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CONTACT

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Faculty: Fakulti Kejuruteraan
Dan Alam Bina

SUPERVISION

PhD - Completed: 0, Ongoing: 2

Master - Completed: 1, Ongoing: 1

AREAS OF EXPERTISE

ACADEMIC QUALIFICATION

PhD in Laser (2010)

Master in Engineering Science (2002)

Bachelor in Electronic & Electrical Engineering (1998)

RESEARCH

1. DEVELOPMENT OF MOBILE APPLICATION FOR "EDUCATIONAL GAMES FOR KIDS WITH LEARNING DISABILITIES: KID WONDERS - KINDERS"

2022 GERAN PENYELIDIKAN AGENSI KERAJAAN COMPLETED CO-RESEARCHER

2. DEVELOPMENT OF LASER ILLUMINATION WARNING SYSTEM BASED ON LASER PHOTODIODE AND DETECTION TECHNOLOGY

2022 GERAN PENYELIDIKAN INDUSTRI COMPLETED CO-RESEARCHER

3. STUDY OF RAINFALL EFFECT TO OPTIMIZE POWER LINES PERFORMANCE

2020 GERAN PENYELIDIKAN USIM RACER COMPLETED CO-RESEARCHER

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

2019 GERAN PENYELIDIKAN USIM COMPLETED CO-RESEARCHER

5. MODELLING OF QUANTUM BASED TUNNEL DIODE FOR THZ MEDICAL IMAGING

2019 GERAN PENYELIDIKAN USIM COMPLETED CO-RESEARCHER

RESEARCH

6. ULTRA-HIGH SENSITIVE BIOANALYTICAL DETERMINATION OF LARD USING NANOHYBRID BIOSENSING APPROACH AS A TOOL FOR HALAL PRODUCT INVESTIGATION

2018

GERAN PENYELIDIKAN KHAS

ON GOING

CO-RESEARCHER

7. MIZAN SOLAR HOME MODEL FOR SUSTAINABLE LIVELIHOOD

2017

GERAN PENYELIDIKAN KHAS

COMPLETED

CO-RESEARCHER

8. DETERMINATION OF ZT FOR SEGMENTED THERMOELECTRIC GENERATOR (TEG) UNDER LARGE TEMPERATURE DIFFERENCE (ΔT) USING "OPEN-SHORT CIRCUIT" TECHNIQUE

2015

GERAN KPT

COMPLETED

CO-RESEARCHER

9. AB INITIO CALCULATION OF VIBRATIONAL SPECTRA OF ZINC CLUSTER OF THE STANNITE-KESTERITE AND THE RAMAN SPECTRA

2013

GERAN KPT

COMPLETED

CO-RESEARCHER

10. NEW POLYNOMIAL FOR LINEAR FEEDBACK SHIFT REGISTERS (LFSRS)-BASED A5/1 STREAM CIPHERS FOR GSM COMMUNICATIONS

2013

GERAN KPT

COMPLETED

CO-RESEARCHER

PUBLICATION

1. TORQUE ASSESSMENT FOR LOW VOLTAGE AERIAL BUNDLE CABLE (ABC) INSULATED PIERCING CONNECTOR (IPC) USING AI ANALYSIS

2024 IEEE INTERNATIONAL CONFERENCE ON APPLIED ELECTRONICS AND ENGINEERING

2024 PROCEEDING SCOPUS CO-AUTHOR

2. PRELIMINARY STUDY ON LIDAR PERFORMANCE IN VIBRATION MEASUREMENT

IEEE ASIA-PACIFIC CONFERENCE ON APPLIED ELECTROMAGNETICS

2024 PROCEEDING SCOPUS CO-AUTHOR

3. HANDOVER PERFORMANCE OF MOBILITY ROBUSTNESS OPTIMIZATION FOR BEYOND 5G NETWORKS

2024 IEEE 14TH SYMPOSIUM ON COMPUTER APPLICATIONS & INDUSTRIAL ELECTRONICS

2024 PROCEEDING SCOPUS CO-AUTHOR

4. INVESTIGATION OF TRENCH NO-CORE FIBER SENSOR FOR HIGH REFRACTIVE INDEX SENSING

2024 14TH INTERNATIONAL CONFERENCE ON SYSTEM ENGINEERING AND TECHNOLOGY (ICSET)

2024 PROCEEDING SCOPUS CO-AUTHOR

5. SINGLE MODE FIBER BASED SPR SENSOR FOR THE DETECTION OF AIR CONTAMINANTS

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2024

2024 PROCEEDING OTHER DATABASE MAIN AUTHOR

6. COMPUTATIONAL ANALYSIS OF NO-CORE FIBER SENSOR FOR DETECTING AGING TRACES IN TRANSFORMER OIL

2024 IEEE INTERNATIONAL CONFERENCE ON ADVANCED TELECOMMUNICATION AND NETWORKING TECHNOLOGIES

2024 PROCEEDING NON-INDEX CO-AUTHOR

7. SURFACE PLASMON RESONANCE BASED PCF SENSOR FOR DOM DETECTION

2024 IEEE INTERNATIONAL CONFERENCE ON APPLIED ELECTRONICS AND ENGINEERING

2024 PROCEEDING NON-INDEX MAIN AUTHOR

8. A COMSOL MULTIPHYSICS FOR POLY (VINYL-ALCOHOL) PVA HYDROGEL EFFECT ON PHOTOVOLTAIC SOLAR CELL BY USING HEAT TRANSFER MODULE

2024 IEEE INTERNATIONAL CONFERENCE ON APPLIED ELECTRONICS AND ENGINEERING (ICAEE)

2024 PROCEEDING SCOPUS MAIN AUTHOR

9. TEMPERATURE DEPENDENT GAIN AND NOISE ANALYSIS OF AN ERBIUM DOPED FIBER AMPLIFIER WITH DIFFERENT PUMPING CONFIGURATIONS

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024 CHAPTER IN BOOK MAIN AUTHOR

10. A5/1 STREAM CIPHER IN GLOBAL SYSTEM FOR MOBILE (GSM) (EMPIRICAL PERSPECTIVES).

ADVANCEMENT IN ENGINEERING AND TECHNOLOGY

2024 CHAPTER IN BOOK CO-AUTHOR

11. HANDOVER PARAMETER FOR SELF-OPTIMISATION IN 6G MOBILE NETWORKS: A SURVEY

AEJ - ALEXANDRIA ENGINEERING JOURNAL

2023 JOURNAL SCOPUS CO-AUTHOR

12. CRYPTOGRAPHY (STREAM CIPHER) IN HARDWARE IMPLEMENTATION

TECHNOLOGIES IN SCIENCE AND ENGINEERING

2023 CHAPTER IN BOOK CO-AUTHOR

13. DESIGN OF SINGLE STAGE C BAND ERBIUM DOPED FIBER AMPLIFIER (EDFA) FOR OPTICAL COMMUNICATIONS

TECHNOLOGIES IN SCIENCE AND ENGINEERING

2023 CHAPTER IN BOOK MAIN AUTHOR

PUBLICATION

14. PRINCIPLES, CHARACTERISTICS AND APPLICATIONS OF OPTICAL FIBRE IN TELECOMMUNICATION AND SENSORY SYSTEMS

TECHNOLOGIES IN SCIENCE AND ENGINEERING

2023 CHAPTER IN BOOK CO-AUTHOR

15. UTILITY FUNCTION BASED RESOURCE BLOCK SCHEDULING IN WIRELESS NETWORKS

ASIA PACIFIC CONFERENCE ON COMMUNICATIONS 2021

2021 PROCEEDING NON-INDEX CO-AUTHOR

16. EFFECTIVENESS OF EARTHING SYSTEM IN VERTICAL CONFIGURATIONS

INTERNATIONAL CONFERENCE ON ELECTRICAL ENGINEERING AND SMART GRIDS

2021 PROCEEDING NON-INDEX CO-AUTHOR

17. ELECTROCHEMICAL DETECTION OF TRIBUTYRIN USING PRUSSIAN BLUE FUNCTIONALIZED GLASSY CARBON ELECTRODE

IEEE INTERNATIONAL CONFERENCE ON SENSORS AND NANOTECHNOLOGY 2021

2021 PROCEEDING NON-INDEX CO-AUTHOR

18. ANALYSIS OF CURRENT-VOLTAGE CHARACTERISTICS ASSOCIATED TO THE QUANTUM STRUCTURE OF ASYMMETRIC SPACER LAYER TUNNEL DIODE (ASPAT): A PROMISING TERAHERTZ DEVICE

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

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

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

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

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

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

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

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

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

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

ADVANCES IN SUSTAINABLE LIVING: ENGINEERING & TECHNOLOGY

2021 CHAPTER IN BOOK CO-AUTHOR

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

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2020

2020 PROCEEDING NON-INDEX CO-AUTHOR

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

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2020

2020 PROCEEDING NON-INDEX CO-AUTHOR

26. PRINCIPLES AND CHARACTERISTICS OF RANDOM LASERS AND THEIR APPLICATIONS IN MEDICAL, BIOIMAGING AND BIOSENSING

THE 2ND INTERNATIONAL CONFERENCE ON APPLIED PHOTONICS AND ELECTRONICS

2020 PROCEEDING NON-INDEX CO-AUTHOR

PUBLICATION

27. BAND ANTI-CROSSING MODELLING ON TAILORED GA_{1-X}IN_X YAS_{1-Y} BAND GAP ENERGY BASED NITROGEN FRACTION

UNIVERSAL JOURNAL OF ELECTRICAL AND ELECTRONIC ENGINEERING

2019 JOURNAL SCOPUS CO-AUTHOR

28. ELECTRICAL PROPERTIES OF A GA_{0.952}IN_{0.048}N_{0.016}AS_{0.984} P-I-N SCHOTTKY BARRIER DIODE

ASM SCIENCE JOURNAL

2019 JOURNAL SCOPUS CO-AUTHOR

29. FINITE ELEMENT MODELING OF OVERHEAD LINE THERMAL RATING METHOD

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2019

2019 PROCEEDING NON-INDEX CO-AUTHOR

30. PERFORMANCE ANALYSIS OF SISO AND MIMO FSO COMMUNICATION UNDER MALAYSIA WEATHER CONDITION BY EMPLOYING OPTISYSTEM

SEMINAR ANTARABANGSA ISLAM DAN SAINS 2019

2019 PROCEEDING NON-INDEX CO-AUTHOR

31. OUTCOME-BASED EDUCATION FOR ENGINEERING PROGRAMME: A CASE STUDY OF USIM

2019 BOOK MAIN AUTHOR

32. PHOTOVOLTAIC TECHNOLOGY: A REVIEW

ADVANCES IN SUSTAINABLE LIVING

2019 CHAPTER IN BOOK MAIN AUTHOR

33. INFLUENCE OF REMOTE EARTH AND IMPULSE POLARITY ON EARTHING SYSTEMS BY FIELD MEASUREMENT

IET SCIENCE, MEASUREMENT & TECHNOLOGY

2018 JOURNAL SCOPUS CO-AUTHOR

34. COMPARATIVE PERFORMANCE OF GAINNAS/GAAS MULTI QUANTUM WELL PHOTODETECTOR FOR 1.0 μ M WAVELENGTH

31ST INTERNATIONAL MICROPROCESSES AND NANOTECHNOLOGY CONFERENCE (MNC2018)

2018 PROCEEDING NON-INDEX CO-AUTHOR

35. IMPULSE CHARACTERISTICS OF EARTH ELECTRODES IN DIFFERENT SOIL RESISTIVITY BY FIELD MEASUREMENTS

2018 IEEE PES ASIA-PACIFIC POWER AND ENERGY ENGINEERING CONFERENCE (APPEEC2018)

2018 PROCEEDING NON-INDEX CO-AUTHOR

36. PERFORMANCE COMPARISON ON CURRENT CONSUMPTION BETWEEN ARDUINO NANO AND ARM CORETEX M3 FOR PORTABLE DIALYSIS SYSTEM

IEEE INTERNATIONAL CONFERENCE ON SEMICONDUCTOR ELECTRONICS (ICSE2018)

2018 PROCEEDING NON-INDEX CO-AUTHOR

37. COMPACT U-SHAPED SLOTTED ANTENNA WITH CONDUCTOR-BACKED PLANE FOR ULTRA-WIDEBAND (UWB) APPLICATIONS

3RD INTERNATIONAL CONFERENCE ON ELECTRICAL, ELECTRONIC, COMMUNICATION AND CONTROL ENGINEERING (ICEECC 2018)

2018 PROCEEDING NON-INDEX CO-AUTHOR

38. EFFECT OF THE NUMBER OF TAPPING BITS OF THE A5/1 STREAM CIPHER TOWARDS HARDWARE PERFORMANCE

SCIENCE INTERNATIONAL JOURNAL

2017 JOURNAL SCOPUS CO-AUTHOR

39. THE EFFECT OF TOTAL BITS AND NUMBER OF LFSRS ON THE HARDWARE PERFORMANCE OF MODIFIED A5/1

STREAM CIPHERS

ADVANCED SCIENCE LETTERS

2017 JOURNAL SCOPUS CO-AUTHOR

PUBLICATION

40. CHARACTERIZATIONS OF A SINGLE ROD ELECTRODE UNDER HIGH IMPULSE CURRENTS WITH DIFFERENT POLARITIES

1ST IEEE INTERNATIONAL CONFERENCE ON ELECTRICAL MATERIALS AND POWER EQUIPMENT (ICEMPE 2017)

2017 PROCEEDING NON-INDEX CO-AUTHOR

41. HARDWARE PERFORMANCE ANALYSIS ON MODIFIED A5/1 STREAM CIPHER

2016 WORLD INTERNATIONAL CONFERENCE ON ISLAMIC SCIENCES 2016

2016 PROCEEDING NON-INDEX CO-AUTHOR

42. HARDWARE IMPLEMENTATION OF MODIFIED A5/1 STREAM CIPHER

2016 INTERNATIONAL CONFERENCE ON COMMUNICATION AND INFORMATION SYSTEMS

2016 PROCEEDING NON-INDEX CO-AUTHOR

43. RANDOMNESS EVALUATION OF MODIFIED A5/1 STREAM CIPHER FOR GLOBAL SYSTEM FOR MOBILE COMMUNICATION

KOLOKIUW SISWAZAH SAINS & TEKNOLOGI

2016 PROCEEDING NON-INDEX CO-AUTHOR

44. EFFECT OF THE NUMBER OF TAPPING BITS OF THE A5/1 STREAM CIPHER TOWARDS HARDWARE PERFORMANCE

2ND INTERNATIONAL CONFERENCE ON ENGINEERING SCIENCE AND TECHNOLOGY

2016 PROCEEDING NON-INDEX CO-AUTHOR

45. METHODOLOGIES OF IMPULSE TESTS ON EARTHING SYSTEMS BY FIELD MEASUREMENTS WITH DIFFERENT REMOTE EARTH

2016 IEEE INTERNATIONAL CONFERENCE ON HIGH VOLTAGE ENGINEERING AND APPLICATION

2016 PROCEEDING NON-INDEX CO-AUTHOR

46. IMPROVING GSM SECURITY BY ENHANCING THE RANDOMNESS PROPERTY OF THE A5/1 DESIGN

AUSTRALIAN JOURNAL OF BASIC AND APPLIED SCIENCES

2015 JOURNAL SCOPUS MAIN AUTHOR

47. ANALYSIS OF THE CHARACTERISTICS OF AN EARTHING SYSTEM BASED ON FINITE ELEMENT METHOD

POSTGRADUATE COLLOQUIUM 2014, FACULTY OF SCIENCE AND TECHNOLOGY

2014 PROCEEDING NON-INDEX CO-AUTHOR

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

PIONEERING ISLAMIC SCIENCE, SPEARHEADING KNOWLEDGE

2013 CHAPTER IN BOOK

49. MULTIWAVELENGTH BRILLOUIN ERBIUM FIBER LASER

PIONEERING ISLAMIC SCIENCE, SPEARHEADING KNOWLEDGE

2013 CHAPTER IN BOOK

CONSULTATION

1. FASILITATOR PROGRAM "TRAINING ON CURRICULUM DEVELOPMENT", INSTITUT AGAMA ISLAM NEGERI (IAIN)
WALISONGO INDONESIA

INSTITUT AGAMA ISLAM NEGERI (IAIN) INDONESIA

2013

INTERNATIONAL

AWARDS/RECOGNITION

1. ACADEMIC ADVISOR

JPT

2023

NATIONAL

2. ACADEMIC ADVISOR

JPT

2022

NATIONAL

3. ACADEMIC ADVISOR

USIM

2022

UNIVERSITY

4. SMART PARCEL DROP BOX

PERTANDINGAN REKACIPTA INOVASI INTERNASIONAL & NASIONAL 2022 (PRIIN 2022)

2022

ANTARABANGSA

SILVER

5. 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

6. USIM MIZAN HOMESTAY

THE INTERNATIONAL CONFERENCE AND EXPOSITION ON INVENTION (PECIPTA 17)

2017

UNIVERSITI

BRONZE

7. MIZAN SOLARHOME

27TH INTERNATIONAL INVENTION & INNOVATION EXHIBITION 2017 (ITEX 2017)

2017

ANTARABANGSA

SILVER

8. SILVER; NOVEL RESEARCH & INNOVATION COMPETITION 2015 (NRIC 2015)

2015

NATIONAL

9. QIBLAH FINDER FOR VISUALLY IMPAIRED PERSON

NOVEL RESEARCH & INNOVATION COMPETITION (NRIC) 2015

2015

KEBANGSAAN

SILVER

10. NEW POLYNOMIAL STRUCTURE FOR A5/1 STREAM CIPHER TO STRENGTHEN GSM SECURITY

EKSPO INOVASI ISLAM I-INOVA 2014

2014

KEBANGSAAN

CERTIFICATE OF APPRECIATION

11. SECOND RUNNER UP; "QIBLAT COMPASS FOR THE BLIND -- I SEE"; COMMUNITY RESEARCH & INNOVATION COMPETITION 2013 (CORIC 2013)

2013

NATIONAL

12. ANUGERAH E-NILAI - SEMESTER 2 2012/2013

2013

UNIVERSITY

13. SENIOR MEMBER IEEE

2013

INTERNATIONAL

14. MOTION DETECTION OF BREAST TUMORS BASED ON TISSUE ELASTICITY FROM B MODE ULTRASOUND IMAGES USING GRA

4TH EXPOSITION ON ISLAMIC INNOVATION 2013 (I-INOVA"13)

2013

KEBANGSAAN

BRONZE