



Holy Cross College (Autonomous)

Nagercoil – 629 004

Affiliated to Manonmaniam Sundaranar University, Tirunelveli
Nationally Accredited with A+ Grade (CGPA 3.35) by NAAC IV Cycle
An ISO 9001:2015 Certified Institution

SSR
2019-2020
to
2023-2024

3.4.5 Bibliometrics of the Publications during the last five years based on average Citation Index in Scopus/ Web of Science



Scopus Preview



Source details

Adalya

Scopus coverage years: 2009, from 2011 to 2014, from 2020 to 2023

Publisher: Suna Inan Kirac Akdeniz Medeniyetleri Aractirma Enstitusunun

ISSN: 1301-2746

Subject area: [Arts and Humanities: History](#) [Arts and Humanities: Conservation](#)

[Arts and Humanities: Archeology \(arts and humanities\)](#) [Social Sciences: Archeology](#)

Source type: Journal

[View all documents >](#)

[Set document alert](#)

[Save to source list](#)

CiteScore 2022

0.1



SJR 2022

0.141



SNIP 2022

0.158



[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ×

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$0.1 = \frac{4 \text{ Citations 2019 - 2022}}{28 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

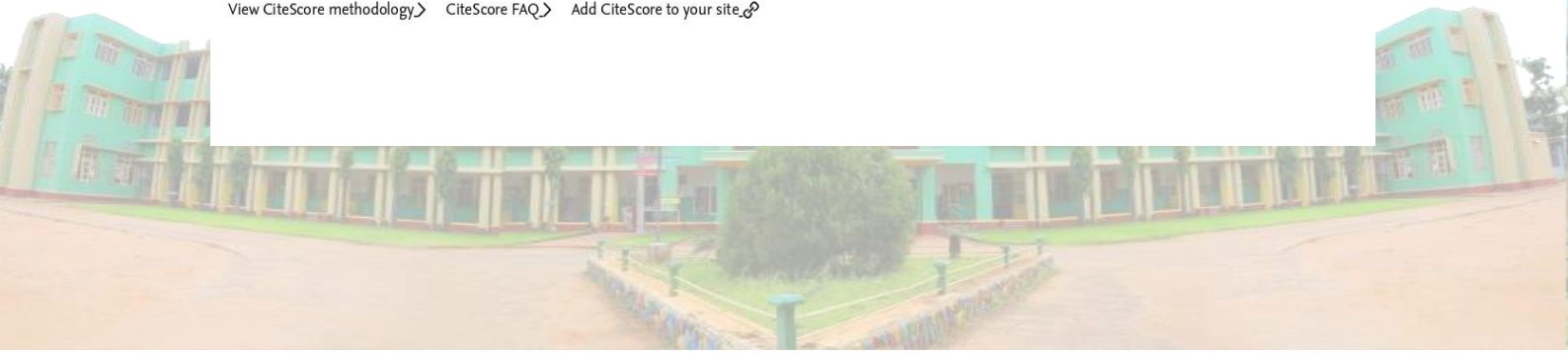
$$0.4 = \frac{25 \text{ Citations to date}}{68 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Arts and Humanities └ History	#1185/1599	25th
Arts and Humanities └ Conservation	#84/102	18th
Arts and Humanities └ Archeology (arts and humanities)	#316/368	14th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site >](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help Center

NEW

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Refine Your Search Results

Adalya

Search

Sort By: Title (A-Z)

Search Results

Found 1 results (Page 1)

Share These Results

Exact Match Found

ADALYA

Publisher: KOC UNIV SUNA & INAN KIRAC RES CTR MEDITERRANEAN CIVILIZATIONS-AKMED , BARBAROS MAH KOCATEPE SK NO 22, KALEICI, Turkiye, ANTALYA, 07100

ISSN / eISSN: 1301-2746

Web of Science Core Collection: Arts & Humanities Citation Index Additional Web of Science Indexes: Current Contents Arts & Humanities

Share This Journal

View profile page

* Requires free login.



The screenshot displays the Adalya Journal website interface. At the top, there is a navigation bar with 'Web of Science Group Master Journal List', 'Search Journals', 'Match Manuscript', 'Downloads', and 'Help Center'. On the right, there are 'Login' and 'Create Free Account' buttons. The main content area is titled 'Adalya Journal' and features a search bar with 'adalya' entered. Below the search bar, there are 'Active Filters' for 'ARTS & HUMANITIES' and 'Search Results' showing 'Found 1 results (Page 1)'. A section titled 'Exact Match Found' highlights the journal 'ADALYA' with details: Publisher: KOC UNW SUNA & INAN KIBAC RES CTR MEDITERRANEAN CIVILIZATIONS-ARWED, BARBAROS MAH KOCATEPE SK NO 22, KALENDI, TURKEY, ANTALYA, 07100; ISSN / eISSN: 2301-2746; Web of Science Core Collection: Arts & Humanities Citation Index; Additional Web of Science Indexes: Current Contents Arts & Humanities. A 'Filters' sidebar on the left shows 'Web of Science Coverage' and 'Care Collection' options, with 'Arts & Humanities' selected. The footer of the screenshot reads 'UGC Care Group II Journal'.

HEC recognized journal

ADALYA is a leading high quality open access & peer reviewed monthly published research journal for encouraging Researchers, Practitioners, Academicians from Life Sciences, Engineering and Technology Management sectors to contribute to their inventive Research achievements and original work to make superiority information presented for a broader civic of readers and Internet users. ADALYA targets at promoting the integration of academic theories.

ADALYA focuses on interdisciplinary techniques and state-of-the-art research among various disciplines related to the different fields.

Submit article at: editor.adalyajournal@gmail.com

Subjects : Arts, Banking, Bio-medical, Biology, Business, Commerce, Corporate Governance, Clinical Research, Economics, Education, Engineering, Finance, Financial Accounting, Fine Art, Geography, History, Home Science, Human Resource, Industrial Laws, Information Technology, Journalism, Literature, Management, Marketing, Medical Science, Organization Behavior, Organizational Psychology, Philosophy, Pharmaceutical Science, Political Science, Public Administration, Religious Studies, Rural India, Statistics, Science, Social Sciences, Social Welfare, Tourism Management, Visual

UGC Care

ADALYA is part of University Grants Commission (UGC) Consortium for Research and Academic Ethics (CARE) in Group 2. You may find ADALYA by searching UGC Care List Group 2 page by searching through Try the MJL Beta option. To match global standards of high-quality research, in all academic disciplines under its purview, the UGC, aspires to stimulate and empower the Indian academia through its "Quality Mandate".



THE MINIMUM DOMINATING ENERGY OF STAR RELATED GRAPHS

⁽¹⁾Victoria Jayafin Nisha S L , ⁽²⁾V.M.Arul Flower Mary & ⁽³⁾M,Regees

⁽¹⁾Research Scholar (19123042092002) , ⁽²⁾Associate Professor & ⁽³⁾Assistant Professor

^{(1) & (2)} Holy Cross College (Autonomous), Nagercoil – 4, . &

⁽³⁾Malankara Catholic College, Mariagiri, Kaliyakkavilai,

^{(1), (2) & (3)} Kanyakumari District, Tamilnadu, India.

Abstract : Chandrasekhar Adiga et.al., introduced the minimum covering energy of a graph which depends on its particular minimum cover. M.R. Rajesh Kanna et al defined the minimum dominating energy, $E_D(G)$ of some families of graphs such as, Star graph, Complete graph, Crown graph and Cocktail graphs. Motivated by this, we obtained the minimum dominating energy of star related graphs.

AMS Subject Classification: 05C50, 05C69

Keywords : minimum dominating set, minimum dominating matrix, minimum dominating eigenvalues, minimum dominating energy of a graph.

1. Introduction

Let $G = (V, E)$ be a simple undirected graph. I. Gutman [3] introduced the concept of energy of a graph in the year 1978. Let G be a graph with n vertices and m edges and let the adjacency matrix of the graph be $R = (r_{ij})$. $\omega_1, \omega_2, \dots, \omega_m$ assumed in non increasing order, are the eigenvalues of the graph G . The eigenvalues of G are real with sum equal to zero. Since, A is real symmetric. The energy $E(G)$ of G is defined to be the sum of the absolute values of the eigenvalues of G . i.e., $E(G) = \sum_{i=1}^m |\omega_i|$ [4,5]

2. The Minimum Dominating Energy

Definition 2.1: A dominating set in a graph G is a subset M of $V(G)$ such that each element of $V(G) - M$ is adjacent to at least one vertex of M .

Equivalently $N[M] = V$.

If M is a dominating set of a graph G , then every super set $M' \supset M$ is also a dominating set.

Definition 2.2:[6] The minimum dominating set in a graph G is a dominating set of minimum cardinality. This set is also called γ - set.

Definition 2.3:[6]The domination number of G , denoted by $\gamma(G)$, is the minimum cardinality of all dominating sets of G that is $\gamma(G) = \min \{ |M| / M \subseteq V, N[M] = V \}$

Definition 2.4:[6] Let G be a simple graph of order n with vertex set $V = \{ t_1, t_2, \dots, t_n \}$ and edge set E . Let M be a minimum dominating set of the graph G . The minimum dominating matrix of G is the $m \times m$ matrix defined by $R_{sd}(G) = (r_{ij})$, where





Source details

Journal of Mathematical and Computational Science

Scopus coverage years: from 2019 to 2021
(coverage discontinued in Scopus)

Publisher: SCIK Publishing Corporation
E-ISSN: 1927-5307

Subject area: Mathematics: General Mathematics Computer Science: Computational Theory and Mathematics

Source type: Journal

CiteScore 2020 ⓘ
0.2

SJR 2020 ⓘ
0.120

SNIP 2022 ⓘ
0.499

[View all documents >](#) [Set document alert](#) [Save to source list](#) [Source Homepage](#)

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2020 counts the citations received in 2017-2020 to articles, reviews, conference papers, book chapters and data papers published in 2017-2020, and divides this by the number of publications published in 2017-2020. [Learn more >](#)

CiteScore 2020 ▼

$$0.2 = \frac{46 \text{ Citations 2017 - 2020}}{254 \text{ Documents 2017 - 2020}}$$

Calculated on 05 May, 2021

CiteScore rank 2020 ⓘ

Category	Rank	Percentile
Mathematics		
General Mathematics	#362/378	4th
Computer Science		
Computational Theory and Mathematics	#131/133	1st

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site ↗](#)





USER

Username

Password

Remember me

[Log In](#) [Register](#)

Reset Password

Email

[Reset Password](#)

INFORMATION

- [For Authors](#)

JOURNAL CONTENT

Search

All

[Search](#)

Browse

- [By Issue](#)
- [By Author](#)
- [By Title](#)

[Home](#) [About](#) [Table of Contents](#) [Aims and Scope](#) [Editorial Board](#)
[Publication Ethics](#) [Editorial Workflow](#) [Contact](#)

Home > Vol 13 (2023)

Aims and Scope

Journal of mathematical and computational science (JMCS) is a peer-reviewed open access international journal, which is aimed to provide a publication forum for important research in different areas covering all aspects of mathematical and computational science, such as numerical analysis, optimization, linear and nonlinear programming, theory of computation, control theory, theory of algorithms, computational logic, applied combinatorics, coding theory, cryptographics, fuzzy theory, differential equations, algebra and number theory. This journal will accept high quality articles containing original research results and survey articles of exceptional merit.

ISSN: 1927-5307

Editorial Office: jmcs@scik.org

Editorial Policy

Papers submitted for publication in the journal must be correct, original, and nontrivial.

Copyright

By submitting a manuscript, the author acknowledges that:

- It has not been previously published elsewhere, is original and has been written by the stated authors.
- The article is not currently being considered for publication by any other journal and will not be submitted for such review while under review by this journal.
- All authors have read the manuscript and agree to publish it.
- The authors declare that there is no conflict of interests.

Open Access

Journal of Mathematical and Computational Science is an open access journal, and all articles are distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Vol 13 (2023)

Table of Contents

<p>Tanveer Fatima On conformal bi-slant submersion from cosymplectic manifold J. Math. Comput. Sci., 13 (2023), Article ID 1</p>	PDF
<p>Ilyas Sitti, Fouad Lahmidi On the null controllability of switched positive and periodic positive systems J. Math. Comput. Sci., 13 (2023), Article ID 2</p>	PDF
<p>Yanan Yan Phase retrieval problem in space of $l_p(\Gamma)$ ($0 < p \leq 1$) J. Math. Comput. Sci., 13 (2023), Article ID 3</p>	PDF
<p>Asina Kibonge, Stephen Edward, Monica Kung'aro Modelling the transmission dynamics of mumps with control measures J. Math. Comput. Sci., 13 (2023), Article ID 4</p>	PDF
<p>Kabbaj Samir, Karkri Rafik, Zoubeir Hicham Tensor product of Schauder frames and besselian Schauder frames of Banach spaces J. Math. Comput. Sci., 13 (2023), Article ID 5</p>	PDF
<p>H. S. Al-Saadi, N. S. Al-Zahrani On Sg-w-closed sets and ST-$1/2$ spaces in weak structures J. Math. Comput. Sci., 13 (2023), Article ID 6</p>	PDF
<p>U. E. Michael, L. O. Omeriyi, K. O. Elebute, A. A. Offa, G. E. Ozoigbo, M. O. Ekhaton, O. F. Nkume Quantitative analysis of transmission dynamic of Boko Haram</p>	PDF





Available online at <http://scik.org>

J. Math. Comput. Sci. 11 (2021), No. 5, 6007-6017

<https://doi.org/10.28919/jmcs/6225>

ISSN: 1927-5307

THE MONOPHONIC GLOBAL DOMINATION NUMBER OF A GRAPH

V. SELVI^{†,*}, V. SUJIN FLOWER

Department of Mathematics, Holy Cross College (Autonomous), Nagercoil - 629 004, India

Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627 012, Tamil Nadu, India

Copyright © 2021 the author(s). This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract. A set $M \subseteq V$ is said to be a monophonic global dominating set of G if M is both a monophonic set and a global dominating set of G . The minimum cardinality of a monophonic global dominating set of G is the monophonic global domination number of G and is denoted by $\bar{\gamma}_m(G)$. A monophonic global dominating set of cardinality $\bar{\gamma}_m(G)$ is called a $\bar{\gamma}_m$ -set of G . The monophonic global domination number of certain classes of graphs are determined. It is proved that $2 \leq \bar{\gamma}_m(G) \leq \bar{\gamma}_g(G) \leq n$, where $\bar{\gamma}_g(G)$ is a geodetic global domination number of a G . It is shown that for every pair of positive integers a and b with $2 \leq a \leq b$, there exists a connected graph G such that $\bar{\gamma}_m(G) = a$ and $\bar{\gamma}_g(G) = b$.

Keywords: monophonic global domination number; global domination number; monophonic number; domination number.

2010 AMS Subject Classification: 05C38, 05C69, 05C12.

1. INTRODUCTION

By a graph $G = (V, E)$, we mean a finite, undirected connected graph without loops or multiple edges. The *order* and *size* of G are denoted by m and n respectively. For basic graph theoretic terminology, we refer to [2]. Two vertices u and v are said to be *adjacent* if uv is

*Corresponding author

E-mail address: selvi.maths1983@gmail.com

[†]Research Scholar, Register Number: 20123042092008

Received June 05, 2021





Scopus Preview



Source details

Design Engineering (Toronto)

Scopus coverage years: from 1971 to 1976, from 1996 to 2005, from 2012 to Present

Publisher: Rogers Media Publishing

ISSN: 0011-9342

Subject area: Engineering: General Engineering

Source type: Trade Journal

[View all documents >](#)

[Set document alert](#)

[Save to source list](#) [Source Homepage](#)

CiteScore 2022 ⓘ
0.0

SJR 2022 ⓘ
0.101

SNIP 2017 ⓘ
0.000

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

0.0 = $\frac{0 \text{ Citations 2019 - 2022}}{30 \text{ Documents 2019 - 2022}}$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

0.0 = $\frac{0 \text{ Citations to date}}{31 \text{ Documents to date}}$

Last updated on 08 November, 2023 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Engineering		
General Engineering	#301/302	0th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)



Design Engineering (Toronto)

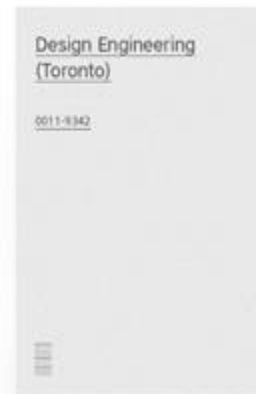
Scopus Journals - Engineering(all)

The scientific journal Design Engineering (Toronto) is included in the Scopus database. Based on 2020, SJR is 0.101. Publisher country is Canada. The main subject areas of published articles are Hardware and Architecture, Engineering(all), Mechanical Engineering.

We offer making basic requirements to academic papers compliance test using "Paper quality checking" service. Paper quality checking service is in demand among researchers who wish to make final improvements to their work before submitting it to the target journal. The experienced editors of ORES, who have published papers in cited journals, with the participation of foreign partners go through finished articles. They perform complex checks on many parameters, improve the structure and logic of content, and conduct spell checks, among others.

SCOPUS classifier

- 1708 Hardware and Architecture**
- 2200 Engineering(all)**
- 2210 Mechanical Engineering**



ISSN: 00119342

The scientific journal is included in the Scopus database.

[Publish scientific article](#)

Other journals in category

ISSN	Title	Indicators
00137758	Engineer	SJR: 0.1
10763333	Resource: Engineering and Technolog...	SJR: 0.102
23492473	Journal of Engineering Education Tran...	SJR: 0.114

ORES Science Platform is a leading service designed to support scientists from the CIS and Asia. We work with authors of scientific articles and strive to promote science at a global level, uniting researchers with international experts to improve the quality of their scientific research.

Contacts:
 Global: global@ores.su
 Russia and CIS: info@ores.su
 Indonesia: info-id@ores.su

 **Kontakt**

English



[Register](#)[Login](#)

DESIGN ENGINEERING

[HOME](#)[CURRENT](#)[ABOUT US](#)[ARCHIVES](#)[CONTACT](#)[ABOUT](#)[HOME](#) [ARCHIVES](#) [VOL 2021 ISSUE 06](#) [Articles](#)

The Minimum Dominating Seidel Energy of Some Graphs

V. M. Arul Flower Mary, Victoria Jayafin Nisha S L, M. Regees

Keywords: minimum dominating set, minimum dominating seidel matrix, minimum dominating seidel eigenvalues, minimum dominating seidel energy of a graph.

ABSTRACT

M.R. Rajesh Kanna et al defined the minimum dominating seidel energy, $E_{sd}(G)$ of some families of graphs such as, Star graph, Complete graph, Crown graph and Cocktail graphs. Motivated by this, we obtained the minimum dominating seidel energy of Book graph and Friendship graphs. Relation between domination number, energy and rank of minimum dominating seidel matrix of graphs are also established.

 PDF

HOW TO CITE





Source details

Proyecciones

Scopus coverage years: from 2000 to 2002, from 2006 to Present

Publisher: Universidad Catolica del Norte

ISSN: 0716-0917 E-ISSN: 0717-6279

Subject area: Mathematics: General Mathematics

Source type: Journal

[View all documents >](#)

[Set document alert](#)

[Save to source list](#) [Source Homepage](#)

CiteScore 2022
1.1

SJR 2022
0.320

SNIP 2022
0.786

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022

$$1.1 = \frac{376 \text{ Citations 2019 - 2022}}{349 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023

$$1.1 = \frac{385 \text{ Citations to date}}{354 \text{ Documents to date}}$$

Last updated on 08 November, 2023 • Updated monthly

CiteScore rank 2022

Category	Rank	Percentile
Mathematics		
General Mathematics	#237/387	38th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site &P](#)



Continuous publication modality

2023-10-25

Projections Journal of Mathematics **announces** that from Volume 42 No. 6, December 2023, it adheres to the **continuous publication modality**. This means that as soon as a submission is accepted, it will be published in the corresponding volume.

[Read More](#)

Current Issue

ATM 1.0

PM 1.0

PM 1.0

1.1 2022
CiteScore

38th percentile
Powered by Scopus

Current Issue

Vol. 42 No. 5 (2023)



ORCID

sorry, we can't preview this file

Published: 2023-09-13



Information

- [For Readers](#)
- [For Authors](#)
- [For Librarians](#)

[Make a Submission](#)

Artículos

An inverse source time-fractional diffusion problem via an input-output mapping

Rahima Atmania, Loubna Settara

1105-1127

[PDF](#)

Study of some algebraic and topological properties of difference gai sequence of interval numbers





The edge-to-edge geodetic domination number of a graph

J. John¹ orcid.org/0000-0001-5528-4387

V. Sujin Flower² orcid.org/0000-0002-3702-6875

¹Government College of Engineering, Dept. of Mathematics, Tirunelveli, TN, India.

john@gcetly.ac.in

²Holy Cross College (Autonomous), Dept. of Mathematics, Nagercoil, TN, India.

sujinflower@gmail.com

Received: 28 March 2020 | Accepted: 12 January 2021

Abstract:

Let $G = (V, E)$ be a connected graph with at least three vertices. A set $S \subseteq E(G)$ is called an edge-to-edge geodetic dominating set of G if S is both an edge-to-edge geodetic set of G and an edge dominating set of G . The edge-to-edge geodetic domination number $\gamma_{gee}(G)$ of G is the minimum cardinality of its edge-to-edge geodetic dominating sets. Some general properties satisfied by this concept are studied. Connected graphs of size m with edge-to-edge geodetic domination number 2 or m or $m - 1$ are characterized. We proved that if G is a connected graph of size $m \geq 4$ and \bar{G} is also connected, then $4 \leq \gamma_{gee}(G) + \gamma_{gee}(\bar{G}) \leq 2m - 2$. Moreover we characterized graphs for which the lower and the upper bounds are sharp. It is shown that, for every pair of positive integers a, b with $2 \leq a \leq b$, there exists a connected graph G with $g_{ee}(G) = a$ and $\gamma_{gee}(G) = b$. Also it is shown that, for every pair of positive integers a and b with $2 < a \leq b$, there exists a connected graph G with $\gamma_e(G) = a$ and $\gamma_{gee}(G) = b$, where $\gamma_e(G)$ is the edge domination number of G and $g_{ee}(G)$ is the edge-to-edge geodetic number of G .

Keywords: Edge-to-edge geodetic domination number; Edge-to-edge geodetic number; Edge domination number; Domination number; Geodetic number

MSC (2020): 05C69, 05C12.

Cite this article as (IEEE citation style):

J. John and V. Sujin Flower, "The edge-to-edge geodetic domination number of a graph", *Proyecciones (Antofagasta, On line)*, vol. 40, no. 3, pp. 635-658, 2021, doi: 10.22199/issn.0717-6279-4057



Article copyright: © 2021 J. John and V. Sujin Flower. This is an open access article distributed under the terms of the Creative Commons License, which permits unrestricted use and distribution provided the original author and source are credited.





Source details

South East Asian Journal of Mathematics and Mathematical Sciences

Scopus coverage years: from 2019 to 2023

Publisher: RAMANUJAN SOCIETY OF MATHEMATICS AND MATHEMATICAL SCIENCES

ISSN: 0972-7752 E-ISSN: 2582-0850

Subject area: [Mathematics: Algebra and Number Theory](#) [Mathematics: Applied Mathematics](#) [Mathematics: Analysis](#) [Mathematics: Discrete Mathematics and Combinatorics](#) [Mathematics: Computational Mathematics](#)

Source type: Journal

CiteScore 2022 ⓘ
0.2

SJR 2022 ⓘ
0.133

SNIP 2022 ⓘ
0.152

[View all documents >](#) [Set document alert](#) [Save to source list](#)

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

0.2 = $\frac{64 \text{ Citations } 2019 - 2022}{340 \text{ Documents } 2019 - 2022}$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

0.4 = $\frac{132 \text{ Citations to date}}{373 \text{ Documents to date}}$

Last updated on 05 April, 2024 • Updated monthly


CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Mathematics		
Algebra and Number Theory	#114/117	2nd
Mathematics		
Applied Mathematics	#597/609	2nd
Mathematics		

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)



Back to rsmams.org Feedback Contact Us

 **South East Asian Journal of Mathematics and Mathematical Sciences**
PRINT ISSN : 0972-7752 | ONLINE ISSN : 2582-0850

f g

HOME ARTICLES - EDITORIAL BOARD - SUBMIT A PAPER GUIDELINES CALL FOR PAPERS FOR AUTHORS
POLICY - CONTACT US

South East Asian Journal of Mathematics and Mathematical Sciences > home

HOME



It is an internationally reputed Research Journal South East Asian Journal of Mathematics and Mathematical Sciences published by the Ramanujan Society of Mathematics and Mathematical Sciences. The Journal is Indexed in Scopus. It may be noted all Scopus Indexed journals are part of UGC-CARE list Group II.

For authors willing to submit papers:
Check the [Call for Papers](#) for details regarding submission.
Please read the [Guidelines](#) carefully before you submit.
[Submit your Paper](#) following the regulatory Guidelines.

Details of Publication

The Journal is published one volume of three numbers of issue in each year.

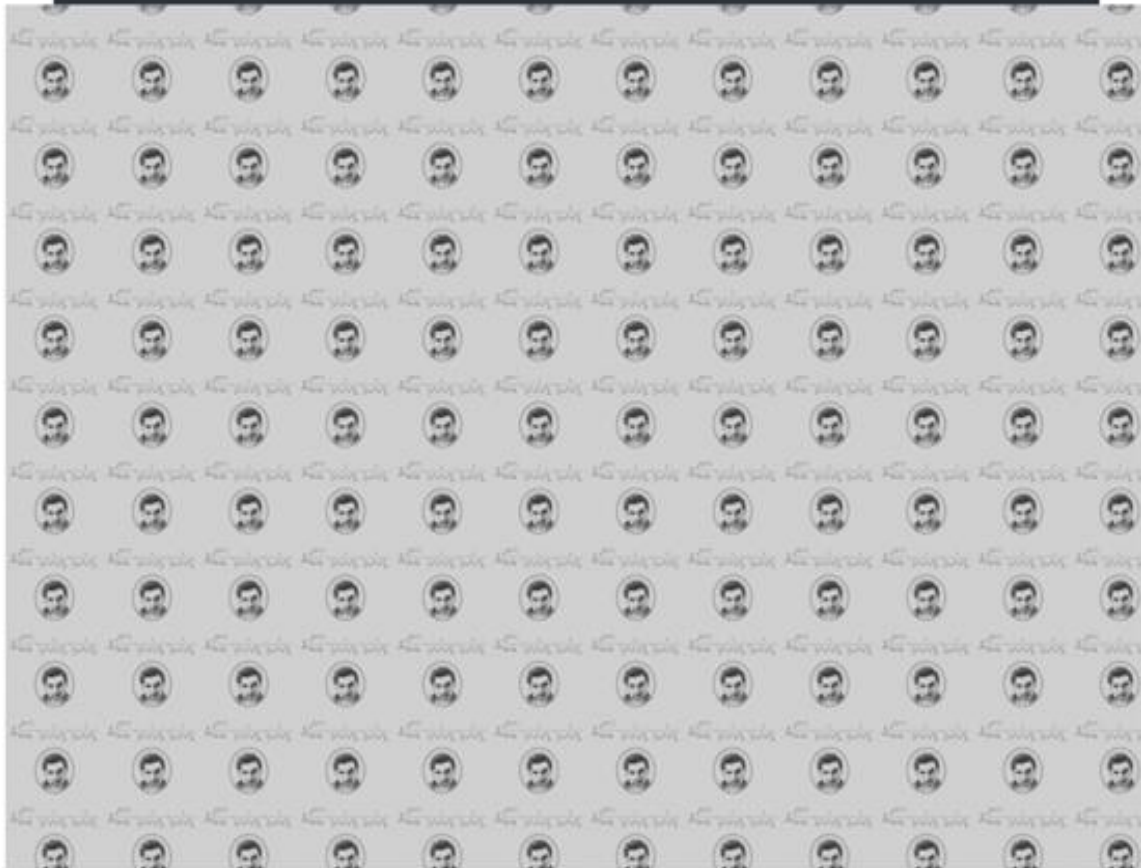
Subscription rates: [Subscription Rates PDF file](#)
[Contact Us](#) if you are interested in the subscription of this publication.

News & Events

Submission method of article through new website of journal

National Council for Science & Technology Communication (RASHTRIYA VIGYAN EVAM PRODYOGIJI SANCHAR PARISHAD) Department of Science and Technology sponsored workshop during November 15-19, 2023

Published issue of Journal of Ramanujan Society of Mathematics and Mathematical



South East Asian J. of Mathematics and Mathematical Sciences
Vol. 17, No. 1 (2021), pp. 285-296

ISSN (Online): 2582-0850

ISSN (Print): 0972-7752

THE CONNECTED GEODETIC VERTEX COVERING
NUMBER OF A GRAPH

V. M. Arul Flower Mary, J. Anne Mary Leema*, B. Uma Devi**
and P. Titus***

Department of Mathematics,
Holy Cross College (Autonomous), Nagercoil, Tamil Nadu - 629004, INDIA
E-mail : arulflowermary@gmail.com

*Department of Mathematics,
Manonmaniam Sundaranar University,
Abishekapatti, Tirunelveli, Tamil Nadu - 627012, INDIA
E-mail : annemary88ma@gmail.com

**Department of Mathematics,
S. T. Hindu College, Nagercoil, Tamil Nadu - 629002, INDIA
E-mail : umasub1968@gmail.com

***Department of Mathematics,
University College of Engineering, Nagercoil
Anna University, Tirunelveli Region,
Tirunelveli, Tamil Nadu - 627007, INDIA
E-mail : titusvino@yahoo.com

(Received: Mar. 18, 2020 Accepted: Jan. 02, 2021 Published: Apr. 30, 2021)

Abstract: For a connected graph G of order $n \geq 2$, a set $S \subseteq V(G)$ is a *geodetic vertex cover* of G if S is both a geodetic set and a vertex cover of G . The minimum cardinality of a geodetic vertex cover of G is defined as the *geodetic vertex covering number* of G and is denoted by $g_{\alpha}(G)$. Any geodetic vertex cover of cardinality $g_{\alpha}(G)$ is a g_{α} -set of G . A *connected geodetic vertex cover* of G is a geodetic vertex cover S such that the subgraph $G[S]$ induced by S is connected. The minimum cardinality of a connected geodetic vertex cover of G is the *connected geodetic vertex covering number* of G and is denoted by $g_{\alpha c}(G)$. A connected geodetic vertex cover of cardinality $g_{\alpha c}(G)$ is called a $g_{\alpha c}$ -set of G . Some general properties satisfied by connected geodetic vertex covering sets are studied. The connected geodetic





Source details

Proyecciones

Scopus coverage years: from 2000 to 2002, from 2006 to Present

Publisher: Universidad Catolica del Norte

ISSN: 0716-0917 E-ISSN: 0717-6279

Subject area: Mathematics: General Mathematics

Source type: Journal

[View all documents >](#) [Set document alert](#) [Save to source list](#) [Source Homepage](#)

CiteScore 2022 ⓘ
1.1

SJR 2022 ⓘ
0.320

SNIP 2022 ⓘ
0.786

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

1.1 = $\frac{376 \text{ Citations 2019 - 2022}}{349 \text{ Documents 2019 - 2022}}$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

1.1 = $\frac{385 \text{ Citations to date}}{354 \text{ Documents to date}}$


Last updated on 08 November, 2023 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Mathematics		
General Mathematics	#237/387	38th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)





PROYECCIONES
Journal of Mathematics
ISSN 0370-1908 (Print) / ISSN 2790-1041 (Online)

[Login](#) [Register](#)

[Current](#) [Archives](#) [Policies and Norms](#) [About](#) [Announcements](#) [Indexing and others](#) [Search](#)

Continuous publication modality
2023-10-25


Projections Journal of Mathematics **announces** that from Volume 42 No. 6, December 2023, it adheres to the **continuous publication modality**. This means that as soon as a submission is accepted, it will be published in the corresponding volume.

[Read More >](#)

Current Issue

1.1 2022 CiteScore
38th percentile
Powered by **Scopus**


Current Issue
Vol. 42 No. 5 (2023)



Published: 2023-09-13

ORCID

sorry, we can't preview this file



REVISTAS CIENTÍFICAS
de la Universidad Cauces del Norte.
[VOLVER AL INICIO](#)

Information

[For Readers](#)

[For Authors](#)

[For Librarians](#)

[Make a Submission](#)

Artículos

An inverse source time-fractional diffusion problem via an input-output mapping
Rahima Atmania, Loubna Settara 1105-1127
[PDF](#)

Study of some algebraic and topological properties of difference gai sequence of interval numbers



Proyecciones Journal of Mathematics
 Vol. 40, N° 5, pp. 1097-1116, October 2021.
 Universidad Católica del Norte
 Antofagasta - Chile

doi 10.22199/issn.0717-6279-4258



k-super cube root cube mean labeling of graphs

V. Princy Kala

Holy Cross College (Autonomous), India

Received : June 2020. Accepted : January 2021

Abstract

Consider a graph G with $|V(G)| = p$ and $|E(G)| = q$ and let $f : V(G) \rightarrow \{k, k+1, k+2, \dots, p+q+k-1\}$ be an injective function. The induced edge labeling f^* for a vertex labeling f is defined by $f^*(e) = \left\lfloor \sqrt[3]{\frac{f(u)^3 + f(v)^3}{2}} \right\rfloor$ or $\left\lceil \sqrt[3]{\frac{f(u)^3 + f(v)^3}{2}} \right\rceil$ for all $e = uv \in E(G)$ is bijective. If $f(V(G)) \cup \{f^*(e) : e \in E(G)\} = \{k, k+1, k+2, \dots, p+q+k-1\}$, then f is called a k -super cube root cube mean labeling. If such labeling exists, then G is a k -super cube root cube mean graph. In this paper, I introduce k -super cube root cube mean labeling and prove the existence of this labeling to the graphs viz., triangular snake graph T_n , double triangular snake graph $D(T_n)$, Quadrilateral snake graph Q_n , double quadrilateral snake graph $D(Q_n)$, alternate triangular snake graph $A(T_n)$, alternate double triangular snake graph $AD(T_n)$, alternate quadrilateral snake graph $A(Q_n)$, & alternate double quadrilateral snake graph $AD(Q_n)$.

Keywords: k -super cube root cube mean labeling, k -super cube root cube mean graph, snake graph, alternate snake graph.

MSC(2020): 05C78.





Source details

Journal of Mathematical and Computational Science

Scopus coverage years: from 2019 to 2021

(coverage discontinued in Scopus)

Publisher: SCIK Publishing Corporation

E-ISSN: 1927-5307

Subject area: Mathematics: General Mathematics Computer Science: Computational Theory and Mathematics

Source type: Journal

CiteScore 2020 ⓘ
0.2

SJR 2020 ⓘ
0.120

SNIP 2022 ⓘ
0.499

- [View all documents >](#)
- [Set document alert](#)
- [Save to source list](#)
- [Source Homepage](#)

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2020 counts the citations received in 2017-2020 to articles, reviews, conference papers, book chapters and data papers published in 2017-2020, and divides this by the number of publications published in 2017-2020. [Learn more >](#)

CiteScore 2020 ▼

$$0.2 = \frac{46 \text{ Citations 2017 - 2020}}{254 \text{ Documents 2017 - 2020}}$$

Calculated on 05 May, 2021

CiteScore rank 2020 ⓘ

Category	Rank	Percentile
Mathematics		
└ General Mathematics	#362/378	4th
Computer Science		
└ Computational Theory and Mathematics	#131/133	1st

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)





USER

Username

Password

Remember me

[Log In](#) [Register](#)

[Reset Password](#)

Email

[Reset Password](#)

INFORMATION

- [For Authors](#)

JOURNAL CONTENT

Search

All

[Search](#)

Browse

- [By Issue](#)
- [By Author](#)
- [By Title](#)

[Home](#) [About](#) [Table of Contents](#) [Aims and Scope](#) [Editorial Board](#)
[Publication Ethics](#) [Editorial Workflow](#) [Contact](#)

Home > Vol 13 (2023)

Aims and Scope

Journal of mathematical and computational science (JMCS) is a peer-reviewed open access international journal, which is aimed to provide a publication forum for important research in different areas covering all aspects of mathematical and computational science, such as numerical analysis, optimization, linear and nonlinear programming, theory of computation, control theory, theory of algorithms, computational logic, applied combinatorics, coding theory, cryptographics, fuzzy theory, differential equations, algebra and number theory. This journal will accept high quality articles containing original research results and survey articles of exceptional merit.

ISSN: 1927-5307

Editorial Office: jmcs@scik.org

Editorial Policy

Papers submitted for publication in the journal must be correct, original, and nontrivial.

Copyright

By submitting a manuscript, the author acknowledges that:

- It has not been previously published elsewhere, is original and has been written by the stated authors.
- The article is not currently being considered for publication by any other journal and will not be submitted for such review while under review by this journal.
- All authors have read the manuscript and agree to publish it.
- The authors declare that there is no conflict of interests.

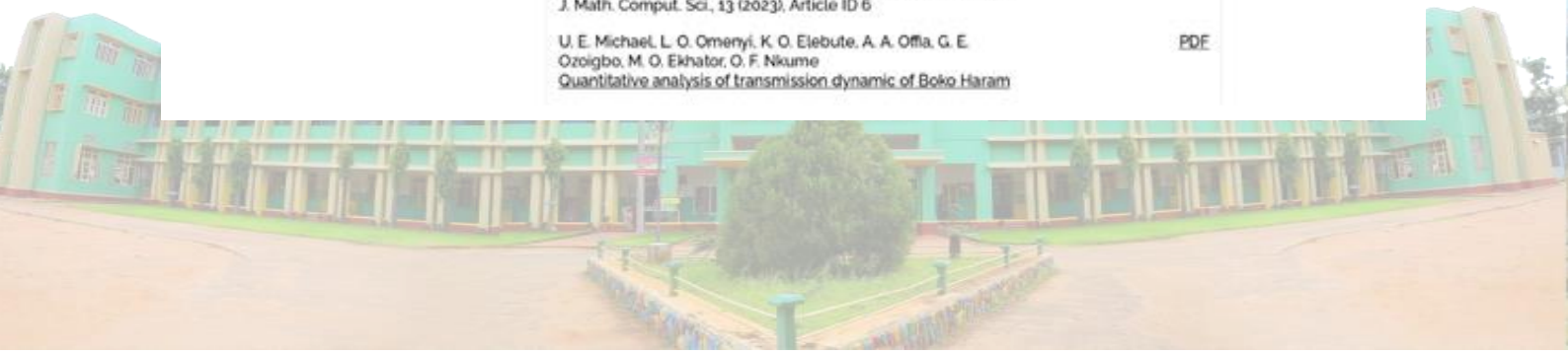
Open Access

Journal of Mathematical and Computational Science is an open access journal, and all articles are distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Vol 13 (2023)

Table of Contents

<p>Tarveer Fatima On conformal bi-slant submersion from cosymplectic manifold J. Math. Comput. Sci., 13 (2023), Article ID 1</p>	PDF
<p>Ilyas Sitti, Fouad Lahmidi On the null controllability of switched positive and periodic positive systems J. Math. Comput. Sci., 13 (2023), Article ID 2</p>	PDF
<p>Yanan Yan Phase retrieval problem in space of $l_p(\Gamma)$ ($0 < p \leq 1$) J. Math. Comput. Sci., 13 (2023), Article ID 3</p>	PDF
<p>Asina Kibonge, Stephen Edward, Monica Kung'aro Modelling the transmission dynamics of mumps with control measures J. Math. Comput. Sci., 13 (2023), Article ID 4</p>	PDF
<p>Kabbaj Samir, Karkri Rafik, Zoubeir Hicham Tensor product of Schauder frames and besselian Schauder frames of Banach spaces J. Math. Comput. Sci., 13 (2023), Article ID 5</p>	PDF
<p>H. S. Al-Saadi, N. S. Al-Zahrani On S_q-w-closed sets and $ST_{1/2}$ spaces in weak structures J. Math. Comput. Sci., 13 (2023), Article ID 6</p>	PDF
<p>U. E. Michael, L. O. Omeriyi, K. O. Elebute, A. A. Offa, G. E. Ozoigbo, M. O. Ekhatior, O. F. Nkume Quantitative analysis of transmission dynamic of Boko Haram</p>	PDF





Available online at <http://scik.org>

J. Math. Comput. Sci. 11 (2021), No. 2, 1728-1742

<https://doi.org/10.28919/jmcs/5352>

ISSN: 1927-5307

THE EDGE GEODETIC VERTEX COVERING NUMBER OF A GRAPH

J. ANNE MARY LEEMA^{1,*}, V.M. ARUL FLOWER MARY¹, P. TITUS²

¹Department of Mathematics, Holy Cross College (Autonomous), Nagercoil, Affiliated College of Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627012, Tamilnadu, India

²Department of Science and Humanities, University College of Engineering Nagercoil, Anna University: Tirunelveli Region, Tirunelveli-627007, Tamilnadu, India

Copyright © 2021 the author(s). This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Abstract. For a connected graph G of order $n \geq 2$, a set $S \subseteq V(G)$ is an *edge geodetic vertex cover* of G if S is both an edge geodetic set and a vertex covering set of G . The minimum cardinality of an edge geodetic vertex cover of G is defined as the *edge geodetic vertex covering number* of G and is denoted by $g_{1a}(G)$. Any edge geodetic vertex cover of cardinality $g_{1a}(G)$ is a g_{1a} -set of G . Some general properties satisfied by edge geodetic vertex cover are studied. The edge geodetic vertex covering number of several classes of graphs are determined. Connected graphs of order n with edge geodetic vertex covering number 2 is characterized. A few realization results are given for the parameter $g_{1a}(G)$.

Keywords: geodesic; edge geodetic set; vertex covering set; edge geodetic vertex cover; edge geodetic vertex covering number.

2010 AMS Subject Classification: 05C12.

1. INTRODUCTION

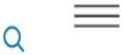
By a graph $G = (V, E)$, we mean a finite undirected connected graph without loops and multiple edges. The *order* and *size* of G are denoted by n and m , respectively. For basic graph

*Corresponding author

E-mail address: annemary88ma@gmail.com

Received December 28, 2020





Source details

Journal of Natural Fibers

Open Access ⓘ

Scopus coverage years: from 2004 to Present

Publisher: Taylor & Francis

ISSN: 1544-0478 E-ISSN: 1544-046X

Subject area: Materials Science: Materials Science (miscellaneous)

Source type: Journal

CiteScore 2022 ⓘ
4.7

SJR 2022 ⓘ
0.595

SNIP 2022 ⓘ
2.313

[View all documents >](#) [Set document alert](#) [Save to source list](#)

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ⓘ

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

4.7 = $\frac{7,839 \text{ Citations } 2019 - 2022}{1,651 \text{ Documents } 2019 - 2022}$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

6.1 = $\frac{11,727 \text{ Citations to date}}{1,909 \text{ Documents to date}}$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Materials Science		
Materials Science (miscellaneous)	#48/150	68th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site ↗](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help C

NEW

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Filters

Clear All

Web of Science Coverage

Open Access

Category

Country / Region

Language

Frequency

Journal Citation Reports

Refine Your Search Results

Journal of natural fibers

Search

Sort By: Relevancy

Search Results

Found 486 results (Page 1)

Share These Results

Exact Match Found

JOURNAL OF NATURAL FIBERS

OPEN ACCESS

Publisher: TAYLOR & FRANCIS INC , 530 WALNUT STREET, STE 850, PHILADELPHIA, USA, PA, 19106

ISSN / eISSN: 1544-0478 / 1544-046X

Web of Science Core Collection: Science Citation Index Expanded

Additional Web of Science Indexes: Essential Science Indicators

Share This Journal

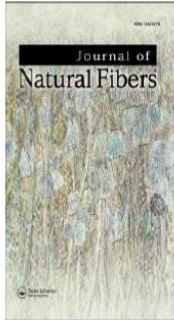
View profile page

* Requires free login.

Other Possible Matches

ANALES DEL MUSEO DE HISTORIA





Journal of Natural Fibers

 An open access journal

Publishes research in processing natural raw materials, particularly fibers; related lifecycle assessment; sustainable agriculture; bioreclamation.

[Submit an article](#)
▼

[About this journal](#)
▼

[Browse all articles & issues](#)
▼

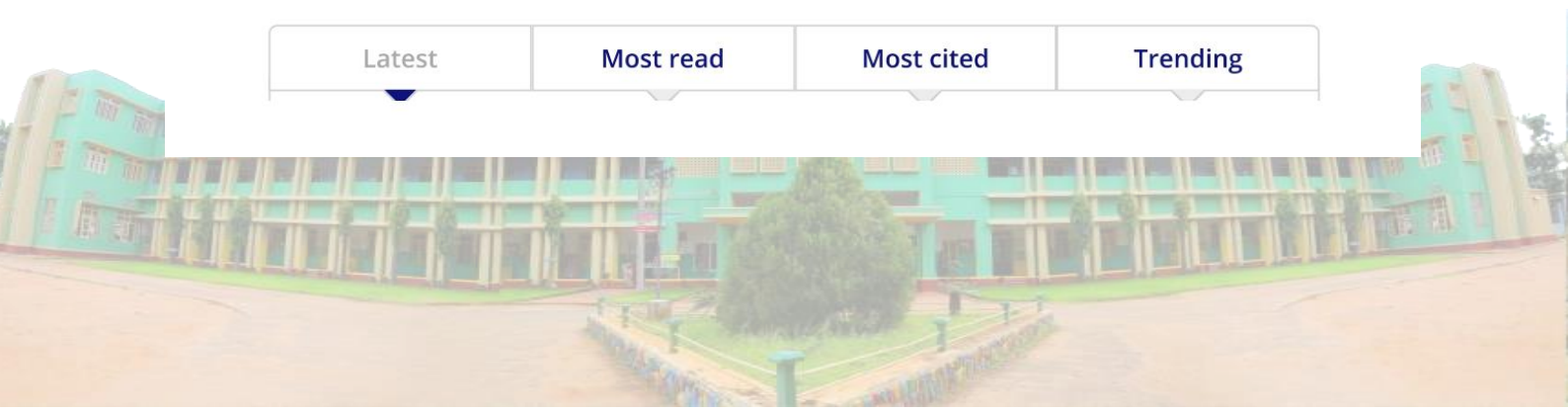
[Alerts & RSS feed](#)
▼

Journal overview

Aims and scope	
Journal metrics >	Editorial board >
Instructions for authors >	
<p>Please note that <i>Journal of Natural Fibers</i> converted to a full Open Access journal from Volume 20 (2023). Previous volumes will continue to provide access through a Pay to Read model.</p>	
Read full aims and scope	

Explore articles

Latest	Most read	Most cited	Trending
------------------------	---------------------------	----------------------------	--------------------------



Taylor & Francis Online Log in | Register | Cart




Home ▶ All Journals ▶ Journal of Natural Fibers ▶ List of Issues ▶ Volume 19, Issue 13 ▶ Characterization of alkali treated Nelum ...

Journal of Natural Fibers >
Volume 19, 2022 - Issue 13




1733 Views | CrossRef citations to date | Altmetric 1

Research Article

Characterization of alkali treated *Nelumbo nucifera* fiber and properties of its reinforced composite

Ananthkrishnan Harish Elango, Kalidas Vinoth Kumar , Thozhuvur Govindaraman Loganathan ,
Rathnam Krishna Priya, Sutha Shobana, Manickam Balasubramanian  & ...show all

Pages 4949-4963 | Published online: 18 Mar 2021

 Cite this article  <https://doi.org/10.1080/15440478.2020.1870640> 

[Full Article](#) [Figures & data](#) [References](#) [Citations](#) [Metrics](#) [Reprints & Permissions](#)

[Read this article](#)

ABSTRACT

Natural fibers are being extensively used in recent technological and structural applications due to the need for biodegradable materials. This paper deals with extraction of new cellulosic fiber from the stem of *Nelumbo nucifera* (*Nn*) (lotus) and the investigations *via* physical, structural and thermal properties on the alkali-treated fiber were carried out. The XRD analysis of the *Nn* fiber provides the crystallinity index of about 52.53% that implies its high crystalline structure and own associated strength. The FTIR analysis proves the presence of alcoholic and alpha keto carboxylic acid in *Nn* fiber. Thermal stability of *Nn* composite is found around 210°C and the TGA results prove that the extracted as well as alkali-treated fibers provide a good reinforcement to the matrix, which can be well synthesized mechanically improved biocomposites. Test samples of three different weight % of *Nn* fiber with the epoxy basement are designated as L10, L15 and L20 to measure the tensile and flexural strength. Test sample with L20 as weight % exhibits better Young's and flexural modulus. Alkali treated *Nn* composite is an important candidate for the natural fiber reinforcement and such a category can serve as a good material for household applications.

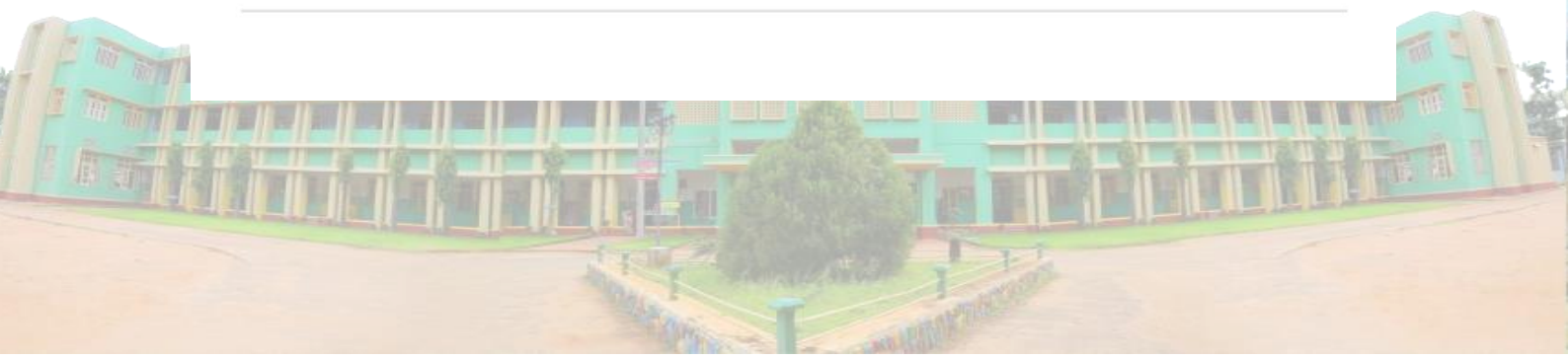
抽象:

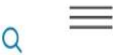
由于需要生物降解材料, 天然纤维正广泛应用于最近的技术和结构应用. 本文论述了从 *Nelumbo nucifera* (*Nn*) (莲花) 茎中提取新的纤维素纤维, 并进行了碱处理纤维的物理、结构和热特性的研究. *Nn* 纤维的XRD分析提供约52.53%的结晶指数, 这意味着其高晶体结构和自身相关强度. FTIR 分析证明 *Nn* 纤维中存在酒精和 α 酮羧酸. *Nn* 复合材料的热稳定性在210°C左右, TGA结果表明, 提取的和碱处理的纤维对基体提供了很好的强化, 可以很好地合成机械改进的生物复合材料. 使用环氧树脂的 *Nn* 纤维三个不同重量 % 的测试样品被指定为 L10、L15 和 L20, 用于测量拉伸和弯曲强度. 以L20为重量的试验样品表现出更好的杨和弹性模量. 碱处理 *Nn* 复合材料是天然纤维增强的重要候选材料, 此类产品可作为家庭应用的好材料.

Q KEYWORDS: [Nelumbo nucifera fiber](#) [powder XRD](#) [ftir](#) [thermal](#) [crystallinity index](#) [mechanical properties](#) [关键字-纤维](#) [powder XRD](#) [粉末](#) [热](#) [结晶指数](#) [机械性能](#)

Correction Statement

This article has been republished with minor changes. These changes do not impact the academic content of the article.





Source details

Jordan Journal of Physics

Scopus coverage years: from 2008 to 2023

Publisher: Yarmouk University

ISSN: 1994-7607 E-ISSN: 1994-7615

Subject area: Physics and Astronomy: General Physics and Astronomy

Source type: Journal

[View all documents >](#)

[Set document alert](#)

[Save to source list](#)

CiteScore 2022 ⓘ
0.7

SJR 2022 ⓘ
0.159

SNIP 2022 ⓘ
0.373

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$0.7 = \frac{104 \text{ Citations 2019 - 2022}}{156 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$0.9 = \frac{163 \text{ Citations to date}}{188 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Physics and Astronomy		
General Physics and Astronomy	#209/240	13th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site ↗](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help C

NEW

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Refine Your Search Results

Jordan Journal of Physics

Search

Sort By: Relevancy

Search Results

Found 1,218 results (Page 1)

Share These Results

Exact Match Found

JORDAN JOURNAL OF PHYSICS

Publisher: YARMOUK UNIV, DEANSHIP RESEARCH & GRADUATE STUDIES , C/O PROF IBRAHIM O ABU AL-JARAYESH, EIC, IRBID, JORDAN, 00000

ISSN / eISSN: 1994-7607 / 1994-7615

Web of Science Core Collection: Emerging Sources Citation Index

Share This Journal

View profile page

* Requires free login.

Other Possible Matches

ACOUSTICAL PHYSICS

5




 **Jordan Journal of Physics** 


Register Login


EDITORIAL TEAM INTERNATIONAL ADVISORY BOARD PUBLICATION ETHICS ISSUES ▾


Q SEARCH

MANUSCRIPT ORGANIZATION ANNOUNCEMENTS ABOUT ▾

 جامعة اليرموك

 المملكة الأردنية الهاشمية

 The Hashemite Kingdom of Jordan

 Yarmouk University

INFORMATION

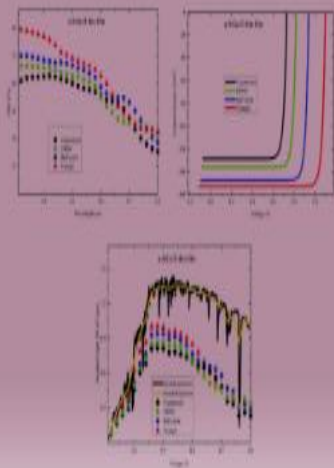
For Readers

For Authors

For Librarians

MAKE A SUBMISSION

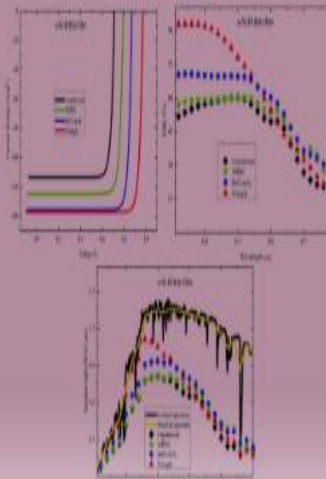
المجلة الأردنية
للفيزياء
مجلة علمية عالمية محكمة



جلد (19)، العدد (1)، آذار 2023، رمضان 1444 هـ

ISSN 1994-7607

Jordan Journal of
PHYSICS
An International Peer-Reviewed
Research Journal



Volume 16, No. 1, March 2023, Ramadan 1444 H

ISSN 1994-7607



Jordan Journal of Physics

ARTICLE

Structural and Surface Characteristics of CuO and Pt/CuO Nanostructured Thin Films

C. G. Jinitha^a, P. Abisha^b, S. Sonia^c, Naidu Dhanpal Jayram^d and S. Virgin Jeba^e

^a Research Scholar (Reg. No. 19213042132016), Department of Physics, Holy Cross College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627012, India.

^b M. Phil Scholar (Reg. No. 191408), Department of Physics, Holy Cross College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627012, India.

^c Department of Physics, Holy Cross College, Nagercoil-4, India.

^d Department of Physics, Kalasalingam Academy of Research and Education, Krishnan Koil - 626126, India.

^e Research Scholar, Department of Physics, Holy Cross College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627012, India.

Doi:

Received on: 01/05/2020;

Accepted on: 05/04/2021

Abstract: The most prominent and utilizable platinum-coated copper Oxide nanostructured thin films are prepared using the SILAR method. Their structural properties have been studied using X-ray diffraction (XRD) and Raman spectroscopy. XRD pattern reveals the phase purity and crystallinity of CuO nanostructures. The average grain size estimated from XRD gives diameters in the range of 14 - 27 nm. Raman spectra explain the structural information of CuO and Pt/CuO nanostructured thin films, in which the peaks observed at 328 cm^{-1} , 609.32 cm^{-1} and 1141.77 cm^{-1} are the different phonon modes of CuO. The peak at 2136 cm^{-1} provides strong evidence for the formation of platinum on CuO nanostructures. The SEM micrograph confirms the floral morphology, which is composed of nano petals. From the observed morphology, it is observed that the deposited thin films such as CuO and Pt/CuO will give interesting applications to our society by being self-cleaning agents, photocatalysts, semiconductor devices, optical fibers, ... etc.

Keywords: CuO, Pt/CuO, Structural analysis, SILAR, Crystallinity.

1. Introduction

Copper oxide, including cuprous oxide (copper (I) oxide) and cupric oxide (copper (II) oxide), is formed when copper is exposed to oxygen [1]. These semiconductor oxides have been investigated for various purposes, such as the inherent abundance of starting material (Cu), the ease of production by Cu oxidation, their non-toxic nature and the reasonably good electrical and optical properties exhibited by CuO [2]. Previous works showed that many of

the growth methods for copper oxide resulted in a combined growth of copper (I) oxide (Cu_2O) and copper (II) oxide (CuO). However, CuO is a more widely used material than Cu_2O due to its stability. Cupric oxide (CuO) possesses a monoclinic crystal structure with a bandgap of 1.22–2.0 eV [3, 4]. Its high optical absorption coefficient in the visible range and reasonably good electrical properties constitute important advantages and render CuO as the most

Corresponding Author: S. Sonia

Email: sonianst10@gmail.com





Source details

Journal of Materials Science: Materials in Electronics

Scopus coverage years: from 1990 to Present

Publisher: Springer Nature

ISSN: 0957-4522 E-ISSN: 1573-482X

- Subject area:
- Engineering: Electrical and Electronic Engineering
 - Physics and Astronomy: Condensed Matter Physics
 - Physics and Astronomy: Atomic and Molecular Physics, and Optics
 - Materials Science: Electronic, Optical and Magnetic Materials

Source type: Journal

[View all documents >](#)
[Set document alert](#)
 [Save to source list](#)

CiteScore 2022 **4.6**

SJR 2022 **0.496**

SNIP 2022 **0.681**

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

4.6 = $\frac{40,235 \text{ Citations } 2019 - 2022}{8,708 \text{ Documents } 2019 - 2022}$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

5.0 = $\frac{44,280 \text{ Citations to date}}{8,893 \text{ Documents to date}}$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Engineering		
Electrical and Electronic Engineering	#259/738	64th
Physics and Astronomy		
Condensed Matter Physics	#155/423	63rd

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)



NEW The power of the Web of Science™ on your mobile device, wherever inspiration strikes. Dismiss Learn More

Already have a manuscript? Use our Manuscript Matcher to find the best relevant journals! Find a Match

Refine Your Search Results

Journal of Materials Science-Materials in Elec Search

Sort By: Relevancy

Search Results

Found 1,533 results (Page 1) Share These Results

Filters Clear All Web of Science Coverage Open Access Category Country / Region Language Frequency Journal Citation Reports

Exact Match Found

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS Publisher: SPRINGER, VAN GODEWIJCKSTRAAT 30, DORDRECHT, NETHERLANDS, 3311 GZ ISSN / eISSN: 0957-4522 / 1573-482X Web of Science Core Collection: Science Citation Index Expanded Additional Indexes: Current Contents Electronics & Telecommunications Collection | Current Contents Engineering, Computing & Technology | Current Contents Physical, Chemical & Earth Sciences | Essential Science Indicators Share This Journal View profile page * Requires free login





Journal of Materials Science: Materials in Electronics

Publishing model
Hybrid

[Submit your manuscript](#)

[Editorial board](#)

[Aims and scope](#)

[Journal updates](#)

Overview

Journal of Materials Science: Materials in Electronics publishes papers on materials and their applications in modern electronics.

- A refereed companion to the Journal of Materials Science.
- Covers the intersection of fundamental science and application-specific work.
- Explores the growth, preparation, and processing of new materials.
- Discusses reliability, failure analysis, quality assurance, and characterization in electronics applications.

Editor-in-Chief

Safa O. Kasap

Impact factor
2.8 (2022)

5 year impact factor
2.5 (2022)

Submission to first decision (median)
11 days

Downloads
1,932,729 (2023)

For authors

[Submission guidelines](#)

[Language editing services](#)

[Ethics and disclosures](#)

[How to publish with us](#)

[Open Access fees and funding](#)

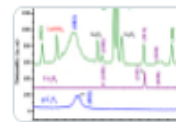
[Contact the journal](#)

Latest articles

Construction and XRD analysis of $\text{La@Co}_3\text{O}_4@g\text{-C}_3\text{N}_4$ nanostructures for removal of Co ions from contaminated water

Hanan Alhussaini, Nuha Y. Elamin ... A. Modwi

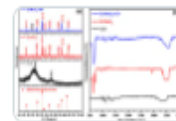
Original Paper | 17 March 2024 | Article: 588



Facile synthesis of perovskite ZnMnO_3 composite with reduced graphene oxide via solvothermal route for supercapacitor applications

Kashan Ali Geelani, B. M. Alotaibi ... A. M.A. Henshah

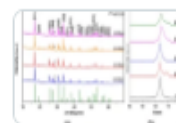
Original Paper | 17 March 2024 | Article: 587



Study of Ge-doped garnet type $\text{Li}_7\text{La}_3\text{Zr}_2\text{O}_{12}$ as solid electrolyte for Li-ion battery application

Muktal Aote & A. V. Deshpande

Original Paper | 15 March 2024 | Article: 586



Language quality checker

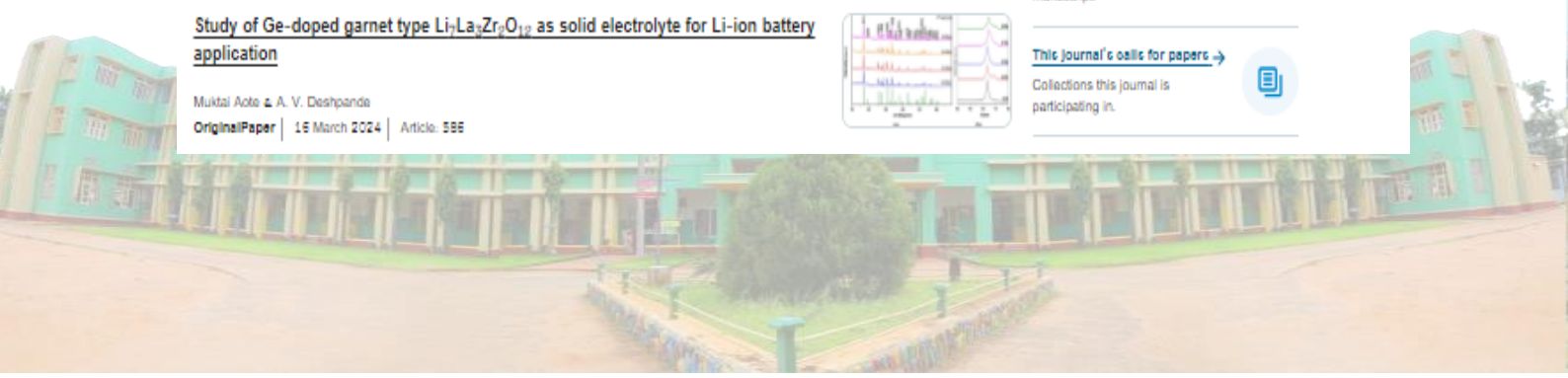
[Get your manuscript edited for free](#)

Use our pre-submission checklet

Avoid common mistakes on your manuscript.

This Journal's oasls for papers

Collections this journal is participating in.



[Home](#) > [Journal of Materials Science: Materials in Electronics](#) > [Article](#)

Surface-enhanced Raman spectroscopy studies of orderly arranged silica nanospheres–synthesis, characterization and dye detection

Published: 29 September 2021

Volume 32, pages 26596–26607, (2021) [Cite this article](#)

Journal of Materials Science:
Materials in Electronics

[Aims and scope](#) →[Submit manuscript](#) →

M. Ramuthai, Shaik Habibuddin, S. Sonia, Naidu Dhanpal Jayram , K. Deva Arun Kumar, Mohd. Shkir , H. Algarni & S. AlFaify

 442 Accesses  2 Citations [Explore all metrics](#) →

Abstract

Silica nanospheres have been explored much for drug delivery, photocatalysis, sensors and energy storage applications. It also acts as a template for Surface-Enhanced Raman Spectroscopy (SERS) substrates. Uniform nanostructures at low cost with high reproducibility are the major challenges in SERS substrate fabrication. In the present work, silica nanospheres were synthesized using stober method and deposited on to glass slides using Vertical deposition techniques. Different size/thickness of Silver (Ag) nanoparticles were deposited onto silica thin films using sputter deposition technique. The monodispersity of silica nanospheres and size of silver nanoparticles (10 nm, 20 nm and 30 nm) were confirmed by FESEM analysis. The structural properties were confirmed through XRD. UV–Vis analysis revealed that the plasmonic properties of Ag@SiO₂ give high surface plasmons for 30 nm thickness of silver. The binding energy of Ag@SiO₂ confirmed through XPS spectrum. The fabricated SERS substrates were used to detect Rhodamine 6G (R6G), Methylene blue (MB), Methylene violet (MV) and Methyl orange dyes as an analyte molecule with a limit of detection at about 10⁻¹¹ mol/L. The addition of SiO₂ nanospheres decreases the Ag oxidation rate and increases their stability. The maximum enhancement factor (1.5 × 10⁷) achieved for 30nm thickness of Ag@SiO₂. The results and technique establish the potential applications and reproducible SERS substrate.

 This is a preview of subscription content, [log in via an institution](#)  to check access.

Access this article





Source details

Journal of Materials Science: Materials in Electronics

Scopus coverage years: from 1990 to Present

Publisher: Springer Nature

ISSN: 0957-4522 E-ISSN: 1573-482X

Subject area: Engineering: Electrical and Electronic Engineering Physics and Astronomy: Condensed Matter Physics
Physics and Astronomy: Atomic and Molecular Physics, and Optics
Materials Science: Electronic, Optical and Magnetic Materials

Source type: Journal

[View all documents >](#) [Set document alert](#) [Save to source list](#)

CiteScore 2022 ⓘ
4.6

SJR 2022 ⓘ
0.496

SNIP 2022 ⓘ
0.681

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

4.6 = $\frac{40,235 \text{ Citations 2019 - 2022}}{8,708 \text{ Documents 2019 - 2022}}$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

5.0 = $\frac{44,280 \text{ Citations to date}}{8,893 \text{ Documents to date}}$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Engineering		
Electrical and Electronic Engineering	#259/738	64th
Physics and Astronomy		
Condensed Matter Physics	#155/423	63rd

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help C

NEW

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Refine Your Search Results

Journal of Materials Science-Materials in Elec

Search

Sort By: Relevancy

Search Results

Found 1,533 results (Page 1)

Share These Results

Exact Match Found

JOURNAL OF MATERIALS SCIENCE-MATERIALS IN ELECTRONICS

Publisher: SPRINGER, VAN GODEWIJCKSTRAAT 30, DORDRECHT, NETHERLANDS, 3311 GZ

ISSN / eISSN: 0957-4522 / 1573-482X

Web of Science Core Collection: Science Citation Index Expanded

Additional Web of Science Indexes: Current Contents Electronics & Telecommunications Collection | Current Contents Engineering, Computing & Technology | Current Contents Physical, Chemical & Earth Sciences | Essential Science Indicators

Share This Journal

View profile page

* Requires free login





Journal of Materials Science: Materials in Electronics

Publishing model
Hybrid

Submit your manuscript

Editorial board

Aims and scope

Journal updates

Overview

Journal of Materials Science: Materials in Electronics publishes papers on materials and their applications in modern electronics.

- A refereed companion to the Journal of Materials Science.
- Covers the intersection of fundamental science and application-specific work.
- Explores the growth, preparation, and processing of new materials.
- Discusses reliability, failure analysis, quality assurance, and characterization in electronics applications.

Editor-in-Chief

Safa O. Kasap

Impact factor
2.8 (2022)

5 year impact factor
2.5 (2022)

Submission to first decision (median)
11 days

Downloads
1,932,729 (2023)

For authors

Submission guidelines



Language editing services



Ethics and disclosures



How to publish with us



Open Access fees and funding



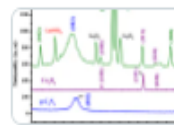
Contact the journal



Latest articles

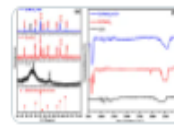
Construction and XRD analysis of $\text{La}@\text{Co}_2\text{O}_4@g\text{-C}_3\text{N}_4$ nanostructures for removal of Co ions from contaminated water

Hanan Alhussain, Nuha Y. Elamin ... A. Modwi
OriginalPaper | 17 March 2024 | Article: 588



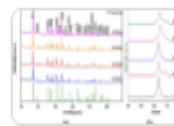
Facile synthesis of perovskite ZnMnO_3 composite with reduced graphene oxide via solvothermal route for supercapacitor applications

Kashan Ali Geelani, B. M. Alotaibi ... A. M.A. Henaish
OriginalPaper | 17 March 2024 | Article: 587



Study of Ge-doped garnet type $\text{Li}_7\text{La}_2\text{Zr}_6\text{O}_{12}$ as solid electrolyte for Li-ion battery application

Muktal Aote & A. V. Deshpande
OriginalPaper | 15 March 2024 | Article: 586



Language quality checker

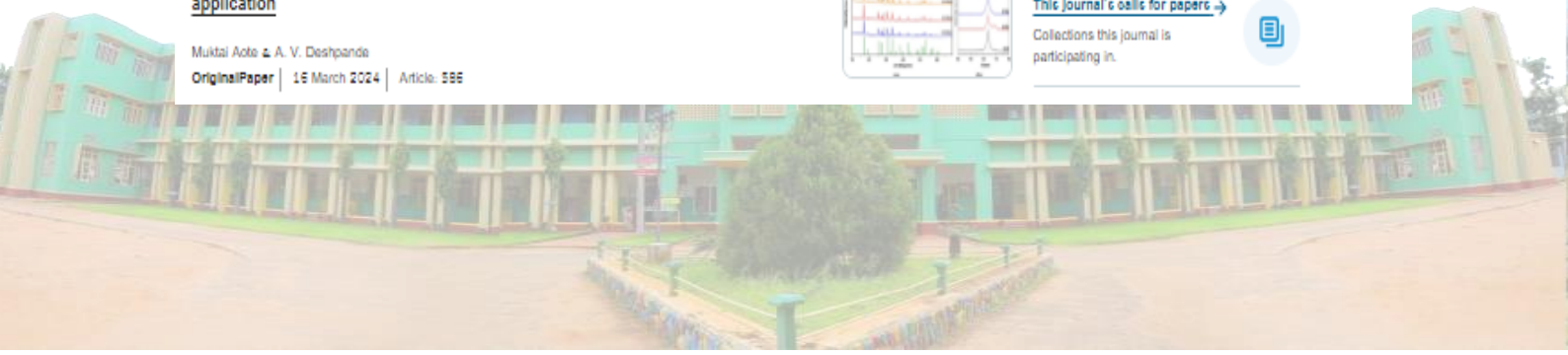
Get your manuscript edited for free

Use our pre-submission checklist

Avoid common mistakes on your manuscript.

This journal's ojs for papers

Collections this journal is participating in.



[Home](#) > [Journal of Materials Science: Materials in Electronics](#) > Article

Enhanced linear and non-linear optical activity of lead onto L-threonine cadmium acetate crystal

| Published: 02 May 2021

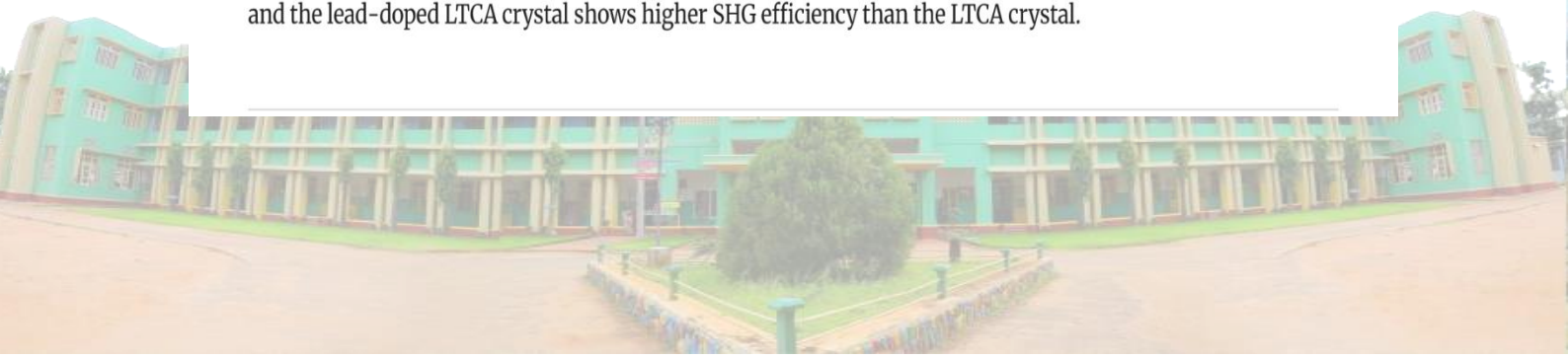
| Volume 32, pages 13261–13268, (2021) [Cite this article](#)

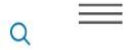
Journal of Materials Science:
Materials in Electronics

[Aims and scope](#) →[Submit manuscript](#) →M. Abila Jeba Queen , [K. C. Bright](#), [S. Mary Delphine](#) & [P. Aji Udhaya](#) 105 Accesses  3 Citations [Explore all metrics](#) →

Abstract

Herein, we describe the growth and characterization of new crystal lead-doped L-threonine cadmium acetate (LTCA). The supramolecular coordination compounds are crystallized by slow evaporation technique at ambient temperature. The X-ray diffraction techniques confirm monoclinic crystal system. The presence of lead and the LTCA lattices were identified using EDAX analysis. L-Threonine amino acids have unique properties like zwitterionic nature and molecular chirality, which improve the optical properties of the lead-doped crystal. The linear optical parameters such as optical band gap and refractive indexes are estimated at lower cutoff wavelength from UV-Vis analysis. The variation of dielectric constant, dielectric loss with frequency is studied using LCR meter. Due to the electropositive character of lead the static permittivity increases. Magnetic behavior changes to paramagnetic nature due to the inclusion of lead. TG/DTA analysis suggests that the crystal is thermally stable up to 135.32 °C. Using Nd-YAG laser, the NLO property was studied and the lead-doped LTCA crystal shows higher SHG efficiency than the LTCA crystal.





Source details

Phosphorus, Sulfur and Silicon and the Related Elements

Scopus coverage years: from 1989 to Present

Publisher: Taylor & Francis

ISSN: 1042-6507 E-ISSN: 1563-5325

Subject area: Chemistry: Inorganic Chemistry Chemistry: Organic Chemistry
Biochemistry, Genetics and Molecular Biology: Biochemistry

Source type: Journal

[View all documents >](#) [Set document alert](#) [Save to source list](#)

CiteScore 2022 ⓘ
2.4

SJR 2022 ⓘ
0.235

SNIP 2022 ⓘ
0.371

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$2.4 = \frac{1,543 \text{ Citations 2019 - 2022}}{634 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$2.6 = \frac{1,356 \text{ Citations to date}}{515 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Chemistry		
└ Inorganic Chemistry	#56/78	28th
Chemistry		
└ Organic Chemistry	#144/197	27th
Biochemistry,		

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help C

NEW

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Filters

Clear All

Web of Science Coverage

Open Access

Category

Country / Region

Language

Frequency

Journal Citation Reports

Refine Your Search Results

Phosphorus Sulfur and Silicon and the Relate

Search

Sort By: Relevancy

Search Results

Found 364 results (Page 1)

Share These Results

Exact Match Found

PHOSPHORUS SULFUR AND SILICON AND THE RELATED ELEMENTS

Publisher: TAYLOR & FRANCIS LTD , 2-4 PARK SQUARE, MILTON PARK, ABINGDON, England, OXON, OX14 4RN

ISSN / eISSN: 1042-6507 / 1563-5325

Web of Science Core Collection: Science Citation Index Expanded

Additional Web of Science Indexes: Current Chemical Reactions | Current Contents Physical, Chemical & Earth Sciences | Essential Science Indicators | Index Chemicus

Share This Journal

View profile page

* Requires free login.

Other Possible Matches



Phosphorus, Sulfur, and Silicon and the Related Elements

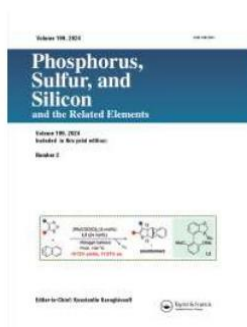
[Submit an article](#) ▼

[About this journal](#) ▼

[Browse all articles & issues](#) ▼

[Alerts & RSS feed](#) ▼

[Buy a subscription](#)



Browse this journal

- [▶ Latest articles](#)
- [▶ Current issue](#)
- [▶ List of issues](#)
- [▶ Special issues](#)
- [▶ Open access articles](#)
- [▶ Most read articles](#)
- [▶ Most cited articles](#)

Phosphorus, Sulfur, and Silicon and the Related Elements, Volume 199, Issue 2



Phosphorus, Sulfur, and Silicon and the Related Elements >

Volume 197, 2022 - Issue 3: ICAMS-21 e-Conference; Guest Editor: Dr. Mohanraj

296 | 2 | 0
Views | CrossRef citations to date | Altmetric

Articles

Chemical and sweet basil leaf mediated synthesis of cerium oxide (CeO₂) nanoparticles: Antibacterial action toward human pathogens

S. Sebastiammal , N. Annlin Bezy, A. Somaprabha, J. Henry , C.S. Biju  & A. Lesly Fathima 

Pages 237-243 | Received 11 Aug 2021, Accepted 07 Dec 2021, Published online: 22 Dec 2021

 Cite this article  <https://doi.org/10.1080/10426507.2021.2017435> Check for updates

Sample our
Physical Sciences
Journals
>> [Sign in here](#) to start your access
to the latest two volumes for 14 days

[Full Article](#) [Figures & data](#) [References](#) [Supplemental](#) [Citations](#)[Metrics](#) [Reprints & Permissions](#) [Read this article](#)

Abstract

The current study explores the bacterial inactivation of CeO₂ nanoparticles (NPs) synthesized via chemical co-precipitation (C-CeO₂) and green synthesis (G-CeO₂) route. In the green synthesis route, the sweet basil leaf extract is used as a reducing agent while CTAB acts as a surfactant in the chemical route. The structural, surface, and optical properties were studied by different physico-chemical techniques. X-ray diffraction pattern of CeO₂ nanoparticles confirms face-centered cubic (FCC) crystal system. The crystallite size is reduced for the green synthesized CeO₂ nanoparticles.





Source details

Songklanakarin Journal of Science and Technology

Scopus coverage years: from 2006 to Present

Publisher: Prince of Songkla University

ISSN: 0125-3395

Subject area: Multidisciplinary

Source type: Journal

- [View all documents >](#)
- [Set document alert](#)
- [Save to source list](#)

CiteScore 2022
0.9



SJR 2022
0.160



SNIP 2022
0.341



[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ×

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$0.9 = \frac{699 \text{ Citations 2019 - 2022}}{783 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$1.1 = \frac{739 \text{ Citations to date}}{689 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Multidisciplinary	#83/134	38th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help C

NEW

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Refine Your Search Results

Songklanakarin Journal of Science and Technr

Search

Sort By: Relevancy

Search Results

Found 20,814 results (Page 1)

Share These Results

Exact Match Found

SONGKLANAKARIN JOURNAL OF SCIENCE AND TECHNOLOGY

OPEN ACCESS

Publisher: PRINCE SONGKLA , UNIV HAT YAI, SONGKHLA, THAILAND, 90112

ISSN / eISSN: 0125-3395 / 2408-1779

Additional Web of Science Indexes: Zoological Record

Share This Journal

View profile page

* Requires free login.

Other Possible Matches

ACS FOOD SCIENCE & TECHNOLOGY

Publisher: AMER CHEMICAL SOC , 1155 16TH ST, NW, WASHINGTON, USA, DC, 20036





Songklanakarin Journal of Science and Technology (SJST)

ISSN: 0125-3395 | e-ISSN: 2408-1779 | Issues per year: 6

Indexed in Scopus | Free of charge to submit and publish

A journal links all aspects of Agricultural and Biological Sciences, Biotechnology and Agro-Industry, Chemistry and Pharmaceutical Sciences, Engineering and Industrial Research, Environmental and Natural Resources, and Physical Sciences and Mathematics.

[Submit your manuscript](#)

[Instructions and templates for authors](#)

[Announcements](#)

LATEST ARTICLES

On the performance of Lucas polynomials on linear and nonlinear Volterra integral equations of the second kind

Notice of the Website Address (URL) Change
We would like to inform you that in order to strengthen



Original Article

Green synthesis of cerium oxide nanoparticles using *aloevera* leaf extract and its optical properties

S. Sebastiammal¹, S. Sonia¹, J. Henry², and A. Lesly Fathima^{1*}¹Department of Physics, Holy Cross College (Autonomous),
Nagercoil, Tamil Nadu, 629004 India²Department of Physics, Manonmaniam Sundaranar University,
Abishekapatti, Tirunelveli, Tamil Nadu, 627012 India

Received: 11 February 2020; Revised: 20 March 2020; Accepted: 13 April 2020

Abstract

In the present report, bio-reduction of cerium nitrate into cerium oxide nanoparticles has been done using *aloevera* leaf extract. The synthesized CeO₂ nanoparticles were characterized by PXRD, FTIR, UV-DRS, FESEM, EDAX and PL. From the PXRD analysis, it is found that the synthesized CeO₂ nanoparticles were the face centered cubic structure. The crystalline size is found to be about 7 nm and 12 nm for the CeO₂ nanoparticles before and after calcination respectively. FTIR spectra exhibit the formation of CeO₂ nanoparticles. The UV – Vis spectra shows an absorption peak at 320 nm. The FESEM analysis, showed spherical shaped CeO₂ nanoparticles and its size is about 50 nm.

Keywords: biosynthesis, CeO₂ NPs, PXRD, FTIR, UV-DRS, FESEM**1. Introduction**

There is an increasing commercial demand for nanoparticles due to its promising applications in electronics, chemistry, catalysis, energy and medicine (Bar *et al.*, 2009; Mittal & Pandey, 2014). Metallic nanoparticles are traditionally synthesized by wet-chemical techniques, where the chemicals used are quit toxic and inflammable (Edison & Sethuraman, 2013). Cerium is one of the most abundant rare-earth metals found in the Earth's crust (Nisha *et al.*, 2014). Cerium oxide (CeO₂) has received much attention in the global nanotechnology market due to its useful applications for catalysts, fuel cells, and fuel additives (Bankar, Joshi, Kumar, & Zinjarde, 2010). CeO₂ is a semiconductor with wide band gap energy (3.19 eV) and large exciton binding energy (Arumugam *et al.*, 2015). Recently the CeO₂ NPs were used as a diesel fuel additive, to reduce the ignition

temperature of carbonaceous diesel exhaust particle (DEP) and subsequently to reduce the emission of particulate matter from diesel engines (Niu, Azfer, Rogers, Wang, & Kolattukudy, 2007). Cerium oxide nanoparticles are exhibiting excellent antioxidant properties so that they can be able to cure stress-related diseases (Caputo *et al.*, 2017).

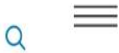
Green nanotechnology is a mushrooming area of research in the scientific world. The green synthesis method offers a plenty of advantages such as cost-effectiveness, large scale commercial production and pharmaceutical applications. The plant extract which facilitates green synthesis has gained a wide attention and has emerged as an active research area in the field of nanotechnology. Plant extract consists of tannins and poly phenol which are widely applied in food processing as natural additives to edible foods and in leather industry for fabrication. The polyphenolic OH groups have good affinity towards metal ions; hence the plant extract is widely applied as reducing, stabilizing and chelating agent (Kalaiselvi, Mathammal, Vijayakumar, & Vaseeharan, 2018). Arunachalam, Karpagasundaram, and Rajarathinam, (2017) have prepared *Prosopis juliflora* leaf extract mediated CeO₂ nanoparticles and studied its antibacterial activity

*Corresponding author

Email address: leslysat@gmail.com,

leslyfathima@holycrossngl.edu.in





Source details

Jordan Journal of Physics

Scopus coverage years: from 2008 to 2023

Publisher: Yarmouk University

ISSN: 1994-7607 E-ISSN: 1994-7615

Subject area: Physics and Astronomy: General Physics and Astronomy

Source type: Journal

[View all documents >](#)

[Set document alert](#)

[Save to source list](#)

CiteScore 2022 **0.7**

SJR 2022 **0.159**

SNIP 2022 **0.373**

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology x

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$0.7 = \frac{104 \text{ Citations } 2019 - 2022}{156 \text{ Documents } 2019 - 2022}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$0.9 = \frac{163 \text{ Citations to date}}{188 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Physics and Astronomy		
General Physics and Astronomy	#209/240	13th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help C

NEW

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Filters

Clear All

Web of Science Coverage

Open Access

Category

Country / Region

Language

Frequency

Journal Citation Reports

Refine Your Search Results

Jordan Journal of Physics

Search

Sort By: Relevancy

Search Results

Found 1,218 results (Page 1)

Share These Results

Exact Match Found

JORDAN JOURNAL OF PHYSICS

Publisher: YARMOUK UNIV, DEANSHIP RESEARCH & GRADUATE STUDIES , C/O PROF IBRAHIM O ABU AL-JARAYESH, EIC, IRBID, JORDAN, 00000

ISSN / eISSN: 1994-7607 / 1994-7615

Web of Science Core Collection: Emerging Sources Citation Index

Share This Journal


View profile page

* Requires free login.


Other Possible Matches

ACOUSTICAL PHYSICS






Jordan Journal of Physics




[Register](#) [Login](#)

[EDITORIAL TEAM](#)
[INTERNATIONAL ADVISORY BOARD](#)
[PUBLICATION ETHICS](#)
[ISSUES ▾](#)
[MANUSCRIPT ORGANIZATION](#)


[ANNOUNCEMENTS](#)
[ABOUT ▾](#)



جامعة اليرموك



The Hashemite Kingdom of Jordan



Yarmouk University

ABOUT THE JOURNAL

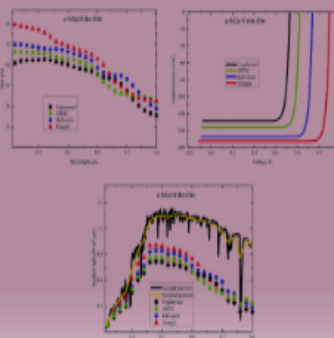
SUBMISSIONS


PRIVACY STATEMENT

CONTACT

المجلة الأردنية للفيزياء

مجلة علمية عالمية محكمة

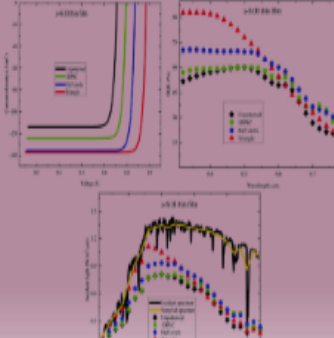




The Hashemite Kingdom of Jordan

Jordan Journal of PHYSICS

An International Peer-Reviewed
Research Journal



MAKE A SUBMISSION

About the Journal

The Jordan Journal of Physics (JJP) is an International Peer-Reviewed Research Journal established by the Higher Research Committee, Ministry of Higher Education & Scientific Research, Jordan, and published by the Deanship of Research & Graduate Studies, Yarmouk University, Irbid, Jordan.

Jordan Journal of Physics is indexed in:

- 1- [Scopus CiteScore Tracker](#)

Jordan Journal of Physics



Albumen-assisted Synthesis of Nanocrystalline Nickel Ferrite Photocatalyst

P. Aji Udhaya^{a,b}, M. Meena^c, M. Abila Jeba Queen^a, M. Mary Freeda^a
and T. Regin Das^d

^a Department of Physics, Holy Cross College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelvel-627012, India.

^b Research Scholar, Reg. No. 18123152132038, Department of Physics, S.T. Hindu College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelvel-627012, India.

^c Department of Physics, S.T. Hindu College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelvel-627012, India.

^d Department of Physics, Lekshmiipuram Arts and Science College, Neyyoor, Nagercoil, India.

Doi: <https://doi.org/10.47011/14.5.5>

Received on: 01/05/2020;

Accepted on: 15/09/2020

Abstract: As a simple step to remove the polluting dyes in aqua ecosystem, NiFe₂O₄ nanoparticles well known for their ferromagnetic properties, low conductivity and high electrochemical stability were prepared by simple auto combustion method using egg white as fuel via green synthesis route. The structural, morphological and magnetic properties of prepared NiFe₂O₄ was analyzed. The desirable phase purity of the prepared spinel ferrite was deliberated by X-ray Diffractometer (XRD), Fourier Transform Infrared Spectrometer (FTIR), Scanning Electron Microscopy (SEM), Energy Dispersive and Vibrating Sample Magnetometer (VSM). XRD predicts the phase formation, particle size and lattice parameter of the spinel ferrite. The FTIR spectrum confirms the ferrite structure. The morphological and elemental analysis was made using SEM and EDAX. The hysteresis curve reveals the magnetic properties, such as remanence magnetization (Mr), coercivity (H_c) and saturation magnetization (M_s). The photocatalytic efficiency of the synthesized samples was determined from degradation of methylene blue dye. The whole process was monitored using spectrophotometer at regular intervals of time. The maximum photocatalytic degradation efficiency for NiFe₂O₄ is around 95.6 %.

Keywords: NiFe₂O₄, Ferrite, Green synthesis, Egg white, Combustion, Photocatalyst.

1. Introduction

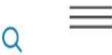
Wastewater management in developing countries is a major problem due to various industrial processes that meet human needs. Dyeing and pigment industries are of major environmental concern among the various industries, as wastewater includes several non-biodegradable organic colors. From textiles to food, dyes are widely used by humans. Methylene blue is an organic dye that is

synthetic and water soluble. It is widely used as a colorant in textiles, paper, plastics, cosmetics, leather, food and many other industries, leading to large dye effluent discharges. If the effluents are not treated properly, they become a serious environmental problem that affects the flora and fauna, as well as human health. Methylene blue dye can irradiate the eyes and skin and damage the respiratory, reproductive, and nervous systems through carcinogenic actions. In

Corresponding Author: P. Aji Udhaya

Email: ajjudhaya@gmail.com





Source details

Jordan Journal of Physics

Scopus coverage years: from 2008 to 2023

Publisher: Yarmouk University

ISSN: 1994-7607 E-ISSN: 1994-7615

Subject area: Physics and Astronomy: General Physics and Astronomy

Source type: Journal

[View all documents >](#)

[Set document alert](#)

[Save to source list](#)

CiteScore 2022 ⓘ
0.7

SJR 2022 ⓘ
0.159

SNIP 2022 ⓘ
0.373

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$0.7 = \frac{104 \text{ Citations 2019 - 2022}}{156 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$0.9 = \frac{163 \text{ Citations to date}}{188 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Physics and Astronomy		
General Physics and Astronomy	#209/240	13th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site ↗](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help C

NEW

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Filters

Clear All

Web of Science Coverage

Open Access

Category

Country / Region

Language

Frequency

Journal Citation Reports

Refine Your Search Results

Jordan Journal of Physics

Search

Sort By: Relevancy

Search Results

Found 1,213 results (Page 1)

Share These Results

Exact Match Found

JORDAN JOURNAL OF PHYSICS

Publisher: YARMOUK UNIV, DEANSHIP RESEARCH & GRADUATE STUDIES, C/O PROF IBRAHIM O ABU AL-JARAYESH, EIC, IRBID, JORDAN, 00000

ISSN / eISSN: 1994-7607 / 1994-7615

Web of Science Core Collection: Emerging Sources Citation Index

Share This Journal

View profile page

* Requires free login.

Other Possible Matches

ACOUSTICAL PHYSICS





EDITORIAL TEAM INTERNATIONAL ADVISORY BOARD PUBLICATION ETHICS ISSUES MANUSCRIPT ORGANIZATION SEARCH

ANNOUNCEMENTS ABOUT



INFORMATION

- For Readers
- For Authors
- For Librarians

MAKE A SUBMISSION



About the Journal

The Jordan Journal of Physics (JJP) is an International Peer-Reviewed Research Journal established by the Higher Research Committee, Ministry of Higher Education & Scientific Research, Jordan, and published by the Deanship of Research & Graduate Studies, Yarmouk University, Irbid, Jordan.

Jordan Journal of Physics is indexed in:

- 1- Scopus [CiteScore Tracker](#)

Jordan Journal of Physics



Albumen-mediated Green Synthesis of ZnFe₂O₄ Nanoparticles and Their Physico-Chemical Properties

P. Aji Udhaya^{a,b}, M. Meena^c, M. Abila Jeba Queen^a, M. Mary Freeda^a
and T. Regin Das^d

^a Department of Physics, Holy Cross College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelvel-627012, India.

^b Research Scholar, Reg. No. 18123152132038, Department of Physics, S.T. Hindu College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelvel-627012, India.

^c Department of Physics, S.T. Hindu College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelvel-627012, India.

^d Department of Physics, Lekshmpuram Arts and Science College, Neyyoor, Nagercoil, India.

Doi: <https://doi.org/10.47011/14.5.6>

Received on: 01/05/2020;

Accepted on: 15/9/2020

Abstract: Spinel ferrites with general formula AB₂O₄ possess charming magnetic and electrical properties owing to their thermal and chemical steadfastness. Spinel zinc ferrite (ZnFe₂O₄) nanoparticles have attracted massive attention due to their unusual amalgamation of properties, especially magnetic properties, where these properties are equipped as suitable candidates in the field of electronics. Here, a simple self-combustion technique is made with the assistance of albumen to synthesize nanocrystalline zinc ferrite (ZnFe₂O₄) particles. The egg white (albumen) that is used in the synthesis process plays the fuel role in the process of combustion. The results of the powder X-ray diffraction (PXRD) and Fourier Transform Infrared Spectroscopy (FTIR) suggested that the synthesized nanoparticles are of single phase and show spinel structure. The photoluminescence studies reported a doublet peak at around 360-380 nm. The functional groups present in the synthesized nanoparticles were revealed from FTIR data. EDX findings give an account of the percentage composition of the elements Fe, Zn and O present in the synthesized sample. High-resolution Scanning Microscope (HRSEM) reveals the agglomerated coalescence nature of ferrite nanoparticles.

Keywords: Ferrite, PXRD, FTIR, HRSEM, EDX Albumen.

1. Introduction

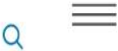
Ferrites are of interest due to their electrical, magnetic and mechanical properties, which can be adapted to the requirements of device manufacturing and biological applications. Magnetic Nanoparticles have emerging biomedical applications in sundry areas, such as disease diagnostics, magnetic resonance imaging, sensors, actuators, magnetic storage devices,

... etc. Nano-sized ferrites of the MFe₂O₄ type are the most significant magnetic materials which have yet to be properly investigated on the way to their physical and chemical properties. The metal-iron ratio plays a crucial role in the regulation of MFe₂O₄ nanoparticles' magnetic properties [1, 2]. Due to the increased volume fraction of surface atoms, surface effects may be crucial when reducing

Corresponding Author: P. Aji Udhaya

Email: ajiudhaya@gmail.com





Source details

Jordan Journal of Physics

Scopus coverage years: from 2008 to 2023

Publisher: Yarmouk University

ISSN: 1994-7607 E-ISSN: 1994-7615

Subject area: Physics and Astronomy: General Physics and Astronomy

Source type: Journal

[View all documents >](#)

[Set document alert](#)

[Save to source list](#)

CiteScore 2022 **0.7** ⓘ

SJR 2022 **0.159** ⓘ

SNIP 2022 **0.373** ⓘ

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

Improved CiteScore methodology ⓘ

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$0.7 = \frac{104 \text{ Citations 2019 - 2022}}{156 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$0.9 = \frac{163 \text{ Citations to date}}{188 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Physics and Astronomy		
General Physics and Astronomy	#209/240	13th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site ⓘ](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help C

NEW

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Filters

Clear All

Web of Science Coverage

Open Access

Category

Country / Region

Language

Frequency

Journal Citation Reports

Refine Your Search Results

Jordan Journal of Physics

Search

Sort By: Relevancy

Search Results

Found 1,218 results (Page 1)

Share These Results

Exact Match Found

JORDAN JOURNAL OF PHYSICS

Publisher: YARMOUK UNIV, DEANSHIP RESEARCH & GRADUATE STUDIES , C/O PROF IBRAHIM O ABU AL-JARAYESH, EIC, IRBID, JORDAN, 00000

ISSN / eISSN: 1994-7607 / 1994-7615

Web of Science Core Collection: Emerging Sources Citation Index

Share This Journal

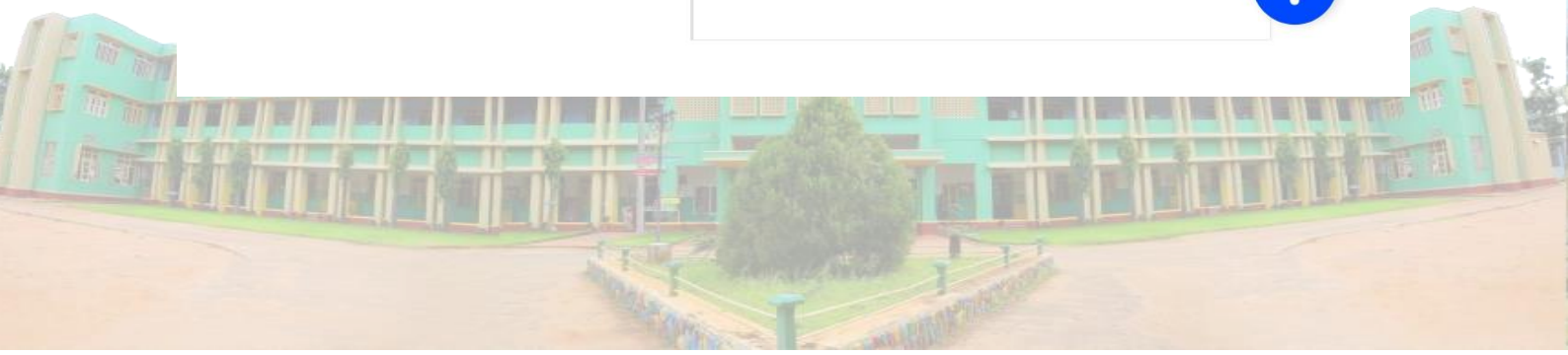
View profile page

* Requires free login.

Other Possible Matches

ACOUSTICAL PHYSICS

5



 **Jordan Journal of Physics** 

Register Login

- EDITORIAL TEAM INTERNATIONAL ADVISORY BOARD PUBLICATION ETHICS ISSUES ▾ Q SEARCH
- MANUSCRIPT ORGANIZATION ANNOUNCEMENTS ABOUT ▾

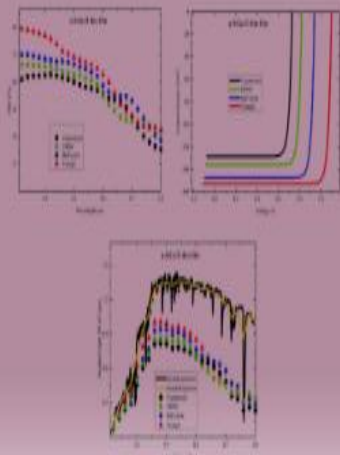


INFORMATION

- For Readers
- For Authors
- For Librarians

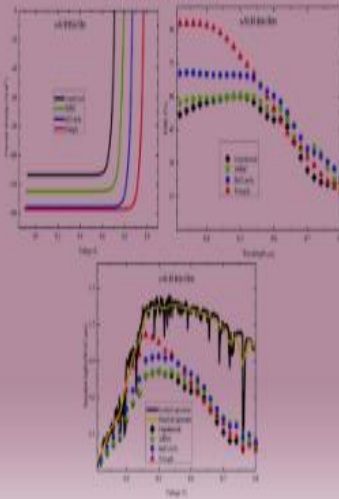
MAKE A SUBMISSION

المجلة الأردنية
للفيزياء
مجلة علمية عالمية محكمة



عدد (16)، العدد (1)، المار 2023 / رمضان 1444 هـ
ISSN 1994-7007

Jordan Journal of
PHYSICS
An International Peer-Reviewed
Research Journal



Volume 16, No. 1, March 2023, Ramadan 1444 H
ISSN 1994-7007



Volume 14, Number 1, 2021. pp. 71-78

Jordan Journal of Physics

ARTICLE

Physicochemical Properties and Antimicrobial Potential of Green Synthesized Cerium Oxide (CeO₂) Nanoparticles from Pomegranate Peel Extract

S. Sebastiammal^a, S. Sonia^b, C. S. Biju^c and A. Lesly Fathima^b

^a *Research Scholar (Reg.No:17213042132003), Department of Physics, Holy Cross College (Autonomous), Nagercoil-629004, Tamil Nadu, India. (Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627012, Tamil Nadu, India).*

^b *Department of Physics, Holy Cross College (Autonomous), Nagercoil-629004, Tamil Nadu, India.*

^c *Department of Physics, Malankara Catholic College, Mariagiri, Kaliakkavilai-629 153, Tamil Nadu, India.*

Doi: <https://doi.org/10.47011/14.1.7>

Received on: 10/02/2020;

Accepted on: 24/04/2020

Abstract: Green synthesis of CeO₂ Nanoparticles (NPs) with small size and high stability paved the approach to recover and protect the environment by decreasing the use of toxic chemicals and eliminating biological risks in biomedical applications. Peel-mediated synthesis of CeO₂ NPs is gaining more importance owing to its easiness and eco-friendliness. In this study, biosynthesis of CeO₂ NPs using the fruit peel extract of *punica granatum* is reported. The synthesized CeO₂ NPs are characterized by Powder X-ray Diffraction (PXRD), UV-Diffused Reflection Spectroscopy (UV-DRS), Field Emission Scanning Electron Microscopy (FESEM), Energy Dispersive X-Ray Analysis (EDAX) and antimicrobial activity. The CeO₂ NPs show more lethal activity towards gram +ve bacteria than towards gram -ve bacteria.

Keywords: Biosynthesis, Optical properties, Antimicrobial activity.

Introduction

Pathogenic microorganisms have become a major problem in our today life, since they pose a threat to health and food materials. This paves the way to the research community to investigate solutions to remove or reduce these hazardous species from the environment. Emergence of new bacterial strains which are resistant to current antibiotics has become a serious health issue. From recent literature, it is believed that nanotechnology is one of the most active research areas in providing solutions for such problems. Synthesis of nanoparticles (NPs) with various sizes and shapes has gained much

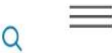
importance in nanotechnological applications [1-5]. In general, nanoparticles have a higher surface-to-volume ratio with an enlarged contact area with microbes. This feature enhances the biological activity of NPs and finds applications in the medical field.

CeO₂ is a semiconductor material which has a wide bandgap ranging between 3.0 eV and 3.9 eV with large excitation energy [6]. CeO₂ NPs have received much attention in nanotechnology due to their useful applications as catalysts, fuel cells and antioxidants in biological systems [7-10]. CeO₂ can be prepared by several methods,

Corresponding Author: Lesly Fathima

Email: leslysath@gmail.com





Source details

Jordan Journal of Physics

Scopus coverage years: from 2008 to 2023

Publisher: Yarmouk University

ISSN: 1994-7607 E-ISSN: 1994-7615

Subject area: Physics and Astronomy: General Physics and Astronomy

Source type: Journal

- [View all documents >](#)
- [Set document alert](#)
- [Save to source list](#)

CiteScore 2022 **0.7**

SJR 2022 **0.159**

SNIP 2022 **0.373**

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$0.7 = \frac{104 \text{ Citations 2019 - 2022}}{156 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$0.9 = \frac{163 \text{ Citations to date}}{188 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Physics and Astronomy		
General Physics and Astronomy	#209/240	13th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help C

NEW

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Filters

Clear All

Web of Science Coverage

Open Access

Category

Country / Region

Language

Frequency

Journal Citation Reports

Refine Your Search Results

Jordan Journal of Physics

Search

Sort By: Relevancy

Search Results

Found 1,218 results (Page 1)

Share These Results

Exact Match Found

JORDAN JOURNAL OF PHYSICS

Publisher: YARMOUK UNIV, DEANSHIP RESEARCH & GRADUATE STUDIES , C/O PROF IBRAHIM O ABU AL-JARAYESH, EIC, IRBID, JORDAN, 00000

ISSN / eISSN: 1994-7607 / 1994-7615

Web of Science Core Collection: Emerging Sources Citation Index

Share This Journal

View profile page

* Requires free login.

Other Possible Matches

ACOUSTICAL PHYSICS



 **Jordan Journal of Physics** 

Register Login

EDITORIAL TEAM INTERNATIONAL ADVISORY BOARD PUBLICATION ETHICS ISSUES ▾

Q SEARCH

MANUSCRIPT ORGANIZATION ANNOUNCEMENTS ABOUT ▾

جامعة اليرموك المملكة الأردنية الهاشمية The Hashemite Kingdom of Jordan Yamouk University

INFORMATION

For Readers

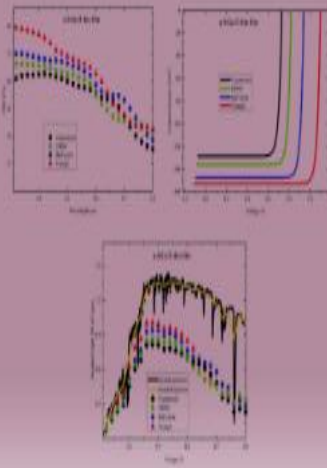
For Authors

For Librarians

MAKE A SUBMISSION

المجلة الأردنية
للفيزياء
مجلة علمية عالمية محكمة

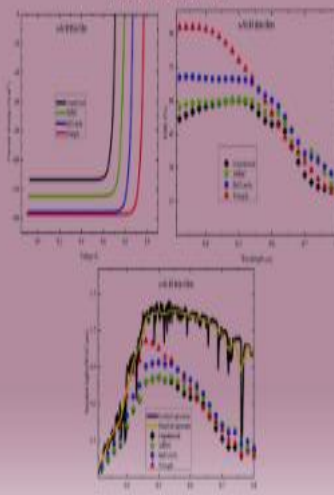
Jordan Journal of
PHYSICS
An International Peer-Reviewed
Research Journal



المجلد (16)، العدد (1)، آذار 2023، رمضان 1444 هـ

ISSN 1994-7007

المجلد (16)، العدد (1)، آذار 2023، رمضان 1444 هـ



Volume 16, No. 1, March 2023, Ramadan 1444 H

ISSN 1994-7007



Effect of ZrO₂ Nanofiller on the Physical Properties of Epoxy Composites: Mechanical, Thermal and Dielectric

N. Annlin Bezy^a, A. Lesly Fathima^b, S. Sebastianmal^b and S. Virgin Jeba^b

^a Research Scholar (Reg.No:20213042132006), Department of Physics, Holy Cross College (Autonomous), Nagercoil-629004, Tamil Nadu, India.

^b Research Department of Physics, Holy Cross College (Autonomous), Nagercoil-629004, Tamil Nadu, India.
(Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli-627012, Tamil Nadu, India).

Doi: <https://doi.org/10.47011/14.5.4>

Received on: 01/05/2020;

Accepted on: 24/05/2021

Abstract: In this present work, Zirconia nanoparticles were prepared by precipitation method, Zirconium Oxychloride (ZrOCl₂.8H₂O) and ammonia (NH₃) as starting materials. The synthesized Zirconia nanoparticles were characterized by XRD and the grain size in nanoscale was confirmed. The sheets of neat epoxy resin and epoxy with addition of ZrO₂ nanoparticles are primed by solution casting method. The structures of epoxy polymer and hardener were found out using FTIR analysis. The thermal properties were analyzed using Thermo Gravimetric Analysis (TGA) and Differential Thermal Analysis (DTA). Thermo gravimetric analysis has been employed to investigate the thermal characteristics and their mode of thermal degradation. Differential thermal analysis has been used to determine the glass transition temperature of epoxy nanocomposites. The mechanical properties like tensile and flexural studies were analyzed and thus influences of nanofiller loading on these parameters were found to be very low.

Keywords: Epoxy, ZrO₂ nanoparticles, Nanocomposites, Thermal stability, Dielectric properties, Tensile strength, Flexural strength.

Introduction

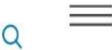
Polymer nanocomposites have attracted increasing attention in the last decade because of their significant improvement of physical and chemical properties over the matrix polymers. The effects of nanofillers on these properties have been extensively observed to make nanocomposites for application purpose. The addition of just a few percent by weight of nanofillers can result in significant enhancement in dielectric, thermal and mechanical properties. The incorporation of metal oxide nanoparticles with polymer is approached to improve the mechanical strength [1–6]. The effects of inorganic fillers on the properties of composites strongly depend on filler size and shape, type of

particles and the degree of dispersion [7-8]. Various nanoscale fillers, including metal oxides, montmorillonite and calcium carbonate, have been reported to enhance the mechanical properties, thermal stability, gas barrier properties, electrical properties and flame retardancy of the polymer matrix [9-11]. Among various metal oxide fillers, nano-sized zinc oxide (ZnO), zirconium oxide (ZrO₂), titanium dioxide (TiO₂) and cerium oxide (CeO₂) fillers have attracted considerable attention because of their unique physical properties as well as their low cost and extensive applications in diverse areas [12-15]. Here, the purpose of study is to evaluate the physical properties of epoxy resin with Zirconia nanoparticles.

Corresponding Author: A. Lesly Fathima

Email: leslysat@gmail.com





Source details

Jordan Journal of Physics

Scopus coverage years: from 2008 to 2023

Publisher: Yarmouk University

ISSN: 1994-7607 E-ISSN: 1994-7615

Subject area: Physics and Astronomy: General Physics and Astronomy

Source type: Journal

[View all documents >](#)

[Set document alert](#)

[Save to source list](#)

CiteScore 2022 ⓘ
0.7

SJR 2022 ⓘ
0.159

SNIP 2022 ⓘ
0.373

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$0.7 = \frac{104 \text{ Citations 2019 - 2022}}{156 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$0.9 = \frac{163 \text{ Citations to date}}{188 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Physics and Astronomy		
General Physics and Astronomy	#209/240	13th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site ↻](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help C

NEW

The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Refine Your Search Results

Jordan Journal of Physics

Search

Sort By: Relevancy

Search Results

Found 1,218 results (Page 1)

Share These Results

Exact Match Found

JORDAN JOURNAL OF PHYSICS

Publisher: YARMOUK UNIV, DEANSHIP RESEARCH & GRADUATE STUDIES, C/O PROF IBRAHIM O ABU AL-JARAYESH, EIC, IRBID, JORDAN, 00000

ISSN / eISSN: 1994-7607 / 1994-7615

Web of Science Core Collection: Emerging Sources Citation Index

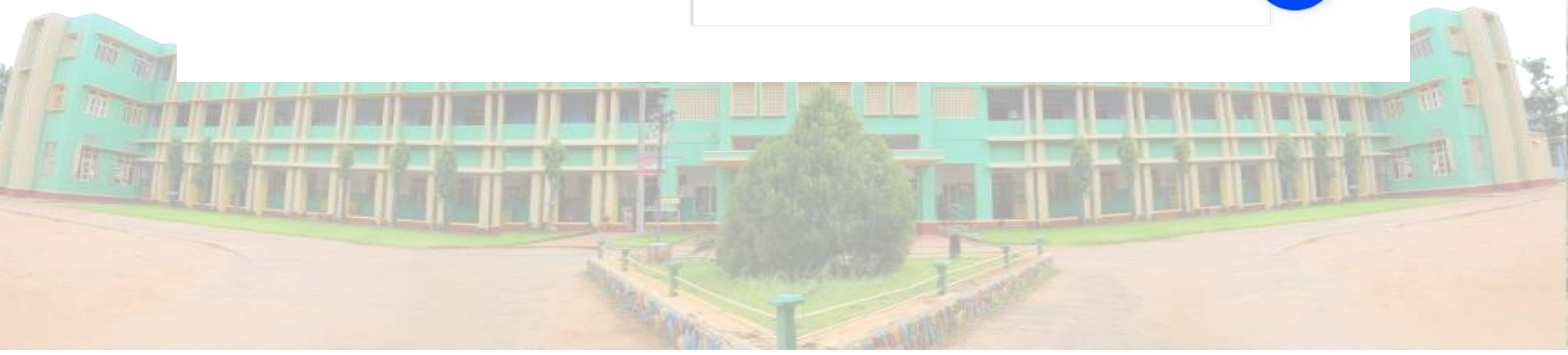
Share This Journal

View profile page

* Requires free login.

Other Possible Matches

ACOUSTICAL PHYSICS



 **Jordan Journal of Physics** 

Register Login

EDITORIAL TEAM INTERNATIONAL ADVISORY BOARD PUBLICATION ETHICS ISSUES ▾

Q SEARCH

MANUSCRIPT ORGANIZATION ANNOUNCEMENTS ABOUT ▾

 جامعة اليرموك

 المملكة الأردنية الهاشمية

 The Hashemite Kingdom of Jordan

 Yarmouk University

INFORMATION

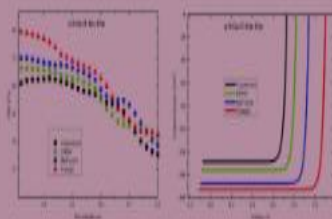
For Readers

For Authors

For Librarians

MAKE A SUBMISSION

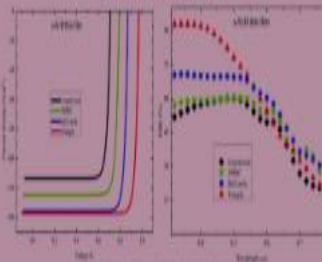
المجلة الأردنية
للفيزياء
مجلة علمية عالمية محكمة



المجلد 16، العدد (1)، آذار 2023، رمضان 1444 هـ

ISSN 1994-7017

Jordan Journal of
PHYSICS
An International Peer-Reviewed
Research Journal



Volume 16, No. 1, March 2023, Ramadan 1444 H

ISSN 1994-7017



Structural and Optical Properties of Pure NiO Nanoparticles and NiO-Mn₂O₃, NiO-CdO, NiO-Pb₂O₃, NiO-ZnO Nanocomposites

E. J. Vishaka^a, M. Priya Dharshini^b, V. Shally^b and Sr. Gerardin Jayam^b

^a Research Scholar (Reg.No:20213042132010), Research Department of Physics, Holy Cross College, Nagercoil – 629004. Affiliated to Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli- 627012, India.

^b Research Department of Physics, Holy Cross College, Nagercoil – 629004.

Doi: <https://doi.org/10.47011/14.5.2>

Received on: 01/05/2020;

Accepted on: 25/1/2021

Abstract: Pure nickel oxide (NiO) nanoparticles and NiO-Mn₂O₃, NiO-CdO, NiO-Pb₂O₃, NiO-ZnO nanocomposites were synthesized by co-precipitation method. The PXRD studies revealed that NiO, Mn₂O₃ and CdO possessed cubic structure, Pb₂O₃ possessed monoclinic structure, ZnO possessed hexagonal structure and confirmed the presence of polycrystallinity nature of NiO and Mn₂O₃, CdO, Pb₂O₃, ZnO in the nanocomposites. The average grain size of NiO nanoparticles was found to be 30.10 nm using Debye Scherer's formula. The FESEM images of NiO nanoparticles and their nanocomposites revealed spherical shaped structure and NiO-Pb₂O₃ revealed needle shaped rod-like structure. EDAX analysis confirmed the composition of NiO nanoparticles and their nanocomposites. Raman spectra exhibited characteristic peaks of pure NiO and that of NiO- Mn₂O₃, NiO-CdO, NiO- Pb₂O₃, NiO-ZnO in the synthesized nanocomposites. In the PL spectra, blue and green emission was observed in the samples. UV-vis spectra revealed the absorption peaks of NiO nanoparticles and their nanocomposites. Thus, the synthesized NiO- Mn₂O₃, NiO-CdO, NiO - Pb₂O₃ and NiO-ZnO nanocomposites can be a suitable material for electrocatalysis applications.

Keywords: Nickel oxide nanocomposites, Structure, Morphology, Absorption, Luminescence.

1. Introduction

Nickel oxide (NiO) is an important transition metal oxide that has been under the extensive investigation for decades due to its interesting electronic structures, strongly affected by Ni-3d electrons [1] which are localized in space, but spread out over a wide energy range because of strong Coulomb repulsion between them [2]. The high specific surface area of NiO nanoparticles has significant implications with respect to the energy storage devices based on electrochemically active sites (batteries, super capacitors) and energy conversion devices depending on catalytic sites or defect structures. NiO nanoparticles and their nanocomposites have been synthesized *via* a cost-effective and

highly convenient co-precipitation method [3]. Mn₂O₃ nanoparticles can be utilized for advanced materials in batteries, as well as other applications, such as water treatment and imaging contrast agents [4]. CdO has potential applications in flat panel displays, organic light emitting diodes, optoelectronic devices, gas sensors and electrodes [5]. CdO also possesses both antibacterial and anticancer activity. Previous studies reported the synthesis of nanocomposites containing CdO and other metal oxide combinations [6]. The Pb₂O₃ nanoparticles are used in magnetic resonance and as magnetic nanoparticles for magnetic data storage and magnetic resonance imaging (MRI). The most

Corresponding Author: E. J. Vishaka

Email: vishaka8397@gmail.com





Source details

Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy

Formerly known as: [Spectrochimica Acta - Part A Molecular Spectroscopy](#)

Scopus coverage years: from 1995 to Present

Publisher: Elsevier

ISSN: 1386-1425

Subject area: [Physics and Astronomy: Instrumentation](#) [Chemistry: Spectroscopy](#)
[Physics and Astronomy: Atomic and Molecular Physics, and Optics](#) [Chemistry: Analytical Chemistry](#)

Source type: Journal

[View all documents >](#) [Set document alert](#) [Save to source list](#)

CiteScore 2022 ⓘ
7.9

SJR 2022 ⓘ
0.635

SNIP 2022 ⓘ
1.037

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$7.9 = \frac{37,372 \text{ Citations 2019 - 2022}}{4,752 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$8.4 = \frac{42,437 \text{ Citations to date}}{5,066 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Physics and Astronomy Instrumentation	#9/136	93rd
Chemistry Spectroscopy	#11/75	86th
Physics and Astronomy Atomic and Molecular Physics	#37/211	82nd

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site >](#)




Master Journal List

[Search Journals](#)

[Match Manuscript](#)

[Downloads](#)

[Help C](#)


 The power of the Web of Science™ on your mobile device, wherever inspiration strikes. [Dismiss](#) [Learn More](#)

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

[Find a Match](#)

Filters [Clear All](#)

- Web of Science Coverage ▼
- Open Access  ▼
- Category ▼
- Country / Region ▼
- Language ▼
- Frequency ▼
- Journal Citation Reports ▼

Refine Your Search Results

[Search](#)

Sort By: ☰

Search Results

Found 1 results (Page 1) [Share These Results](#)

Exact Match Found

**SPECTROCHIMICA ACTA PART A-
MOLECULAR AND BIOMOLECULAR
SPECTROSCOPY**

Publisher: PERGAMON-ELSEVIER SCIENCE LTD ,
THE BOULEVARD, LANGFORD LANE,
KIDLINGTON, OXFORD, ENGLAND, OX5
1GB

ISSN / eISSN: 1386-1425 / 1873-3557

Web of Science Core **Science Citation Index**
Collection: Expanded

Additional Web of Science **Biological Abstracts | BIOSIS Previews |
Current Contents Physical, Chemical &
Earth Sciences | Essential Science Indicators**

Indexes:

[Share This Journal](#) [View profile page](#)

* Requires free login



JOURNALS



Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy

Supports open access

7.9
CiteScore

4.4
Impact Factor

[Articles & Issues](#) | [About](#) | [Publish](#) | [Order journal](#) | [Search in this journal](#) | [Submit your article](#) | [Guide for authors](#)

About the journal

Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (SAA) is an interdisciplinary journal which spans from **basic to applied aspects of optical spectroscopy** in chemistry, medicine, biology, and materials science. The journal publishes original scientific papers that feature **high-quality** research.

[View full aims & scope](#)

\$3440

Article publishing charge for open access

14 days

Time to first decision

69 days

Review time


84 days

Submission to acceptance


[View all insights](#)

Editors


[View full editorial board](#)



Małgorzata Baranska
Jagiellonian University in Kraków, Kraków, Poland



Sylvio Canuto, PhD
University of São Paulo, SAO PAULO, Brazil



Christian Wolfgang Huck, Mag. Dr.
University of Innsbruck, Innsbruck, Austria

< ● ● ● >

Articles

Latest published | **Articles in press** | Top cited | Most downloaded | Most popular

Research article • Abstract only
Spectroscopic and thermal investigations on Zn²⁺ and Ba²⁺ ions modified 30TeO₂-39.5B₂O₃-(30-x)ZnO-xBaO-0.5V₂O₅ (0 ≤ x ≤ 30 mol %) glass system
M. Anand Pandeyraath, ... G. Upender
12 May 2024

Research article • Abstract only
Construction of a dual-excitation ratiometric fluorescent probe for determining peroxyxynitrite levels in living cells and zebrafish
Xu Chen, ... Zhi-Hong Xu
10 May 2024

Research article • Abstract only
In situ rapid evaluation method of quality of peach kernels based on near infrared spectroscopy
Xinyu Yang, ... Lei Nie
10 May 2024

Research article • Abstract only
Experimental and theoretical investigation of Low-Frequency vibrational modes of 4-Amino 3,5 Dinitro Pyrazole in terahertz frequency domain
Hajesh Kozhik, ... Anil Kumar Chaudhary
10 May 2024

Research article • Abstract only
Development of a turn-on fluorescent probe for the imaging of intracellular hypochlorous acid (HClO) during ferroptosis
Yan Wang, ... Tao Yue
10 May 2024

Research article • Abstract only
Weakly bound complexes of 1,2,3-triazole with nitrogen and carbon dioxide isolated in solid argon: A combined FT-IR matrix isolation and theoretical investigation
K. Mucha, M. Wierzejewska
10 May 2024

Research article • Abstract only
Theoretical insights into excited state behaviors of D3HF derivatives via altering atomic electronegativity of chalcogen
Daping Yang, Yongqiang Yang
10 May 2024

Research article • Abstract only
Extensive optical and DFT studies on novel AIE active fluorescent sensor for Colorimetric and fluorometric detection of nitrobenzene in Solid, solution and vapor phase





Contents lists available at ScienceDirect

Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy

journal homepage: www.elsevier.com/locate/saa

Quantum chemical insight into molecular structure, NBO analysis of the hydrogen-bonded interactions, spectroscopic (FT-IR, FT-Raman), drug likeness and molecular docking of the novel anti COVID-19 molecule 2-[(4,6-diaminopyrimidin-2-yl)sulfanyl]-N-(4-fluorophenyl)acetamide - dimer

S.J. Jenepha Mary^a, Mohd Usman Mohd Siddique^{b,d}, Sayantan Pradhan^c, Venkatesan Jayaprakash^d, C. James^{a,*}^a Register number 18113162132001, Department of Physics and Research Centre, Scott Christian College (Autonomous), Nagercoil- 629003, Tamil Nadu, Affiliated to Manonmaniam Sundarnar University, Abishekapatti, Tirunelveli 627012, India^b Department of Pharmaceutical Chemistry, Shri Vile Parle Kelavani Mandal's Institute of Pharmacy, Dhule, Maharashtra 424001, India^c Department of Chemistry, Jadavpur University, Kolkata 700 032, WestBengal, India.^d Department of Pharmaceutical Sciences & Technology, Birla Institute of Technology, Mesra, Ranchi 835215, JH, India

ARTICLE INFO

Article history:

Received 29 May 2020

Received in revised form 15 July 2020

Accepted 20 July 2020

Available online 12 August 2020

Keywords:

Density functional theory
Natural bond orbital analysis
Hirshfeld surface
FT-IR and Raman spectra
SARS-CoV-2

ABSTRACT

Novel antiviral active molecule 2-[(4,6-diaminopyrimidin-2-yl)sulfanyl]-N-(4-fluoro-phenyl)acetamide has been synthesised and characterized by FT-IR and FT-Raman spectra. The equilibrium geometry, natural bond orbital calculations and vibrational assignments have been carried out using density functional B3LYP method with the 6-311G++(d,p) basis set. The complete vibrational assignments for all the vibrational modes have been supported by normal coordinate analysis, force constants and potential energy distributions. A detailed analysis of the intermolecular interactions has been performed based on the Hirshfeld surfaces. Drug likeness has been carried out based on Lipinski's rule and the absorption, distribution, metabolism, excretion and toxicity of the title molecule has been calculated. Antiviral potency of 2-[(4,6-diaminopyrimidin-2-yl)sulfanyl]-N-(4-fluoro-phenyl)acetamide has been investigated by docking against SARS-CoV-2 protein. The optimized geometry shows near-planarity between the phenyl ring and the pyrimidine ring. Differences in the geometries due to the substitution of the most electronegative fluorine atom and intermolecular contacts due to amino pyrimidine were analyzed. NBO analysis reveals the formation of two strong stable hydrogen bonded N-H...N intermolecular interactions and weak intramolecular interactions C-H...O and N-H...O. The Hirshfeld surfaces and consequently the 2D-fingerprint confirm the nature of intermolecular interactions and their quantitative contributions towards the crystal packing. The red shift in N-H stretching frequency exposed from IR substantiate the formation of N-H...N intermolecular hydrogen bond. Drug likeness and absorption, distribution, metabolism, excretion and toxicity properties analysis gives an idea about the pharmacokinetic properties of the title molecule. The binding energy -8.7 kcal/mol of the nonbonding interaction present a clear view that 2-[(4,6-diaminopyrimidin-2-yl)sulfanyl]-N-(4-fluoro-phenyl)acetamide can irreversibly interact with SARS-CoV-2 protease.

© 2020 Published by Elsevier B.V.

1. Introduction

Pyrimidine and its derivatives take up a key position in the field of medicinal chemistry due to its multifarious pharmacological activities. In an urge for searching new promising small therapeutic agents, we introduce 2-[(4,6-diaminopyrimidin-2-yl)sulfanyl]-N-(4-fluoro-phenyl)acetamide (DAPF). In the present study, we focus on the investigation

on the molecular structure, electronic properties, vibrational spectra and molecular docking of the title compound, with the hope that the results of the present investigation may be decisive in the prognosis of its mechanism of biological activity.

Pyrimidines, the fundamental building blocks for nucleic acids, are invoking much scientific interest owing to their potential biological activities and pharmacological applications [1]. Pyrimidines are also reported to show anti-HIV, [2] dengue [3] and anticancer [4] activities. The title compound DAPF, which has the amino substituent at the 4,6- position are found to be Troponin I-Interacting Kinase

* Corresponding author.

E-mail address: james@scottchristian.org (C. James).



Source details

Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy

Formerly known as: [Spectrochimica Acta - Part A Molecular Spectroscopy](#)

Scopus coverage years: from 1995 to Present

Publisher: Elsevier

ISSN: 1386-1425

Subject area: [Physics and Astronomy: Instrumentation](#) [Chemistry: Spectroscopy](#)
[Physics and Astronomy: Atomic and Molecular Physics, and Optics](#) [Chemistry: Analytical Chemistry](#)

Source type: Journal

[View all documents >](#) [Set document alert](#) [Save to source list](#)

CiteScore 2022 ⓘ
7.9

SJR 2022 ⓘ
0.635

SNIP 2022 ⓘ
1.037

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$7.9 = \frac{37,372 \text{ Citations 2019 - 2022}}{4,752 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$8.4 = \frac{42,437 \text{ Citations to date}}{5,066 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Physics and Astronomy Instrumentation	#9/136	93rd
Chemistry Spectroscopy	#11/75	86th
Physics and Astronomy Atomic and Molecular Physics	#37/211	82nd

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site >](#)




Master Journal List

[Search Journals](#)

[Match Manuscript](#)

[Downloads](#)

[Help C](#)

 The power of the Web of Science™ on your mobile device, wherever inspiration strikes. [Dismiss](#) [Learn More](#)

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!


[Find a Match](#)

Refine Your Search Results

[Search](#)

Sort By:

Filters [Clear All](#)

- Web of Science Coverage
- Open Access 
- Category
- Country / Region
- Language
- Frequency
- Journal Citation Reports

Search Results

Found 1 results (Page 1) [Share These Results](#)

Exact Match Found

**SPECTROCHIMICA ACTA PART A-
MOLECULAR AND BIOMOLECULAR
SPECTROSCOPY**

Publisher: PERGAMON-ELSEVIER SCIENCE LTD ,
THE BOULEVARD, LANGFORD LANE,
KIDLINGTON, OXFORD, ENGLAND, OX5
1GB

ISSN / eISSN: 1386-1425 / 1873-3557

Web of Science Core **Science Citation Index**
Collection: Expanded

Additional Web of Science **Biological Abstracts | BIOSIS Previews |
Current Contents Physical, Chemical &
Earth Sciences | Essential Science Indicators**

Indexes:

[Share This Journal](#) [View profile page](#)

* Requires free login



JOURNALS



Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy

Supports open access

7.9
CiteScore

4.4
Impact Factor

[Articles & Issues](#) | [About](#) | [Publish](#) | [Order journal](#) | [Search in this journal](#) | [Submit your article](#) | [Guide for authors](#)


About the journal

Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy (SAA) is an interdisciplinary journal which spans from **basic to applied aspects of optical spectroscopy** in chemistry, medicine, biology, and materials science. The journal publishes original scientific papers that feature **high-quality** research.


[View full aims & scope](#)

<p>\$3440 </p> <p>Article publishing charge for open access</p>	<p>14 days</p> <p>Time to first decision</p>	<p>69 days</p> <p>Review time</p>	<p>84 days</p> <p>Submission to acceptance</p>	<p>View all insights</p>
--	---	--	---	--


Editors [View full editorial board](#)



Małgorzata Baranska
Jagiellonian University in Kraków, Kraków, Poland



Sylvio Canuto, PhD
University of São Paulo, SAO PAULO, Brazil



Christian Wolfgang Huck, Mag. Dr.
University of Innsbruck, Innsbruck, Austria

< ● ● ● >

Articles

Latest published | **Articles in press** | Top cited | Most downloaded | Most popular

Research article [Abstract only](#)
Spectroscopic and thermal investigations on Zn²⁺ and Ba²⁺ ions modified 30TeO₂-39.5B₂O₃-(30-x)ZnO-xBaO-0.5V₂O₅ (0 ≤ x ≤ 30 mol %) glass system
M. Anand Pandeyraath, ... G. Upender
12 May 2024

Research article [Abstract only](#)
Construction of a dual-excitation ratiometric fluorescent probe for determining peroxyxynitrite levels in living cells and zebrafish
Xu Chen, ... Zhi-Hong Xu
10 May 2024

Research article [Abstract only](#)
In situ rapid evaluation method of quality of peach kernels based on near infrared spectroscopy
Xinyu Yang, ... Lei Nie
10 May 2024

Research article [Abstract only](#)
Experimental and theoretical investigation of Low-Frequency vibrational modes of 4-Amino 3,5 Dinitro Pyrazole in terahertz frequency domain
Hajesh Kozhik, ... Anil Kumar Chaudhary
10 May 2024

Research article [Abstract only](#)
Development of a turn-on fluorescent probe for the imaging of intracellular hypochlorous acid (HClO) during ferroptosis
Yan Wang, ... Tao Yue
10 May 2024

Research article [Abstract only](#)
Weakly bound complexes of 1,2,3-triazole with nitrogen and carbon dioxide isolated in solid argon: A combined FT-IR matrix isolation and theoretical investigation
K. Mucha, M. Wierzejewska
10 May 2024

Research article [Abstract only](#)
Theoretical insights into excited state behaviors of D3HF derivatives via altering atomic electronegativity of chalcogen
Daping Yang, Yongqiang Yang
10 May 2024

Research article [Abstract only](#)
Extensive optical and DFT studies on novel AIE active fluorescent sensor for Colorimetric and fluorometric detection of nitrobenzene in Solid, solution and vapor phase





Contents lists available at ScienceDirect

Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy

journal homepage: www.elsevier.com/locate/saa

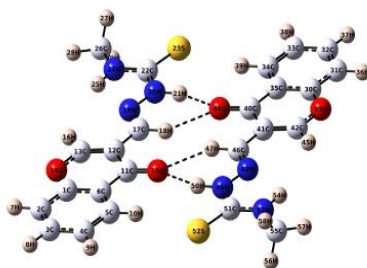
Molecular structure, NBO analysis of the hydrogen-bonded interactions, spectroscopic (FT-IR, FT-Raman), drug likeness and molecular docking of the novel anti COVID-2 molecule (2E)-N-methyl-2-[(4-oxo-4H-chromen-3-yl)methylidene]-hydrazinecarbothioamide (Dimer) - quantum chemical approach

S.J. Jenepha Mary^{a,1}, Sayantan Pradhan^b, C. James^{a,*}^a Department of Physics and Research Centre, Scott Christian College (Autonomous), Nagercoil 629003, Tamil Nadu, Affiliated to Manonmaniam Sundarnar University, Abishekapatti, Tirunelveli 627012, India^b Department of Chemistry, Jadavpur University, Kolkata 700 032, West Bengal, India

HIGHLIGHTS

- N—H...O intermolecular interactions elucidates the effect of hyperconjugation.
- C—H...O intermolecular interactions elucidates the effect of rehybridization.
- FT-IR and FT-Raman spectral analysis substantiates the red shift and blue shift in stretching frequencies.
- Drug likeness and ADMET analysis reveals pharmacokinetic properties.
- Molecular docking shows the interaction of MCMH with SARS-CoV-2 protease.

GRAPHICAL ABSTRACT



ARTICLE INFO

Article history:

Received 11 October 2020

Received in revised form 4 December 2020

Accepted 24 December 2020

Available online 29 December 2020

Keywords:

Density functional theory

Hyperconjugation-Rehybridization

FT-IR and Raman spectra

SARS-COVID-19

(2E)-N-methyl-2-[(4-oxo-4H-chromen-3-yl)methylidene]-hydrazinecarbothioamide

ABSTRACT

Prospective antiviral molecule (2E)-N-methyl-2-[(4-oxo-4H-chromen-3-yl)methylidene]-hydrazinecarbothioamide has been probed using Fourier transform infrared (FTIR), FT-Raman and quantum chemical computations. The geometry equilibrium and natural bond orbital analysis have been carried out with density functional theory employing Becke, 3-parameter, Lee-Yang-Parr method with the 6-311G++(d, p) basis set. The vibrational assignments pertaining to different modes of vibrations have been augmented by normal coordinate analysis, force constant and potential energy distributions. Drug likeness and oral activity have been carried out based on Lipinski's rule of five. The inhibiting potency of 2(2E)-methyl-2-[(4-oxo-4H-chromen-3-yl)methylidene]-hydrazinecarbothioamide has been investigated by docking simulation against SARS-CoV-2 protein.

The optimized geometry shows a planar structure between the chromone and the side chain. Differences in the geometries due to the substitution of the electronegative atom and intermolecular contacts due to the chromone and hydrazinecarbothioamide were analyzed. NBO analysis confirms the presence of two strong stable hydrogen bonded N—H...O intermolecular interactions and two weak hydrogen bonded C—H...O interactions. The red shift in N—H stretching frequency exposed from IR substantiates the formation of N—H...O intermolecular hydrogen bond and the blue shift in C—H stretching frequency

* Corresponding author.

E-mail address: cjamesha@gmail.com (C. James).¹ Register number: 18113162132001.<https://doi.org/10.1016/j.saa.2020.119388>

1386-1425/© 2020 Published by Elsevier B.V.



Source details

Materials Today: Proceedings

Scopus coverage years: 2005, from 2014 to Present

E-ISSN: 2214-7853

Subject area: Materials Science: General Materials Science

Source type: Conference Proceeding

[View all documents >](#)

[Set document alert](#)

[Save to source list](#)

CiteScore 2022 ⓘ
3.2

SJR 2022 ⓘ
0.445

SNIP 2022 ⓘ
0.774

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$3.2 = \frac{80,455 \text{ Citations 2019 - 2022}}{24,871 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$4.9 = \frac{108,812 \text{ Citations to date}}{22,228 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Materials Science		
General Materials Science	#259/453	42nd

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site &](#)





ScienceDirect

materialstoday: PROCEEDINGS

3.2
CiteScore

[Submit your article ↗](#)

[Guide for authors](#)

☰ Menu

🔍 Search in this journal

About the journal

Materials Today: Proceedings provides the materials science community with a fast and flexible route to the publication of research presented at national and international scientific conferences in the field of materials science.

Guest Editors are responsible for quality control, the peer review ...

[View full aims & scope](#)

\$200 ⓘ

Article publishing charge
for open access

68 days

Review time

70 days

Submission to acceptance



[View all insights](#)

Articles

[Latest published](#)

[Articles in press](#)

[Top cited](#)

[Most downloaded](#)

[Most popular](#)

FEEDBACK





^1H NMR – A validation tool for supramolecular complexes of α -cyclodextrin with Antidiabetic drugs

S. Lizy Roselet^a , J. Prema Kumari^b

Show more 

 Share  Cite

<https://doi.org/10.1016/j.matpr.2020.04.077>

[Get rights and content](#) 

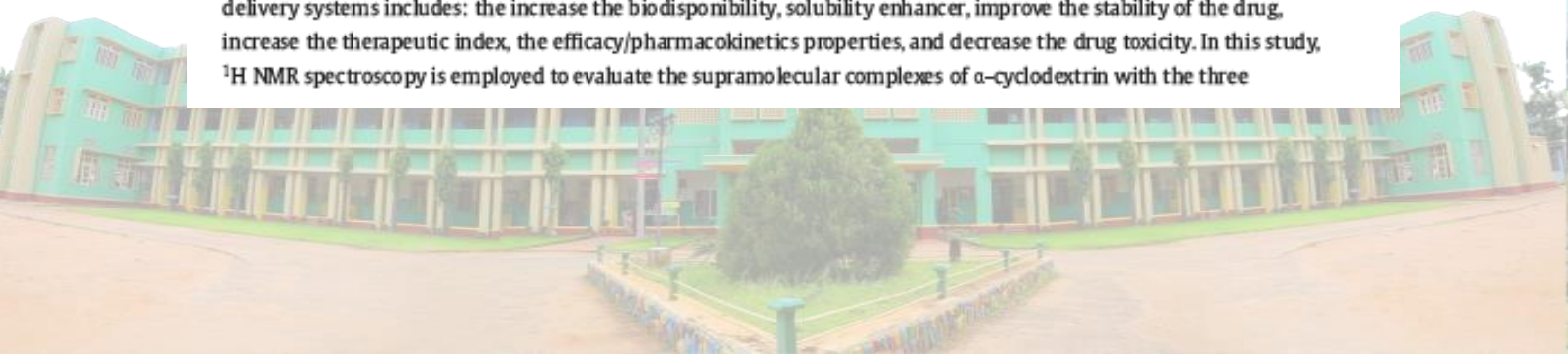
Abstract

Metformin hydrochloride, Pioglitazone hydrochloride and Glimepiride are antidiabetic drugs used in the treatment of Type-2 diabetes. In this study, supramolecular complexes of these three drugs were synthesized and characterized using ^1H NMR spectroscopy. The possible encapsulation of the drugs inside the supramolecular complexes were depicted according to the chemical shift variances of ^1H NMR of the host and guest molecules inside the inclusion complex. Nuclear Magnetic Resonance spectroscopy has been extensively employed in Chemistry and can be considered as one of the most complete spectroscopic techniques, due to its widefield of applications from structural elucidation of structures to investigations on intra/inter-molecular. ^1H NMR spectroscopy served as a validation tool for the supramolecular complexes. Therefore the supramolecular complexes could be used in enhancing the physico-chemical properties of the drugs thereby improving the efficacy of the drugs in the pharmaceutical industry.

Introduction

Metformin hydrochloride, Pioglitazone hydrochloride and Glimepiride are antidiabetic drugs used in the treatment of Type-2 diabetes. Cyclodextrins (CDs) are cyclic oligomers of glucopyranose units that play an important role as a host in inclusion complexes, where non-covalent interactions are involved. They have been extensively studied in supramolecular chemistry. Because of its biocompatibility, relatively non-toxicity and relatively low price, CDs have been widely employed for encapsulation of several substances, being used in food, cosmetic and pharmaceutical industries. Nuclear Magnetic Resonance spectroscopy has been extensively employed in Chemistry and can be considered as one of the most complete spectroscopic techniques, due to its widefield of applications from structural elucidation of structures to investigations on intra/inter-molecular [1], [2], [3].

Applications of NMR on CDs chemistry is so important that no other spectroscopic technique can provide the same wealth of chemical information on the supramolecular systems and it is the only technique that provides information on the right orientation of the guest molecule inside the cavity and also on other important parameters related to the physico-chemical characteristics of the inclusion complexes [4], [5], [6], [7]. The main advantages of using CDs in drug delivery systems includes: the increase the bioavailability, solubility enhancer, improve the stability of the drug, increase the therapeutic index, the efficacy/pharmacokinetics properties, and decrease the drug toxicity. In this study, ^1H NMR spectroscopy is employed to evaluate the supramolecular complexes of α -cyclodextrin with the three





Source details

Design Engineering (Toronto)

Scopus coverage years: from 1971 to 1976, from 1996 to 2005, from 2012 to Present

Publisher: Rogers Media Publishing

ISSN: 0011-9342

Subject area: Engineering: General Engineering

Source type: Trade Journal

[View all documents >](#) [Set document alert](#) [Save to source list](#) [Source Homepage](#)

CiteScore 2022 ⓘ
0.0

SJR 2022 ⓘ
0.101

SNIP 2017 ⓘ
0.000

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

0.0 = $\frac{0 \text{ Citations 2019 - 2022}}{30 \text{ Documents 2019 - 2022}}$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

0.0 = $\frac{0 \text{ Citations to date}}{31 \text{ Documents to date}}$

Last updated on 08 November, 2023 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Engineering		
General Engineering	#301/302	0th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site 🌐](#)



Design Engineering (Toronto)

Scopus journals - Engineering(all)

The scientific journal Design Engineering (Toronto) is included in the Scopus database. Based on 2020, SJR is 0.101. Publisher country is Canada. The main subject areas of published articles are Hardware and Architecture, Engineering(all), Mechanical Engineering.

We offer making basic requirements to academic papers compliance test using "Paper quality checking" service. Paper quality checking service is in demand among researchers who wish to make final improvements to their work before submitting it to the target journal. The experienced editors of ORES, who have published papers in cited journals, with the participation of foreign partners go through finished articles. They perform complex checks on many parameters, improve the structure and logic of content, and conduct spell checks, among others.

SCOPUS classifier

- 1708 Hardware and Architecture
- 2200 Engineering(all)
- 2210 Mechanical Engineering



ISSN: 00119342
The scientific journal is included in the Scopus database.

[Publish scientific article](#)

Other journals in category

ISSN	Title	Indicators
00137758	Engineer	SJR: 0.1
10763333	Resource: Engineering and Technolog...	SJR: 0.102
23492473	Journal of Engineering Education Tran...	SJR: 0.114

ORES Science Platform is a leading service designed to support scientists from the CIS and Asia. We work with authors of scientific articles and strive to promote science at a global level, uniting researchers with international experts to improve the quality of their scientific research.

Contacts:
Global: global@ores.su
Russia and CIS: info@ores.su
Indonesia: info-id@ores.su

Kontakt English



Plant mediated Synthesis and Characterization of Silver Nanoparticles Using the ethanolic extract of *Mangifera indica* Seed and their Antimicrobial Activity

B. T. Delma¹, S. Sebastiammal² and M. Anitha Malbi^{3*}

¹Research scholar (Reg.No:18123042032016), Department of Chemistry, Holy Cross College (Autonomous), Nagercoil-629004, Tamil Nadu, India.

(Affiliated to Manonmanium Sundaranar University, Abishekapatti, Tirunelveli-627012, Tamil Nadu.

²Research Department of Physics, Holy Cross College (Autonomous), Nagercoil-629004, Tamil Nadu, India.

³Department of Chemistry, Holy Cross College (Autonomous), Nagercoil-629004, Tamil Nadu, India.

Corresponding Author

*M. Anitha Malbi - anithamalbi@holycrossncl.edu.in, delma.chem5@gmail.com

Abstract


Environment-friendly methods for the synthesis of silver nanoparticles become a valuable method in the current scenario. The utilization of phytochemicals from plant extract has become a unique skill for the synthesis of nanoparticles as they possess the dual nature of reducing and capping agents to the nanoparticles. In the present study silver nanoparticles were synthesized by using the ethanolic extract of *Mangifera indica* seed as a reducing and capping agent at room temperature. The formed nanoparticles were characterized by UV-Vis, FT-IR, XRD, SEM and EDAX and TEM. XRD shows the nanoparticles are crystalline. TEM shows particles are spherical and the size of the nanoparticles are in the range of 14.06 nm – 49.043 nm. FT-IR analysis shows that *Mangifera indica* seed extract capping in silver nanoparticles and has profound anti-microbial activity against the pathogens *Escherichia coli*, *Staphylococcus aureus*, *Pseudomonas aeruginosa*, *Candida albicans* and *Aspergillus niger*.

Keywords: Silver nanoparticles, *Mangifera indica*, Anti-microbial activity.


1. Introduction

Nanotechnology is a significant field that deals with particles size approximately 1 to 100 nm. The chemical, physical and biological properties are differing from their bulk and their properties




Products

Master Journal List
Search Journals
Match Manuscript
Downloads
Help Center



The power of the Web of Science™ on your mobile device, wherever inspiration strikes.

Dismiss
Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Refine Your Search Results

Search

Sort By: Relevancy

Search Results

Found 1,278 results (Page 1) [Share These Results](#)

Exact Match Found

INDIAN JOURNAL OF CHEMISTRY

Publisher: NATL INST SCIENCE COMMUNICATION & POLICY RESEARCH-NISCP, DR K S KRISHNAN MARG, PUSA CAMPUS, NEW DELHI, India, 110012

ISSN / eISSN: 0019-5103

Web of Science Core Collection: Science Citation Index Expanded

Additional Web of Science Indexes: Current Chemical Reactions | Current Contents Physical, Chemical & Earth Sciences | Essential Science Indicators | Index Chemicus

[Share This Journal](#)

View profile page

*Requires free login.

Other Possible Matches

INDIAN JOURNAL OF HETEROCYCLIC CHEMISTRY ?





Indian Journal of Chemistry (IJC)

[OP-HOME](#) [IJC-HOME](#) [ABOUT](#) [LOG IN](#) [SEARCH](#) [CURRENT](#)
[ARCHIVES](#) [ANNOUNCEMENTS](#) [NISCPR](#) [NOPR](#)

11-Apr-2024
12:34:04 IST

[Journal Help](#)

Home > **Indian Journal of Chemistry (IJC)**

Indian Journal of Chemistry (IJC)

The Indian Journal of Chemistry publishes papers in the areas of inorganic chemistry (synthetic and structural inorganic chemistry, inorganic reaction mechanisms), solid state chemistry, photochemistry, thermodynamics, spectroscopy, electrochemistry, theoretical and computational chemistry, organic chemistry (organic reaction mechanism, synthesis of chiral compounds, bio-organic chemistry, enzymes in organic synthesis, chemoenzymatic and enantioselective synthesis of organic compounds, metal-catalyzed asymmetric reactions), medicinal chemistry, natural products, analytical chemistry and materials chemistry.

USER

Username

Password

Remember me

NOTIFICATIONS

- [View](#)
- [Subscribe / Unsubscribe](#)

JOURNAL CONTENT

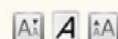
Search

All

Browse

- [By Issue](#)
- [By Author](#)
- [By Title](#)
- [Other Journals](#)

FONT SIZE



Announcements

New URL for CSIR-NIScPR journals :
<http://or.niscpr.res.in>

Beginning 20 March 2023, CSIR-NIScPR journals have a new manuscript submission and processing system—<http://or.niscpr.res.in>

The old portal (<http://op.niscpr.res.in>) will remain active for processing of already submitted manuscripts only.

Posted: 2023-03-21

[More...](#)

Author guidelines

[Instructions to Authors for preparation of manuscript](#)

[Editorial Board](#)

[Author guidelines for online submission](#)

Posted: 2022-02-09

[More Announcements...](#)

Indian Journal of Chemistry (IJC)



Computational calculations and molecular docking studies on 2-(2-ethylaminothiazol-5-oyl)benzothiazole

N S Femila Nirmal^a, Bojaxa A Rosy^b & T F Abbs Fen Reji^{a*}

^aDepartment of Chemistry and Research Centre, Nesamony Memorial Christian College, Marthandam 629 165, India

^bDepartment of Botany and Research Centre, Holy Cross College (Autonomous), Nagercoil 629 004, India

E-mail: abbsfen@gmail.com

Received 16 December 2019; accepted (revised) 11 January 2021

2-(2-Ethylaminothiazol-5-oyl)benzothiazole has been synthesized and its bond length, bond angle, dihedral angle, HOMO-LUMO and Mulliken charges on the atoms have been calculated by density functional theory (DFT/B3LYP) method with 6-311++G(d,p) basis sets. Biological properties like the target receptor identification and identification of interacting residues, of this compound is identified and analyzed by using Openbabel GUI (C) software.

Keywords: DFT method, marine alkaloids, benzothiazole and molecular docking

Alkaloids have attracted the attention of humans due to their significant bioactivity. The chemical compounds, which are isolated from marine sources usually consists of nitrogen containing heterocyclic rings. Due to these promising biological activities, there has been a rapid growth of interest in the synthesis of this class of compounds and their analogues. Benzothiazole is a privileged heterocyclic scaffold found in a number of biologically important molecules and chemotherapeutic agents, which includes clinically used drugs. Based on this conjecture, we have conceived a tentative, retro synthetic analysis for the synthesis of benzothiazole analogs of alkaloid topsentin¹. However, so far, no work has been reported on the vibrational analysis and molecular docking of 2-(2-ethylaminothiazol-5-oyl)benzothiazole (Figure 1). Hence, in the present work, a detailed vibrational analysis is carried out and for a proper understanding of the IR spectra a reliable assignment of all vibrational bands is essential. DFT calculations, particularly those based on hybrid functional methods have evolved to a powerful quantum chemical tool for the determination of the electronic structure of molecules²⁻⁸. In this framework, the B3LYP hybrid exchange–correlation functional is one of the most used since it proved its ability in reproducing various molecular properties, including vibrational spectra⁹⁻¹⁵ (Figure 2). The combined use of B3LYP functional and standard split valence basis set 6-31G(d) has been previously

shown to provide an excellent compromise between accuracy and computational efficiency of vibrational spectra for large and medium-size molecules. In addition, molecular docking studies were carried out and, the mechanism of action of this compound on pancreas cancer cell line (PDB ID: BCL2), HIV-1 reverse transcriptase (PDB ID: 1RT2) and cytochrome P450 enzyme 14- α -demethylase of *M. tuberculosis* (PDB ID: 1EA1) is found and it is very much useful to develop efficient drugs.

Experimental Section

The title compound was prepared from 1-alkyl-3-(N,N-dimethylimidoyl)thiourea and 2-(2-bromoacetyl)benzothiazole, which was prepared from 2-(1-hydroxyethyl)benzothiazole in DMF. The reaction mixture was stirred well and triethylamine was added. The reaction mixture was warmed at 80-85°C for 5 minutes. It was then cooled and poured into ice cold water with constant stirring. An orange precipitate thus obtained was filtered, washed with water and dried. The crude product was crystallized from methanol: water (2:1) and then from benzene:

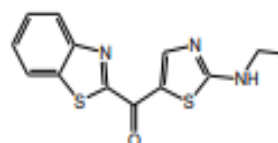
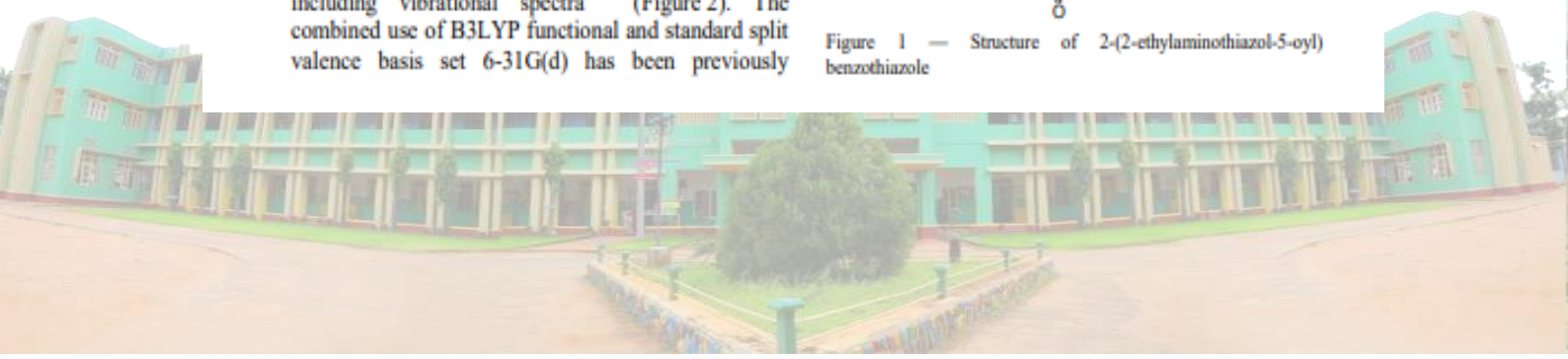


Figure 1 — Structure of 2-(2-ethylaminothiazol-5-oyl) benzothiazole





Source details

Turkish Journal of Physiotherapy and Rehabilitation

Scopus coverage years: from 2018 to 2023

Publisher: Turkish Physiotherapy Association

ISSN: 2651-4451 E-ISSN: 2651-446X

Subject area: Medicine: Rehabilitation Health Professions: Physical Therapy, Sports Therapy and Rehabilitation
Medicine: Orthopedics and Sports Medicine

Source type: Journal

CiteScore 2022 ⓘ
0.3

SJR 2022 ⓘ
0.124

SNIP 2022 ⓘ
0.271

[View all documents >](#) [Set document alert](#) [Save to source list](#)

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

0.3 = $\frac{27 \text{ Citations 2019 - 2022}}{83 \text{ Documents 2019 - 2022}}$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

0.4 = $\frac{56 \text{ Citations to date}}{155 \text{ Documents to date}}$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Medicine		
Rehabilitation	#127/146	13th
Health Professions		
Physical Therapy, Sports Therapy and Rehabilitation	#211/226	6th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)



The power of the Web of Science™ on your mobile device, wherever inspiration strikes. Dismiss Learn More

Already have a manuscript? Use our Manuscript Matcher to find the best relevant journals! Find a Match

Refine Your Search Results

2651-4451 Search

Sort By: Title (A-Z)

- Filters Clear All Web of Science Coverage Open Access Category Country / Region Language Frequency Journal Citation Reports

Search Results

Found 1 results (Page 1) Share These Results

Exact Match Found

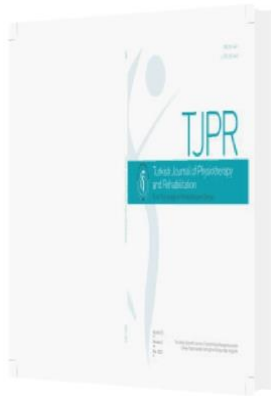
TURKISH JOURNAL OF PHYSIOTHERAPY REHABILITATION-TURK FIZYOTERAPI VE REHABILITASYON DERGISI Publisher: TURKEY ASSOC PHYSIOTHERAPISTS, KULTUR MAH MITHATPASA CAD 71-13 KIZILA, ANKARA, Turkiye, 06100 ISSN / eISSN: 2651-4451 / 2651-446X Web of Science Core Collection: Emerging Sources Citation Index Share This Journal View profile page * Requires free login.



Turkish Journal of Physiotherapy and Rehabilitation

• ISSN: 2651-4451 • e-ISSN: 2651-446X • Founded: 1974 • Period: [3 Issues Per Year](#) • Publisher: Türkiye Fizyoterapistler Derneği

Search article in the journal



94K

162K

22

61

113

ABOUT

Turkish Journal of Physiotherapy and Rehabilitation is the official peer-reviewed scientific journal of the Turkish Physiotherapy Association. It is abbreviated as Turk J Physiother Rehabil. The journal publishes three issues at April, August and December, in Turkish and English. This is a open access journal and all rights of the journal belongs to Turkish Physiotherapy Association.

"Turkish Journal of Physiotherapy and Rehabilitation" is listed in Emerging Sources Citation Index (ESCI), Cumulative Index to Nursing and Allied Health Literature (CINAHL), EBSCO, Excerpta Medica (EMBASE), Turkey Citation Index and Ulakbim TR Medical Index.

It is abbreviated as Turk J Physiother Rehabil.

ISSN: 2651-4451

e- ISSN: 2651-446X



+ Follow

64

ARCHIVE

Latest Issues

[2023 - Volume: 34 Issue: 3](#)

[2023 - Volume: 34 Issue: 2](#)

[2023 - Volume: 34 Issue: 1](#)

[2022 - Volume: 33 Issue: 3](#)

[All Issues](#)

EXPLORE

[Submit a Manuscript](#)

[Send Reviewer Request](#)

[Aim & Scope](#)

[Writing Rules](#)

[Ethical Principles and Publication Policy](#)

[Price Policy](#)

[Journal Boards](#)

[Statistics](#)

[Indexes](#)

[Contact](#)

[Journal History](#)

[CURRENT ISSUE](#)

[ARTICLES IN PRESS](#)

[Feedback](#)

FORMULATION OF VALUE-ADDED PRODUCTS FROM JAMUN SEED WITHOUT LOSS IN THE PHYSICOCHEMICAL AND MEDICAL PROPERTIES

R. Mahalakshmi¹, S. Devisri¹, J. Albino Wins², Pralay Ganguly³, Niti Chawla⁴
M.I. Niyas ahamed⁵

¹Department of Nutrition, FSM & Dietetics, Marudhar Kesari Jain College for Women, Vaniyambadi, Tamilnadu.

²Department of Botany, Holy Cross College (Autonomous), Nagercoil, Tamil Nadu (Affiliated to ManonmaniamSundaranar University, Abishekapatti, Tirunelveli District).

³Department of Tourism & Hotel Management, NSHM Knowledge Campus, Durgapur, West Bengal.

⁴Department of Biotechnology, Chaudhary Bansi Lal University, Bhiwani, Haryana.

⁵Department of Biochemistry, Sacred Heart College (Autonomous), Tirupattur, Tamilnadu.

¹Corresponding Author: dharshumaha@gmail.com

ABSTRACT:

The aim of this study was to evaluate the physicochemical, proximate composition of Jamun (*Syzygium Cumini*) seed vitamins and minerals. The physical characteristics such as jamun color were registered as white to pink. The forms of the jamun seed were similar to the oblong forms. Jamun or Java plum seed was found to be long, wide and weight (18.20 mm, 11.05 mm and 1.62 g). Jamun seeds have been evaluated for their chemical composition as (53, 1.02, 3.84, 31.62, 7.01 and 1.51 g/100 g) such as moisture, crude fat, crude protein, carbohydrate or raw Fibres. The vitamin A (3 IU/100g), B3 (0.09 mg/100g) and C (0.21 mg/100g) presence values were recorded in jamun seed. Mineral values for jamun seed powder were iron, calcium, magnesium, phosphorus, potassium and zinc (0.140, 0.651, 0.010, 0.072, 16.07 and 0.009 mg/100g). The conclusion was that the traditional medicinal plant seed jamun (*Syzygium Cumini*) provides a strong source of nutrients such as protein, fiber, vitamins, and minerals.

Keywords: Jamun fruits, Jamun seed, Physicochemical, Nutritional, Vitamin, Value Addition.

I. INTRODUCTION:

India is the source of many fruit cultivations and the majority of crops are confined to its growing area only. Their commercial production is lacking despite their high nutritional and medicinal properties. The majority of underused fruits are in many Ayurvedic formulations' core recipes. Jamun is the most common underused fruit that gains its popularity (*Syzygium cumini*). This species is native to Southeast Asia and India but has also been recorded as cultivated in Hawaii, Australia, Kenya, Florida, etc. The jamun fruits are grown annually and are available from June to July]. And jamun fruits are described as sweet savory berries. Kaatha, Narendra Jamun-6 and Konkan bhar doli are popular cultivars for jamun. The jamun fruit is a large berry, long-shaped and deep purple or bluish in colour. It has a purple pink pulp and a juicy fruit and a sweet fruit.

The world output of Jamun is estimated at 13.5 million tons annually, 15.4 percent of which was contributed by India. India is the second largest producer of Jamun in the world. In ayurvedic medicine, traditionally, jambul fruits, leaves, seeds and bark are used. For decades, Jamun seed powder has been used as a natural way to balance the amount of balanced blood sugar. It is a very tasty, detoxifying herb with properties to preserve normal urination and sweating. It has a hypolipidemic and cardioprotective immunomodulatory property. There are also studies on the antioxidant and radiation protection properties of the Jamun seed extract, as well as anti-inflammatory, anti-pyretic, anti-allergic, anti-bacterial and gastro-protective properties. It also works as a hepatic stimulant, digestive, cooling agent and blood purifier. Jamun seeds contain a glycoside, called jambolanas that helps to maintain glucose levels as normal. Ayurvedic text indicates that 1-3 g of jamun powder daily is an





Scopus Preview



Source details

Saudi Journal of Biological Sciences

Open Access

Year: currently covered by Scopus: from 2009 to 2024

Publisher: Elsevier

ISSN: 1309-162X

Subject area: Agricultural and Biological Sciences General Agricultural and Biological Sciences

Source type: journal

CiteScore 2023

9.3

Q1 2023

0.774

SNIP 2023

1.288

[View all documents](#)

[Get document alert](#)

[Share to source list](#)

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

CiteScore 2023

9.3 = $\frac{26,924 \text{ Citations } 2020 - 2023}{2,351 \text{ Documents } 2020 - 2023}$

calculated on 16 July 2024

CiteScoreTracker 2024

9.8 = $\frac{18,294 \text{ Citations to date}}{1,879 \text{ Documents to date}}$

last updated on 16 July 2024, next update monthly

CiteScore rank 2023

Category	Rank	Percentile
Agricultural and Biological Sciences	894/928	95th
General Agricultural and Biological Sciences		

[View CiteScore methodology](#) [CiteScore FAQ](#) [Add CiteScore to your site](#)



Master Journal List

Search Journals

Match Manuscript

Downloads

Help



The power of the Web of Science® on your mobile device, wherever inspiration strikes.

Dismiss

Learn More

Already have a manuscript?

Use our Manuscript Matcher to find the best relevant journals!

Find a Match

Refine Your Search Results

1218-662X

Search

Sort By: Title (A-Z)

Search Results

Found 1 results (Page 1)

Share These Results

Exact Match Found

SAUDI JOURNAL OF BIOLOGICAL SCIENCES

View Profile

Publisher: ELSEVIER, RADARWEG 29, AMSTERDAM, Netherlands, 1043 NX

ISSN / eISSN: 1218-662X / 2213-7166

Additional Web of Science indexes: Biological Abstracts | BIOSIS Previews | Zoological Record

Share This Journal

View profile page

* Requires free login.

1-1 of 1

10

<

>

20

Items per page: 10





Saudi Journal of Biological Sciences

Volume 28, Issue 8, August 2021, Pages 4113–4120

Original article

In vitro fibrinolytic activity of an enzyme purified from *Bacillus amyloliquefaciens* strain KJ10 isolated from soybean paste

Jayarajapatham Rajaseelvam ^a, Hatarajan Benit ^b, Saqer S. Alotaibi ^c, M.A. Rathi ^d,
Srihareram Srigopalnam ^e, Gurupatham Devadhasan Bijji ^f, Pennarawamy Vijayaraghavan ^g, ^g, ^g

- ^a Bioprocess Engineering Division, Smykon Biotech Pvt Ltd, Nagercoil, Kanyakumari, Tamil Nadu 629301, India
- ^b Department of Botany, Holy Cross College, Nagercoil, Kanyakumari District, Tamil Nadu 629 002, India
- ^c Department of Biotechnology, College of Science, Taif University, P.O. Box 11099, Taif 21944, Saudi Arabia
- ^d Department of Biochemistry, Sree Narayana Guru College, Coimbatore, Tamil Nadu 641 105, India
- ^e Application Specialist, Genarem Biosciences Tiruchirappalli, Tamil Nadu 620021, India
- ^f Department of Zoology, Hezromany Memorial Christian College, Marthandam, Kanyakumari, Tamil Nadu 629 165, India

Received 2 March 2021, Revised 22 April 2021, Accepted 22 April 2021, Available online 1 May 2021,
Version of Record 21 July 2021.

[What do these dates mean?](#)



Show less

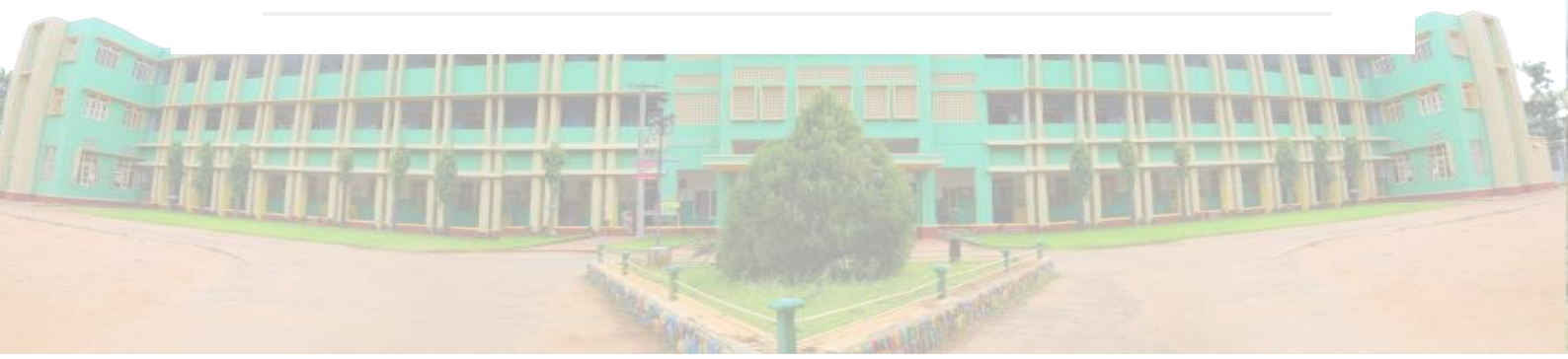
Outline | Share | Cite

<https://doi.org/10.1016/j.sjbs.2021.04.062>

[Get rights and content](#)

[Under a Creative Commons license](#)

[Open access](#)





Source details

Journal of Infection and Public Health

Open Access

Years currently covered by Scopus: from 2008 to 2024

Publisher: Elsevier

ISSN: 1876-0346 E-ISSN: 1876-035X

Subject area: **Medicine Public Health, Environmental and Occupational Health** **Medicine Infectious Diseases**

Source type: Journal

[View all documents](#) [Set document alert](#) [Save to source list](#)

CiteScore 2023 **13.1**

SJR 2023 **1.081**

h5-IF 2023 **1.225**

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

CiteScore 2023 TM

13.1 = $\frac{14,187 \text{ Citations } 2020 - 2023}{1,879 \text{ Documents } 2020 - 2023}$

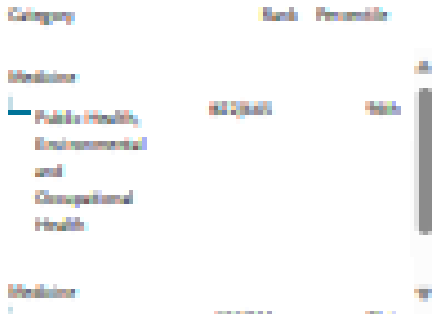
included on 10 May 2024

CiteScoreTracker 2024 TM

7.3 = $\frac{4,967 \text{ Citations to date}}{649 \text{ Documents to date}}$

not updated on 01 July 2024 - updated monthly

CiteScore rank 2023



[View CiteScore methodology](#) [CiteScore FAQ](#) [Add CiteScore to your site](#)



The screenshot displays the 'Master Journal List' website interface. At the top, there are navigation links: 'Master Journal List', 'Search Journals', 'Match Manuscript', 'Downloads', and 'Help'. Below this is a banner with the text 'The power of the Web of Science™ in your mobile device, wherever inspiration strikes.' and buttons for 'Download' and 'Learn More'.

The main content area is divided into several sections:

- Left Sidebar:**
 - Already have a manuscript?** A section with a 'Find a Match' button.
 - Filters:** A list of filter categories with a 'Clear All' button: 'Web of Science Coverage', 'Open Access' (with a lock icon), 'Category', 'Country / Region', 'Language', 'Frequency', and 'Journal Citation Reports'.
- Search Results:**
 - Refine Your Search Results:** A search input field containing '1876-0341' and a 'Search' button.
 - Sort by:** A dropdown menu showing 'Title (A-Z)'.
 - Search Results:** A section indicating 'Found 1 results (Page 1)' and a 'Share These Results' button.
 - Exact Match Found:** A detailed entry for 'JOURNAL OF INFECTION AND PUBLIC HEALTH' with a 'CrossMark' icon. The entry includes:
 - Publisher:** ELSEVIER SCIENCE LONDON, 84 THEOBALDS RD, LONDON, ENGLAND, WC1E 7HR
 - ISSN / eISSN:** 1876-0341 / 1876-035X
 - Web of Science Core Collection:** Science Citation Index Expanded
 - Additional Web of Science Indicators:** Essential Science Indicators
 - Actions:** 'Share This Journal' and 'View profile page' buttons. A note below the latter says '* Requires login'.
 - Page Navigation:** A pagination bar showing '1 - 1 of 1' items and 'Items per page'.





Carbapenemases producing *Klebsiella pneumoniae* from the pus of hospitalized patients: In-vitro antibiotic properties of *Streptomyces* against multidrug resistant infectious bacteria

Belamuralikrishnan Balasubramanian^a, Natarajan Benit^b, Paul Agastian^c,
Khalid S. Almoary^d, R. El, Turki M. Dawoud^d, Yahya B. Elbadawi^d, Ayman Mubarak^d,
Mohammed S. Alfadul^d, Reem M. Aljowair^d

- ^a Department of Food Science and Biotechnology, College of Life Science, Sejong University, Seoul 05086, South Korea
- ^b Department of Botany, Holy Cross College, ManonmaniamSundaranar University, Abishekapatti, Tirunelveli 627 012, Tamil Nadu, India
- ^c Research Department of Plant Biology and Biotechnology, Loyola College, Chennai, Tamil Nadu, India
- ^d Department of Botany and Microbiology, College of Science, King Saud University, P.O. 3455, Riyadh 11451, Saudi Arabia

Received 15 February 2021, Revised 10 May 2021, Accepted 18 May 2021, Available online 27 May 2021, Version of Record 11 June 2021.

 [What do these dates mean?](#)

 Check for updates

Show less 

 Outline |  Share  Cite

<https://doi.org/10.1016/j.jiph.2021.06.004>

[Get rights and content](#)

[Under a Creative Commons license](#)

[open access](#)





Source details

Materials Today: Proceedings

Scopus coverage years: 2005, from 2014 to Present

E-ISSN: 2214-7853

Subject area: Materials Science: General Materials Science

Source type: Conference Proceeding

[View all documents >](#)

[Set document alert](#)

[Save to source list](#)

CiteScore 2022 **3.2**

SJR 2022 **0.445**

SNIP 2022 **0.774**

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

3.2 = $\frac{80,455 \text{ Citations } 2019 - 2022}{24,871 \text{ Documents } 2019 - 2022}$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

4.9 = $\frac{108,812 \text{ Citations to date}}{22,228 \text{ Documents to date}}$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

Category	Rank	Percentile
Materials Science		
General Materials Science	#259/453	42nd

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)





ScienceDirect®

materialstoday: PROCEEDINGS

3.2

CiteScore

[Submit your article ↗](#)

[Guide for authors](#)

Menu

About the journal

Materials Today: Proceedings provides the materials science community with a fast and flexible route to the publication of research presented at national and international scientific conferences in the field of materials science.

Guest Editors are responsible for quality control, the peer review ...

[View full aims & scope](#)

\$200 ⓘ

Article publishing charge
for open access

68 days

Review time

70 days

Submission to acceptance



[View all insights](#)

Articles

Latest published

Articles in press

Top cited

Most downloaded

Most popular

FEEDBACK





Materials Today: Proceedings

Volume 45, Part 2, 2021, Pages 2087-2090

Production and characterization of extracellular pectinase from a newly isolated *Bacillus* species from fruit waste soil

T. Murugan ^a, P. Deepika ^a, A. Kowsalya ^a, K. Sivasubramanian ^a, R.P. Rejisha ^b, M. Murugan ^b, J. Albino Wins ^c

Show more

Share Cite

<https://doi.org/10.1016/j.matpr.2020.09.607>

[Get rights and content](#)

Abstract

The present investigation was carried for identification of pectinolytic bacteria and determination of their pectinolytic activity. The isolation was made from soil sample collected from fruit wastes. Screening of pectinolytic activity was achieved with pectin agar plate. Among 36 strains tested 12 shows pectinolytic activity. The potent isolate FWS II-4 was identified as *Bacillus* sp. and further used for enzyme production. Pectinase was produced by submerged fermentation and the purified. The purified enzyme demonstrated 3.40 mg/ml of total protein and 484.70 U/mg of specific activity. In characterization studies, the pectinase demonstrated good activity at pH 6.0 and 40 °C. Also, the bacterial strain showed maximum growth when the medium pH was 7.0 and incubated 37 °C.

Introduction

Pectin is large molecular weight polysaccharides that are commonly found in plants [1], [2], [3]. Pectinase is a complex of enzymes involved in the biological degradation of pectin [4]. Polygalacturonase is commercially used pectinase that cleave the glycosidic bonds present in the of galaturonic acid [5]. The pectinolytic enzymes have been classified into depolymerases, esterases and protopectinases [4], [6]. Pectinases are important in plants for fruit ripening, signaling and cell adhesion [7], [8].

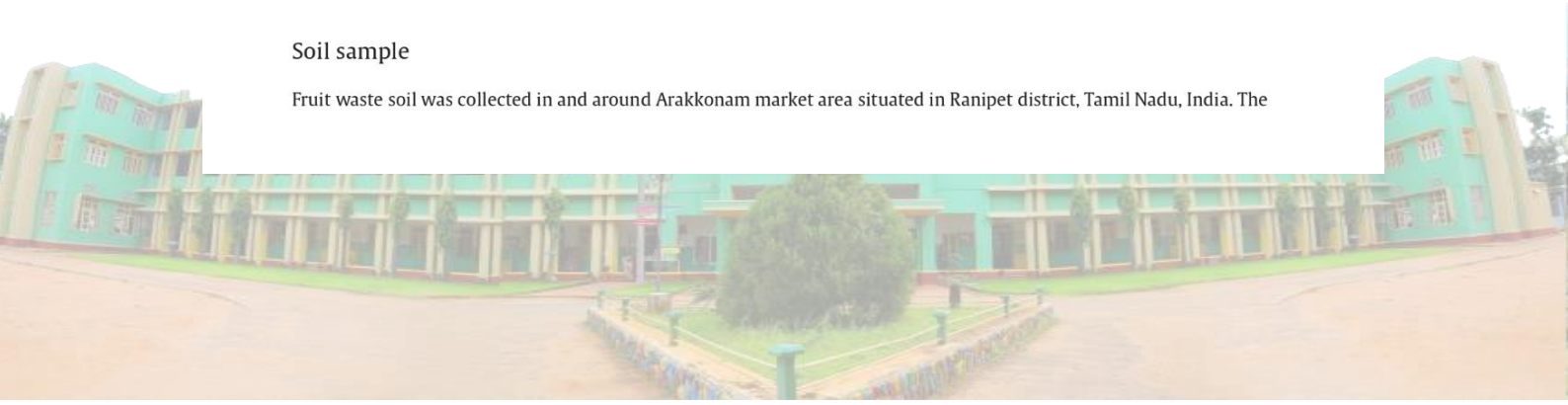
Pectinase possess significant industrial importances that are used in the production of fruit juices, wines and vegetable oil [9], [10], [11]. It has remarkable applications in food, pharmaceutical, textile industry [12] and fruit juice wastewater treatment [13].

In global food enzyme sales, pectinases are accounts for approximately 25% [11] and 10% of the global industrial enzyme production [14]. Pectinases have been produced by many organisms include plants, nematodes, insects, bacteria, fungi mold, yeast, actinomycetes and protozoans [15]. The majority of pectinases are produced by bacteria [16], fungi [17] and actinomycetes [18]. The bacterial isolates that are producing industrially important pectinase are including the bacterial genera such as *Bacillus*, *Pseudomonas* and *Staphylococcus* [18], [19]. Among these, *Bacillus* species has the significances to produce pectinase in large quantities [13], [20]. The study aimed to identify pectinolytic bacteria in fruit waste soil and study the characteristics of enzyme and bacterial isolate for obtaining commercially importance pectinase with high activity.

Section snippets

Soil sample

Fruit waste soil was collected in and around Arakkonam market area situated in Ranipet district, Tamil Nadu, India. The





Source details

Linguistica Antverpiensia, New Series – Themes in Translation Studies

Scopus coverage years: from 2002 to 2023

Publisher: Department of Applied Linguistics, Translators and Interpreters, University of Antwerp

ISSN: 0304-2294 E-ISSN: 2295-5739

Subject area: [Arts and Humanities: Language and Linguistics](#) [Social Sciences: Linguistics and Language](#)

Source type: Journal

CiteScore 2022 ⓘ
1.8

SJR 2022 ⓘ
0.648

SNIP 2022 ⓘ
1.505

- [View all documents >](#)
- [Set document alert](#)
- [Save to source list](#)

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$1.8 = \frac{85 \text{ Citations 2019 - 2022}}{48 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$2.3 = \frac{103 \text{ Citations to date}}{45 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

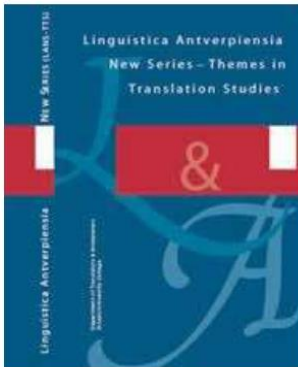
Category	Rank	Percentile
Arts and Humanities		
Language and Linguistics	#186/1001	81st
Social Sciences		
Linguistics and Language	#218/1078	79th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)





About the Journal



Linguistica Antverpiensia, New Series – Themes in Translation Studies (LANS – TTS) is an annual, peer-reviewed, open-access publication devoted to the study of translation and interpreting that is indexed in the **Web of Science**. The journal is not bound to any particular school of thought or academic group. Translation is understood to be a dynamic form of communication which has strong roots in the society and culture that produce it and is conceived as an integral part of the production and reproduction of culture in the broadest sense.

LANS-TTS is published once a year in December in the form of one thematic issue. There is no open issue (continuous publication). See [About/Submissions](#).

Our current ISSN is 2295-5739. Between 2002 (issue 1) and 2012 (issue 11), we were not in open access and had a different ISSN, i.e. 0304-2294. Please note that "Linguistica Antverpiensia" ceased to exist in 2001. Our address is <https://lans-tts.uantwerpen.be/index.php/LANS-TTS/index>.

With the support of the [University Foundation](#) and of the [Trics Research group](#) (University of Antwerp)

Call for abstracts & papers: Machine and Computer-assisted Interpreting - LANS-TTS issue 24, publication year 2025

05-09-2023

Call for abstracts & papers: Machine and Computer-assisted Interpreting

LANS-TTS issue 24, publication year 2025

Guest editors

- Lu Xinchao, Beijing Foreign Studies University (China)
- Claudio Fantinuoli, Mainz University (Germany)

Practical information and deadlines



V

Function of Brain in L2 Learning - Neurolinguistic Perspective

Dr. Delbio. A, Assistant Professor of English, VTM College of Arts and Science (Affiliated to Manonmaniam Sundaranar University, Tirunelveli) Arumanai,

Email: delbiodel@gmail.com ORCID No. 0000-0003-2097-127X

Dr. M. Ilankumaran, Professor of English, Noorul Islam Centre for Higher Education, Kumaracoil, Thuckalay, Tamilnadu, India. Email: mikumaran@yahoo.com

ORCID No. 0000-0002-4803-896X

Dr. R. Abilasha, Assistant Professor of English, Holy Cross College (Autonomous) (Affiliated to Manonmaniam Sundaranar University, Tirunelveli) Nagarcoil,

Email: abilasharajan@yahoo.com, ORCID.No. 0000-0001-5300-8928

Dr. V. Chanthiramathi, Associate Professor of English V. O. Chidambaram College, (Affiliated to Manonmaniam Sundaranar University, Tirunelveli), Thoothukudi,

Email: chanthiramathi63@yahoo.com

Issue Details

Issue Title: Issue 1

Received: 15 January, 2021

Accepted: 08 February, 2021

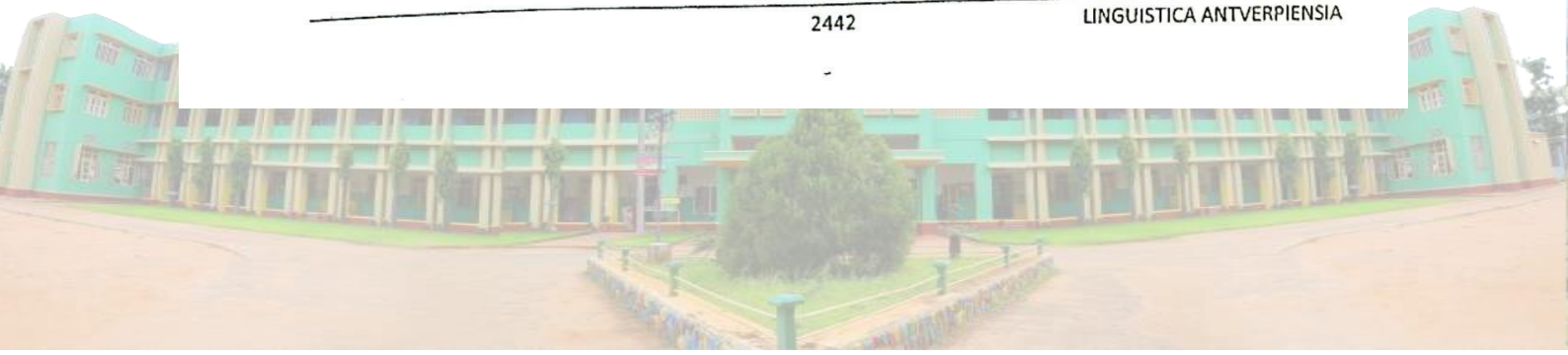
Published: 31 March, 2021

Pages: 2442 - 2459

Copyright © 2020 by author(s) and
Linguistica Antverpiensia

Abstract

Language learning is a basic concept of all over the world. To learn a foreign language, there should be proper guidance and proper coaching. The students should know the rules and principles which are followed by the native speakers. L2 learning is not an easy task, at first all grammatical rules and the phonetics have to be taught to the learners. There are several methods which are used for training an individual in English. Grammar Translation method is the pioneer method which is followed in 19th century. After few years, Bilingual method, Translation method, Eclectic method are introduced for foreign language teaching. All these methods are completely formal and focus upon direct learning and teaching process. These methods are formal and boring so that there is a lot of chance for the students to get deviated from learning. Grammatical rules and syntax are boring part in a language study. So there should be a better method for learning a language. The present generation focuses on Neuro science as





Source details

Linguistica Antverpiensia, New Series – Themes in Translation Studies

Scopus coverage years: from 2002 to 2023

Publisher: Department of Applied Linguistics, Translators and Interpreters, University of Antwerp

ISSN: 0304-2294 E-ISSN: 2295-5739

Subject area: Arts and Humanities: Language and Linguistics Social Sciences: Linguistics and Language

Source type: Journal

CiteScore 2022 ⓘ
1.8

SJR 2022 ⓘ
0.648

SNIP 2022 ⓘ
1.505

- [View all documents >](#)
- [Set document alert](#)
- [Save to source list](#)

[CiteScore](#) [CiteScore rank & trend](#) [Scopus content coverage](#)

i Improved CiteScore methodology ✕

CiteScore 2022 counts the citations received in 2019-2022 to articles, reviews, conference papers, book chapters and data papers published in 2019-2022, and divides this by the number of publications published in 2019-2022. [Learn more >](#)

CiteScore 2022 ▼

$$1.8 = \frac{85 \text{ Citations 2019 - 2022}}{48 \text{ Documents 2019 - 2022}}$$

Calculated on 05 May, 2023

CiteScoreTracker 2023 ⓘ

$$2.3 = \frac{103 \text{ Citations to date}}{45 \text{ Documents to date}}$$

Last updated on 05 April, 2024 • Updated monthly

CiteScore rank 2022 ⓘ

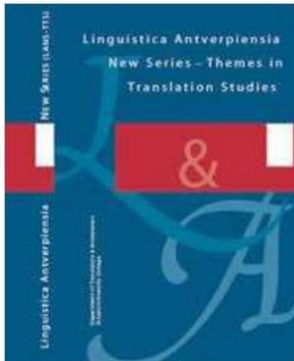
Category	Rank	Percentile
Arts and Humanities		
Language and Linguistics	#186/1001	81st
Social Sciences		
Linguistics and Language	#218/1078	79th

[View CiteScore methodology >](#) [CiteScore FAQ >](#) [Add CiteScore to your site](#)





About the Journal



Linguistica Antverpiensia, New Series – Themes in Translation Studies (LANS – TTS) is an annual, peer-reviewed, open-access publication devoted to the study of translation and interpreting that is indexed in the Web of Science. The journal is not bound to any particular school of thought or academic group. Translation is understood to be a dynamic form of communication which has strong roots in the society and culture that produce it and is conceived as an integral part of the production and reproduction of culture in the broadest sense.

LANS-TTS is published once a year in December in the form of one thematic issue. There is no open issue (continuous publication). See About/Submissions.

Our current ISSN is 2295-5739. Between 2002 (issue 1) and 2012 (issue 11), we were not in open access and had a different ISSN, i.e. 0304-2294. Please note that "Linguistica Antverpiensia" ceased to exist in 2001. Our address is <https://lans-tts.uantwerpen.be/index.php/LANS-TTS/index>.

With the support of the [University Foundation](#) and of the [Trics Research group](#) (University of Antwerp)

Call for abstracts & papers: Machine and Computer-assisted Interpreting - LANS-TTS issue 24, publication year 2025

📅 05-09-2023

Call for abstracts & papers: Machine and Computer-assisted Interpreting

LANS-TTS issue 24, publication year 2025

Guest editors

- Lu Xinchao, Beijing Foreign Studies University (China)
- Claudio Fantinuoli, Mainz University (Germany)

Practical information and deadlines



The Prominence of Innovative Ideas and Technologies in ELT Classroom

Dr. Delbio. A., Assistant Professor of English, VTM College of Arts and Science (Affiliated to Manonmaniam Sundaranar University, Tirunelveli) Arumanai,

Email: delbiodel@gmail.com ORCID No. 0000-0003-2097-127X

Dr. M. Ilankumaran, Professor of English, Noorul Islam Centre for Higher Education, Kumaracoil, Thuckalay, Tamilnadu, India. Email: mikumaran@yahoo.com

ORCID No. 0000-0002-4803-896X

Dr. R. Abilasha, Assistant Professor of English, Holy Cross College (Autonomous) (Affiliated to Manonmaniam Sundaranar University, Tirunelveli) Nagarcoil,

Email: abilasharajan@yahoo.com, ORCID.No. 0000-0001-5300-8928

Dr. V. Chanthiramathi, Associate Professor of English V. O. Chidambaram College, (Affiliated to Manonmaniam Sundaranar University, Tirunelveli), Thoothukudi,

Email: chanthiramathi63@yahoo.com

Issue Details

Issue Title: Issue 1

Received: 15 January, 2021

Accepted: 08 February, 2021

Published: 31 March, 2021

Pages: 2460 - 2474

Copyright © 2020 by author(s) and
Linguistica Antverpiensia

Abstract

Learning English language is entirely basic for making opportunities. English as it is known, is a worldwide language which makes a simple access with various tongues of the world. Learning English language keeps away from false impressions in language development and communication process. The role of innovation in learning English language through cooperation would clear away boundaries in complete comprehension of feelings. Human language can be verbal or non-verbal that passes on feelings. Everything is identified with human feelings, which can be passed on through language. Language is a scholarly mine where an individual can discover supportive for the basic living. It could be productivity and displacement, and depends totally on social show and learning. People secure language through social collaboration in early adolescence and youngsters by and large smoothly. This paper focuses on the degree of utilizing inventive showing

