p>				
Industry collaborations over the last 5 years	<p>Project title:</p> <p>Partners:</p>				
Patents and proprietary rights	<table border="1"> <thead> <tr> <th data-bbox="534 1561 1236 1592">Title</th> <th data-bbox="1236 1561 1420 1592">Year</th> </tr> </thead> <tbody> <tr> <td data-bbox="534 1632 1236 1937"> <p>Bahan Penyusun Inhaler Berbasis Grafena Oksida dan Senyawa Aktif Eucalyptol (1,8-Cineole) Secara In-Silico Sebagai Inhibitor Virus SARS-CoV-2 (Graphene Oxide-Based Inhaler Ingredients and Active Compounds Eucalyptol (1,8-Cineole) As SARS-CoV-2 Virus Inhibitors) In-Silico analysis</p> </td> <td data-bbox="1236 1632 1420 1664">2021</td> </tr> </tbody> </table>	Title	Year	<p>Bahan Penyusun Inhaler Berbasis Grafena Oksida dan Senyawa Aktif Eucalyptol (1,8-Cineole) Secara In-Silico Sebagai Inhibitor Virus SARS-CoV-2 (Graphene Oxide-Based Inhaler Ingredients and Active Compounds Eucalyptol (1,8-Cineole) As SARS-CoV-2 Virus Inhibitors) In-Silico analysis</p>	2021
Title	Year				
<p>Bahan Penyusun Inhaler Berbasis Grafena Oksida dan Senyawa Aktif Eucalyptol (1,8-Cineole) Secara In-Silico Sebagai Inhibitor Virus SARS-CoV-2 (Graphene Oxide-Based Inhaler Ingredients and Active Compounds Eucalyptol (1,8-Cineole) As SARS-CoV-2 Virus Inhibitors) In-Silico analysis</p>	2021				



<p>Important publications over the last 5 years</p>	<p><i>Selected recent publications from a total of approx. (46 articles have been published since 2019):</i></p> <p><i>Authors: T Sumaryada, M Sandy Gunawan, S Perdana, S Arjo, A Maddu</i></p> <p><b><i>Title: A molecular interaction analysis reveals the possible roles of graphene oxide in a glucose biosensor</i></b></p> <p><i>MDPI, Biosensors, 28 January 2019, Vol; 9(1), page: 18, <a href="https://doi.org/10.3390/bios9010018">https://doi.org/10.3390/bios9010018</a></i></p> <p><i>Authors: R Rizaldy, AR Alfarasyi, A Sulaksono, T Sumaryada</i></p> <p><b><i>Title: Neutron-star deformation due to anisotropic momentum distribution of neutron-star matter</i></b></p> <p><i>American Physical Society, Physical Review C, 26 November 2019, Vol 100(5), Pages 055804, <a href="https://doi.org/10.1103/PhysRevC.100.055804">https://doi.org/10.1103/PhysRevC.100.055804</a></i></p> <p><i>Authors: Kartono, A., Mafahir, I.A., Wahyudi, S.T., Setiawan, A.A., Sumaryada, T</i></p> <p><b><i>Title: A New Method for Estimating Diagnostic Parameters in the Dynamics Model of Modified Glucose-Insulin Homeostasis from the Oral Glucose Tolerance Test Using a Gravitational Search Algorithm</i></b></p> <p><i>Springer Berlin Heidelberg, Arabian Journal for Science and Engineering, 1 January 2022, Pages 1-13, <a href="https://doi.org/10.1007/s13369-021-05945-5">https://doi.org/10.1007/s13369-021-05945-5</a></i></p>						
<p>Activities in specialist bodies over the last 5 years</p>	<table border="1"> <thead> <tr> <th><i>Organisation</i></th> <th><i>Role</i></th> <th><i>Period</i></th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	<i>Organisation</i>	<i>Role</i>	<i>Period</i>			
<i>Organisation</i>	<i>Role</i>	<i>Period</i>					
<p>Website</p>	<p><a href="https://physics.ipb.ac.id/rti/">https://physics.ipb.ac.id/rti/</a></p>						

Name	<i>Rima Fitria Adiati, S.T., M.T.</i>		
Post	<i>Applied Physics</i>		
Academic career	<i>Initial academic appointment</i>	<i>Institution</i>	<i>Year</i>
	<i>Master (Engineering Physics)</i>	<i>Sepuluh Nopember Institute of Technology</i>	<i>2019</i>
	<i>Undergraduate degree (Physics)</i>	<i>Sepuluh Nopember Institute of Technology</i>	<i>2017</i>
Employment	<i>Position</i>	<i>Employer</i>	<i>Period</i>
	<i>Lecturer</i>	<i>IPB-University</i>	<i>2022 - Present</i>
Research and development projects over the last 5 years			
Industry collaborations over the last 5 years			
Patents and proprietary rights	<i>Title</i>	<i>Year</i>	
	<i>Metode pengukuran Kadar Hemoglobin Darah Secara Non-Invasif (Non-Invasive Method of Measuring Blood Hemoglobin Levels)</i>	<i>2022</i>	
	<i>Metode Pembuatan Film Tipis Berbasis Litium Niobat (LiNbO<sub>3</sub>) (Lithium Niobate (LiNbO<sub>3</sub>) Based Thin Film Preparation Method)</i>	<i>2021</i>	

	<p><i>Metode Pembuatan Film Tipis Berbasis Barium Titanat (BaTiO<sub>3</sub>) (Barium Titanate (BaTiO<sub>3</sub>) Based Thin Film Preparation Method )</i></p>						
<p>Important publications over the last 5 years</p>	<p><i>Selected recent publications from a total of approx. (4 articles were published since 2019):</i></p> <p><i>Authors: Rima Adiaty, Agus M. Hatta</i></p> <p><b><i>Title: A study of packaging schemes for SMS optical fiber temperature sensor</i></b></p> <p><i>National Institute of Optoelectronics, Optoelectronics and Advanced Materials Rapid Communications, 7 April 2021, Vol 15, pages 3-4</i></p> <p><i>Author(s): Rima Fitria Adiaty, Apriani Kusumawardhani, Heru Setijono</i></p> <p><b><i>Title: Analysis of signal-to-noise ratio and bit error rate parameters of optical fiber communication backbone in the Lamongan-Kebalen segment</i></b></p> <p><i>SPIE, Third International Seminar on Photonic, Optics, and its application (ISPhOA 2018) 11 April 2019, Volume 11044, pages 149 - 154</i></p> <p><i>Doi: <a href="https://doi.org/10.1117/12.2504200">https://doi.org/10.1117/12.2504200</a></i></p>						
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<i>Organisation</i>	<i>Role</i>	<i>Period</i>					
<p>Website</p>	<p><a href="https://physics.ipb.ac.id/rfa/">https://physics.ipb.ac.id/rfa/</a></p>						