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Dr. Martha Rianna, S.Si was born in Jakarta on March 21, 1993. She is a Physics lecturer at the Universitas Sumatera Utara. She completed her doctoral degree in Physics at the Universitas Sumatera Utara in 2019.

Publications

2026
Jurnal internasional bereputasi

Calcination-induced structural evolution and magnetic–optical properties of hydrothermally synthesized BaFe12O19/V2O5 composites

MARTHA RIANNA , ERWIN , TIMBANGEN SEMBIRING , Evi Linanda Silalahi , Akrajas Ali Umar

2026
Jurnal internasional bereputasi

Composition-driven structural, hard magnetic, and optical properties of hydrothermally synthesized BaFe12O19/V2O5 composites

MARTHA RIANNA , TIMBANGEN SEMBIRING , ERWIN , Rianto Nadapdap , Frederica Simanjuntak , Muhammad Khalid Hussain

2026
Jurnal internasional bereputasi

Composition-dependent electromagnetic response of NiO/$BaFe_{12}O_{19}$ microwave absorbing composites

MARTHA RIANNA , ACHMAD WALID , TIMBANGEN SEMBIRING , Linda Ewi Diana , Liderson Sinaga , Yeni P.S. Naibaho , Muhammad Khalid Hussain , Nanang Sudrajat

2025
Prosiding seminar internasional

Structural and Magnetic Studies of Co0.8Ni0.2Fe2O4 Using Co-Precipitation Method

MARTHA RIANNA , SYAHRUL HUMAIDI , TIMBANGEN SEMBIRING , Aknes Talanda , Yoga Pratama , Muhammad Khalid Hussain , Eko Arief Setiadi , Anggito P. Tetuko , Perdamean Sebayang

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Jurnal internasional bereputasi

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Jurnal internasional bereputasi

Thermo-Physical Enhancement of Paraffin Based Phase Change Materials with Iron Sand (Fe3O4) for Application in Building Thermal Management

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Jurnal internasional bereputasi

Micro-Magnetic Activity of the Fabricated MnFe2O4 via Co-Precipitation from Natural Iron Sand

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Prosiding seminar internasional

Magnetic and Optical Properties of α-Fe2O3/TiO2 Nanocomposite Derived from Logas Natural Sand for Environmental Application

TEGUH P. HADILALA , NOVALIN PUTRI , MARTHA RIANNA , ARI SULISTYO RINI , ERWIN , LAZUARDI , AMIR AWALUDDIN

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Jurnal internasional bereputasi

Characterization of BaFe12O19/Co3O4 using mechanical alloying approach for microwave absorbing materials

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Jurnal nasional terakreditasi

THE EFFECT OF TETRAETHIL ORTHOCILICATE (TEOS) ON Fe3O4 NANOPARTICLES ADDITION IN ELECTRICAL

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MARTHA RIANNA , ERWIN , SALOMO , AMIR AWALUDDIN , Heri Hadianto , Muhammad Rizki , Novia Magdalena Purba , Indah Tamara Sitorus

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Artikel ilmiah

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Manufacture and characterization of indicator electrodes from PPy + H2SO4 and PPy + Sulfonic acid as a urea sensor using urease enzyme immobilization technique in PVA

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Nano-structures and magnetic properties of Zn1-xCux/2Nix/2Fe2O4 (x = 0-0.4) synthesized from natural iron sand

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Water Conservation and Sanitation HKBP Sidorame Private SMA

MARTHA RIANNA , NOVERITA SPRINSE VINOLINA

2021
Jurnal internasional bereputasi

UNDOPED AND MANGANESE DOPED IRON OXIDE NANOPARTICLES FOR ENVIRONMENTAL APPLICATIONS

MARTHA RIANNA

2020
Jurnal internasional bereputasi

The effect of Mgâ€“Al binary doped barium hexaferrite for enhanced microwave absorption performance

MARTHA RIANNA

2020
Prosiding seminar internasional

Study of Thermal Conductivity of Fe3O4 Nanoparticles Coated With TEOS

KURNIA SEMBIRING , KERISTA SEBAYANG , TIMBANGEN SEMBIRING , MARTHA RIANNA

2020
Prosiding seminar internasional

Micro-structures and magnetic properties of Mg-Al substituted in barium

hexa-ferrite prepared by co-precipitation method

TIMBANGEN SEMBIRING , MARHAPOSAN SITUMORANG , MARTHA RIANNA

Researches

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Ipteks Bagi Kewirausahaan

Detektor Gangguan Keseimbangan Massa Tubuh Pasien Maloklusi

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MARTHA RIANNA , JANE ELNOVRENY

2023
Penelitian Kerjasama Antar Perguruan Tinggi

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Ipteks

Pengembangan Magnet dari Logam Transisi (Co dan Ni) Berbahan Baku Lokal untuk Material Pembersih Air Limbah Logam Berat

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STUDI DAN KARAKTERISASI NANOPARTIKEL Fe3O4-PEG DENGAN METODE CO-PRESIPITASI UNTUK PEMBUATAN MAGNET PERMANEN

MARHAPOSAN SITUMORANG , MARTHA RIANNA , FITRI HANDAYANI , Perdamean Sebayang

2021
Penelitian Kerjasama Antar Perguruan Tinggi

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MARTHA RIANNA , PERDINAN SINUHAJI

Community Services

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Ipteks Bagi Masyarakat

Pembelajaran Konsep Fisika melalui Metode Eksperimen dan Peragaan bagi Siswa-Siswi di SMA Negeri 9 Medan, Sumatera Utara

MARTHA RIANNA , PERDINAN SINUHAJI , MARNALA WINDAWATI TOGATOROP , GRACE DAVINA BR MANULLANG , LASTRI DEBORA SITANGGANG , APRIANI PIRDASARI SIDABUTAR , DARA DIVA NASUTION

2022

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2021

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MARTHA RIANNA , NOVERITA SPRINSE VINOLINA , PERDINAN SINUHAJI

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Peningkatan Sensitivitas Elektroda Indikator Metode Voltametri Teknik Immobilisasi Enzim Urease Pada PVA Cross Linking GA, Coating Polimer Konduksi PANI Dan PVC KTpClPB-o-NPO

JANE ELNOVRENY , MARTHA RIANNA , ABD HAKIM S

2023
Hak cipta nasional

Fisika Dasar Jilid 1

MARTHA RIANNA , TIMBANGEN SEMBIRING

2018
Paten nasional

Metode Pembuatan Serbuk Barium Heksaferit dari Pasir Besi Alam

TIMBANGEN SEMBIRING , MARTHA RIANNA