DR. SHARMA RAO A/L BALAKRISHNAN

PENSYARAH UNIVERSITI DS13

CONTACT

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Address: Fakulti Kejuruteraan Dan Alam Bina

SUPERVISION

PhD - Completed: 1, Ongoing: 1

Master - Completed: 1, Ongoing: 0

AREAS OF EXPERTISE

Nano Materials

Semiconductor Materials

Fabrication Technology

Biochips

Biosensor

BIOGRAPHY

A lecturer from Fakulti Kejuruteraan Dan Alam Bina. Holds a Phd in Kejuruteraan Nanoelektronik.

ACADEMIC QUALIFICATION

Phd in Kejuruteraan Nanoelektronik (2016)

Bachelor in Kejuruteraan Mikroelektronik (2012)

RESEARCH

1. NANOHYBRID BASED MULTIPLEXED NANO-INTERDIGITATED ELECTRODE ARRAY (NIDEA) BIOSENSOR FOR CANCER RELATED DISEASE

2020 ON GOING MAIN RESEARCHER

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

2018 ON GOING MAIN RESEARCHER

PUBLICATION

1. COMPARATIVE ANALYSIS ON DIELECTRIC GOLD AND ALUMINIUM TRIANGULAR JUNCTIONS: IMPACT OF IONIC STRENGTH AND BACKGROUND ELECTROLYTE BY PH VARIATIONS

2020 JOURNAL

2. DESIGN AND FABRICATION OF POLYDIMETHYLSILOXANE BASED LOW COST MICROFLUIDIC FOR ULTRA-FAST DIAGNOSTIC APPLICATIONS

2018 JOURNAL

3. SMART WATER TURBIDITY LEVEL MEASUREMENT SYSTEM WITH WIRELESS DATA TRANSMISSION BASED ON ARDUINO HARDWARE PLATFORM

2018 PROCEEDING

4. DESIGN AND FABRICATION OF POLYDIMETHYLSILOXANE BASED LOW COST MICROFLUIDIC FOR ULTRA-FAST DIAGNOSTIC APPLICATIONS

2017 PROCEEDING

5. POLYSILICON NANOGAP LAB-ON-CHIP FACILITATES MULTIPLEX ANALYSES WITH SINGLE ANALYTE

2016 JOURNAL

6. A POINT-OF-CARE IMMUNOSENSOR FOR HUMAN CHORIONIC GONADOTROPIN IN CLINICAL URINE SAMPLES USING A CUNEATED POLYSILICON NANOGAP LAB-ON-CHIP

2015 JOURNAL

7. POLYSILICON NANOGAP LAB-ON-CHIP FACILITATES MULTIPLEX ANALYSES WITH SINGLE ANALYTE

2015 PROCEEDING

8. DEVELOPMENT OF HIGHLY SENSITIVE POLYSILICON NANOGAP WITH APTES/GOX BASED LAB-ON-CHIP BIOSENSOR TO DETERMINE LOW LEVELS OF SALIVARY GLUCOSE

2014 JOURNAL

9. CONVENTIONAL PHOTOLITHOGRAPHY AND PROCESS OPTIMIZATION OF PATTERN-SIZE EXPANSION TECHNIQUE FOR NANOGAP BIOSENSOR FABRICATION

2013 PROCEEDING

10. PATTERN TRANSFER OF 1?M SIZED MICROGAP AND MICROBRIDGE ELECTRODE FOR APPLICATION IN BIOMEDICAL NANO-DIAGNOSTICS

2013 PROCEEDING

11. THIN FILM THICKNESS AND UNIFORMITY MEASUREMENT FOR LAB-ON-CHIP BASED NANOELECTRODE BIOSENSOR DEVELOPMENT

2013 PROCEEDING

12. MICROFLUIDIC PHOTOMASK DESIGN USING CAD SOFTWARE FOR APPLICATION IN LAB-ON-CHIP BIOMEDICAL NANODIAGNOSTICS

2013 PROCEEDING

13. PHOTORESIST MICROBRIDGE PATTERN OPTIMIZATION AT 1?M USING CONVENTIONAL PHOTOLITHOGRAPHY TECHNIQUE

2013 PROCEEDING

14. NANOELECTRODE CHROME PHOTOMASK DESIGN AND SPECIFICATION FOR BIOSENSOR FABRICATION

2013 PROCEEDING

15. QUANTITATIVE MEASUREMENT OF SUGAR CONCENTRATION USING IN HOUSE FABRICATED MICROGAP BIOSENSOR

2013 PROCEEDING

16. PH SENSING USING IN HOUSE FABRICATED POLYSILICON NANOELECTRODE BASED TRANSDUCER

2012 PROCEEDING

17. CARBON NANOTUBES-BASED ELECTROCHEMICAL BIOSENSORS

2012 PROCEEDING

AWARDS/RECOGNITION

1. PHOTOACOUSTIC TOMOGRAPHY CONCEPT FOR EARLY DETECTION OF PREMOLAR CARIES

2025 Antarabangsa Silver

2. ENZYMATIC COCOA POD WAX EXTRACTION MONITORING DEVICE FOR COCOA FARMS

2024 Universiti Silver

3. NANOHYBRID BASED MULTIPLEXED NANO-INTERDIGITATED ELECTRODE ARRAY (NIDEA) BIOSENSOR FOR CANCER RELATED DISEASE

2023 Universiti Gold

4. THE POTENTIAL OF .... TOMOGRAPHY (PAT) TECHNIQUE FOR DENTAL IMAGING..

2023 Universiti Bronze

5. STAF CONTOH BULANAN SEPT 2022

2022 UNIVERSITY