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Fakultas Matematika Dan Ilmu Pengetahuan Alam
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Saharman Gea S.Si., M.Si. Ph.D dilahirkan di Nias pada tanggal 10 November 1968. Beliau merupakan seorang dosen Kimia di Universitas Sumatera Utara. Beliau menyelesaikan pendidikan terakhirnya pada jenjang S3, program studi Kimia di London pada tahun 2011.

Publications

2012

Makalah ilmiah

Nonporous chitosan/collagen scaffold for skin tissue engineering

SAHARMAN GEA

2018

Makalah ilmiah

All-cellulose composite isolated from oil palm empty fruit bunch

SAHARMAN GEA

2018

Makalah ilmiah

Activity assays of calcinated sarulla natural zeolite (snz-cal) in catalytic hydrocracking rubber seed oil

SAHARMAN GEA

2025

Jurnal internasional bereputasi

Synergy of Intercalation and Stacking Fault Formation to Increase the Optical Properties of N-CQDs/ZnO NCs via Nonmetal-Metal Interface and The Investigation of Its Photocatalytic Activities for Degradation of Rhodamine B

AVERROES FAZLUR RAHMAN PILIANG , SAHARMAN GEA

2018

Makalah ilmiah

The characterization of Sarulla natural zeolite crystal and its morphological structure

SAHARMAN GEA

2019

Prosiding seminar nasional

Analisa XRD Terhadap Perubahan Struktur Dan Kristalinitas Karbonisasi Batubara Sawahlunto - Sijunjung Sumatera Barat

SAHARMAN GEA , BASUKI , Ir. VIVI PURWANDARI, M.Si

2026

Jurnal internasional

Biochar-Based Catalysts in Hydrogen Production: Mechanisms, Activation, and Efficiency

SAHARMAN GEA , BASUKI , ANDRIAYANI , RICKY ANDI SYAHPUTRA , KARNA WIJAYA , SHIPLU SARKER

2022

Jurnal nasional terakreditasi

Enhancement Mechanical Properties of Simalambuo Wood (*Loppophetalum spp*) Delignified using NaOH in the Thermomechanical Densification Method

SAHARMAN GEA , ANDRIAYANI , FEBRI SINDIKA , NUR AZIZAH

2023

Artikel ilmiah

Lignocellulosic analysis from oil palm empty fruit bunches and crystallinity index analysis of cellulose nanofibers isolated via high pressure steam explosion

TAMRIN , SAHARMAN GEA , JULIATI BR TARIGAN

2014

Jurnal internasional bereputasi

Mechanical properties of nanocrystal cellulose reinforced polystyrene with glycerol monostearic as antistatic agent

SAHARMAN GEA

2023

Jurnal internasional bereputasi

Photocatalytic Degradation of Methylene Blue Using Nâ€‘Doped ZnO/ Carbon Dot (N-ZnO/CD) Nanocomposites Derived from Organic Soybean

ANDRIAYANI , SAHARMAN GEA

2018

Jurnal internasional

Preparation of graphene oxide/bacterial cellulose nanocomposite via in situ process in agitated culture

SAHARMAN GEA

2025

Jurnal nasional terakreditasi

Antifungal activities of auto-polymerized silicone soft denture liner material containing *Origanum vulgare* gel against *Candida albicans* over 14-day period: an in vitro study

ARIYANI DRG , ISMET DANIAL NASUTION , DWI SURYANTO , SAHARMAN GEA

2024

Jurnal internasional

The Effect of Concentration Based on Etching Time of Hydrofluoric Acid on Shear-Bond Strength of Porcelain Repair Material on Cohesive Fractures of Porcelain Fused to Metal Restoration

SYAFRINANI , SAHARMAN GEA , PUTRI WELDA UTAMI RITONGA , ANDRI SINULINGGA

2024

Prosiding seminar internasional

Esterification of palm fatty acid distillate to methyl ester using amberlyst catalyst in a semi-continuous reactor

SAHARMAN GEA , SYUKRI , EDDIYANTO , ALFA AKUSTIA WIDATI

2018

Makalah ilmiah

Fabrication and characterization of natural rubber composite (sir 5)/organomontmorillonite using cetil trimetil ammonium bromide as a surface modifier

SAHARMAN GEA

2018

Makalah ilmiah

Morphological study of fluorescent carbon Nanoparticles (F-CNPs) from ground coffee waste soot oxidation by diluted acid

SAHARMAN GEA

2018

Makalah ilmiah

Preliminary study on the fabrication of cellulose nanocomposite film from oil palm empty fruit bunches partially solved into licl/dmac with the variation of

dissolution time

SAHARMAN GEA

2025

Prosiding seminar internasional

The Utilization of Alumunium Waste as Metal Agent to Improve Electrical Characteristics of Biochar-Based Flexible Film

AVERROES FAZLUR RAHMAN PILIANG , SANJAYA BAROAR SAKTI NASUTION , ALFIN FAUZI MALIK , OKI SUPRADA OMPUSUNGGU , SAHARMAN GEA

2023

Jurnal internasional bereputasi

Nanofiber Cellulose/Lignin from Oil Palm Empty Fruit Bunches and the Potential for Carbon Fiber Precursor Prepared by Wet-spinning

SAHARMAN GEA

2026

Jurnal internasional bereputasi

NaHCO₃-Assisted Synthesis of Ni-Promoted Sulfated Mesoporous Silica for the Hydrocracking of Used Cooking Oil into Biogasoline

NIKO PRASETYO , KARNA WIJAYA , SAHARMAN GEA , MARINI FAIRUZ VEBRYANA , Aldino Javier Saviola , Dr. Wahyu Dita Saputri , Dr. Amalia Kurnia Amin, S.Si. , Dr. Latifah Hauli

2022

Jurnal internasional bereputasi

Facile synthesis of ZnO@Ag nanocomposite supported by graphene oxide with stabilised band-gap and wider visible-light region for photocatalyst application

NURHAIDA PASARIBU , SAHARMAN GEA

2023

Jurnal nasional terakreditasi

Synthesis of Carbon Dots From Empty Fruit Bunch Biochar an Acid-Free Hydrothermal Method

MARPONGAHTUN , SAHARMAN GEA

2024

Prosiding seminar internasional

The synthesis of macro-initiator using cellulose isolated from OPEFB via atomic transfer radical polymerization method

SAHARMAN GEA

2018

Makalah ilmiah

The analysis of thermal and mechanical properties of biocomposite policaprolactone/cellulose nanofiber from oil palm empty fruit bunches

SAHARMAN GEA

2015

Jurnal internasional

The effect of concentration of structure and optical properties of thin films synthesized by sol-gel methods spin coating

SAHARMAN GEA

2021

Jurnal internasional bereputasi

The effect of plasticizers and chitosan concentration on the structure and properties of Gracilaria sp.-based thin films for food packaging purpose

EMMA ZAIDAR , MUHAMMAD ZULHAM EFENDI SINAGA , FIRMAN SEBAYANG , YUAN ALFINSYAH SIHOMBING , SAHARMAN GEA , CUT FATIMAH ZUHRA

2020

Jurnal internasional bereputasi

Characteristic and Catalytic Performance of Co and Co-Mo Metal Impregnated in Sarulla Natural Zeolite Catalyst for Hydrocracking of MEFA Rubber Seed Oil into Biogasoline Fraction

2022

Artikel ilmiah

Utilization of Silica Nanoparticles from Rice Husks for Improving the Mechanical Properties of Dental Materials: A Literature Review

SLAMAT TARIGAN , SAHARMAN GEA

2024

Prosiding seminar internasional

Graft Copolymerisation of Maleic Anhydride onto Natural Rubber (SIR-20): Melt Processing and Characterisation

SAHARMAN GEA

2023

Jurnal internasional bereputasi

Pyrolysis of Palm Fronds Waste into Bio-Oil and Upgrading Process Via Esterification-Hydrodeoxygenation Using Cu-Zn Metal Oxide Catalyst Loaded on Mordenite Zeolite

SAHARMAN GEA

2026

Jurnal internasional bereputasi

NaHCO₃-Assisted Synthesis of Ni-Promoted Sulfated Mesoporous Silica for the Hydrocracking of Used Cooking Oil into Biogasoline

NIKO PRASETYO , KARNA WIJAYA , SAHARMAN GEA , MARINI FAIRUZ VEBRYANA , Aldino Javier Saviola , Dr. Wahyu Dita Saputri , Dr. Amalia Kurnia Amin, S.Si. , Dr. Latifah Hauli

2020

Jurnal internasional bereputasi

Isolation and Characterisation of Cellulose Nanofibre and Lignin from Oil Palm Empty Fruit Bunches

SAHARMAN GEA

2020

Jurnal internasional bereputasi

The Stabilization of Liquid Smoke through Hydrodeoxygenation Over Nickel Catalyst Loaded on Sarulla Natural Zeolite

SAHARMAN GEA

2018

Makalah ilmiah

Characterization of composite boards made of oil palm trunk flour/maleic anhydride grafted polypropylene

SAHARMAN GEA

2020

Jurnal internasional bereputasi

Fabrication and In-Vivo Study of Micro-Colloidal Zanthoxylum acanthopodium-Loaded Bacterial Cellulose as a Burn Wound Dressing

SAHARMAN GEA

2011

Jurnal internasional bereputasi

Investigation into the structural, morphological, mechanical and thermal behaviour of bacterial cellulose after a two-step purification process

SAHARMAN GEA

2025

Jurnal internasional

Investigation of electrical conductivity of graphite, graphene oxide (GO) and reduce graphene oxide (rGO) as a filler of acetate cellulose-based nanocomposite

SAHARMAN GEA , ERWAN BENHARD SILITONGA , Gabriella Althea Buntaro , Ronn Goei , Reka Mustika Sari

2022

Jurnal internasional bereputasi

Bio-oil hydrodeoxygenation over zeolite-based catalyst: the effect of zeolite activation and nickel loading on product characteristics

SAHARMAN GEA

2025

Book chapter internasional

Natural Resources, Environment, and Food and Energy Security Updates in North Sumatra

SAHARMAN GEA , ANDRIAYANI , TAMRIN

2018

Jurnal internasional bereputasi

The Preparation of All-Cellulose Nanocomposite Film from Isolated Cellulose of Corncobs as Food Packaging

SAHARMAN GEA

2013

Jurnal internasional bereputasi

Mechanical and thermal properties of bacterial-cellulose-fibre-reinforced mater-biÂ® bionanocomposite

SAHARMAN GEA

2023

Jurnal internasional bereputasi

Compression Strength of Metal-Ceramic Fixed Dental Prostheses Reinforced by Nanoparticle Silica from Rice Husks

SAHARMAN GEA

2022

Jurnal internasional bereputasi

Evaluation to possibility of cellulose fibers isolated from kapok randu (Ceiba Pentandra) as a precursor growth of carbon micro structures with the assist of metal catalysts

ANDRIAYANI , SAHARMAN GEA

2018

Makalah ilmiah

The Isolation of Nanofibre Cellulose from Oil Palm Empty Fruit Bunch Via Steam Explosion and Hydrolysis with HCl 10%

SAHARMAN GEA

2024

Jurnal internasional bereputasi

Development of chromium-impregnated sulfated silica as a mesoporous catalyst in the production of biogasoline from used cooking oil via a hydrocracking process

SAHARMAN GEA

2018

Jurnal nasional

IbM of Small Medium Enterprise of Coconut Milk and Liquid Smoke from Coconut Shells

SAHARMAN GEA

2018

Jurnal internasional bereputasi

Synthesis of nanobentonite as heavy metal adsorbent with various solvents

SAHARMAN GEA

2026

Jurnal internasional bereputasi

Hydrogen generation from coconut shell bio-oil via steam reforming incorporating energy- exergy analysis

KARNA WIJAYA , DENNY HARYANTO SINAGA , SAHARMAN GEA , RICKY ANDI SYAHPUTRA , BASUKI , HENDRA SUSILO

2018
Makalah ilmiah

Acetylation of breadfruit utarch by Using Acetic Anhydride

SAHARMAN GEA

2019
Makalah ilmiah

Preparation of polyvinyl alcohol/cellulose nano fiber nanocomposite isolated from empty oil palm fruit bunches

SAHARMAN GEA

2020
Jurnal internasional

Bacterial cellulose based biosensors

SAHARMAN GEA

2020
Jurnal internasional bereputasi

Characterization of Bacterial Cellulose-Based Wound Dressing in Different Order Impregnation of Chitosan and Collagen

SAHARMAN GEA

2018
Makalah ilmiah

Enhancing the quality of nata de coco starter by channeling the oxygen into the bioreactor through agitation method

SAHARMAN GEA

2015
Jurnal internasional bereputasi

Mechanical properties of oil palm trunk by reactive compregnation methode with dammar resin

SAHARMAN GEA

2024
Jurnal internasional bereputasi

A review: Current trends and future perspectives of bacterial nanocellulose-based wound dressings

SAHARMAN GEA , NOVIA AMALIA SHOLEHA , I PUTU MAHENDRA , Khatarina Meldawati Pasaribu , Nanang Masruchin , Myrtha Karina , Abhishek Gupta , Brian Johnston , Izabela Radecka

2019
Jurnal nasional

Analisa XRD Terhadap Perubahan Struktur Dan Kristalinitas Karbonisasi Batubara Sawahluntoâ€“Sijunjung Sumatera Barat

SAHARMAN GEA

2021
Jurnal internasional bereputasi

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

SAHARMAN GEA

2021
Jurnal internasional bereputasi

Analysis and availability of lignocellulosic wastes: Assessments for Indonesia and Peru

SAHARMAN GEA

2019
Jurnal nasional

Briquettes manufacturing: mechanisation of briquette productions at SME santan coco

SAHARMAN GEA

2019
Makalah ilmiah

Wet-spinning of cellulose acetate reinforced with acetylated nano-crystalline cellulose as carbon fibre precursors

SAHARMAN GEA

2021

Jurnal internasional bereputasi

Extraction silica from rice husk with naoh leaching agent with temperature variation burning rice husk

SAHARMAN GEA

2019

Jurnal nasional

Sintesis Nanoserat Selulosa dari Tandan Kosong Sawit (Tks) dengan Menggunakan Metode Tetramethyl Piperidine 1 Oxyl (TEMPO)

SAHARMAN GEA

2023

Jurnal internasional

The Effect of Fluoride Acid Ething Times on The Adhesive Behaviours of Porcelain Restorative Materials on The Cohesive Fractures of Porcelain Fused to Metal Restoration

PUTRI WELDA UTAMI RITONGA , SYAFRINANI , SAHARMAN GEA , FEMY RILINDA, DRG

2021

Jurnal internasional bereputasi

The effect of plasticizers and chitosan concentration on the structure and properties of Gracilaria sp.-based thin films for food packaging purpose

CUT FATIMAH ZUHRA , SAHARMAN GEA , MUHAMMAD ZULHAM EFENDI SINAGA

2024

Jurnal nasional terakreditasi

Characterization of Silicon from Rice Husk Doped with Cobalt: Analysis of Structure and Magnetoelectric Properties

RIZKY KURNIAWAN , HADI KURNIAWAN , ANDRIAYANI , SAHARMAN GEA

2025

Prosiding seminar internasional

Characterization and evaluation of a cellulose-based hydrogel prepared from oil palm empty fruit bunches and crosslinked with citric acid

NAJLA LUBIS , SAHARMAN GEA , TAMRIN , JULIATI BR TARIGAN

2018

Makalah ilmiah

The Study of Liquid Smoke as Substitutions in Coagulating Latex to the Quality of Crumb Rubber

SAHARMAN GEA

2020

Jurnal nasional terakreditasi

NANOENKAPSULASI ASAM STEARAT DENGAN MODIFIKASI GRAFENA mG/SA WALL-CORE SEBAGAI KOMPOSIT PERUBAHAN FASA

SAHARMAN GEA

2020

Jurnal internasional bereputasi

The exfoliation process of sawahlunto coal into graphene through the modified hummer method

SAHARMAN GEA

2021

Jurnal internasional bereputasi

The effectiveness of coconut coir as tar adsorbent in liquid smoke integrated into the pyrolysis reactor

SAHARMAN GEA

2023
Jurnal internasional bereputasi

Acetylated lignin from oil palm empty fruit bunches and its electrospun nanofibres with PVA: Potential carbon fibre precursor

SAHARMAN GEA

2024
Jurnal nasional terakreditasi

Pioneering bio-oil extraction: The role of transition metal oxide zeolite catalysts in co-pyrolyzing palm fronds and high-density polyethylene

DIANA ALEMIN BARUS , SAHARMAN GEA

2020
Jurnal nasional terakreditasi

Mechanical and morphological characteristic investigations of deinked used newsprint paper via ultra-sonochemistry method

SAHARMAN GEA

2023
Jurnal internasional bereputasi

Bioactive bacterial cellulose wound dressings for burns with collagen in-situ and chitosan ex-situ impregnation

SAHARMAN GEA

2024
Jurnal nasional terakreditasi

Pelatihan dan Pengembangan Peningkatan Kompetensi Penulisan Karya Ilmiah Bagi Dosen Universitas Prima Kota Medan

YENI ABSAH , SYAFRIZAL HELMI SITUMORANG , SAHARMAN GEA , BEBY KARINA FAWZEEA

2012
Jurnal nasional

Sifat Mekanik dan Termal Bionanokomposit Pati yang Diperkuat oleh Partikulat Sellulose Bakteri

SAHARMAN GEA

2017
Jurnal nasional

Peningkatan Kualitas Produksi Santan Kelapa Sebagai Bahan Baku Industri Kuliner Di Kota Medan

SAHARMAN GEA

2023
Jurnal internasional bereputasi

Silica-Based Catalysts for Biodiesel Production: A Brief Review

SAHARMAN GEA

2020
Jurnal nasional terakreditasi

The Effect of Chemical Activation Using Base Solution With Various Concentrations Towards Sarulla Natural Zeolite

SAHARMAN GEA

2026
Jurnal internasional bereputasi

Enhancing recycled-paper quality using cellulose nanocrystals from pineapple leaf waste

SAHARMAN GEA , AVERROES FAZLUR RAHMAN PILIANG , SRI RAHAYU, S.SI , Refi Ikhtiari , MUHAMMAD IBADURRAHMAN , Ronn Goei , Zhihao Yen

2020
Makalah ilmiah

Improving quality and yield production of coconut shell charcoal through a modified pyrolysis reactor with tar scrubber to reduce smoke pollution

SAHARMAN GEA

2025
Jurnal internasional bereputasi

Graphene oxide-bacterial cellulose composites for enhanced adsorption of rhodamine B from aqueous solutions

SAHARMAN GEA

2023
Artikel ilmiah

The characterization of agitated bacterial cellulose-based paper synthesized at various rotational speeds

SAHARMAN GEA

2021
Jurnal internasional bereputasi

The effect of plasticizers and chitosan concentration on the structure and properties of Gracilaria sp.-based thin films for food packaging purpose

SAHARMAN GEA

2023
Jurnal nasional terakreditasi

PREPARATION OF KEMUNING LEAF EXTRACT MICROENCAPSULATION BY IONIC GELATION METHOD AS AN ANTIBACTERIAL

SAHARMAN GEA , ANDRIAYANI , HARIYATI , Khatarina Meldawati Pasaribu

2019
Jurnal internasional bereputasi

Conversion of methyl ester fatty acid from rice bran oil into fuel fraction via hydrocracking reaction over zeolite catalyst supported of Ni, Co and Mo metals

SAHARMAN GEA

2018
Makalah ilmiah

Synthesis of graphene oxide from the Sawahlunto-Sijunjung coal via modified hummers method

SAHARMAN GEA

2025
Jurnal nasional terakreditasi

Aktivitas fisik dan psikologis pada pasien chronic kidney disease yang menjalani hemodialisis: A literature review

RESMI PANGARIBUAN , ALMINA ROSPITARIA TARIGAN , ERMI GIRSANG , ELIS ANGGERIA , SAHARMAN GEA

2024
Jurnal internasional bereputasi

Development of chromium-impregnated sulfated silica as a mesoporous catalyst in the production of biogasoline from used cooking oil via a hydrocracking process

SAHARMAN GEA , KARNA WIJAYA , NIKO PRASETYO , Zulfaa Lola Ardelia , RISKA ASTIN FITRIA , Aldino Javier Saviola , TYAS SEKAR NINGRUM , Dr. Latifah Hauli , Adi Setiawan , Dr. Wahyu Dita Saputri , Won-Chun Oh , Dr. Amalia Kurnia Amin, S.Si.

2023
Jurnal internasional bereputasi

Characteristics of Simalambuo (Lophopetalum sp.) wood from Nias Island, North Sumatra Province, Indonesia

ATMAWI DARWIS , SAHARMAN GEA , RUDI HARTONO , TITO SUCIPTO , SYAHIDAH , ARIDA SUSILOWATI , APRI HERI ISWANTO , NIKEN SUBEKTI , WAHYU HIDAYAT , Widya Patriasari , Jajang Sutiawan , Nan Hun Kim , DWIVIA WAHYU AMANDA , Muhammad Adly Rahandi Lubis

2022
Jurnal internasional bereputasi

A Comprehensive Review of Experimental Parameters in Bio-oil Upgrading from Pyrolysis of Biomass to Biofuel Through Catalytic Hydrodeoxygenation

SAHARMAN GEA

2025
Prosiding seminar internasional

Synthesis and physicochemical properties of cationic starch from the etherification of cassava (*Manihot utilissima*)

SAHARMAN GEA , CUT FATIMAH ZUHRA , SRI RAHAYU , REKA MUSTIKA SARI , NOR AZZURA , Ronn Goei , Eva Oktavini

2025

Jurnal internasional bereputasi

NaHCO₃-Assisted Synthesis of Ni-Promoted Sulfated Mesoporous Silica for the Hydrocracking of Used Cooking Oil into Biogasoline

SAHARMAN GEA , KARNA WIJAYA , NIKO PRASETYO , MARINI FAIRUZ VEBRYANA , Aldino Javier Saviola , Wahyu Dita Saputri , Amalia Kurnia Amin , Latifah Hauli

2024

Prosiding seminar internasional

Esterification of palm fatty acid distillate to methyl ester using amberlyst catalyst in a semi-continuous reactor

SAHARMAN GEA

2023

Jurnal internasional bereputasi

Production of levulinic acid from glucose using nickel phosphate-silica catalyst

SAHARMAN GEA

2024

Jurnal internasional bereputasi

Improved mechanical and thermal performance of bacterial cellulose paper through cationic cassava starch addition

SAHARMAN GEA

2024

Prosiding seminar internasional

Preparation of biochar catalyst from coconut shell impregnated with nickel metal as a heterogeneous catalyst

SAHARMAN GEA , BASUKI , KARNA WIJAYA , RICKY ANDI SYAHPUTRA , ANI SUTIANI , MARLAN , MUHAMMAD IRVAN HASIBUAN , ADELBERT LANA SIMANGUNSONG

2021

Jurnal internasional bereputasi

THE COMPARISON OF OPAQUE TiO₂ AND TRANSPARENT TiO₂ ON THE PERFORMANCE OF AgSbS₂“SENSITIZED SOLAR CELL PREPARED BY SOLUTION PROCESSING

SAHARMAN GEA

2018

Makalah ilmiah

The preparation and characterization of bentonite nanoparticle from Bener Meriah, Indonesia

SAHARMAN GEA

2007

Jurnal internasional bereputasi

Biocomposites based on bacterial cellulose and apple and radish pulp

SAHARMAN GEA

2023

Jurnal internasional bereputasi

Evaluation to possibility of cellulose fibers isolated from kapok randu (*Ceiba Pentandra*) as a precursor growth of carbon micro structures with the assist of metal catalysts

SAHARMAN GEA

2020

Jurnal internasional

The Fabrication of Natural Zeolite Via Co-Precipitation Method as Cu, Pb and Zn Metal Absorbent

SAHARMAN GEA

2018

Jurnal internasional

Fabrication of poly (vinyl alcohol)/bentonite nanocomposites using sol-gel method

SAHARMAN GEA

2015

Jurnal internasional bereputasi

The manufacture of palm oil-based polyurethane nanocomposite with organic montmorillonite nanoparticle as paint coatings

SAHARMAN GEA

2018

Makalah ilmiah

Synthesis of Carbon Nanodots from Cellulose Nanocrystals Oil Palm Empty Fruit by Pyrolysis Method

SAHARMAN GEA

2020

Jurnal internasional bereputasi

The Fabrication of Natural Zeolite Via Co-Precipitation Method As Cu, Pb and Zn Metal Absorbent

SAHARMAN GEA

2018

Makalah ilmiah

Study of bacterial cellulose as scaffold on cartilage tissue engineering

SAHARMAN GEA

2023

Artikel ilmiah

Lignocellulosic analysis from oil palm empty fruit bunches and crystallinity index analysis of cellulose nanofibers isolated via high pressure steam explosion

SAHARMAN GEA

2023

Artikel ilmiah

Rice husk is renewable source in synthesis nanosilicon and its application as potential anode lithium-ion batteries

SAHARMAN GEA

2020

Jurnal internasional bereputasi

Preparation and characterisation of electrospun composite nanofibre polyvinyl alcohol/ nanofibrillated cellulose isolated from oil palm empty fruit bunches

SAHARMAN GEA

2018

Makalah ilmiah

The study on physical and mechanical properties of latex/graphene oxide composite film

SAHARMAN GEA

2019

Makalah ilmiah

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

SAHARMAN GEA

2022

Jurnal internasional bereputasi

Carbon-Nano Fibers Yield Improvement with Iodinated Electrospun PVA/Silver Nanoparticle as Precursor via One-Step Synthesis at Low Temperature

SAHARMAN GEA

2020

Makalah ilmiah

Preparation and Characterisation of Electrospun Composite Nanofibre Polyvinyl Alcohol/ Nanofibrillated Cellulose Isolated from Oil Palm Empty Fruit Bunches

SAHARMAN GEA

2022

Jurnal internasional bereputasi

Cassava starch/bacterial cellulose-based bioplastics with Zanthoxylum acanthopodium

SAHARMAN GEA

2024

Jurnal internasional bereputasi

Efficient conversion of used palm cooking oil into biogasoline over hydrothermally prepared sulfated mesoporous silica loaded with NiMo catalyst

SAHARMAN GEA , NIKO PRASETYO , KARNA WIJAYA

2018

Jurnal internasional bereputasi

Synthesis of Carbon Nanodots from Cellulose Nanocrystals Oil Palm Empty Fruit by Pyrolysis Method

YUGIA MUIS , SAHARMAN GEA , MARPONGAHTUN , ANDRIAYANI

2025

Jurnal internasional bereputasi

Facile synthesis of reduced graphene oxide using natural plant extracts as green reducing agents

SAHARMAN GEA

2022

Jurnal internasional

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

SAHARMAN GEA , AMIR HAMZAH SIREGAR , MAHYUNI HARAHAP

2021

Makalah ilmiah

Effect of variation temperature at burning rice husk to obtain silica

SAHARMAN GEA

2020

Makalah ilmiah

The effect of chelating agents on the formation of manganese oxide (MnO) in the synthesis of sodium manganese oxide ($\text{Na}_2\text{Mn}_3\text{O}_7$)

SAHARMAN GEA

2020

Jurnal nasional terakreditasi

Morphology and thermal properties of polypropylene-montmorillonite nanocomposite using modified bentonite of Bener Meriah Aceh

SAHARMAN GEA

2021

Makalah ilmiah

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

SAHARMAN GEA

2018

Jurnal nasional terakreditasi

Isolasi dan Karakterisasi Nanokistral Selulosa dari Tandan Sawit (Elaeis Guineensis Jack)

2024

Jurnal internasional bereputasi

Temperature-dependent etherification of cassava starch with CHPTAC for cationic starch production

JULIATI BR TARIGAN , BASUKI , SRI RAHAYU , AVERROES FAZLUR RAHMAN PILIANG , NICO SETYAWAN SIHOTANG , Khatarina Meldawati Pasaribu , Evi Oktavia , Ronn Goei , Alfred Ling Yoong Tok , Jonathan Low , SAHARMAN GEA , CUT FATIMAH ZUHRA

2021

Jurnal internasional bereputasi

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

SAHARMAN GEA

2024

Jurnal internasional bereputasi

Development of chromium-impregnated sulfated silica as a mesoporous catalyst in the production of biogasoline from used cooking oil via a hydrocracking process

SAHARMAN GEA , KARNA WIJAYA

2023

Jurnal internasional bereputasi

Highly Fluorescent Nitrogen-doped Carbon dots derived from Jengkol Peels (Archidendron pauciflorum) by Solvothermal Synthesis for Sensitive Hg²⁺ Ions Detection

ANIZA SALVIANA PRAYUGO , AMRU DAULAY , Ronn Goei , Alfred Ling Yoong Tok , MARPONGAHTUN , SAHARMAN GEA

2025

Makalah ilmiah

Physical Characteristics of Pyrolytic Bio-Oil Synthesized From Pericarp from Mahogany (Swietenia mahogany) with Water Hyacinth Biodhar as Catalyst

AVERROES FAZLUR RAHMAN PILIANG , SAHARMAN GEA

2019

Makalah ilmiah

The use of bentonite of Bener Meriah Aceh to improve the mechanical properties of Polypropylene-Montmorillonite Nanocomposite

SAHARMAN GEA

2009

Jurnal internasional bereputasi

All-cellulose nanocomposites by surface selective dissolution of bacterial cellulose

SAHARMAN GEA

2010

Jurnal internasional bereputasi

Bacterial cellulose-“poly (vinyl alcohol) nanocomposites prepared by an in-situ process

SAHARMAN GEA

0001

Jurnal internasional bereputasi

Facile synthesis of ZnO-“Ag nanocomposite supported by graphene oxide with stabilised band-gap and wider visible-light region for photocatalyst application

SAHARMAN GEA , NURHAIDA PASARIBU

2017

Jurnal nasional terakreditasi

The Manufacture of Nanocomposites Polyvinyl Alcohol/cellulose Nanofiber Isolated From Empty Bunch Fruit Palm Oil (Elaeis Guineensis Jack) with Steam Explosion

2025

Jurnal nasional terakreditasi

Improvement of Research Proposal Writing Skills for PSDKU USU Lecturers in North Nias

RAHMAWATY , SAHARMAN GEA

2020

Jurnal nasional terakreditasi

Electrical and thermal conductivity of cyclic natural rubber/graphene nanocomposite prepared by solution mixing technique

SAHARMAN GEA

2020

Jurnal nasional terakreditasi

Comparative Optimization of Cellulase and Laccase Enzymes in Deinking Process of Used Newspapers

SAHARMAN GEA

2025

Jurnal internasional bereputasi

Facile synthesis and electrochemical performance of bacterial cellulose/reduced graphene oxide/NiCo-layered double hydroxide composite film for self-standing supercapacitor electrode

SAHARMAN GEA

2025

Prosiding seminar internasional

Characterization and evaluation of a cellulose-based hydrogel prepared from oil palm empty fruit bunches and crosslinked with citric acid

AVERROES FAZLUR RAHMAN PILIANG , SAHARMAN GEA , TAMRIN , JULIATI BR TARIGAN , NAJLA LUBIS , Ronn Goei

2023

Prosiding seminar internasional

Simulation Analysis of The Utilizing Oil Palm Mill Waste Into Hydrogen Energy Through The Biomass Pyrolysis

TAUFIQ BIN NUR , SAHARMAN GEA , IRVAN

2025

Prosiding seminar internasional

Penetration ability of liquid smoke and silicon oil on Simalambuo wood

ANDRIAYANI , SAHARMAN GEA , NURAZIZAH

2018

Makalah ilmiah

Chitosan/graphene oxide biocomposite film from pencil rod

SAHARMAN GEA

2020

Jurnal internasional bereputasi

Thermal behavior, mineral phase, and microstructure characteristics of Na₂Mn₃O₇ synthesized from MnO₂ and MnCl₂ via a low-cost, simple conventional mixing method

SAHARMAN GEA

2024

Jurnal internasional bereputasi

A review: Current trends and future perspectives of bacterial nanocellulose-based wound dressings

Khatarina Meldawati Pasaribu , SAHARMAN GEA

2022

Jurnal internasional bereputasi

Synthesis of fluorescent citric acid carbon dots composites derived from empty fruit bunches of palm oil tree and its anti-bacterial property

2014

Jurnal internasional bereputasi

Preparation and Characterization of Nanocrystalline Cellulose from Sugar Palm Bunch (Arenga Pinnata (Wurmb) Merr.)

SAHARMAN GEA

2023

Jurnal internasional bereputasi

Two stages upgrading of bio-oil through esterification and hydrodeoxygenation reactions using Fe₂O₃-CoO supported catalyst

SAHARMAN GEA

2014

Jurnal internasional

Effect of mixed nanoparticles ZnS and polyvinyl alcohol (PVA) against nanocomposite mechanical properties of PVA/ZnS

SAHARMAN GEA

2024

Jurnal internasional bereputasi

Biomass-derived N-doped Carbon Dots/TiO₂ for Visible-Light-Induced Degradation of Methyl Orange in Wastewater

SAHARMAN GEA

2024

Jurnal internasional bereputasi

Pyrolysis of Palm Fronds Waste into Bio-Oil and Upgrading Process Via Esterification-Hydrodeoxygenation Using Cu-Zn Metal Oxide Catalyst Loaded on Mordenite Zeolite

AHMAD NASIR PULUNGAN , FAUZIYAH HARAHAP , SAHARMAN GEA , CICIK SURIANI , JUNIFA LAYLA SIHOMBING , LISNAWATY SIMATUPANG

2025

Jurnal internasional bereputasi

Extraction and characterization of cellulose nanofibers from rice husk: Potential for electrospun PVA/CNF mat composites

SAHARMAN GEA

2023

Jurnal internasional bereputasi

Ultrasound pretreatment and enzymatic deinking by using bacterial cellulases from rice husk

SAHARMAN GEA

Researches

2024

Essential oil analysis of origanum vulgare and their antimicrobial activity and toxicity

SAHARMAN GEA , DWI SURYANTO , ARIYANI DRG , ISMET DANIAL NASUTION

2024

Penelitian Unggulan Perguruan Tinggi

Potential of Periodontal Chip Hydrogel Propolis Against Clinical Parameters, Fibroblast Proliferation, and Tumor Necrosis Factor- α (TNF- α) Serum Rate: In-Vivo Study on the Marmot (Carvia Porcellus) Periodontitis Model

RINI OCTAVIA NASUTION , SAHARMAN GEA , SONDANG PINTAULI

2022

Penelitian Dana Lokal Perguruan Tinggi

Sintesis Resin Kopolimer Polistirena Divinilbenzena Sulfonat Sebagai Katalis

Heterogen Dalam Pembuatan Biodiesel Dari Asam Oleat

SYUKRI , SAHARMAN GEA

2022

Penelitian Unggulan Perguruan Tinggi

Sistem Produksi dan Penyimpanan Hidrogen dari Pirolisis Biomassa Limbah Pertanian Serta Pemanfaatannya sebagai Bahan Bakar Mesin Pembakaran Dalam dan Sel Bahan Bakar

SAHARMAN GEA , IRVAN , TAUFIQ BIN NUR , Harditya Umaraul Haq , DONY WALFARED KURNIAWAN MARPAUNG , Iqbal Syamputra Tanjung , RAHMAT KHOLIS HARAHAAP

2025

Aktivitas fisik dan psikologis pada pasien chronic kidney disease yang menjalani hemodialisis: A literature review

ERMI GIRSANG , ALMINA ROSPITARIA TARIGAN , ELIS ANGGERIA , SAHARMAN GEA , RESMI PANGARIBUAN

2022

Penelitian Unggulan Perguruan Tinggi

Fungsionalisasi Carbon Nanotubes (CNT) Sebagai Pendukung Katalis Generasi Baru dalam Pembuatan Biodiesel dari Asam Lemak Bebas

AHMAD YUNUS NASUTION , ANDRIAYANI , SAHARMAN GEA , TAUFIQ BIN NUR

2019

Penelitian Disertasi Doktor

Proses Eksfoliasi Grafit Batubara Sawahlunto menjadi Grafena dengan Metode Modifikasi Hummers

BASUKI , SAHARMAN GEA , Ir. VIVI PURWANDARI, M.Si , Saharman Gea

Community Services

2018

Ipteks Bagi Masyarakat

Sistem Kalibrasi Massa untuk mendukung pengembangan wisata kuliner di kawasan tempat pelelangan ikan (TPI) Bagan Percut Kabupaten Deli Serdang

SAHARMAN GEA , DIANA ALEMEN BARUS , PERDINAN SINUHAJI

2023

Ipteks Bagi Masyarakat

Penyuluhan, Perbaikan dan Bimbingan Perawatan Anti Petir di GBKP Km 8 Padang Bulan Medan

SAHARMAN GEA , Dr. KERISTA TARIGAN, M.Eng.Sc. , KURNIA BRAHMANA , CHRISTINE FEBY FEBYOLA. S , WARDAINI PANJAITAN , PINDONTA SURBAKTI

2024

Ipteks Bagi Masyarakat

Peningkatan Kemampuan Pembuatan Proposal Penelitian Bagi Dosen PSDKU USU Di Nias Utara

SAHARMAN GEA

2022

Ipteks Bagi Masyarakat

Peningkatan Rendemen Produksi Arang dan Asap Cair pada UMKM Baluse Kanira Nias Utara

ERNI MISRAN , DIANA CHALIL , SAHARMAN GEA , TAUFIQ BIN NUR

2018

Ipteks Bagi Masyarakat

Peningkatan Kualitas Asap Cair melalui penyediaan Tarscrubber pada UMKM santan coco dan coco prima

SAHARMAN GEA , DIANA ALEMEN BARUS

2022

Penguatan Kegiatan Penelitian dan Pengabdian Masyarakat di Universitas

Nias Raya Teluk Dalam

HIMSAR AMBARITA , SAHARMAN GEA , ELISA JULIANTI , TAUFIQ BIN NUR

2019

Peningkatan wawasan karir bagi anak SMA Unggulan di Gunung Sitoli

RIKA ELIANA , SAHARMAN GEA , MAYA SILVI LYDIA , IRVAN

2017

Ipteks Bagi Kewirausahaan

IbM Industri Kelapa Kering (Dessicated Coconut) dan UKM Santan dan Batok Kelapa

HALIMATUDDAHLIANA , SAHARMAN GEA , ERA YUSRINI

2021

Penelitian Unggulan Perguruan Tinggi

Pembinaan dan Pelestarian Kesenian dan Kebudayaan Nias Pesisir

WARISMAN SINAGA , SAHARMAN GEA , LESTARI DARA CINTA UTAMI GINTING

2019

Ipteks Bagi Masyarakat

PENINGKATAN KUALITAS ASAP CAIR MELALUI PENYEDIAAN TARSCRUBBER PADA UMKM SANTAN COCO_TAHUN KE 2

SAHARMAN GEA , ADITIA WARMAN , DIANA ALEMEN BARUS , ELISA JULIANTI

2023

Ipteks Bagi Masyarakat

Pelatihan dan Pendampingan Peningkatan Kompetensi Penulisan Karya Ilmiah Bagi Dosen Universitas Prima Kota Medan

SAHARMAN GEA , SYAFRIZAL HELMI SITUMORANG , YENI ABSAH , BEBY KARINA FAWZEEA

2017

PEMANFAATAN BIOREAKTOR UNTUK PENINGKATAN PRODUKSI NATA DE COCO PADA UKM SANTAN COCO DAN SANTAN COPRO MEDAN

KERISTA SEBAYANG , SAHARMAN GEA , ELISA JULIANTI

2024

Ipteks Bagi Masyarakat

Peningkatan Kemampuan Penulisan Publikasi Ilmiah bagi Dosen Sekolah Tinggi Agama Islam (STAI) Nias

ISKANDAR ZULKARNAIN , SAHARMAN GEA

2024

Penelitian Dana Lokal Perguruan Tinggi

Peningkatan Kemampuan Penulisan Publikasi Ilmiah bagi Dosen Sekolah Tinggi Agama Islam (STAI) Nias

ISKANDAR ZULKARNAIN , SAHARMAN GEA , YENI ABSAH , HUMAIZI , FARIDA HANIM , MUNZAIMAH M , MOULITA

2018

Peningkatan Kualitas Asap Cair melalui Penyediaan Tar Scrubber pada UMKM Santan COCO dan Santan COPRO

SAHARMAN GEA , ADITIA WARMAN , ELISA JULIANTI

2024

Penelitian Tim Pasca Sarjana

Peningkatan Kemampuan Pembuatan Proposal Penelitian Bagi Dosen PSDKU USU Di Nias Utara

RAHMAWATY , SAHARMAN GEA

Intellectual Property Rights

2023

Paten nasional

PLASTER NANOPARTIKEL PERAK KITOSAN UNTUK PENYEMBUHAN LUKA EKSISI PADA PENDERITA DIABETES

YUANDANI , SAHARMAN GEA , POPPY ANJELISA ZAITUN HASIBUAN

2023

Paten nasional

KONVERSI MINYAK GORENG SAWIT BEKAS MENJADI BIOGASOLIN TERKATALISIS NANOKATALIS NiMo/SO₄-SiO₂ YANG DISINTESIS SECARA HIDROTERMAL

KARNA WIJAYA , SAHARMAN GEA

2023

Paten nasional

Reaktor Karbonisasi Cerobong Terbalik dan Peralatannya

SITI UTARI RAHAYU , SAHARMAN GEA

2023

Paten nasional

NANOKATALIS NIKEL TERIMPREGNASI PADA SILIKA TERSULFATASI (Ni/SO₄-SiO₂) SECARA REFLUKS UNTUK PRODUKSI BAHAN BAKAR FRAKSI BENSIN DARI LIMBAH PLASTIK LDPE

SAHARMAN GEA , KARNA WIJAYA

2023

Paten nasional

Pengering Semprot Untuk Pembuatan Serbuk Pati

AVERROES FAZLUR RAHMAN PILIANG , SAHARMAN GEA

2023

Paten nasional

NANOKATALIS SILIKA MESOPORI TERSULFATASI TERIMPREGNASI LOGAM NIKEL (Ni/SO₄-SiO₂) SECARA HIDROTERMAL DAN PERFORMANYA DALAM HYDROTREATMENT MINYAK GORENG SAWIT BEKAS MENJADI BAHAN BAKAR FRAKSI BENSIN

KARNA WIJAYA , SAHARMAN GEA

2023

Paten nasional

Aparatus Untuk Pembuatan Asap Cair Dengan Pemanfaatan Limbah Batok Kelapa

SAHARMAN GEA , ELISA JULIANTI , DIANA ALEMEN BARUS , ADITIA WARMAN , SITI UTARI RAHAYU

2023

Paten nasional

Metode untuk Pembuatan Katalis pada Proses Perengkahan Minyak Biji Karet

SAHARMAN GEA