



CURRICULUM VITAE

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Faculty: Fakultas Matematika dan IPA

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Biography

Scopus of the Last 5 Years

Tiny (ZnO)_n clusters supported on graphene for solar energy trapping: A density functional theory study. Journal of the Taiwan Institute of Chemical Engineers, Jonuarti R., 2023

Factor Analysis Affecting the Implementation of the Generative Learning Model with a Cognitive Conflict Strategy in the Computational Physics Course during the COVID-19 Pandemic Era. Educational Administration: Theory and Practice, Akmam A., 2022

Green synthesis of silver nanoparticles from anthocyanin extracts of purple cabbage (brassica oleracea var capitata) and its characteristics for dye-sensitized solar cells (DSSC) application. Journal of Physics: Conference Series, Arsyad W.S., 2022

The Effect of Molecular Orientation in Disperse Red-1 Film on Its Refractive Index. Journal of Physics: Conference Series, Herman H., 2022

Need analysis to develop a generative learning model with a cognitive conflict strategy oriented to creative thinking in the Computational Physics course. Journal of Physics: Conference Series, Akmam A., 2022

Verdet constant of various types of honey and sugar solution analyzed at different concentration. Journal of Physics: Conference Series, Purwandari E., 2021

IR emission of Er³⁺ ion-doped fluoroborotellurite glass for communication application. Journal of Non-Crystalline Solids, Yuliantini L., 2021

Problems of students in following the online learning process in the covid-19 pandemic. Journal of Physics: Conference Series, Akmam A., 2021

Preliminary study of graphene like material fabrication from coconut shell using conventional furnace. Journal of Physics: Conference Series, Hidayat R., 2021

Photostabilization of phycocyanin from Spirulina platensis modified by formaldehyde. Process Biochemistry, Munawaroh H.S.H., 2020

Design of a simple and low cost electrical property tester for graphene material : a preliminary study. Journal of Physics: Conference Series, Hidayat R., 2020

Effects of interface state density on the carrier transport and performance of metal-insulator-semiconductor (MIS) type thin film solar cells. Journal of Physics: Conference Series, Oktasendra F., 2020

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A control of TiO₂ nanostructures by hydrothermal condition and their application: A short review. IOP Conference Series: Materials Science and Engineering, Hidayat R., 2019

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Web of Science (WoS) of the Last 5 Years

Eco-friendly direct-current pulsed electropolymerization of polyaniline nanofibers on synthetic graphite substrate for counter electrode in dye-sensitized solar cells. POLYMER-PLASTICS TECHNOLOGY AND MATERIALS, Fauziah, N; Khasannah, WL; Andari, GA; Fatya, AI; Benu, DP; Steky, FV; Milana, P; Hidayat, R; Suendo, V., 2023

Photostabilization of phycocyanin from *Spirulina platensis* modified by formaldehyde. PROCESS BIOCHEMISTRY, Munawaroh, HSH; Gumilar, GG; Alifia, CR; Marthania, M; Stellasary, B; Yuliani, G; Wulandari, AP; Kurniawan, I; Hidayat, R; Ningrum, A; Koyande, AK; Show, PL., 2020

Facile deposition of reduced graphene oxide-based transparent conductive film with microwave assisted method. THIN SOLID FILMS, Aimon, AH; Hidayat, R; Rahmawati, D; Sutarto, R; Permatasari, FA; Iskandar, F., 2019

Performance of *Pterocarpus Indicus* Willd Leaf Extract as Natural Dye TiO₂-Dye/ITO DSSC. MATERIALS TODAY-PROCEEDINGS, Diantoro, M; Maftuha, D; Suprayogi, T; Iqbal, MR; Solehudin; Mufti, N; Taufiq, A; Hidayat, A; Suryana, R; Hidayat, R., 2019

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Factor Analysis Affecting the Implementation of the Generative Learning Model with a Cognitive Conflict Strategy in the Computational Physics Course during the COVID-19. Educational Administration: Theory and Practice 28 (01), 64-74, 2022, A Akmam, R Hidayat, F Mufit, N Jalinus, A Amran, 2022

Analysis of Students' Attitudes and Difficulties in Studying Computational Physics. Berkala Ilmiah Pendidikan Fisika 10 (1), 34-43, 2022, R Indriani, A Akmam, F Mufit, R Hidayat, SY Sari, 2022

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Analysis of student's creative thinking ability in computation physics course. Gravity: Jurnal Ilmiah Penelitian dan Pembelajaran Fisika 8 (2), 2022, RM Putri, A Akmam, F Mufit, SY Sari, R Hidayat, 2022

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Problems of students in following the online learning process in the covid-19 pandemic. Journal of Physics: Conference Series 1876 (1), 012083, 2021, A Akmam, R Hidayat, F Mufit, N Jalinus, A Amran, 2021

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The Improvement of Physics Teachers' Competence in Developing an Interactive Recitation Programs to Remediate Students' Misconception. Indonesian Journal of Science and Mathematics Education 4 (3), 242-252, 2021, PD Sundari, WS Dewi, D Saputra, R Hidayat, 2021

Primary and Secondary Education During COVID-19 (Disruptions to Educational Opportunity During a Pandemic. Education 3-13, 2-2, 2021, N Irawan, R Hidayat, 2021

Design of a simple and low cost electrical property tester for graphene material: a preliminary study. Journal of Physics: Conference Series 1481 (1), 012010, 2020, R Hidayat, F Oktasendra, 2020

Effects of interface state density on the carrier transport and performance of metal-insulator-semiconductor (MIS) type thin film solar cells. Journal of Physics: Conference Series 1481 (1), 012005, 2020, F Oktasendra, R Hidayat, RI Utama, 2020

PERAN HUKUM ADAT DALAM PELAKSANAAN SYARIAT ISLAM DI ACEH. AL-ILMU 5 (2), 124-146, 2020, R Hidayat, AM Afni, R Ananda, B Ningsih, 2020

Nonlinear Finite Element Method Analysis of After Fire Reinforced Concrete Beam Strengthened with Carbon Fiber Strip. Journal of Physics: Conference Series 1175 (1), 2019, BSRH Eka Juliafad, R Ananda, D Sulisty, 2019

Facile deposition of reduced graphene oxide-based transparent conductive film with microwave assisted method. Thin Solid Films 692, 137618, 2019, AH Aimon, R Hidayat, D Rahmawati, R Sutarto, FA Permatasari, ..., 2019

Research of the Last 5 Years

Pengembangan Learning Physics Game Bermuatan Literasi Saintifik Dalam Rangka Meningkatkan Pemahaman Konsep Fisika Siswa Sma. Pd-penelitian Dasar, Leader: Renol Afrizon, Implementation Year: 2022

Pengembangan Model Pembelajaran Generatif Berstrategi Konflik Kognitif Berorientasi Berpikir Kreatif Mahasiswa Pada Mata Kuliah Komputasi Fisika. Pd-penelitian Dasar, Leader: Akmam Akmam, Implementation Year: 2022

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Studi Pengaruh Suhu Annealing Terhadap Sifat Grafena Hasil Sintesis Limbah Tempurung Kelapa. Penelitian Pemula, Leader: Rahmat Hidayat, Implementation Year: 2020

Pemodelan Transport Pembawa Muatan Pada Divais Sel Surya Berbasis Material Perovskite. Penelitian Pemula, Leader: Fandi Oktasendra, Implementation Year: 2019

Sintesis Grafena Berbiaya Rendah Dengan Memanfaatkan Limbah Tempurung Kelapa. Penelitian Pemula, Leader: Rahmat Hidayat, Implementation Year: 2019

Community Service of the Last 5 Years

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IPR's of the Last 5 Years

Asthma Control: Sistem Pemantauan Pernafasan Untuk Pasien Asma Berbasis IoT Guna Mewujudkan SDGS 2030. Inventor: TEGAR PUTRA SOCRATES; TEFA PUTRI SOCRATES; MUHAMMAD AZKI; Rahmat Hidayat, S.Pd., M.Si., Publication Date: 2022-06-20

ATHYNOS: Media Pembelajaran Berbasis Augmented Reality Dan Serious Game Untuk Meningkatkan Kemampuan Matematika Anak Diskalkulia Pada Siswa SD Di Era New Normal. Inventor: TEGAR PUTRA SOCRATES; AFDHAL AZRIANTO; M. FAIZ JIHADI A; Rahmat Hidayat, S.Pd., M.Si., Publication Date: 2022-06-20

Smart Detector: Pendeteksi Ujian Anti Nyontek Berbasis IoT Dan Biosecurity Management Guna Mewujudkan Indonesia Berbudaya Menuju Era Society 5.0. Inventor: TEGAR PUTRA SOCRATES; RIO FAHLEVI; RIZIQUL IKRAM; Muhammad Irvan Wahyudhie; Rahmat Hidayat, S.Pd., M.Si., Publication Date: 2022-06-20

Book of the Last 5 Years

Fisika Komputasi. ISBN: 9786233729567, Publisher: PT. RajaGrafindo Persada Depok, Year: 2023
