



DR. NADHRAH BINTI MD YATIM

PENSYARAH UNIVERSITI DS13

CONTACT

Phone: 6431

E-mail:
nadhrah@usim.edu.my

Faculty: Fakulti Sains
Dan Teknologi

SUPERVISION

PhD - Completed: 1, Ongoing: 1

Master - Completed: 3,
Ongoing: 0

AREAS OF EXPERTISE

Electrical Power Generation And Supply

Other Energy Transformation

Energy Supply And Conservation

Material Physics

ACADEMIC QUALIFICATION

PhD in Kejuruteraan Elektrik & Elektronik (2012)

Master in Mikroelektronik (2006)

Bachelor in Fizik (2001)

Lain-Lain (1998)

RESEARCH

1. OPTIMISE FABRICATION OF SNSE-BASED THERMOELECTRIC MATERIALS SINTERED BY COLD PRESSING (CP) FOR WASTE HEAT HARVESTING APPLICATIONS.

2023 GERAN PENYELIDIKAN USIM ON GOING MAIN RESEARCHER

2. BIOCLIMATIC ARCHITECTURE AND INTEGRATED HYBRID SOLAR COOLING SYSTEM FOR ENGAGING RESILIENT COMMUNITY TO CLIMATE CHANGE

2019 GERAN PENYELIDIKAN USIM COMPLETED CO-RESEARCHER

3. DETERMINATION OF ZT FOR SEGMENTED THERMOELECTRIC GENERATOR (TEG) UNDER LARGE TEMPERATURE DIFFERENCE (L Δ T) USING "OPEN-SHORT CIRCUIT" TECHNIQUE

2015 GERAN KPT COMPLETED MAIN RESEARCHER

4. DEVELOPMENT OF THERMOELECTRIC ZT MEASUREMENT FACILITY UNDER TEMPERATURE RANGE OF 300K-700K USING NOVEL "OPEN-SHORT CIRCUIT" TECHNIQUE

2015 GERAN PENYELIDIKAN JANGKA PENDEK COMPLETED MAIN RESEARCHER

5. SELF SENSING ACTUATOR MADE FROM THE CELLULOSE NANOCRYSTAL (CNC) AND BIO-BASED SHAPE MEMORY POLYURETHANE (SMPU)

2012 GERAN KPT COMPLETED CO-RESEARCHER

RESEARCH

6. BIOCOMPATIBILITY OF BIO-BASED SHAPE MEMORY POLYURETHANE NANOCOMPOSITE FOR BIOMEDICAL APPLICATION

2012

GERAN PENYELIDIKAN PENTADBIR

COMPLETED

CO-RESEARCHER

PUBLICATION

1. FABRICATION AND PERFORMANCE ANALYSIS OF Bi₂Te₃ AND Sb₂Te₃ THIN FILM THERMOELECTRIC GENERATOR FOR WASTE HEAT RECOVERY

JOURNAL OF CLIMATE CHANGE

2025 JOURNAL OTHER DATABASE CO-AUTHOR

2. FABRICATION OF THERMOELECTRIC BISMUTH TELLURIDE FILMS USING THE NOVEL RESIN 3D PRINTING TECHNIQUE

JOURNAL OF ADVANCED RESEARCH IN MICRO AND NANO ENGINEERING

2025 JOURNAL OTHER DATABASE CO-AUTHOR

3. LEARNING PATTERNS AND THEIR IMPLICATIONS IN THE DEVELOPMENT OF STUDENTS' RELIGIOUS CHARACTER

JOURNAL OF INNOVATION IN EDUCATIONAL AND CULTURAL RESEARCH

2025 JOURNAL OTHER DATABASE CO-AUTHOR

4. PERFORMANCE IMPROVEMENT OF A THIN FILM THERMOELECTRIC GENERATOR VIA OPTIMISATION OF THE DEPOSITION PARAMETERS

MATERIAL ADVANCES

2025 JOURNAL OTHER DATABASE CO-AUTHOR

5. FABRICATION OF Bi₂Te₃ AND Sb₂Te₃ THERMOELECTRIC THIN FILMS USING RADIO FREQUENCY MAGNETRON SPUTTERING TECHNIQUE

JOVE-JOURNAL OF VISUALIZED EXPERIMENTS

2024 JOURNAL ISI CO-AUTHOR

6. ANALYSIS OF ITEMS FOR MEASURING TECHNOLOGICAL LITERACY USING THE RASCH MODEL

JURNAL PENDIDIKAN IPA INDONESIA

2024 JOURNAL SCOPUS CO-AUTHOR

7. EFFECTS OF PH ON GRAIN SIZE AND STRUCTURE OF ZNO NANOPARTICLE SYNTHESIZED VIA SOL-GEL METHOD FOR ENHANCED THERMOELECTRIC MATERIALS

INTELLIGENT MANUFACTURING AND MECHATRONICS

2024 PROCEEDING NON-INDEX CO-AUTHOR

8. VISIBLE AND ANGULAR INTERROGATION OF KRETSCHMANN-BASED SPR USING HYBRID Au-ZNO OPTICAL SENSOR FOR HYPERURICEMIA DETECTION

HELIYON

2023 JOURNAL OTHER DATABASE CO-AUTHOR

9. DEVELOPMENT INSTRUMENT OF INTERDISCIPLINARY THINKING SKILLS IN SCIENCE LESSON PLANNING (IITSSL)

JOURNAL OF NATURAL SCIENCE TEACHING

2023 JOURNAL OTHER DATABASE CO-AUTHOR

10. A REVIEW OF CZTS THIN FILM SOLAR CELL TECHNOLOGY

JOURNAL OF ADVANCED RESEARCH IN FLUID MECHANICS AND THERMAL SCIENCES

2021 JOURNAL SCOPUS CORRESPONDING AUTHOR

11. OPTIMIZATION OF DYE EXTRACTION FROM PURPLE CABBAGE AND CORDYLINE FRUTICOSA IN DYE-SENSITIZED SOLAR CELL

SOLID STATE PHENOMENA

2020 JOURNAL ERA CO-AUTHOR

12. PCM-BASED FOR HEAT STORAGE IN SOLAR-THERMAL CONVERTER

SOLID STATE PHENOMENA

2020 JOURNAL ERA MAIN AUTHOR

13. INTRODUCTION TO VIBRATION AND WAVES

2019 BOOK CO-AUTHOR

PUBLICATION

14. A REVIEW OF ZT MEASUREMENT FOR BULK THERMOELECTRIC MATERIAL

AIP CONFERENCE PROCEEDING

2018 JOURNAL SCOPUS MAIN AUTHOR

15. A REVIEW ON FABRICATION METHODS FOR SEGMENTED THERMOELECTRIC STRUCTURE

AIP CONFERENCE PROCEEDINGS

2018 JOURNAL SCOPUS CO-AUTHOR

16. THE STRUCTURAL PROPERTIES OF Sn-DOPED ZINC OXIDE SYNTHESIZED BY HOT-TUBE THERMAL EVAPORATION

AIP CONFERENCE PROCEEDINGS

2018 JOURNAL SCOPUS CO-AUTHOR

17. EFFECT OF NATURAL DYE SENSITIZERS TOWARDS THE IMPROVEMENT OF DYE-SENSITIZED SOLAR CELL (DSSC) EFFICIENCY

AIP CONFERENCE PROCEEDINGS

2018 JOURNAL SCOPUS CO-AUTHOR

18. HYBRID SOLID POLYMER ELECTROLYTE FROM DIAPERS AS SEPARATOR FOR ELECTROCHEMICAL DOUBLE LAYER CAPACITOR (EDLC)

AIP CONFERENCE PROCEEDING

2018 JOURNAL SCOPUS CO-AUTHOR

19. RECENT ADVANCEMENT ON APPLIED PHYSICS, INDUSTRIAL CHEMISTRY AND CHEMICAL TECHNOLOGY: PROCEEDINGS OF THE INTERNATIONAL CONFERENCE ON RECENT ADVANCEMENTS IN SCIENCE AND TECHNOLOGY 2017 (ICORAST2017)

2018 BOOK EDITOR

20. INFLUENCE OF DIFFERENCE LENGTH SEGMENTED Bi₂Te_{2.95}Se_{0.05}/SnSe_{0.95}IO_{0.05} ON THERMOELECTRIC'S SEEBECK COEFFICIENT

ADVANCED SCIENCE LETTERS

2017 JOURNAL SCOPUS CO-AUTHOR

21. A REVIEW OF ZT MEASUREMENT FOR BULK THERMOELECTRIC MATERIAL

INTERNATIONAL CONFERENCE ON RECENT ADVANCEMENTS IN SCIENCE AND TECHNOLOGY (ICORAST) 2017

2017 PROCEEDING NON-INDEX MAIN AUTHOR

22. A REVIEW ON FABRICATION METHODS FOR SEGMENTED THERMOELECTRIC STRUCTURE

INTERNATIONAL CONFERENCE ON RECENT ADVANCEMENTS IN SCIENCE AND TECHNOLOGY (ICORAST) 2017

2017 PROCEEDING NON-INDEX CO-AUTHOR

23. EFFECT OF NATURAL DYE SENSITIZERS TOWARDS THE IMPROVEMENT OF DYE-SENSITIZED SOLAR CELL (DSSC) EFFICIENCY

INTERNATIONAL CONFERENCE ON RECENT ADVANCEMENTS IN SCIENCE AND TECHNOLOGY (ICORAST) 2017

2017 PROCEEDING NON-INDEX CO-AUTHOR

24. HYBRID SOLID POLYMER ELECTROLYTE FROM DIAPERS AS SEPARATOR FOR ELECTROCHEMICAL DOUBLE LAYER CAPACITOR (EDLC)

INTERNATIONAL CONFERENCE ON RECENT ADVANCEMENTS IN SCIENCE AND TECHNOLOGY (ICORAST) 2017

2017 PROCEEDING NON-INDEX CO-AUTHOR

25. EXPERIMENTAL INVESTIGATION OF SOLAR WATER HEATING SYSTEM PARABOLIC TROUGH CONCENTRATOR (PTC) UNDER MALAYSIAN ENVIRONMENTAL WEATHER

PROCEEDINGS OF THE 2ND INTERNATIONAL CONFERENCE ON SCIENCE, TECHNOLOGY AND SOCIAL SCIENCES 2016 (ICSESS2016)

2016 PROCEEDING NON-INDEX CO-AUTHOR

26. ZT MEASUREMENTS OF THERMOELEMENTS UNDER LARGE TEMPERATURE DIFFERENCE

ADVANCED MATERIALS RESEARCH

2015 JOURNAL SCOPUS MAIN AUTHOR

PUBLICATION

27. REMOTE LIGHTING AND SECURITY CAMERA SYSTEM

5TH EXPOSITION ON ISLAMIC INNOVATION 2014 (I-INOVA"14)

2014 PROCEEDING NON-INDEX CO-AUTHOR

28. FEASIBILITY STUDY OF "OPEN-SHORT CIRCUIT" DIMENSIONLESS FIGURE-OF-MERIT (ZT) MEASUREMENT TECHNIQUE FOR THERMOELECTRIC DEVICE

PIONEERING ISLAMIC SCIENCE SPEARHEADING KNOWLEDGE

2014 CHAPTER IN BOOK MAIN AUTHOR

29. SHAPE MEMORY BIOPOLYURETHANE

PIONEERING ISLAMIC SCIENCE SPEARHEADING KNOWLEDGE

2014 CHAPTER IN BOOK CO-AUTHOR

30. ZT MEASUREMENTS OF THERMOELEMENTS THERMOELECTRIC MATERIALS UNDER LARGE TEMPERATURE DIFFERENCE

SOLID STATE SCIENCE & TECHNOLOGY (RCSST27)

2013 PROCEEDING NON-INDEX MAIN AUTHOR

31. VARIABLE THERMAL RESISTOR BASED ON SELF-POWERED Peltier EFFECT

JOURNAL OF PHYSICS D: APPLIED PHYSICS

2008 JOURNAL WOS CO-AUTHOR

AWARDS/RECOGNITION

1. PRESTASI LNPT MELEBIHI 95%

2025 UNIVERSITY

2. ANUGERAH PENERBITAN BAB DALAM BUKU

2025 OTHERS

3. ANUGERAH PENERBITAN JOURNAL BERINDEKS WOS/SCOPUS/MYCITE

2025 OTHERS

4. TOP 100 USIM E-NILAI

2025 UNIVERSITY

5. VISITING SCIENTIST (SAINTIS PELAWAT)

MINISTRY OF SCIENCE AND ICT (MSIT) KOREA

2025 INTERNATIONAL

6. JOURNAL PEER REVIEWER (PEWASIT ARTIKEL JURNAL)

UKM

2025 NATIONAL

7. ANUGERAH PENERBITAN JOURNAL BERINDEKS

2024 OTHERS

8. ANUGERAH PENERIMA GERAN PENYELIDKAN

2024 STATE

9. ANUGERAH KUALITI

2024 OTHERS

10. OPTIMISE COLD PRESS SNSE-BASED AS HEAT CONVERTER

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI SILVER

11. PSEUDO-3D PRINTING THERMOELECTRIC SNSE FOR HARVESTING WASTE HEAT APPLICATIONS

SCIENCE AND TECHNOLOGY RESEARCH EXPO (SCITEX)

2024 UNIVERSITI GOLD

12. ACADEMIC ADVISOR

UNIVERSITAS NEGERI SEMARANG

2022 INTERNATIONAL

13. ANUGERAH E-PEMBELAJARAN USIM - KURSUS AKTIF

2020 UNIVERSITY

14. ANUGERAH KHIDMAT SETIA

2020 UNIVERSITY

AWARDS/RECOGNITION

15. ANUGERAH PEKERJA CEMERLANG

2019 UNIVERSITY

16. ANUGERAH STAF CONTOH BULANAN FST MEI 2018

2018 OTHERS

17. I-SOLD: A PROTOTYPE OF SOLAR COOLING INTEGRATED FACADE FOR BALANCING HUMAN COMFORT, SUSTAINABILITY IN WORKING AND LEARNING SPACE

8th EXPOSITION ON ISLAMIC INNOVATION (i-INOVA) 2018

2018 UNIVERSITI BRONZE

18. ULTRASONIC ANIMAL REPELLANT WITH INDICATOR

8th EXPOSITION ON ISLAMIC INNOVATION (i-INOVA) 2018

2018 UNIVERSITI BRONZE

19. ANUGERAH STAF CONTOH BULAN MEI 2014

2014 UNIVERSITY

20. THERMAL PERFORMANCE OF DOUBLE ANGLE TWELVE SIDED SOLAR COOKER (SAINS DAN TEKNOLOGI)

PERTANDINGAN REKACIPTA DAN INOVASI ISLAM USIM 2014 (I-REKA 14)

2014 UNIVERSITI CERTIFICATE OF APPRECIATION

21. REMOTE LIGHTING AND SECURITY CAMERA SYSTEM(RELISECS)

EKSPO INOVASI ISLAM I-INOVA 2014

2014 KEBANGSAAN CERTIFICATE OF APPRECIATION