



STAFF HANDBOOK

Name	Muhamad Gina Nugraha				
Position	Physics Education				
Academic career	<i>Initial academic appointment</i>	<i>Institution</i>	<i>Year</i>		
		Associate Professor, Department of Physics Education of Universitas Pendidikan Indonesia	2020-Now		
	<i>Habilitation [German post-doctoral qualification] (Subject)</i>	<i>Institution</i>	<i>Year</i>		
		-	-		
	<i>Doctorate (Subject)</i>	<i>Institution</i>	<i>Year</i>		
	<i>Master degree (subject)</i>	<i>Institution</i>	<i>Year</i>		
		Institut Teknologi Bandung	2011-2014		
	<i>Master degree (subject)</i>	<i>Institution</i>	<i>Year</i>		
		Universitas Pendidikan Indonesia	2009-2011		
	<i>Undergraduate degree (subject)</i>	<i>Institution</i>	<i>Year</i>		
		Universitas Pendidikan Indonesia	2003-2007		
Employment	<i>Position</i>	<i>Employer</i>	<i>Year</i>		
	Lecturer	Dean	2012-Now		
Research and development projects over the last 5 years	<i>Name of project or research focus</i>				
	<i>Period and any other information</i>				
	<i>Partners, if applicable</i>				
	<i>Amount of financing</i>				
	No	Year	Title of Research Project	Financing	
				Sources	
				Amount (Million Rp)	
	1	2017 - 2018	Penerapan Eksperimen Berbasis Ketrampilan Proses Sains (KPS) Untuk Meningkatkan KPS dan Penguasaan Konsep Bagi Mahasiswa Calon Guru Fisika	Ministry of Research and Technology of the Republic of Indonesia	75 (2018) 75 (2017)
	2	2018-2019	Desain Didaktik Pembelajaran Fisika Berdasarkan Analisis Respon Siswa Dalam Pembelajaran Dengan Menggunakan Dimensi Belajar Marzano dan Strategi <i>Reading Infusion</i> Terhadap Literacy Scientific	Ministry of Research and Technology of the Republic of Indonesia	120 (2018) 55 (2019)
	3	2019	Pengembangan Model Penilaian Eksperimen Menggunakan Socio Assessment Pada Perkuliahan Eksperimen Fisika Dasar I (EFD 1) Bagi Calon Guru Fisika	Universitas Pendidikan Indonesia	32.5 (2019)



Industry collaborations over the last 5 years	-															
Patents and proprietary rights	No.	Title	Type	Year												
	1	Perangkat pembelajaran materi Usaha dan Energi untuk siswa SMA kelas X menggunakan pembelajaran Think Pair Share berbantuan PDEODE*E	Proprietary rights	2017												
	2	Lembar kerja praktikum Fisika Dasar 1, Lembar kerja mahasiswa (LKM) eksperimen berbasis Keterampilan Proses Sains (KPS) untuk melatih kemampuan KPS calon guru Fisika	Proprietary rights	2017												
	3	Buku manual/petunjuk Allepran (Alarm toilet pengingat barang bawaan)	Proprietary rights	2019												
	4	Desain Didaktik Pembelajaran Fisika Menggunakan Dimensi Belajar Marzano Dan Strategi Reading Infusion	Proprietary rights	2019												
	5	Eksperimen sederhana untuk memahami prinsip kontinuitas fluida	Proprietary rights	2021												
Important publications over the last 5 years	<p><i>Selected recent publications from a total of approx. (give total number): 16 Publication (Scopus Indexed)</i></p> <p><i>Author(s)</i></p> <p><i>Title</i></p> <p><i>Any other information</i></p> <p><i>Publisher, place of publication, date of publication or name of periodical, volume, issue, page numbers</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr style="background-color: #4a86e8; color: white;"> <th style="width: 10%;">No</th> <th style="width: 60%;">Publication</th> <th style="width: 30%;">Author (s)</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">1</td> <td>Development of Reasoning Test Instrument Based on TIMSS Framework for Measuring Reasoning Ability of Senior High School Student on the Physics Concept Journal of Physics: Conf. Series 812 (2017) 012108, IOP Publishing doi:10.1088/1742-6596/812/1/012108</td> <td>Muslim, A Suhandi, M G Nugraha</td> </tr> <tr> <td style="text-align: center;">2</td> <td>Recostrucing the Physics Teaching Didactic based on Marzano's Learning Dimension on Training the Scientific Literacies Journal of Physics: Conf. Series 812 (2017) 012102, IOP Publishing doi:10.1088/1742-6596/812/1/012102</td> <td>S Karim, E C Prima, S Utari, D Saepuzaman, M G Nugraha</td> </tr> <tr> <td style="text-align: center;">3</td> <td>Developing energy and momentum conceptual survey (EMCS) with four-tier diagnostic test items AIP Conference Proceedings 1848, 050010 (2017); doi: 10.1063/1.4983966</td> <td>Nur Faadhilah Afif, Achmad Samsudin, Muhammad Gina Nugraha</td> </tr> </tbody> </table>				No	Publication	Author (s)	1	Development of Reasoning Test Instrument Based on TIMSS Framework for Measuring Reasoning Ability of Senior High School Student on the Physics Concept Journal of Physics: Conf. Series 812 (2017) 012108, IOP Publishing doi:10.1088/1742-6596/812/1/012108	Muslim, A Suhandi, M G Nugraha	2	Recostrucing the Physics Teaching Didactic based on Marzano's Learning Dimension on Training the Scientific Literacies Journal of Physics: Conf. Series 812 (2017) 012102, IOP Publishing doi:10.1088/1742-6596/812/1/012102	S Karim, E C Prima, S Utari, D Saepuzaman, M G Nugraha	3	Developing energy and momentum conceptual survey (EMCS) with four-tier diagnostic test items AIP Conference Proceedings 1848, 050010 (2017); doi: 10.1063/1.4983966	Nur Faadhilah Afif, Achmad Samsudin, Muhammad Gina Nugraha
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	Published by the American Institute of Physics	
4	Computer Virtual Media-Aided Active Learning Student Sheets (ALSS) to Improve Students' Understanding on PV, PT, VT, and TS Diagrams of Ideal Gas IOP Conf. Series: Materials Science and Engineering 288 (2017) 012050 doi:10.1088/1757-899X/288/1/012050	D Saepuzaman, S Karim, M G Nugraha and A Zulfikar
5	Cililin Landslide Process Modelling Using Lumped Mass Model Pertanika J. Sci. & Technol. 25 (S): 23 - 34 (2017) ISSN: 0128-7680 © 2017 Universiti Putra Malaysia Press	Duden Saepuzaman, Wahyu Srigutomo and Muhamad Gina Nugraha
6	Using Jolly Balance Spring Method to Determine Pure Water Surface Tension Coefficient Pertanika J. Sci. & Technol. 26 (3): 1435 - 1442 (2018) ISSN: 0128-7680 © 2018 Universiti Putra Malaysia Press	Duden Saepuzaman, Muhamad Gina Nugraha , Regiana Dewi, Fitri Kafiyan and Fanny Herliyana Dewi
7	Influence of Partial Solar Eclipse 2016 on the surface gravity acceleration using photogate sensor on Kater's reversible pendulum Journal of Physics: Conference Series 771 (2016) 012002 Volume 771, Number 1, IOP Publishing doi:10.1088/1742-6596/771/1/012002	M G Nugraha , D Saepuzaman, F N Sholihat, S Ramayanti, A H Setyadin, A R Ferahenki, A Samsudin, J A Utama, H Susanti, K H Kirana
8	Optimization of Rectilinear Motion Experiments using Tracker Application IOP Conf. Series: Materials Science and Engineering 288 (2017) 012096 doi:10.1088/1757-899X/288/1/012096	M G Nugraha , K H Kirana, F Nugraha, E A Nurinsani and F N Sholihat
9	The Prediction of Rockfall Run-Out Using CRSP 3D: A Case Study at Gunung Batu, Lembang, West Java, Indonesia Pertanika J. Sci. & Technol. 25 (S): 47 - 56 (2017) ISSN: 0128-7680 © 2017 Universiti Putra Malaysia Press	Muhamad Gina Nugraha , Kartika Hajar Kirana, Wahyu Srigutomo, Duden Saepuzaman, Cahyo Aji Hapsoro and Rahmat Firman Septiyanto



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10	Redesign of students' worksheet on basic physics experiment based on students' scientific process skills analysis in Melde's law. Journal of Physics: Conf. Series 1013 (2018) 012038, IOP	M G Nugraha , S Utari, D Saepuzaman and F Nugraha
11	Development of basic physics experiments based on science process skills (SPS) to enhance mastery concepts of physics preservice teachers in Melde's law Journal of Physics: Conf. Series 1280 (2019) 052075, IOP	M G Nugraha* , S Utari, D Saepuzaman, F N Solihat and K H Kirana
12	ICT media utilization model to increase science process skills on natural science lessons in junior high school Journal of Physics: Conference Series 1280 (2019) 052004 doi:10.1088/1742-6596/1280/5/052004	A Suyatna*, M G Nugraha and I Rakhmawati
13	Anomalies of Earth Surface Gravity Field (G) During Total Lunar Eclipse (TLE) On January 31 And July 28 2018 Using Video Tracker Analysis On Pendulum Harmonic Motion Journal of Engineering Science and Technology Vol. 15, No. 2 (2020) 1001 - 1010 © School of Engineering, Taylor's University	Muhamad Gina Nugraha , Raden Giovanni Ariantara, Annisa Nurjanah, Harbi Setyo Nugroho, Judhistira Aria Utama, Duden Saepuzaman, Hana Susanti, Fitri Nurul Sholihat, Anggi Hanif Setyadin, Kartika Hajar Kirana
14	Homemade experiment for understanding the fluid continuity principle Phys. Educ. 56 (2021) 035013 (8pp)	M G Nugraha , U Purwana, S Parwati and K H Kirana
15	Magnetic morphology and mineralogy in urban soil of Bandung City, Indonesia Journal of Physics: Conference Series 1876 (2021) 012006 IOP Publishing doi:10.1088/1742-6596/1876/1/012006	K H Kiranaa, J Aprilawardani, D Ariza, D Fitriani and E Agustine and M G Nugraha
16	Reconstructing Students' Misconceptions on Work and Energy through the PDEODE*E Tasks with Think-Pair-Share Journal of Turkish Science Education, 2021, 18(1), 118-144. DOI no: 10.36681/tused.2021.56	Achmad Samsudin, Nur Faadhilah Afif, Muhamad Gina Nugraha , Andi Suhandi, Nuzulira Janeusse Fratiwi, Adam Hadiana Aminudin, Rizal Adimayuda, Suharto Linuwih, Bayram Costu



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Activities in specialist bodies over the last 5 years	Organization	Role	Periods
	Physical Society of Indonesia	Member	2015 - Now
	* <i>Membership without a specific role need not be mentioned</i>		