Profile Image

DR. SHAHNURRIMAN BIN ABDUL RAHMAN

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CONTACT

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Faculty: Fakulti Kejuruteraan

Dan Alam Bina

SUPERVISION

PhD - Completed: 0, Ongoing: 0 Master - Completed: 0, Ongoing: 2

AREAS OF EXPERTISE

Thermodynamics

Power Electronics

Power System

Electricity Transmission

ACADEMIC QUALIFICATION

PhD in Electrical & Electronic Engineering (2019) Master in Kejuruteraan (elektrik - Kuasa) (2012) Bachelor in Kejuruteraan (elektrik) (2010)

RESEARCH

1. ADVANCING BATTERY MONITORING SYSTEM WITH STATE-OF-HEALTH METRIC AT JAYALAX RESOURCES

2025 GERAN KPT ON GOING MAIN RESEARCHER

2. SMART AQUAGUARD: IOT-POWERED WATER QUALITY MONITORING FOR SUSTAINABLE AQUATIC MANAGEMENT

2025 GERAN KPT ON GOING CO-RESEARCHER

3. AUTOMATED MACHINE LEARNING SYSTEM FOR INSTALLATION, OPERATION AND MAINTENANCE OF SOLAR PROJECTS USING SATELLITE AND DRONE IMAGERY

2025 GERAN KPT ON GOING CO-RESEARCHER

4. IOT BASED SECURED VOICE COMMUNICATION THROUGH ULTRASONIC FENCE

2024 GERAN KPT ON GOING CO-RESEARCHER

5. SALAH CHAIR

2023 GERAN PENYELIDIKAN LAB2MARKET ON GOING CO-

RESEARCHER

RESEARCH

6. BATTERY MONITORING SYSTEM FOR GENERATOR SETS 2022 GERAN PENYELIDIKAN AGENSI KERAJAAN COMPLETED MAIN RESEARCHER 7. CORROSION-AMPACITY MODELLING FOR AMPACITY PERFORMANCE INDEX FORMULATION ON OVERHEAD **CONDUCTORS** 2022 GERAN KPT ON GOING MAIN RESEARCHER 8. RESOURCE MANAGEMENT OPTIMIZATION IN 6G NETWORK FOR SMART GRID COMMUNICATIONS USING DEEP **LEARNING** 2022 GERAN PENYELIDIKAN USIM ON GOING CO-RESEARCHER 9. DEVELOPMENT OF DATA BASED ENERGY EFFICIENCY MANAGEMENT SYSTEM AT KAMPUS BAROKAH USIM FOR COST EFFECTIVE PRACTISE USING PREDICTIVE AND MACHINE LEARNING CAPABILITY 2022 GERAN PENYELIDIKAN USIM ON GOING CO-RESEARCHER 10. DEVELOPMENT OF MOBILE APPLICATION FOR "EDUCATIONAL GAMES FOR KIDS WITH LEARNING DISABILITIES: KID **WONDERS - KINDERS"** 2022 GERAN PENYELIDIKAN AGENSI KERAJAAN COMPLETED CO-RESEARCHER 11. INVESTIGATION OF INDUCED VOLTAGE ON UNDERGROUND TRANSMISSION CABLES WITHIN LINE CORRIDORS FOR **URBAN PLANNING.** 2021 GERAN KPT COMPLETED CO-RESEARCHER 12. STUDY OF RAINFALL EFFECT TO OPTIMIZE POWER LINES PERFORMANCE 2020 GERAN PENYELIDIKAN USIM RACER COMPLETED MAIN RESEARCHER 13. 3D PRINTED EMERGENCY DEVICE (VENTILATOR) 2020 GERAN PENYELIDIKAN COVID-19 COMPLETED CO-RESEARCHER 14. AUTOMATIC DISINFECTION CHAMBER 2020 GERAN PENYELIDIKAN COVID-19 COMPLETED CO-RESEARCHER 15. MODELLING AND CONTROL OF AN AERIAL TRANSPORTATION SYSTEM CARRYING SUSPENDED PAYLOAD 2020 GERAN PENYELIDIKAN USIM RACER COMPLETED CO-RESEARCHER 16. DESIGN AND DEVELOPMENT OF PERSONAL PROTECTIVE EQUIPMENT (PPE) BOX FOR HEALTHCARE APPLICATION 2020 GERAN PENYELIDIKAN COVID-19 COMPLETED CO-RESEARCHER 17. A NEW PARAMETRIC MODULE OF THERMAL AND LIGHTING BASED ON SOLAR CELL FACADE SYSTEM IN SCHOOL 2020 GERAN KPT COMPLETED CO-RESEARCHER 18. MODELLING OF QUANTUM BASED TUNNEL DIODE FOR THZ MEDICAL IMAGING 2019 GERAN PENYELIDIKAN USIM COMPLETED CO-RESEARCHER 19. SURVIVORS IDENTIFICATION AND LOCALIZATION FOR SAR ROBOTICS SYSTEM USING MACHINE LEARNING 2019 GERAN SEPADAN AGENSI KERAJAAN COMPLETED CO-RESEARCHER

PUBLICATION

ASM SCIENCE JOURNAL

2021 JOURNAL SCOPUS CO-AUTHOR

1. ENHANCING THE CULTIVATION OF MOINA SP.: AN INTEGRATION OF AERATION SYSTEM WITH GREEN WATER **DETECTION AND PH MONITORING** PRZEGLAD ELEKTROTECHNICZNY 2024 JOURNAL SCOPUS CO-AUTHOR 2. ANALYSIS OF UNDERGROUND TRANSMISSION CABLE AMPACITY FOR ON-SITE APPLICATIONS JOURNAL OF ELECTRICAL AND ELECTRONIC SYSTEMS RESEARCH 2024 JOURNAL MYCITE CO-AUTHOR 3. ASSESSING THE IMPACT OF GALVANIC CORROSION ON THE PERFORMANCE OF ACSR/TW AND ACCC/TW CONDUCTORS 2024 IEEE 4TH INTERNATIONAL CONFERENCE IN POWER ENGINEERING APPLICATIONS (ICPEA) 2024 PROCEEDING SCOPUS CO-AUTHOR 4. DEVELOPMENT OF BATTERY MONITORING SYSTEM FOR POWER GENERATORS: INSIGHTS AND EXPERIENCE 2024 POSTGRADUATE AND INDUSTRY RESEARCH COLLOQUIUM (PIRC) 2024 PROCEEDING NON-INDEX CO-AUTHOR 5. ANALYSIS OF ELECTRIC FIELD ON OVERHEAD DISTRIBUTION LINE DUE TO LIGHTNING STRIKE 2024 POSTGRADUATE AND INDUSTRY RESEARCH COLLOQUIUM (PIRC) 2024 PROCEEDING NON-INDEX CO-AUTHOR 6. PALM OIL AS A TRANSFORMER INSULATING FLUID: A REVIEW 2024 POSTGRADUATE AND INDUSTRY RESEARCH COLLOQUIUM (PIRC) 2024 PROCEEDING NON-INDEX CO-AUTHOR 7. HIGH-TEMPERATURE LOW SAG CONDUCTOR: THE NEW TREND TO TRANSMIT ELECTRICITY ADVANCEMENT IN ENGINEERING AND TECHNOLOGY 2024 CHAPTER IN BOOK MAIN AUTHOR 8. IOT BASED INDOOR AIR AND WATER QUALITY MONITORING SYSTEM USING NODE-RED 9TH INTERNATIONAL CONFERENCE ON COMPUTER AND COMMUNICATION ENGINEERING (ICCCE 2023) 2023 PROCEEDING SCOPUS MAIN AUTHOR 9. DESIGN OF SINGLE STAGE C BAND ERBIUM DOPED FIBER AMPLIFIER (EDFA) FOR OPTICAL COMMUNICATION TECHNOLOGIES IN SCIENCE AND ENGINEERING: A MULTIDISCIPLINARY APPROACH 2023 CHAPTER IN BOOK CO-AUTHOR 10. COMPARISON TECHNIQUES FOR OPTIMIZATION SWITCHING FREQUENCY IN ENERGY ENCRYPTION OF WIRELESS POWER TRANSFER SYSTEM JOURNAL OF ADVANCED RESEARCH IN APPLIED SCIENCES AND ENGINEERING TECHNOLOGY 2022 JOURNAL MYCITE CO-AUTHOR 11. ADVANCING OHL RATING CALCULATIONS: MODELING MIXED-CONVECTIVE COOLING AND CONDUCTOR GEOMETRY IEEE TRANSACTIONS ON POWER DELIVERY 2022 JOURNAL ISI MAIN AUTHOR 12. EXAMINING THE IMPORTANCE OF CONDUCTOR SURFACE TRAIT ON AMPACITY DETERMINATION 2022 IEEE INTERNATIONAL CONFERENCE IN POWER ENGINEERING APPLICATION (ICPEA) 2022 PROCEEDING NON-INDEX MAIN AUTHOR 13. AN ILLEGAL DUMPING DETECTION SYSTEM BASED ON IMAGE PROCESSING IN OPENALPR

PUBLICATION

14. THE BENEFIT OF RAIN ON ELECTRICAL POWER DELIVERY

THE 7TH INTERNATIONAL CONFERENCE ON QURAN AS FOUNDATION OF CIVILISATION (SWAT2021)

2021 PROCEEDING NON-INDEX CORRESPONDING AUTHOR

15. BLUEPRINT KELESTARIAN USIM: MENYEMARKKAN KAMPUS BARAKAH

2021 BOOK CO-AUTHOR

16. ANALYSIS OF CURRENT-VOLTAGE CHARACTERISTICS ASSOCIATED TO THE QUANTUM STRICTURE OF ASYMMETRIC SPACER LAYER TUNNEL DIODE (ASPAT): A PROMISING TERAHERTZ DEVICES

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING AND TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

17. IMPROVING ELECTRO-THERMAL CALCULATION OF OVERHEAD LINES CONDUCTORS FOR MORE ON-GRID RENEWABLE ENERGY RESOURCES

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING AND TECHNOLOGY

2021 CHAPTER IN BOOK MAIN AUTHOR

18. EFFECT OF THE DOPING CONCENTRATION AND JUNCTION DEPTH ON THE PERFORMANCE OF SOLAR CELLS

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING AND TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

19. EMOTION DETECTION BASED ON AUDIO/VOICE SIGNAL FOR AUTISM SPECTRUM DISORDER (ASD) USING CORRELATION METHOD

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING AND TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

20. RADIO OVER FIBRE FREE SPACE OPTICS (ROFSO) SYSTEM

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING AND TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

21. EFFECT OF THE SLOT SHAPE AND GROUND PLANE ON THE MICROSTRIP PATCH ANTENNA PERFORMANCE

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING AND TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

22. APPLICATION OF FINITE ELEMENT METHOD (FEM) IN THE ELECTRICAL SAFETY ASSESSMENT

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING AND TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

23. IMPACT OF IDEALITY FACTOR AND SEMICONDUCTING MATERIAL ON PV MODULE PERFORMANCES

SEMINAR ANTARABANGSA ISLAM DAN SAINS (SAIS 2020)

2020 PROCEEDING NON-INDEX MAIN AUTHOR

24. DESIGN OF A LOW-COST AUTOMATIC DISINFECTION CHAMBER

SEMINAR ANTARABANGSA ISLAM DAN SAINS (SAIS 2020

2020 PROCEEDING NON-INDEX CO-AUTHOR

25. DC ANALYSIS OF GAAS/ALAS SINGLE BARRIER ASYMMETRIC SPACER TUNNEL DIODE

SEMINAR ANTARABANGSA ISLAM DAN SAINS (SAIS 2020)

2020 PROCEEDING NON-INDEX CO-AUTHOR

26. AUTOMATED MOTION DETECTION SECURITY SYSTEM NOTIFIER USING RASPBERRY PI WITH TELEGRAM

2020 IEEE SYMPOSIUM ON INDUSTRIAL ELECTRONICS & APPLICATIONS (ISIEA)

2020 PROCEEDING NON-INDEX CO-AUTHOR

PUBLICATION

27. FINITE ELEMENT MODELING OF OVERHEAD LINE THERMAL RATING METHOD

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE 2019 (SAIS2019)

2019 PROCEEDING NON-INDEX MAIN AUTHOR

28. NON-EQUILIBRIUM GREENS FUNCTION ON GAAS/ALAS DOUBLE BARRIER QUANTUM WELLS RESONANT TUNELLING DIODE

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE 2019

2019 PROCEEDING NON-INDEX CO-AUTHOR

29. PERFORMANCE ANALYSIS OF SISO AND MISO FSO COMMUNICATION UNDER MALAYSIA WEATHER CONDITION BY EMPLOYING OPTISYSTEM

INTERNATIONAL SEMINAR ON ISLAM AND SCIENCE 2019 (SAIS 2019)

2019 PROCEEDING NON-INDEX CO-AUTHOR

30. STUDY OF THE FLOW AROUND A HEATED CYLINDER IN MIXED CONVECTION REGIME

DIRECT AND LARGE-EDDY SIMULATION XI

2019 CHAPTER IN BOOK CO-AUTHOR

31. EFFECT OF LARGE SCALE 3-D STRUCTURES ON THE FLOW AROUND A HEATED CYLINDER AT LOW REYNOLDS NUMBER

FLOW, TURBULENCE AND COMBUSTION

2018 JOURNAL SCOPUS CO-AUTHOR

32. THERMAL STATE ANALYSIS ON BUNDLED OVERHEAD LINE CONDUCTORS

MEDITERRANEAN CONFERENCE ON POWER GENERATION, TRANSMISSION, DISTRIBUTION AND ENERGY CONVERSION (MEDPOWER 2018)

2018 PROCEEDING NON-INDEX MAIN AUTHOR

33. IMPACT OF SIMPLIFIED CONVECTION MODEL IN OVERHEAD LINES THERMAL RATING CALCULATION METHODS

2018 IEEE/PES TRANSMISSION AND DISTRIBUTION CONFERENCE AND EXPOSITION (T&D)

2018 PROCEEDING NON-INDEX MAIN AUTHOR

34. MODELLING OF CONVECTIVE COOLING ON CONDUCTOR THERMAL RATING METHODS

2017 IEEE MANCHESTER POWERTECH

2017 PROCEEDING NON-INDEX MAIN AUTHOR

CONSULTATION

1. BATTERY STORAGE MANAGEMENT SYSTEM (BSMS) AND TECHNICAL KNOWLEDGE TRAINING TECHNOPRENEUR UNIMAP SDN BHD



2021 NATIONAL

AWARDS/RECOGNITION

1. MUSOLLI COMPANION

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITI BRONZE

2. BATTERY MONITORING SYSTEM FOR GENERATOR SETS

RESEARCH SEMINAR UNIVERSITI SAINS ISLAM MALAYSIA

2024 UNIVERSITI CERTIFICATE OF APPRECIATION

3. PRODUCTIVITY CHAMPION

2023 NATIONAL

4. IOT- BASED BATTERY MONITORING SYSTEM

5. ICE BOX (INDOOR, COMFORT, ENVIRONMENT)

PERTANDINGAN REKACIPTA INOVASI INTERNASIONAL & NASIONAL 2022 (PRIIN 2022)

2022 ANTARABANGSA SILVER

Persidangan dan Ekspo Ciptaan Institusi Pengajian Tinggi Antarabangsa (PECIPTA22)

2022 ANTARABANGSA GOLD