Profile Image

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CONTACT

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FACULTY
Fakulti Sains Dan Teknologi

SUPERVISION

	COMPLETED	ONGOING
PhD	1	2
Master	1	0

AREAS OF EXPERTISE

- Other Theoretical And Computational Physics N.e.c
- Condensed Matter Physics

ACADEMIC QUALIFICATION

- 2011 **PhD** - Fizik
- 2008 **Master** - Fizik
- 2006 **Bachelor** - Fizik Industri

RESEARCH

1. **A FIRST PRINCIPLES STUDY OF GRAPHENE, GRAPHENE-DOPED METAL AND THE INTERACTION WITH GLUCOSE**
   2026 | GERAN PENYELIDIKAN FUNDAMENTAL | ON GOING | MAIN RESEARCHER
2. **DENSITY FUNCTIONAL THEORY STUDY (DFT) STUDY OF INTERACTIONS BETWEEN PHOTOCATALYST-BIOADSORBENTS (O-PYRITE/CHITOSAN)**
   2019 | GERAN SEPADAN AGENSI KERAJAAN | COMPLETED | MAIN RESEARCHER
3. **ELECTRONIC PROPERTIES OF ARSENENE LAYER CALCULATED USING DENSITY FUNCTIONAL THEORY**
   2018 | GERAN PENYELIDIKAN USIM | COMPLETED | MAIN RESEARCHER
4. **AB INITIO CALCULATION OF VIBRATIONAL SPECTRA OF ZINC CLUSTER OF THE STANNITE-KESTERITE AND THE RAMAN SPECTRA**
   2013 | GERAN KPT | COMPLETED | MAIN RESEARCHER
5. **DENSITY FUNCTIONAL THEORY (DFT) CALCULATION OF SUPERCONDUCTIVITY OF CAC6, BAC6, YBC6, C6CAC6 AND OTHER GRAPHITE COMPOUNDS**
   2013 | GERAN PENYELIDIKAN USIM | COMPLETED | MAIN RESEARCHER

PUBLICATION

1. PRELIMINARY DFT STUDY OF THE ENERGY GAP OF GINGEROL

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE (SAIS) 2025

2025 PROCEEDING NON-INDEX MAIN AUTHOR

2. STRUCTURAL AND ELECTRONIC PROPERTIES OF SINGLE LAYER FLAT STANENE: A COMPUTATIONAL STUDY

2ND INTERNATIONAL SCIENCE, ENGINEERING AND TECHNOLOGY COLLOQUIUM (ISETC 2025)

2025 PROCEEDING NON-INDEX MAIN AUTHOR

3. SOROTAN 2: KEHILANGAN YANG MENGINSAFKAN

ASPIRASI DAN MEMOIR, HAL EHWAL PELAJAR DAN ALUMNI

2025 CHAPTER IN BOOK MAIN AUTHOR

4. THE STRUCTURAL STUDIES OF LAWSONE IN HENNA: THE FIRST PRINCIPLE APPROACH

THE INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE (SAIS 2024)

2024 PROCEEDING NON-INDEX MAIN AUTHOR

5. DETERMINATION OF THERMOELECTRIC PROPERTIES OF FLAT LAYER ARSENENE USING BOLTZMANN TRANSPORT EQUATION: A COMPUTATIONAL STUDY

PERSIDANGAN FIZIK KEBANGSAAN 2022

2022 PROCEEDING NON-INDEX MAIN AUTHOR

6. THE STUDY OF A STRUCTURAL AND ELECTRONIC PROPERTIES OF TWO-DIMENSIONAL FLAT LAYER ARSENENE USING PLANEWAVES DENSITY FUNCTIONAL CALCULATION

SOLID STATE PHENOMENA

2020 JOURNAL SCOPUS MAIN AUTHOR

7. INTRODUCTION TO VIBRATIONS AND WAVES

2019 BOOK MAIN AUTHOR

8. THE BAND STRUCTURE OF A RARE EARTH ELEMENT OF PROMETHIUM (III) OXIDE (PM2O3) CALCULATED USING DENSITY FUNCTIONAL THEORY

JOURNAL OF PHYSICS: CONFERENCE SERIES

2018 JOURNAL SCOPUS MAIN AUTHOR

9. A FIRST PRINCIPLE STUDY OF BAND STRUCTURE OF TETRAGONAL BARIUM TITANATE

AIP CONFERENCE PROCEEDINGS

2017 JOURNAL WOS MAIN AUTHOR

10. DENSITY FUNCTIONAL THEORY (DFT) CALCULATION OF BAND STRUCTURE OF KESTERITE

ADVANCED MATERIALS RESEARCH

2015 JOURNAL SCOPUS MAIN AUTHOR

11. THE STUDY OF BAND STRUCTURE OF GRAPHITE INTERCALATION COMPOUND CONTAINING SODIUM CALCULATED USING DENSITY FUNCTIONAL THEORY

JOURNAL OF PHYSICS: CONFERENCE SERIES

2015 JOURNAL SCOPUS MAIN AUTHOR

PUBLICATION

12. THE ELECTRONIC STRUCTUREOF PEROVSKITE-TYPE MATERIAL BARIUM TITANATE (BATIO3) CALCULATED USING DENSITY FUNCTIONAL THEORY(DFT)

THE 5TH INTERNATIONAL CONFERENCE ON SOLID STATE SCIENCE AND TECHNOLOGY 2015

2015 PROCEEDING NON-INDEX MAIN AUTHOR

13. AB INITIO CALCULATION OF VIBRATIONAL FREQUENCIES OF ZNSE AND THE RAMAN SPECTRA

AIP CONFERENCE PROCEEDINGS

2014 JOURNAL SCOPUS MAIN AUTHOR

14. CLUSTERS OF GAAS PREPARED BY QUANTUM MECHANICAL DFT AND THE NANOWIRE RAMAN SPECTRA

SAINS MALAYSIANA

2013 JOURNAL WOS MAIN AUTHOR

15. DFT CALCULATION OF VIBRATIONS IN THE CLUSTERS OF ZINC AND OXYGEN ATOMS, AHMAD NAZRUL ROSLI, HASAN A. KASSIM, AND KESHAV N. SHRIVASTAVA, SAINS MALAYSIANA, 42 (5) 649-654 (2013).

SAINS MALAYSIANA

2013 JOURNAL WOS MAIN AUTHOR

16. THE RAMAN SPECTRA OF NANOCOMPOSITE CLUSTERS OF ATOMS IN PHOSPHOROUS-SELENIUM GLASSY STATE, AHMAD NAZRUL ROSLI, HASAN A. KASSIM, KESHAV N. SHRIVASTAVA AND V. RADHIKA DEVI, ADVANCED MATERIALS RESEARCH 667, 99-103 (2013).

ADVANCED MATERIALS RESEARCH

2013 JOURNAL WOS MAIN AUTHOR

17. AB INITIO CALCULATION OF VIBRATIONAL FREQUENCIES OF ZNSE AND THE RAMAN SPECTRA, AHMAD NAZRUL ROSLI, NORIZA AHMAD ZABIDI AND HASAN ABU KASSIM, AIP CONFERENCE PROCEEDINGS 1588, 265 (2014); DOI: 10.1063/1.4866958.

FRONTIERS IN PHYSICS IMFP 2013, 27 – 30 AUGUST 2013, AWANA GENTING, PAHANG.

2013 PROCEEDING NON-INDEX MAIN AUTHOR

18. CLUSTERS OF GAAS PREPARED BY QUANTUM MECHANICAL DFT AND THE NANOWIRE RAMAN SPECTRA

NATIONAL PHYSICS CONFERENCES 2012

2012 PROCEEDING NON-INDEX MAIN AUTHOR

19. DENSITY-FUNCTIONAL THEORY OF VIBRATIONS IN NI1-XVX CLUSTERS.

JOURNAL OF CLUSTER SCIENCE

2011 JOURNAL WOS MAIN AUTHOR

20. DFT CALCULATION OF CLUSTERS OF BA AND O ATOMS AND THE RAMAN SPECTRA OF BARIUM PEROXIDE.

SPECTROCHIMICA ACTA PART A

2011 JOURNAL WOS MAIN AUTHOR

21. AB INITIO CALCULATION OF VIBRATIONAL FREQUENCIES OF ASO GLASS.

JOURNAL OF NON-CRYSTALLINE SOLIDS

2010 JOURNAL WOS MAIN AUTHOR

PUBLICATION

22. AB INITIO CALCULATIONS OF VIBRATIONAL FREQUENCIES IN A GLASSY STATE OF SELENIUM.

SAINS MALAYSIANA

2010 JOURNAL WOS MAIN AUTHOR

23. DFT CALCULATIONS OF VIBRATIONAL FREQUENCIES OF CARBON-NITROGEN CLUSTERS: RAMAN SPECTRA OF CARBON-NITRIDES

JOURNAL CLUSTER OF SCIENCE (SPRINGER)

2010 JOURNAL WOS MAIN AUTHOR

24. DFT CALCULATION OF CLUSTERS OF BA AND O ATOMS AND THE RAMAN SPECTRA OF BARIUM PEROXIDE.

ASIAN PHYSICS SYMPOSIUM, APS BANDUNG

2010 PROCEEDING NON-INDEX MAIN AUTHOR

25. CLUSTERS OF GE AND O ATOMS AND THE RAMAN SPECTRA OF VITREOUS GEO2.

PERSIDANGAN FIZIK KEBANGSAAN, PERFIK 2010

2010 PROCEEDING NON-INDEX MAIN AUTHOR

26. DENSITY FUNCTIONAL THEORY CALCULATION OF ADSORPTION OF NACL ON CHLOROPHYLL.

MALAYSIAN JOURNAL OF SCIENCE

2009 JOURNAL WOS MAIN AUTHOR

27. DFT CALCULATION OF VIBRATIONAL FREQUENCIES IN CLUSTERS OF FE AND AS ATOMS

INTERNATIONAL WORKSHOP ON ADVANCED MATERIAL FOR NEW AND RENEWABLE ENERGY

2009 PROCEEDING NON-INDEX MAIN AUTHOR

28. GRAPHENE INFRARED SPECTROSCOPY: DFT VIBRATIONAL FREQUENCIES

PROGRESS OF PHYSICS RESEARCH IN MALAYSIA: PERFIK2009

2009 PROCEEDING NON-INDEX MAIN AUTHOR

29. DFT DETERMINATION OF LAW OF FORCE IN FE AND P CLUSTERS OF ATOMS

FRONTIERS IN PHYSICS: 3RD INTERNATIONAL MEETING

2009 PROCEEDING NON-INDEX MAIN AUTHOR

30. AB INITIO CALCULATION OF VIBRATIONAL FREQUENCIES IN ASXS1−X GLASS AND THE RAMAN SPECTRA

NANOSCIENCE AND NANOTECHNOLOGY: INTERNATIONAL CONFERENCE ON NANOSCIENCE AND NANOTECHNOLOGY 2008

2008 PROCEEDING NON-INDEX MAIN AUTHOR

31. VON KLITZING''S CONSTANT AS A SPECIAL CASE OF GENERALIZED CONSTANTS

NANOSCIENCE AND NANOTECHNOLOGY: INTERNATIONAL CONFERENCE ON NANOSCIENCE AND NANOTECHNOLOGY 2008

2008 PROCEEDING NON-INDEX MAIN AUTHOR

AWARDS/RECOGNITION

1. SILVER MEDAL

2025 INTERNATIONAL

AWARDS/RECOGNITION

2. ANUGERAH KUALITI FST 2024

2025 UNIVERSITY

3. ANUGERAH LIBATSAMA KOMUNITI (PROJEK SCIFEST)

2025 UNIVERSITY

4. TRAINER / FACILITATOR

PERSATUAN PELAJAR TEKNOLOGI INDUSTRI KESIHATAN SESI AKADEMIK 2024/2025

2025 UNIVERSITY

5. IOT-ENABLED NEAR INFRARED SENSOR SYSTEM FOR POLYAMIDE ABSORPTION CHARACTERIZATION

INNOVATION BANK CHALLENGE 2025

2025 ANTARABANGSA SILVER