

Profile Image

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PENSYARAH UNIVERSITI GRED
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CONTACT

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ikmar_isa@usim.edu.my

Faculty: Fakulti Sains
Dan Teknologi

SUPERVISION

PhD - Completed: 1, Ongoing: 4

Master - Completed: 0,
Ongoing: 5

AREAS OF EXPERTISE

Semiconductor Materials

Other Polymer Materials

Other Advanced Materials

Material Physics

Physical Science

ACADEMIC QUALIFICATION

PhD in Advanced Materials (2006)

Bachelor in Computational Physics And Electronics (2002)

RESEARCH

**1. EVALUATION OF THE ROLE OF DOPING COMPOSITION IN
ZNO/C ANODE MATERIALS FOR PROTON BATTERIES:
INSIGHTS FROM STRUCTURAL TO CONDUCTIVITY
INVESTIGATIONS**

2024

GERAN KPT

ON GOING

CO-RESEARCHER

**2. ENHANCING IONIC CONDUCTING PROPERTIES OF
2HYDROXYETHYL CELLULOSE-BASED POLYMERS VIA
AMMONIUM FORMATE DOPING PROCESS FOR ENERGY
STORAGE APPLICATION**

2023

GERAN PENYELIDIKAN PENTADBIR

ON GOING

MAIN RESEARCHER

**3. TRANSPORT PROPERTIES OF CELLULOSE DERIVATIVES
BASED POLYMER ELECTROLYTE DOPED WITH IONIC LIQUIDS
USING SPECTROSCOPY METHODS**

2023

GERAN KPT

ON GOING

CO-RESEARCHER

**4. IMMITTANCE RESPONSES AND IONIC CONDUCTION
MECHANISM STUDIES OF ENHANCED CMC SOLID
BIOPOLYMER ELECTROLYTES VIA FTIR DECONVOLUTION
APPROACH**

2019

GERAN PENYELIDIKAN USIM

COMPLETED

MAIN RESEARCHER

PUBLICATION

1. CRYSTAL STRUCTURE, HIRSHFELD SURFACE ANALYSIS AND IONIC CONDUCTION PROPERTIES OF 4-(DIPHENYLAMINO)BENZALDEHYDE-4-(METHYL)THIOSEMICARBAZONE ADDITIVE WITH D-?-D MOLECULAR ARRANGEMENT SYSTEM

JOURNAL OF ALLOYS AND COMPOUNDS

2024 JOURNAL ERA CO-AUTHOR

2. IONIC CONDUCTIVITY STUDIES ON PROTON CONDUCTING SOLID BIOPOLYMER ELECTROLYTE BASED ON 2-HYDROXYETHYL CELLULOSE (2HEC) DOPED WITH AMMONIUM CHLORIDE (NH₄CL)

IONICS

2024 JOURNAL ISI, SCOPUS AND ERA CORRESPONDING AUTHOR

3. DEVELOPMENT OF CELLULOSE-BASED FILMS CONTAINING SALICYLIC ACID FOR WOUND DRESSING APPLICATIONS: FABRICATION, PROPERTIES AND IN VITRO ASSESSMENT

JOURNAL OF BIOACTIVE AND COMPATIBLE POLYMERS

2024 JOURNAL ERA MAIN AUTHOR

4. INVESTIGATIONS ON ELECTRICAL, ELECTROCHEMICAL, AND THERMAL PROPERTIES OF GELATINE?BASED NOVEL BIOPOLYMER ELECTROLYTES FOR ENERGY STORAGE APPLICATIONS

IONICS

2024 JOURNAL ISI, SCOPUS AND ERA CO-AUTHOR

5. STRUCTURAL INVESTIGATION OF SOLID BIOPOLYMER ELECTROLYTES: 2-HYDROXYETHYL CELLULOSE DOPED AMMONIUM FORMATE AS A PROMISING PROTON CONDUCTOR

ADVANCES IN POLYMER TECHNOLOGY

2024 JOURNAL ERA CO-AUTHOR

6. CORROSION INHIBITION STUDY OF CARBOXYMETHYL CELLULOSE IONIC LIQUID VIA ELECTROCHEMICAL AND MACHINE LEARNING TECHNIQUE

MALAYSIAN JOURNAL OF ANALYTICAL SCIENCES

2024 JOURNAL SCOPUS CO-AUTHOR

7. CHARACTERIZATION OF FREEZE-DRIED GINGER SLICES WITH CARBOXYMETHYL CELLULOSE AS POTENTIAL COATING MATERIAL PRIOR TO OSMOTIC DEHYDRATION

FOOD RESEARCH

2023 JOURNAL SCOPUS CO-AUTHOR

8. SURFACE MODIFICATION VIA ALGINATE-BASED EDIBLE COATING FOR ENHANCED OSMOTIC DEHYDRATION MASS TRANSFER OF GINGER GINGER SLICES

PLANT SCIENCE TODAY

2023 JOURNAL SCOPUS CO-AUTHOR

9. A REVIEW STUDY OF BINARY AND TERNARY ZNO/C COMPOSITES AS ANODES FOR HIGH-CAPACITY LITHIUM- ION BATTERIES

IONICS

2023 JOURNAL ISI, SCOPUS AND ERA CO-AUTHOR

10. FUSED AROMATIC DISUBSTITUTED AZOMETHINE AS ORGANIC ADDITIVES IN NH₄SCN DOPED CMC BASED ELECTROLYTE FILM

THE 1ST INTERNATIONAL CONFERENCE OF CHEMICAL SCIENCE, ENGINEERING AND TECHNOLOGY

2023 PROCEEDING SCOPUS CO-AUTHOR

11. DENSITY FUNCTIONAL THEORY (DFT) CALCULATIONS, SYNTHESIS AND ELECTRONIC PROPERTIES OF ALKOXYLATED-CHALCONE ADDITIVE IN ENHANCING THE PERFORMANCE OF CMC-BASED SOLID BIOPOLYMER ELECTROLYTE

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY

2022 JOURNAL ISI, SCOPUS AND ERA CO-AUTHOR

12. IMPROVING IONIC CONDUCTIVITY OF CARBOXYMETHYL CELLULOSE SOLID BIOPOLYMER ELECTROLYTE WITH ASSIST FROM DIMETHYL CARBONATE

WALAILAK JOURNAL OF SCIENCE AND TECHNOLOGY

2022 JOURNAL SCOPUS CORRESPONDING AUTHOR

13. PLASTICIZED CMC-AMMONIUM ACETATE BASED SOLID BIOPOLYMER ELECTROLYTE: IONIC CONDUCTIVITY AND TRANSPORT STUDY

JOURNAL OF SUSTAINABILITY SCIENCE AND MANAGEMENT

2022

JOURNAL

SCOPUS

CORRESPONDING AUTHOR

PUBLICATION

14. 2-HYDROXYETHYL CELLULOSE-AMMONIUM THIOCYANATE SOLID BIOPOLYMER ELECTROLYTES: IONIC CONDUCTIVITY AND DIELECTRIC STUDIES

JOURNAL OF SUSTAINABILITY SCIENCE AND MANAGEMENT

2022 JOURNAL SCOPUS CO-AUTHOR

15. PHYSICAL, MECHANICAL AND ANTIOXIDANT PROPERTIES OF CHICKEN SKIN GELATIN FILMS INCORPORATED WITH VIRGIN COCONUT OIL

BIOCATALYSIS AND AGRICULTURAL BIOTECHNOLOGY

2022 JOURNAL SCOPUS CO-AUTHOR

16. SURFACE MODIFICATION VIA ALGINATE-BASED EDIBLE COATING FOR ENHANCED OSMOTIC DEHYDRATION MASS TRANSFER OF GINGER SLICES

PLANT SCIENCE TODAY

2022 JOURNAL OTHER DATABASE CO-AUTHOR

17. PROTON-CONDUCTING BIOPOLYMER ELECTROLYTES BASED ON CARBOXYMETHYL CELLULOSE DOPED WITH AMMONIUM FORMATE

POLYMERS

2022 JOURNAL ERA CORRESPONDING AUTHOR

18. PREDICTION OF CORROSION INHIBITION EFFICIENCY VIA MULTILAYER PERCEPTRON

4TH NOVEL INTELLIGENT AND LEADING EMERGING SCIENCES CONFERENCE

2022 PROCEEDING SCOPUS CO-AUTHOR

19. CARBOXYMETHYL CELLULOSE PLASTICIZED POLYMER APPLICATION AS BIO-MATERIAL IN SOLID-STATE HYDROGEN IONIC CELL

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY

2021 JOURNAL ISI, SCOPUS AND ERA MAIN AUTHOR / CONTACT PERSON IN USIM

20. EFFECTS OF PROCESS VARIABLES ON MASS TRANSFER DURING OSMOTIC DEHYDRATION OF GINGER SLICES USING CARBOXYMETHYL CELLULOSE AS AN EDIBLE COATING MATERIAL

JOURNAL OF SUSTAINABILITY SCIENCE AND MANAGEMENT

2020 JOURNAL SCOPUS CO-AUTHOR

21. CONTRIBUTION OF STILBENE-IMINE ADDITIVES ON THE STRUCTURAL, IONIC CONDUCTIVITY PERFORMANCE AND THEORETICAL EVALUATION ON CMC-BASED BIOPOLYMER ELECTROLYTES

CARBOHYDRATE POLYMERS

2020 JOURNAL ISI, SCOPUS AND ERA MAIN AUTHOR

22. CARBOXYMETHYL CELLULOSE PLASTICIZED POLYMER APPLICATION AS BIO-MATERIAL IN SOLID-STATE HYDROGEN IONIC CELL

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY

2020 JOURNAL ISI, SCOPUS AND ERA MAIN AUTHOR / CONTACT PERSON IN USIM

23. CORRELATION BETWEEN STRUCTURAL, ION TRANSPORT AND IONIC CONDUCTIVITY OF PLASTICIZED 2-HYDROXYETHYL CELLULOSE BASED SOLID BIOPOLYMER ELECTROLYTE

JOURNAL OF MEMBRANE SCIENCE

2020 JOURNAL ERA CORRESPONDING AUTHOR

24. CHARACTERISATION OF BIODEGRADABLE PROTEIN BASED FILMS FROM GELATIN ALTERNATIVE: A REVIEW

INTERNATIONAL FOOD RESEARCH JOURNAL

2020 JOURNAL ISI AND SCOPUS MAIN AUTHOR / CONTACT PERSON IN USIM

25. NATURAL INSPIRED CARBOXYMETHYL CELLULOSE (CMC) DOPED WITH AMMONIUM CARBONATE (AC) AS BIOPOLYMER ELECTROLYTE

POLYMERS

2020 JOURNAL ERA MAIN AUTHOR

26. ELECTRICAL BEHAVIOR OF ETHYLENE CARBONATE-PLASTICIZED CELLULOSE BIOPOLYMER ELECTROLYTE FILMS

MALAYSIAN JOURNAL OF CHEMISTRY

2020 JOURNAL SCOPUS MAIN AUTHOR

PUBLICATION

27. EFFECT OF DRYING TEMPERATURE ON ELECTRICAL IMPEDANCE CHARACTERISTIC OF GINGER SLICES

INTERNATIONAL AGROPHYSICS

2020 JOURNAL ISI CO-AUTHOR

28. CORROSION RESISTANCE EVALUATION OF ACRYLIC COATING INCORPORATED WITH HENNA LEAVES EXTRACT

JOURNAL OF ENGINEERING

2020 JOURNAL WOS CO-AUTHOR

29. BIOPOLYMER MEMBRANES FOR BATTERY APPLICATIONS

BIOPOLYMER MEMBRANES AND FILMS: HEALTH, FOOD, ENVIRONMENT, AND ENERGY APPLICATIONS.

2020 CHAPTER IN BOOK MAIN AUTHOR

30. PREPARATION AND CHARACTERIZATION OF BIOPOLYMER ELECTROLYTES BASED ON PECTIN AND NaNO_3 FOR BATTERY APPLICATIONS

POLYMER SCIENCE SERIES A

2019 JOURNAL ISI CO-AUTHOR

31. EFFECT OF IONIC LIQUID BMIM NO_3 TO CHITOSAN-STARCH BLEND BIOPOLYMER ELECTROLYTE SYSTEM

SOLID STATE PHENOMENA

2019 JOURNAL SCOPUS CO-AUTHOR

32. AN INTERACTION MODE OF N-(DECYLOXYPHENYL)-N'-(4-CHLOROBENZOYL)THIOUREA DOPANT IN CARBOXYMETHYL CELLULOSE (CMC) FOR SOLID POLYMER ELECTROLYTE.

EUROPEAN CHEMICAL BULLETIN

2019 JOURNAL ERA CO-AUTHOR

33. INVESTIGATION ON TRANSPORT AND THERMAL STUDIES OF SOLID POLYMER ELECTROLYTE BASED ON CARBOXYMETHYL CELLULOSE DOPED AMMONIUM THIOCYANATE FOR POTENTIAL APPLICATION IN ELECTROCHEMICAL DEVICES

INTERNATIONAL JOURNAL OF HYDROGEN ENERGY

2019 JOURNAL ISI, SCOPUS AND ERA MAIN AUTHOR

34. MECHANICAL PROPERTIES OF CARBOXYMETHYL CELLULOSE-OLEIC ACID SOLID BIOPOLYMER ELECTROLYTE

MATERIALS SCIENCE FORUM

2018 JOURNAL SCOPUS CO-AUTHOR

35. THE EFFECT OF PLASTICIZERS ON THE FUNCTIONAL PROPERTIES OF BIODEGRADABLE GELATIN-BASED FILM: A REVIEW

FOOD BIOSCIENCE

2018 JOURNAL SCOPUS CO-AUTHOR

36. LIGHTWEIGHT AND FLEXIBLE SOLID-STATE EDLC BASED ON OPTIMIZED CMC- NH_4NO_3 SOLID BIO-POLYMER ELECTROLYTE

ASM SCIENCE JOURNAL SPECIAL ISSUE

2018 JOURNAL SCOPUS CO-AUTHOR

37. ELECTRICAL AND STRUCTURAL STUDIES OF POLYMER ELECTROLYTE BASED ON CHITOSAN/METHYL CELLULOSE BLEND DOPED WITH BMIMTFSI

MATERIALS RESEARCH EXPRESS

2018 JOURNAL SCOPUS CO-AUTHOR

38. EFFECT OF HNO_3 CONCENTRATION ON ETCH RATE AND STRUCTURE OF SI WAFER ETCHED IN THE MIXTURE OF HF AND HNO_3 SOLUTIONS

ASM SCIENCE JOURNAL SPECIAL ISSUE

2018 JOURNAL SCOPUS CO-AUTHOR

39. SYNTHESIS AND ELECTRICAL CONDUCTIVITY OF N-(3-(TRIFLUOROMETHYL)BENZYLIDINE)THIOSEMICARBAZIDE TOWARDS DYES SENSITIZED SOLAR CELL

DEFECT AND DIFFUSION FORUM

2018 JOURNAL SCOPUS CO-AUTHOR

PUBLICATION

40. 2-HYDROXYETHYL CELLULOSE AS NATURAL BINDER IN ELECTRODES FOR SOLID-STATE PROTON BATTERY: CONSTRUCTION AND PRELIMINARY RESULTS

ASM SCIENCE JOURNAL SPECIAL ISSUE

2018 JOURNAL SCOPUS MAIN AUTHOR

41. CONDUCTION MECHANISM VIA CORRELATED BARRIER HOPPING IN EC-PLASTICIZED 2-HYDROXYETHYL CELLULOSE-AMMONIUM NITRATE SOLID POLYMER ELECTROLYTE

MATERIALS SCIENCE AND ENGINEERING

2018 JOURNAL SCOPUS MAIN AUTHOR

42. IONIC CONDUCTION STUDY OF 2-HYDROXYETHYL CELLULOSE DOPED WITH DODECYLTRIMETHYL AMMONIUM BROMIDE SOLID BIOPOLYMER ELECTROLYTES

JOURNAL OF SUSTAINABILITY SCIENCE AND MANAGEMENT

2018 JOURNAL SCOPUS MAIN AUTHOR

43. RHEOLOGICAL, FUNCTIONAL AND ANTIOXIDANT PROPERTIES OF FILMS FORMING SOLUTION AND ACTIVE GELATIN FILMS INCORPORATED WITH CENTELLA ASIATICA (L.) URBAN EXTRACT

FOOD PACKAGING AND SHELF LIFE

2018 JOURNAL SCOPUS CO-AUTHOR

44. CHARACTERIZATION ON THE MECHANICAL AND PHYSICAL PROPERTIES OF CHICKEN SKIN GELATIN FILMS IN COMPARISON TO MAMMALIAN GELATIN FILMS

IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING

2018 JOURNAL SCOPUS CO-AUTHOR

45. CONDUCTION MECHANISM VIA CORRELATED BARRIER HOPPING IN EC-PLASTICIZED 2-HYDROXYETHYL CELLULOSE-AMMONIUM NITRATE SOLID POLYMER ELECTROLYTE

IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING

2018 JOURNAL SCOPUS MAIN AUTHOR

46. X-RAY DIFFRACTION AND INFRARED SPECTROSCOPIC ANALYSIS OF SOLID BIOPOLYMER ELECTROLYTES BASED ON DUAL BLEND CARBOXYMETHYL CELLULOSE-CHITOSAN DOPED WITH AMMONIUM BROMIDE

ASM SCIENCE JOURNAL SPECIAL ISSUE

2018 JOURNAL SCOPUS MAIN AUTHOR

47. IONIC CONDUCTIVITY AND STRUCTURAL ANALYSIS OF 2-HYDROXYETHYL CELLULOSE DOPED WITH GLYCOLIC ACID SOLID BIOPOLYMER ELECTROLYTES FOR SOLID PROTON BATTERY

IOP CONFERENCE SERIES: MATERIALS SCIENCE AND ENGINEERING

2018 JOURNAL SCOPUS MAIN AUTHOR

48. CARBOXYMETHYL CELLULOSE ? AMMONIUM CHLORIDE ON ELECTRICAL OF PLASTICIZED PROPYLENE CARBONATE SOLID BIO-POLYMER ELECTROLYTES (SBPS) USING EXPERIMENTAL AND COMPUTATIONAL STUDIES

PHOSPHORUS, SULFUR, AND SILICON

2018 JOURNAL SCOPUS MAIN AUTHOR

49. HENNA LEAVES EXTRACT AS A CORROSION INHIBITOR IN ACRYLIC RESIN COATING

PROGRESS IN ORGANIC COATINGS

2017 JOURNAL WOS CO-AUTHOR

50. PREPARATION AND CHARACTERIZATION OF CHICKEN SKIN GELATIN/CMC COMPOSITE FILM AS COMPARED TO BOVINE GELATIN FILM

FOOD BIOSCIENCE

2017 JOURNAL SCOPUS CO-AUTHOR

51. THE EFFECT OF CONCENTRATION OF LAWSONIA INERMIS AS A CORROSION INHIBITOR FOR ALUMINUM ALLOY IN SEAWATER

ADVANCES IN PHYSICAL CHEMISTRY

2017 JOURNAL SCOPUS CO-AUTHOR

52. IONIC CONDUCTIVITY AND CONDUCTION MECHANISM STUDIES ON CELLULOSE BASED SOLID POLYMER ELECTROLYTES DOPED WITH AMMONIUM CARBONATE.

POLYMER BULLETIN

2017

JOURNAL

SCOPUS

MAIN AUTHOR

PUBLICATION

53. CHARACTERIZATION OF POLYETHYLENE GLYCOL PLASTICIZED CARBOXYMETHYL CELLULOSE-AMMONIUM FLUORIDE SOLID BIOPOLYMER ELECTROLYTES.

AIP CONFERENCE PROCEEDINGS

2017 JOURNAL SCOPUS MAIN AUTHOR

54. SOLID POLYMER ELECTROLYTE PRODUCTION FROM 2-HYDROXYETHYL CELLULOSE: EFFECT OF AMMONIUM NITRATE COMPOSITION ON ITS STRUCTURAL PROPERTIES

CARBOHYDRATE POLYMERS

2017 JOURNAL WOS MAIN AUTHOR

55. SYNTHESIS AND ELECTRICAL CONDUCTIVITY OF N-(3-(TRIFLUOROMETHYL)BENZYLIDINE) THIOSEMICARBAZIDE TOWARDS DYES SENSITIZED SOLAR CELL

DEFECT AND DIFFUSION FORUM

2017 JOURNAL SCOPUS CO-AUTHOR

56. SOLID BIOPOLYMER ELECTROLYTES BASED ON CARBOXYMETHYL CELLULOSE FOR USE IN COIN CELL PROTON BATTERIES.

JOURNAL OF SUSTAINABILITY SCIENCE AND MANAGEMENT SPECIAL ISSUE

2017 JOURNAL SCOPUS MAIN AUTHOR

57. STRUCTURAL AND IONIC CONDUCTIVITY STUDIES ON PROTON CONDUCTING SOLID BIOPOLYMER ELECTROLYTE BASED ON 2-HYDROXYETHYL CELLULOSE INCORPORATED DTAB.

AIP CONFERENCE PROCEEDINGS

2017 JOURNAL SCOPUS MAIN AUTHOR

58. EFFECT OF SORBITOL AT DIFFERENT CONCENTRATIONS ON THE FUNCTIONAL PROPERTIES OF GELATIN/CARBOXYMETHYL CELLULOSE (CMC)/CHITOSAN COMPOSITE FILMS

INTERNATIONAL FOOD RESEARCH JOURNAL

2017 JOURNAL SCOPUS CO-AUTHOR

59. STUDIES OF IONIC CONDUCTIVITY AND A.C. CONDUCTION MECHANISM OF 2-HYDROXYETHYL CELLULOSE BASED SOLID POLYMER ELECTROLYTES.

JOURNAL OF SUSTAINABILITY SCIENCE AND MANAGEMENT SPECIAL ISSUE

2017 JOURNAL SCOPUS MAIN AUTHOR

60. TRANSPORT STUDIES OF CARBOXY METHYL CELLULOSE/CHITOSAN-AMMONIUM BROMIDE BIOPOLYMER BLEND ELECTROLYTES AS AN IONIC CONDUCTOR.

JOURNAL OF SUSTAINABILITY SCIENCE AND MANAGEMENT SPECIAL ISSUE

2017 JOURNAL SCOPUS MAIN AUTHOR

61. AN ENHANCEMENT ON ELECTRICAL PROPERTIES OF CARBOXYMETHYL CELLULOSE-NH₄BR BASED BIOPOLYMER ELECTROLYTES THROUGH IMPEDANCE CHARACTERIZATION.

INTERNATIONAL JOURNAL OF POLYMER ANALYSIS AND CHARACTERIZATION

2017 JOURNAL SCOPUS MAIN AUTHOR

62. ANALYSES OF IONIC CONDUCTIVITY AND DIELECTRIC BEHAVIOR OF SOLID POLYMER ELECTROLYTE BASED 2-HYDROXYETHYL CELLULOSE DOPED AMMONIUM NITRATE PLASTICIZED WITH ETHYLENE CARBONATE

AIP CONFERENCE PROCEEDINGS.

2017 JOURNAL SCOPUS MAIN AUTHOR

63. THE EFFECT OF IONIC CHARGE CARRIERS IN 2-HYDROXYETHYL CELLULOSE SOLID BIOPOLYMER ELECTROLYTES DOPED GLYCOLIC ACID VIA FTIR-DECONVOLUTION TECHNIQUE.

JOURNAL OF SUSTAINABILITY SCIENCE AND MANAGEMENT SPECIAL ISSUE

2017 JOURNAL SCOPUS MAIN AUTHOR

64. DEVELOPMENT OF LOW COST BLOCK MOLD FOR COPPER ALLOY CASTING

JURNAL TEKNOLOGI

2016 JOURNAL SCOPUS CO-AUTHOR

PUBLICATION

66. THICKNESS DEPENDENT ON ENERGY BAND GAP AND ELECTRICAL CONDUCTIVITY OF UNDOPED CONJUGATED POLYMER THIN FILMS.

MATERIALS SCIENCE FORUM

2016 JOURNAL SCOPUS CO-AUTHOR

67. CHARACTERIZATION OF PROTON CONDUCTING CARBOXYMETHYL CELLULOSE/CHITOSAN DUAL-BLEND BASED BIOPOLYMER ELECTROLYTES

MATERIALS SCIENCE FORUM

2016 JOURNAL SCOPUS MAIN AUTHOR

68. EFFECT OF XANTHAN GUM ON THE PHYSICAL AND MECHANICAL PROPERTIES OF GELATIN-CARBOXYMETHYL CELLULOSE FILM BLENDS.

FOOD PACKAGING AND SHELF LIFE

2016 JOURNAL SCOPUS CO-AUTHOR

69. PREPARATION AND PHYSICAL PROPERTIES OF GELATIN/CMC/CHITOSAN COMPOSITE FILMS AS AFFECTED BY DRYING TEMPERATURE

INTERNATIONAL FOOD RESEARCH JOURNAL

2016 JOURNAL SCOPUS CO-AUTHOR

70. IONIC CONDUCTIVITY AND ELECTRICAL PROPERTIES OF CARBOXYMETHYL CELLULOSE - NH₄CL SOLID POLYMER ELECTROLYTES

JOURNAL OF ENGINEERING SCIENCE AND TECHNOLOGY

2016 JOURNAL SCOPUS MAIN AUTHOR

71. EFFECT OF DRYING TEMPERATURE ON THE FUNCTIONAL PROPERTIES OF BIODEGRADABLE CMC-BASED FILM FOR POTENTIAL FOOD PACKAGING.

INTERNATIONAL FOOD RESEARCH JOURNAL

2016 JOURNAL SCOPUS CO-AUTHOR

72. NOVEL PROTON CONDUCTING SOLID BIO-POLYMER ELECTROLYTES BASED ON CARBOXYMETHYL CELLULOSE DOPED WITH OLEIC ACID AND PLASTICIZED WITH GLYCEROL

SCIENTIFIC REPORTS

2016 JOURNAL WOS MAIN AUTHOR

73. CHARACTERIZATION OF UN-PLASTICIZED AND PROPYLENE CARBONATE PLASTICIZED CARBOXYMETHYL CELLULOSE DOPED AMMONIUM CHLORIDE SOLID BIOPOLYMER ELECTROLYTES

CARBOHYDRATE POLYMERS

2016 JOURNAL WOS MAIN AUTHOR

74. POTENTIAL STUDY OF BIO-POLYMER BASED CARBOXY METHYLCELLULOSE ELECTROLYTES SYSTEM FOR SOLID STATE BATTERY APPLICATION. INTERNATIONAL

JOURNAL OF POLYMERIC MATERIALS AND POLYMERIC BIOMATERIALS

2016 JOURNAL SCOPUS CO-AUTHOR

75. STRUCTURAL AND IONIC TRANSPORT PROPERTIES OF PROTONIC CONDUCTING SOLID BIOPOLYMER ELECTROLYTES BASED ON CARBOXYMETHYL CELLULOSE DOPED WITH AMMONIUM FLUORIDE

THE JOURNAL OF PHYSICAL CHEMISTRY B

2016 JOURNAL WOS MAIN AUTHOR

76. EFFECT OF AMMONIUM CARBONATE SALT CONCENTRATION ON STRUCTURAL AND IONIC CONDUCTIVITY OF CELLULOSE BASED SOLID POLYMER ELECTROLYTES

FIBERS AND POLYMERS

2015 JOURNAL SCOPUS MAIN AUTHOR

77. THE EFFECT OF DEWAXING AND BURNOUT TEMPERATURE IN BLACK MOLD PROCESS FOR COPPER ALLOY CASTING

INTERNATIONAL JOURNAL OF ENGINEERING AND TECHNOLOGY (IJET)

2015 JOURNAL SCOPUS CO-AUTHOR

PUBLICATION

79. CONDUCTIVITY AND DIELECTRIC ANALYSIS OF CELLULOSE BASED SOLID POLYMER ELECTROLYTES DOPED WITH AMMONIUM CARBONATE (NH₄CO₃)

APPLIED MECHANICS AND MATERIALS

2015 JOURNAL SCOPUS MAIN AUTHOR

80. STRUCTURAL AND CONDUCTION STUDIES OF SOLID BIO PLOYMER ELECTROLYTES SYSTEM BASED ON CARBOXYMETYL CELLULOSE

AMERICAN-EURASIAN JOURNAL OF SUSTAINABLE AGRICULTURE

2015 JOURNAL SCOPUS MAIN AUTHOR

81. IONIC CONDUCTION MECHANISM OF SOLID BIODEGRADABLE POLYMER ELECTROLYTES BASED CARBOXYMETHYL CELLULOSE DOPED AMMONIUM THIOCYANATE

APPLIED MECHANICS AND MATERIALS

2015 JOURNAL SCOPUS MAIN AUTHOR

82. POROSITY AND STRENGTH PROPERTIES OF GYPSUM BONDED INVESTMENT USING TERENGGANU LOCAL SILICA FOR COPPER ALLOYS CASTING

JOURNAL OF ENGINEERING SCIENCE AND TECHNOLOGY

2015 JOURNAL SCOPUS CO-AUTHOR

83. SOLID BIOPOLYMER ELECTROLYTES BASED CARBOXYMETHYL CELLULOSE DOPED WITH AMMONIUM FLUORIDE: IONIC TRANSPORT AND CONDUCTION MECHANISM

POLYMERS FROM RENEWABLE RESOURCES

2015 JOURNAL SCOPUS MAIN AUTHOR

84. CONDUCTION MECHANISM OF SOLID BIOPOLYMER ELECTROLYTES SYSTEM BASED ON CARBOXYMETHYL CELLULOSE ? AMMONIUM CHLORIDE

AMERICAN-EURASIAN JOURNAL OF SUSTAINABLE AGRICULTURE

2015 JOURNAL SCOPUS MAIN AUTHOR

85. ELECTRICAL STUDIES OF CARBOXY METHYLCELLULOSE - CHITOSAN BLEND BIOPOLYMER DOPED DODECYLTRIMETHYL AMMONIUM BROMIDE SOLID ELECTROLYTES

AMERICAN JOURNAL OF APPLIED SCIENCES

2015 JOURNAL SCOPUS MAIN AUTHOR

86. IONIC CONDUCTIVITY AND STRUCTURAL ANALYSIS OF CARBOXYLMETHYL CELLULOSE DOPED WITH AMMONIUM FLUORIDE AS SOLID BIOPOLYMER ELECTROLYTES

AMERICAN-EURASIAN JOURNAL OF SUSTAINABLE AGRICULTURE

2015 JOURNAL SCOPUS MAIN AUTHOR

87. PROTON CONDUCTING SOLID POLYMER ELECTROLYTES BASED CARBOXYMETHYL CELLULOSE DOPED AMMONIUM CHLORIDE: IONIC CONDUCTIVITY AND TRANSPORT STUDIES

INTERNATIONAL JOURNAL OF PLASTICS TECHNOLOGY

2015 JOURNAL SCOPUS MAIN AUTHOR

88. EFFECT OF ADIPIC ACID COMPOSITION ON STRUCTURAL AND CONDUCTIVITY SOLID BIOPOLYMER ELECTROLYTES BASED ON CARBOXY METHYLCELLULOSE STUDIES.

AMERICAN-EURASIAN JOURNAL OF SUSTAINABLE AGRICULTURE

2015 JOURNAL SCOPUS MAIN AUTHOR

89. INVESTIGATION OF THE IONIC CONDUCTION MECHANISM IN CARBOXYMETHYL CELLULOSE/CHITOSAN BIOPOLYMER BLEND ELECTROLYTE IMPREGNATED WITH AMMONIUM NITRATE

INTERNATIONAL JOURNAL OF POLYMER ANALYSIS AND CHARACTERIZATION

2015 JOURNAL SCOPUS MAIN AUTHOR

CONSULTATION

1. PELANTIKAN SEBAGAI PANEL KONSORTIUM KECEMERLANGAN PENYELIDIKAN (KKP) 2023-2024

JABATAN PENDIDIKAN TINGGI

2023

NATIONAL

2. KNOWLEDGE TRANSFER PROGRAMME-KTP

KEMENTERIAN PENDIDIKAN MALAYSIA

2019

NATIONAL

3. PANEL KENAIKAN PANGKAT AHLI AKADEMIK UMT

UNIVERSITI MALAYSIA TERENGGANU

2019

NATIONAL

AWARDS/RECOGNITION

1. ANUGERAH SITASI TERTINGGI (TAHUN SEMASA) KLUSTER SAINS, TEKNOLOGI DAN PERUBATAN

2024 UNIVERSITY

2. ANUGERAH SITASI TERTINGGI (TAHUN SEMASA) KLUSTER SAINS, TEKNOLOGI DAN PERUBATAN

2024 UNIVERSITY

3. ANUGERAH PENERIMA GERAN PENYELIDIKAN

2024 UNIVERSITY

4. ANUGERAH PERKHIDMATAN CEMERLANG TAHUN 2023

2024 UNIVERSITY

5. ANUGERAH PENERBITAN JURNAL BERINDEKS WOS/SCOPUS/MYCITE

2024 UNIVERSITY

6. ANUGERAH PENCAPAIAN RPI TERTINGGI

2024 UNIVERSITY

7. ANUGERAH PEMFAILAN HARTA INTELEK

2024 UNIVERSITY

8. ANUGERAH PENYELIA POPULAR

2024 UNIVERSITY

9. ANUGERAH PENERBITAN PROSIDING BERINDEKS WOS/SCOPUS

2024 UNIVERSITY

10. ANUGERAH SITASI TERTINGGI SAINS DAN TEKNOLOGI, USIM

2024 UNIVERSITY

11. NEXCEL: NEXT GENERATION BIO-BASED ENERGY STORAGE SOLUTION

4TH INNOVATION BANK CHALLENGE 2024 (IBC 2024)

2024 UNIVERSITY SILVER

12. CELIX: PIONEERING CELLULOSE-BASED BIOFILM FOR A GREENER FUTURE

SCEINCE AND TECHNOLOGY RESEARCH EXPO (SCITEX)

2024 UNIVERSITY GOLD

13. BIO-HYYCE CONDUCTING FILM ELECTROLYTES

SCEINCE AND TECHNOLOGY RESEARCH EXPO (SCITEX)

2024 UNIVERSITY GOLD

14. ANUGERAH PENERIMA GERAN PENYELIDIKAN

Majlis Anugerah Kecemerlangan & Penghargaan Fakulti Sains & Teknologi Tahun 2023

2024 UNIVERSITY CERTIFICATE OF APPRECIATION

AWARDS/RECOGNITION

15. ANUGERAH PENERBITAN PROSIDING BERINDEKS WOS/SCOPUS

Majlis Anugerah Kecemerlangan & Penghargaan Fakulti Sains & Teknologi Tahun 2023

2024

UNIVERSITI

CERTIFICATE OF APPRECIATION

16. ANUGERAH PENERBITAN JURNAL BERINDEKS WOS/SCOPUS/MYCITE

Majlis Anugerah Kecemerlangan & Penghargaan Fakulti Sains & Teknologi Tahun 2023

2024

UNIVERSITI

CERTIFICATE OF APPRECIATION

17. ANUGERAH PENCAPAIAN RPI TERTINGGI

Majlis Anugerah Kecemerlangan & Penghargaan Fakulti Sains & Teknologi Tahun 2023

2024

UNIVERSITI

CERTIFICATE OF APPRECIATION

18. ANUGERAH PEMFAILAN HARTA INTELEK

Majlis Anugerah Kecemerlangan & Penghargaan Fakulti Sains & Teknologi Tahun 2023

2024

UNIVERSITI

CERTIFICATE OF APPRECIATION

19. ANUGERAH SITASI TERTINGGI (TAHUN SEMASA) KLUSTER SAINS, TEKNOLOGI DAN PERUBATAN

MAJLIS APRESIASI PENYELIDIKAN DAN INOVASI PPII

2024

UNIVERSITI

CERTIFICATE OF APPRECIATION

20. CELF BIOFILM GREEN ELECTROLYTE FOR PROTON BATTERY

Malaysia Technology Expo (MTE) 2023

2023

ANTARABANGSA

SILVER

21. CELF BIO-FILM: GREEN ELECTROLYTE FOR PROTON BATTERY

34th INTERNATIONAL INVENTION & TECHNOLOGY EXHIBITION MALAYSIA (ITEX2023)

2023

ANTARABANGSA

GOLD

22. GREEN BIOFILM ELECTROLYTE FOR A SAFER BATTERY

3rd Graduate Digital Invention, Innovation & Design (GDIID) 2023

2023

KEBANGSAAN

SILVER

23. HYDRA SOLID BIOPOLYMER ELECTROLYTE

International Research & Innovative Technology Competition (i-RITEC) 2023

2023

ANTARABANGSA

SILVER

24. HY-CAMBRO BIOFILM ELECTROLYTES

International Research & Innovative Technology Competition (i-RITEC) 2023

2023

ANTARABANGSA

SILVER

25. HYDRA GREEN BIOFILM ELECTROLYTE FOR SAFER BATTERY

SCIENCE AND TECHNOLOGY RESERACH EXPO (SCITEX@20TH FST)

2023

UNIVERSITI

BRONZE

26. THE ROLE OF PLASTICIZER IN ENHANCING GREEN ELECTROLYTE FOR SOLID-STATE BATTERY

SCIENCE AND TECHNOLOGY RESERACH EXPO (SCITEX@20TH FST)

2023

UNIVERSITI

BRONZE

27. BIOFILM, A SAFER CHOICE FOR FUTURE BATTERY

VIRTUAL INNOVATION CEMPETITION 2023

2023

KEBANGSAAN

SILVER

28. HYDRA, A BIO-FILM ELECTROLYT

INVENTION, INNOVATION & DESIGN EXPOSITION 2023 (IIDEX 2023)

2023

ANTARABANGSA

SILVER

AWARDS/RECOGNITION

29. HY-CAMBRO BIOFILM ELECTROLYTE

INVENTION, INNOVATION & DESIGN EXPOSITION 2023 (IIDEX 2023)

2023 ANTARABANGSA SILVER

30. CELF, GREEN CONDUCTING ELECTROLYTE

INVENTION, INNOVATION & DESIGN EXPOSITION 2023 (IIDEX 2023)

2023 ANTARABANGSA SILVER

31. CELF BIOFILM: PROTON CONDUCTING CELLULOSE BASED ELECTROLYTES

INNOVATION BANK CHALLENGE (IBC 2022)

2022 UNIVERSITY GOLD

32. ACADEMIC ADVISOR

3RD SYMPOSIUM ON INDUSTRIAL SCIENCE AND TECHNOLOGY 2021 (SISTEC 2021)

2021 INTERNATIONAL

33. ACADEMIC ADVISOR

JABATAN PENDIDIKAN TINGGI, KEMENTERIAN PENGAJIAN TINGGI

2020 NATIONAL

34. SYCOP2.0 : SYNTHETIC CONDUCTIVE POLYMER 2.0

MINGGU PENYELIDIKAN & INOVASI 2019 UNISZA

2019 UNIVERSITY SILVER

35. CMC COATED OSMO-FREEZE DRIED ZINGIBER OFFICINALE SLICES

MINGGU PENYELIDIKAN & INOVASI 2019 UNISZA

2019 UNIVERSITY GOLD

36. SYCOP 2.0 : SYNTHETIC CONDUCTIVE POLYMER 2.0

INTERNATIONAL FESTIVAL OF INNOVATION ON GREEN TECHNOLOGY 2019 (IFINOG) & IDEAS

2019 ANTARABANGSA SILVER

37. SYNERGISTIC EFFECT OF PVDF-COATED FIBERS AS EFFECTIVE OIL SORBENTS

30th INTERNATIONAL INVENTION, INNOVATION & TECHNOLOGY EXHIBITION 2019 (ITEX 2019)

2019 ANTARABANGSA GOLD

38. UMTCOP : UNIVERSITI MALAYSIA TERENGGANU CONDUCTIVE POLYMER

INTERNATIONAL CONFERENCE AND EXPOSITION ON INVENTIONS BY INSTITUTIONS OF HIGHER LEARNING (PECIPTA 2019)

2019 ANTARABANGSA SILVER

39. EDD MOBILEAPPS : INTERACTIVE TEACHING & LEARNING TOWARDS EDUCATION 4.0

K-NOVASI PENGAJARAN DAN PEMBELAJARAN UKM

2019 KEBANGSAAN SILVER

40. EDD MOBILEAPPS : INTERACTIVE TEACHING & LEARNING TOWARDS EDUCATION 4.0

PERTANDINGAN AMALAN INOVASI PENGAJARAN DAN PEMBELAJARAN (AIPP 2018)

2018 UNIVERSITY SILVER

41. VISITING PROFESOR

KOREA INVENTION ACADEMY (KIA)

2016 INTERNATIONAL