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*Emerson Pascawira Sinulingga, S.T., M.Sc., Ph.D. dilahirkan di Medan pada tanggal 30 Maret 1977. Beliau merupakan seorang dosen Elektro di Universitas Sumatera Utara. Beliau menyelesaikan pendidikan terakhirnya pada jenjang Doctor of Philosophy in Electrical and Electronic Engineering di Department of Electrical & Electronic Engineering, the School of Engineering, the University of Manchester, Inggris pada tahun 2014.*

## Publications

2024

Jurnal internasional bereputasi

### **Compact 3D monolithic microwave integrated circuit bandpass filter based on meander resonator for 5G millimeter-wave**

EMERSON PASCAWIRA SINULINGGA

2011

Artikel ilmiah

### **Wideband 3D coplanar waveguide to thin-film microstrip transition in multilayer technology**

EMERSON PASCAWIRA SINULINGGA

2019

Jurnal nasional terakreditasi

### **3D Modeling Parallel Coupled-Line Bandpass Filter Based on Coplanar Waveguide MMIC Multilayer Technology**

EMERSON PASCAWIRA SINULINGGA , SUHERMAN

2025

Jurnal internasional bereputasi

### **SAVITZKY-GOLAY AND WIENER FILTERING PERFORMANCE ANALYSIS IN ELECTROENCEPHALOGRAPHY SIGNAL PROCESSING OF AUTISTIC CHILDREN**

EMERSON PASCAWIRA SINULINGGA

2021

Prosiding seminar internasional

### **Design of Geothermal and Solar Hybrid Renewable Energy in Sipoholon Village, North Tapanuli Regency, North Sumatera**

EMERSON PASCAWIRA SINULINGGA , SUHERMAN , YULIANTA SIREGAR

2023

Prosiding seminar internasional

### **Metal Insulator Metal Capacitors, Spiral Inductors and Resistors for Multilayer CPW MMIC**

EMERSON PASCAWIRA SINULINGGA

2025

Prosiding seminar internasional

### **The Influence of Soil Two-Layer Structures on Substation Safety in Lightning**

## Strike Conditions

EMERSON PASCAWIRA SINULINGGA , SURYA HARDI , DWI PUTRI WARDANI , Muhd Hafizi Idris

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2024

Prosiding seminar internasional

### **Innovative Portable Quantitative EEG Data Acquisition Based Cyton Biosensing Board using PSD Analysis**

EMERSON PASCAWIRA SINULINGGA , FAHMI , MELINDA , PRIMA DEWI PURNAMASARI , Imam Ashabul Yamin

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2025

Prosiding seminar internasional

### **Wearable Microstrip Patch Antenna to Develop Wireless Body Area Network for Electroencephalogram (EEG) Application**

EMERSON PASCAWIRA SINULINGGA , FAHMI , MELINDA , PRIMA DEWI PURNAMASARI , GLORI MARIANI SILITONGA , Abdul Risyal Nasution

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2020

Prosiding seminar internasional

### **LTE soft handover based on hysteresis and threshold combination**

EMERSON PASCAWIRA SINULINGGA , MAKSUM PINEM , SUHERMAN

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2025

Jurnal internasional bereputasi

### **A comprehensive EEG dataset and performance assessment for Autism Spectrum Disorder**

PRIMA DEWI PURNAMASARI , MELINDA , FAHMI , EMERSON PASCAWIRA SINULINGGA , YUWALDI AWAY , YUNIDAR

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2025

Prosiding seminar internasional

### **Alcoholic EEG Signal Feature Extraction Based on Relative Wavelet Bispectrum and Bispectrum-Gaussian Using CNN and ANN Classifier**

EMERSON PASCAWIRA SINULINGGA , FAHMI , PRIMA DEWI PURNAMASARI , ANAK AGUNG PUTRI RATNA , MELINDA

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2023

Prosiding seminar internasional

### **Analysis of soil resistivity improvement with variations of bentonite and chemical for grounding of electrical equipment**

SURYA HARDI , EMERSON PASCAWIRA SINULINGGA

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2021

Prosiding seminar internasional

### **Diagnosis of Transformer Isolation Using Dielectric Dissipation Factor (Tan Delta) and Insulation Resistance: A Review Study**

EMERSON PASCAWIRA SINULINGGA , HARYOTO PRASETYO NUGROHO , AZWAR NASUTION , Syafruddin Hasan

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2023

Prosiding seminar internasional

### **3dB Wilkinson Power Divider Using Monolithic Microwave Integrated Circuit Technology**

SURYA HARDI , ANDREAS JUAN DANIEL SIMORANGKIR , EMERSON PASCAWIRA SINULINGGA

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2021

Prosiding seminar internasional

### **Grounding Systems in High Voltage Substation by Analysis Optimization Design (Case Study : 150kV Tapak Tuan Substation)**

SUHERMAN , YULIANTA SIREGAR , EMERSON PASCAWIRA SINULINGGA

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2026

Prosiding seminar internasional

### **Design of a Low-Noise Amplifier for 2.4 GHz Wi-Fi Positioning Using 45 nm CMOS Technology**

EMERSON PASCAWIRA SINULINGGA , SUHERMAN , RYADH AL ARIZ BANGSAWAN PUTRA RAMBE , M YAVI RACHMAN , Abdul Risyal Nasution

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# Researches

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2025

Penelitian Fundamental

## **Desain dan Pengembangan Modul Low Noise Amplifier Untuk Aplikasi Wifi Pada Frekuensi 2.4 GHz**

SUHERMAN , EMERSON PASCAWIRA SINULINGGA , PRAMIO GARSON SEMBIRING IR

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# Community Services

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2023

Ipteks Bagi Masyarakat

## **Pelatihan Desain Robot Beroda Pada Siswa SMA Negeri 1 Sidikalang**

SOEHARWINTO , TIGOR HAMONANGAN NASUTION , EMERSON PASCAWIRA SINULINGGA , FAHMI , KASMIR TANDJUNG

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