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Dr. Drs. Amir Hamzah Siregar, M.Si. was born in Padang Sidempuan/South Tapanuli on June 14, 1961, and is a lecturer in Chemistry at Universitas Sumatera Utara. He completed a Doctoral Program in Chemistry at USU in 2014.

Publications

2024
Jurnal internasional bereputasi

Synthesis and application of nano-silicon prepared from rice husk with the hydrothermal method and its use for anode lithium-ion batteries

AMIR HAMZAH SIREGAR , SAUR LUMBANRAJA , Amru Daulay , SUSILO SUDARMAN , ANDRIAYANI

2023
Jurnal internasional bereputasi

Synthesis of silicon nanoparticles with various additions of inert salt as scavenger agent during reduction by the magnesiothermic method as anode lithium-ion batteries

AMIR HAMZAH SIREGAR , SAUR LUMBANRAJA , Amru Daulay , SUSILO SUDARMAN , ANDRIAYANI

2023
Prosiding seminar internasional

Making of sound damping from interpenetrating polymer network of polyurethane and EPDM rubber with corncobs powder (Zea mays) as filler material

AMIR HAMZAH SIREGAR

2022
Jurnal internasional bereputasi

The manufacture nanofiber from sugarcane bagasse lignin with polyvinyl alcohol by electrospinning method

AMIR HAMZAH SIREGAR

2022
Jurnal internasional

Lignin Isolation from Oil Palm Empty Fruit Bunches (OPEFB) by Acidic Method

SAHARMAN GEA , AMIR HAMZAH SIREGAR , MAHYUNI HARAHAP

2021
Jurnal internasional bereputasi

Chemical content and fiber dimension of agarwood branches (Aquilaria malaccensis Lamk)

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2021
Jurnal internasional bereputasi

Mechanical and morphology characteristics of natural rubber-styrene butadiene rubber (NR-SBR) blends in the presence of natural microbentonite

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2021
Jurnal internasional bereputasi

Mechanical, thermal and adhesion characteristics of natural rubber/epoxidised natural rubber (NR/ENR 25) blends containing natural microbentonite

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2021
Jurnal internasional bereputasi

Chemical Compounds and Antioxidant Potential in Hot Water Extract of Cultivated Agarwood (Aquilaria malaccensis) Lamk Leaves

AMIR HAMZAH SIREGAR

2021
Prosiding seminar internasional

Mechanical and morphology characteristics of natural rubber-styrene butadiene rubber (NR-SBR) blends in the presence of natural microbentonite

AMIR HAMZAH SIREGAR , BASUKI

2021
Jurnal internasional bereputasi

Bioactive compounds of ethanol extract from agarwood leaves (Aquilaria malaccensis) and antimicrobial activity against bacteria and fungi growing on the skin

RIDWANTI BATUBARA , AMIR HAMZAH SIREGAR , URIP HARAHAP , TAMRIN

2021
Prosiding seminar internasional

Counseling on health and cleaning protocols, training and demonstration on preparation of hand sanitizer using betel leaf extract and carboxhymetil cellulose of rice straw as antibacterial and moisturising agents for worshipers and community around Nurul Hasanah mosque in Dusun-XI, Sei Rotan, Percut Sei Tuan, Deli Serdang Regency

TAMRIN , AMIR HAMZAH SIREGAR , BASUKI , GUSTANTO

2021
Jurnal internasional bereputasi

Chemical content analysis of agarwood (Aquilaria malaccensis Lamk) twigs

AMIR HAMZAH SIREGAR

2021
Jurnal internasional bereputasi

Preparation of Biodegradable and Low-Cost Lignin-Based PVOH Carbon Fibers Prepared by Electrospinning

AMIR HAMZAH SIREGAR , SAHARMAN GEA

2021
Jurnal internasional bereputasi

Phytochemical screening and py-gc-ms analysis of agarwood leaves (Aquilaria malaccensis lamk.) cultivated in bahorok, langkat regency, North Sumatra, Indonesia

AMIR HAMZAH SIREGAR

2021
Jurnal internasional bereputasi

Bioactive compounds of ethanol extract from agarwood leaves (Aquilaria malaccensis) and antimicrobial activity against bacteria and fungi growing on the skin

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2020
Jurnal internasional bereputasi

Characteristics of maleic anhydrida-modified polystyrene containing sand

aggregate

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2020
Jurnal internasional bereputasi

Preparation and characterisations of maleic anhydridemodified-(asphalt, natural rubber, and polystyrene) blends containing sand aggregate

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2020
Jurnal internasional bereputasi

Characteristics of maleic anhydride-modified polystyrene and natural rubber blends containing "talang" bamboo powder as sound damping material

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2020
Jurnal internasional bereputasi

Modification of Natural Rubber (SIR 10) with Maleic Anhydride as Binder for Sand Aggregate

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2020
Jurnal internasional bereputasi

Efficiency of maleic anhydride-modified polystyrene/Natural rubber blends as sand aggregate binder

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2020
Jurnal internasional bereputasi

Isolation and characterisation of cellulose nanofibre and lignin from oil palm empty fruit bunches

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2019
Jurnal internasional bereputasi

The use of nanofibrils celulose of sugarcane bagasse as precursor in synthesizing carbon nanodots by hydrothermal method

AMIR HAMZAH SIREGAR

2019
Jurnal internasional bereputasi

Improvisation of Mechanical Properties on Natural Rubber Latex Nanocomposites with Additioning of Cellulose Nanocrystals (CNCs) Percolated by Carbon Nanotubes (CNTs) in VariousÂ ...

DIANA ALEMIN BARUS , AMIR HAMZAH SIREGAR , SAHARMAN GEA

2019
Jurnal internasional bereputasi

Compatibility and Thermal Properties of Maleic Anhydride-grafted-Polystyrene Containing Microcrystal cellulose (Avicel) as Raw Material for Soil Binder

AMIR HAMZAH SIREGAR

2019
Jurnal internasional

Compatibility and Thermal Properties of Maleic Anhydride-grafted-Polystyrene Containing Microcrystal cellulose (Avicel) as Raw Material for Soil Binder

BASUKI , AMIR HAMZAH SIREGAR , TAMRIN

2018
Jurnal internasional bereputasi

Compatibilitation of cyclic natural rubber (resiprene-35) with polypropylene in the presence of oleic acid and benzoyl peroxide

AMIR HAMZAH SIREGAR

2018
Jurnal internasional

Compatibilitation of cyclic natural rubber (resiprene-35) with polypropylene in the presence of oleic acid and benzoyl peroxide

AMIR HAMZAH SIREGAR , TULUS IKHSAN NASUTION , BASUKI , TAMRIN

Researches

2022

Optimalisasi Kekuatan Mekanik dan Ikatan Antarmuka Lapis Tipis AspalPasir Termodifikasi Karet Alam Cair dengan Penambahan Aditif Berbasis Lilin sebagai Lapis Aus (Ac-Wc) Perkerasan Jalan

THAMRIN , AMIR HAMZAH SIREGAR

Community Services

2022

Ipteks Bagi Masyarakat

PEMBUATAN DAN KARAKTERISASI LIMBAH TONGKOL JAGUNG SEBAGAI MAKANAN TERNAK PADA KELOMPOK MASYARAKAT PETERNAK KAMBING DI DESA SEI MENCIRIM KECAMATAN KUTALIMBARU KABUPATEN DELI SERDANG

GUSTANTO , AMIR HAMZAH SIREGAR , TAMRIN

Intellectual Property Rights

2024

Paten nasional

Komposisi Lapis Tipis Aspal Pasir (Latasir) Termoditifikasi Karet Alam Terdergdasi (KAd)

IRENE INDAH CAPRI RITONGA , TAMRIN , AMIR HAMZAH SIREGAR

2023

Paten nasional

PADUAN KARET ALAM (SIR-10) DAN KARET ALAM TEREPOKSIDASI (ENR25) DENGAN PENAMBAHAN MIKROBENTONIT ALAM SEBAGAI BAHAN DASAR ADESIF

TAMRIN , BASUKI , AMIR HAMZAH SIREGAR