

Shiksha Mandal's

Bajaj College of Science, Wardha

(Formerly known as Jankidevi Bajaj College of Science)

4th Cycle: Assessment and Accreditation by NAAC



Criterion III

**Research, Innovations
and Extension**

QnM 3.4.6

**Bibliometrics of the publications during
the last five years based on Scopus/
Web of Science – h-index of the
Institution**



Bajaj College of Science, Wardha

(Formerly known as Jankidevi Bajaj College of Science)
An Autonomous College affiliated to RTM Nagpur University, Nagpur
NAAC Reaccredited 'A' with CGPA of 3.21
(A Linguistic Minority College)



Prof. Pradip. V. Tekade
Principal (Offg.)

Email : jbsciencewardha@yahoo.co.in
pradiptekade@gmail.com

Ref. No. BCS/ /20 -20

Date : 27 DEC 2022

DECLARATION

This is to declare that the information and data furnished as supporting/additional document in the metric 3.4.6 *Bibliometrics of the publications during the last five years based on Scopus/ Web of Science – h-index of the Institution* are true to the best of my knowledge and is verified by IQAC.

Dr. M. R. Chandrakar
IQAC Co-ordinator



Prof. P. V. Tekade
Principal (Offg.)
Offi. Principal
Bajaj College of Science
WARDHA

Bajaj College of Science, Wardha

<https://www.webofscience.com/wos/author/rid/ABE-3518-2021>

Web of Science ResearcherID: [ABE-3518-2021](#)

Publications

PUBLICATION METRICS

For manuscripts published from date range March 2017 - November 2022

TOTAL TIMES CITED

164

H-INDEX

8

PUBLICATIONS

52

CORE COLLECTION DOCUMENTS

35

For all time

TOTAL TIMES CITED

388

H-INDEX

9

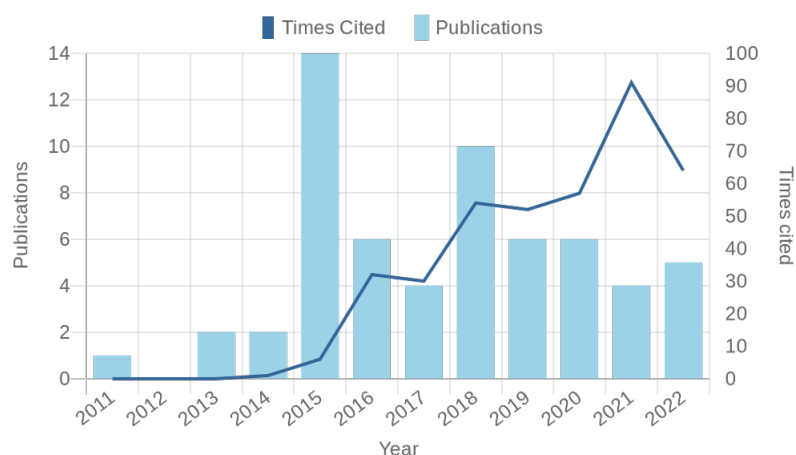
PUBLICATIONS

79

CORE COLLECTION DOCUMENTS

60

PUBLICATION IMPACT OVER TIME



PUBLISHING SUMMARY

For manuscripts published from date range March 2017 - November 2022

(6) Russian Journal of Physical Chemistry A	(4) International Journal of Innovative Technology...
(3) Orbital - The Electronic Journal of Chemistry	(3) Jordan Journal of Physics
(3) Biogenic Sustainable Nanotechnology	(2) Polymer-Plastics Technology and Materials
(2) Indian Journal of Forensic Medicine and Toxic...	(2) ACS Omega
(1) Beilstein Journal of Nanotechnology	(1) Angewandte Chemie International Edition
(1) Tree Physiology	(1) Current Applied Physics
(1) RSC Advances	(1) Heterocyclic Letters
(1) Chemical Physics Letters	(1) Solid State Sciences
(1) Russian Journal of General Chemistry	(1) Acta Physica Polonica A
(1) ChemistrySelect	(1) Natural Product Communications
(1) Luminescence: the Journal of Biological and C...	(1) Journal of Materials Science: Materials in Elec...
(1) Journal of Molecular Structure	(1) Catalysis Communications
(1) International Journal of Research in Pharmace...	(1) Optik - International Journal for Light and Elect...
(1) International Journal of Polymer Analysis and ...	(1) Materials Today: Proceedings
(1) Journal of Scientific Research	(1) Current Pharmacology Reports
(1) AIP Conference Proceedings	(1) Natural Product Research
(1) Advances in Zoology and Botany	(1) Asian Journal of Chemistry
(1) Results in Chemistry	

MANUSCRIPTS PUBLISHED (52)

From date range March 2017 - November 2022

TIMES CITED

(ALL TIME)

Naringenin biosynthesis and fabrication of naringenin mediated nano silver conjugate for antimicrobial potential

Authors (3): Jitendra D. Salunkhe; Bhavana V. Mohite; Satish V. Patil

Published: Nov 2022 in Natural Product Research

DOI: 10.1080/14786419.2022.2147931

Not indexed in
the Web of
Science

Biosynthesized delta-Bi2O3 Nanoparticles from Crinum viviparum Flower Extract for Photocatalytic Dye Degradation and Molecular Docking

Authors (10): Chouke, Prashant B.; Dadure, Kanhaiya M. ... Masram, Dhanraj T.

Published: Jun 2022 in ACS Omega

DOI: 10.1021/ACSOMEGA.2C01745

Web of Science accession number: WOS:000815101100001

0

Moringa Tree, Gift of Nature: a Review on Nutritional and Industrial Potential

Authors (6): Satish V. Patil; Bhavana V. Mohite ... Vikas S. Patil

Published: May 2022 in Current Pharmacology Reports

DOI: 10.1007/S40495-022-00288-7

Not indexed in
the Web of
Science

Natural Extracts-mediated Biosynthesis of Zinc Oxide Nanoparticles and Their Multiple Pharmacotherapeutic Perspectives

0

Authors (4): Haldar, A. G. M.; Mahapatra, D. Kar ... Chaudhary, R. G.

Published: Mar 2022 in Jordan Journal of Physics

DOI: 10.47011/15.1.10

Web of Science accession number: WOS:000762645700010

Utilization of Mother Nature's Gift for the Biofabrication of Copper/Copper Oxide Nanoparticles for Therapeutic Applications

1

Authors (5): Dadure, K. M.; Mahapatra, D. Kar ... Chaudhary, R. G.

Published: Mar 2022 in Jordan Journal of Physics

DOI: 10.47011/15.1.12

Web of Science accession number: WOS:000762645700012

Half a Decade Progress of Biomass-assisted Development of Zirconium Nanomaterials: Anti-microbial Potentials

0

Authors (4): Mahapatra, D. Kar; Haldar, A. G. M. ... Chaudhary, R. G.

Published: Mar 2022 in Jordan Journal of Physics

DOI: 10.47011/15.1.11

Web of Science accession number: WOS:000762645700011

Bioinspired NiO Nanospheres: Exploring In Vitro Toxicity Using Bm-17 and L. rohita Liver Cells, DNA Degradation, Docking, and Proposed Vacuolization Mechanism

4

Authors (10): Chouke, Prashant B.; Potbhare, Ajay K. ... Masram, Dhanraj T.

Published: Mar 2022 in ACS Omega

DOI: 10.1021/ACSOMEGA.1C06544

Web of Science accession number: WOS:000823685400001

Biodiversity of Moths in Hinganghat Taluka, Wardha, Maharashtra (India)

Not indexed in
the Web of
Science

Authors (3): Chandrakar M. R.; Kalwade P. S.; Pachlore G. S.

Published: Mar 2022 in Advances in Zoology and Botany

DOI: 10.13189/AZB.2022.100103

Xanthomonadin mediated synthesis of biocidal and photo-protective silver nanoparticles (XP-AgNPs)

Not indexed in
the Web of
Science

Authors (5): Narendra S. Salunkhe; Sunil H. Koli ... Satish V. Patil

Published: Jan 2022 in Results in Chemistry

DOI: 10.1016/J.RECHEM.2022.100663

Phytofabrication of nickel-based nanoparticles: focus on environmental benign technology and therapeutic perspectives

Not indexed in
the Web of
Science

Authors (5): Kanhaiya M. Dadure; Debarshi Kar Mahapatra ... Ajay K. Potbhare

Published: 2022 in Biogenic Sustainable Nanotechnology

DOI: 10.1016/B978-0-323-88535-5.00016-0

Phytofabrication of metal oxide/iron-based and their therapeutic and their therapeutic potentials: in-depth insights into the recent progress

Not indexed in
the Web of
Science

Authors (4): Animeshchandra G.M. Haldar; Debarshi Kar Mahapatra ... Ratiram G. Chaudhary

Published: 2022 in Biogenic Sustainable Nanotechnology

DOI: 10.1016/B978-0-323-88535-5.00014-7

Highlights of decade long progress of nano-selenium fabricated from plant biomass: insights into techniques and mechanisms

Authors (3): Debarshi Kar Mahapatra; Animeshchandra G.M. Haldar; Kanhaiya M. Dadure

Published: 2022 in Biogenic Sustainable Nanotechnology

DOI: 10.1016/B978-0-323-88535-5.00003-2

Not indexed in
the Web of
Science

The Comprehensive study of Titanium oxide doped Conducting polymers nanocomposites for Photovoltaic applications

Authors (3): Tale, Bhagyashri U.; Nemade, K. R.; Tekade, P. V.

Published: Nov 2021 in Polymer-Plastics Technology and Materials

DOI: 10.1080/25740881.2021.1930047

Web of Science accession number: WOS:000656952500001

0

Comprehensive study to ascertain the effect of MnO₂ loading on supercapacitive properties of conducting polymers

Authors (3): Tale, Bhagyashri; Nemade, Kailash; Tekade, Pradip

Published: Oct 2021 in International Journal of Polymer Analysis and Characterization

DOI: 10.1080/1023666X.2021.1933853

Web of Science accession number: WOS:000658550700001

0

Inverse Thermoelastic Analysis of a Thick Rectangular Plate

Authors (2): Sanjay H Bagade; Department of Physics, Janki Devi Bajaj College of Science, Wardha (Maharashtra), India.

Published: Jul 2021 in International Journal of Innovative Technology and Exploring Engineering

DOI: 10.35940/IJITEE.I9323.0710921

Not indexed in
the Web of
Science

Cetrimonium Bromide Promoted Efficient Multi-component Protocol for Synthesis of 1-Amidoalkyl-2-naphthols in Aqueous Medium

Authors (3): A.V. Nakhate; A.P. Ingale; S.V. Shinde

Published: Jun 2021 in Asian Journal of Chemistry

DOI: 10.14233/AJCHEM.2021.23251

Not indexed in
the Web of
Science

Graphene based nano-composites for efficient energy conversion and storage in Solar cells and Supercapacitors : A Review

Authors (3): Tale, Bhagyashri; Nemade, K. R.; Tekade, P. V

Published: May 2021 in Polymer-Plastics Technology and Materials

DOI: 10.1080/25740881.2020.1851378

Web of Science accession number: WOS:000604680900001

8

Evaluation of Ehretia Laevis Roxb. (Khandu Chakka/Ajan Vruksha) in the Wound Healing Adjudged by Histological Examination of the Tissue

Published: Apr 2021 in Indian Journal of Forensic Medicine and Toxicology

DOI: 10.37506/IJFMT.V15I2.14397

Not indexed in
the Web of
Science

Internal Use of Ajan Vruksha/ Khandu Chakka (Ehretia Laevis Roxb). Plant Leaves Powder in Shoulder Pain Management. – Case Report

Published: Apr 2021 in Indian Journal of Forensic Medicine and Toxicology

DOI: 10.37506/IJFMT.V15I2.14395

Not indexed in
the Web of
Science

Partial and Apparent Molar Volume of Azithromycin in Its Solutions in Ethanol, 1-Propanol, and 1-Butanol at 300.15, 305.15, 310.15 K and Ambient Pressure

0

Authors (3): Mohabansi, Nita P.; Satone, Anita K.; Hirani, Sonia N.
Published: Apr 2021 in Russian Journal of Physical Chemistry A
DOI: 10.1134/S0036024421140132
Web of Science accession number: WOS:000651489200001

High frequency acoustic attenuation in pure semiconductors: A comparative study

Not indexed in
the Web of
Science

Authors (1): Sanjay H. Bagade
Published: 2021 in AIP Conference Proceedings
DOI: 10.1063/5.0060888

Copper supported Mg-Al hydrotalcite derived oxide catalyst for enol carbamates synthesis via C-H bond activation of formamides

2

Authors (5): Vishwakarma, Rakhi; Gadipelly, Chandrakanth ... Mannepalli, Lakshmi Kantam
Published: Dec 2020 in Catalysis Communications
DOI: 10.1016/J.CATCOM.2020.106150
Web of Science accession number: WOS:000582323200009

Synthesis of RE³⁺ (RE³⁺ = Ce³⁺, Dy³⁺, Eu³⁺ and Tb³⁺) activated Gd₂SiO₅ optoelectronics materials for lighting

6

Authors (3): Shinde, V. V.; Tiwari, Ashish; Dhoble, S. J.
Published: Oct 2020 in Journal of Molecular Structure
DOI: 10.1016/J.MOLSTRUC.2020.128397
Web of Science accession number: WOS:000546638700003

Sensitization of Tb³⁺ and Dy³⁺ emission in Li₄Ca(BO₃)₂ via energy transfer from Ce³⁺ and study of energy transfer mechanism

3

Authors (5): Yerpude, Mangesh M.; Nair, Govind B. ... Swart, H. C.
Published: Sep 2020 in Optik - International Journal for Light and Electron Optics
DOI: 10.1016/J.IJLEO.2020.164977
Web of Science accession number: WOS:000581830300027

In vitro Binding Interaction of Isoxazoline Derivative with BSA: Equilibrium, FT-IR, Acoustical and Molecular Modeling Study

0

Authors (3): Pisudde, Ajay Madhukarrao; Tekade, Pradip Vitthalrao; Thakare, Shrikant Bandupant
Published: Jul 2020 in Orbital - The Electronic Journal of Chemistry
DOI: 10.17807/ORBITAL.V12I3.1450
Web of Science accession number: WOS:000579752900002

Eu³⁺ and Dy³⁺-activated LaAlO₃ phosphor for solid-state lighting

8

Authors (5): Ramteke, S. K.; Yerpude, A. N. ... Dhoble, S. J.
Published: Mar 2020 in Journal of Materials Science: Materials in Electronics
DOI: 10.1007/S10854-020-03208-X
Web of Science accession number: WOS:000529360200081

Role of Ajan Vruksha/Khandu Chakka Plant (Ehretia Laevis Roxb.) in Covid-19 Pandemic

Authors (4): Rushikesh Thakre; Ketaki Harne ... Shweta Parve

Published: Mar 2020 in International Journal of Research in Pharmaceutical Sciences

DOI: 10.26452/IJRPS.V11ISPL1.2703

Not indexed in
the Web of
Science

Synthesis and Luminescence Properties of La₂O₂S:RE³⁺ (RE³⁺ = Ce³⁺, Dy³⁺, Eu³⁺ and Tb³⁺) Submicron Size Phosphors for Lamp Industry

Authors (4): V. V. Shinde; Department of Electronics, Bajaj College of Science, Wardha, India ...

Department of Physics, RTM Nagpur University, Nagpur- 440033, India

Published: Feb 2020 in International Journal of Innovative Technology and Exploring Engineering

DOI: 10.35940/IJITEE.D1657.019420

Not indexed in
the Web of
Science

A promising Sr₅(PO₄)₃Br:RE³⁺ (RE³⁺= Dy³⁺, Eu³⁺, and Tb³⁺) Phosphors for Near UV Excited White LED and Display Devices

Published: Feb 2020 in International Journal of Innovative Technology and Exploring Engineering

DOI: 10.35940/IJITEE.D1386.029420

Not indexed in
the Web of
Science

Synthesis of Dy³⁺, Eu³⁺ and Tb³⁺ Activated Y₂O₂S Optoelectronic Phosphors for N-UV LED Applications

Published: Feb 2020 in International Journal of Innovative Technology and Exploring Engineering

DOI: 10.35940/IJITEE.D1412.029420

Not indexed in
the Web of
Science

Molecular docking and antioxidant activity of Cleome simplicifolia assisted synthesis of cerium oxide nanoparticles

Authors (5): Chaudhary, Ratiram Gomaji; Chouke, Prashant B. ... Dadure, Kanhaiya M.

Published: 2020 in Materials Today: Proceedings

DOI: 10.1016/J.MATPR.2020.05.062

Web of Science accession number: WOS:000560700700022

4

Study of Excess Parameters and Partial Molar Volume for the Molecular Interactions of an aqueous 2-(tert-butylamino)-1-(3-chlorophenyl) Propan-1-one and NaCl Solution at Different Temperatures

Authors (1): Nita P. Mohabansi

Published: 2020 in Journal of Scientific Research

DOI: 10.37398/JSR.2020.640248

Not indexed in
the Web of
Science

Prospective of Monascus Pigments as an Additive to Commercial Sunscreens

Authors (4): Koli, Sunil H.; Suryawanshi, Rahul K. ... Patil, Satish, V

Published: Dec 2019 in Natural Product Communications

DOI: 10.1177/1934578X19894095

Web of Science accession number: WOS:000502140500001

5

Luminescence study of LiMgB₃O₆:Dy for gamma-ray and carbon ion beam exposure

Authors (6): Yerpude, Mangesh M.; Chopra, Vibha ... Dhoble, S. J.

Published: Dec 2019 in Luminescence: the Journal of Biological and Chemical Luminescence

DOI: 10.1002/BIO.3694

Web of Science accession number: WOS:000480975400001

7

Ultrasonic Investigations on Molecular Interactions of N-Phthaloyl Compounds in Protic and Non-Protic Solvents at 303-318 K Authors (3): Tekade, Pradip; Tale, Bhagyashri; Bajaj, Sonal Published: Sep 2019 in Russian Journal of Physical Chemistry A DOI: 10.1134/S0036024419090188 Web of Science accession number: WOS:000483839300011	0
Microspheres/Custard-Apples Copper (II) Chelate Polymer: Characterization, Docking, Antioxidant and Antibacterial Assay Authors (8): Bagade, Reena; Chaudhary, Ratiram Gomaji ... Juneja, Harjeet Published: May 2019 in ChemistrySelect DOI: 10.1002/SLCT.201901115 Web of Science accession number: WOS:000473422500033	18
Cu₂S nanocrystals incorporated highly efficient non-fullerene ternary organic solar cells Authors (4): Lakhotiya, Govinda; Belsare, Namdeo ... Gupta, Vinay Published: Apr 2019 in Current Applied Physics DOI: 10.1016/J.CAP.2019.01.006 Web of Science accession number: WOS:000459782100007	6
Enhanced performance of PTB7-Th:PCBM based active layers in ternary organic solar cells Authors (5): Lakhotiya, Govinda; Belsare, Namdeo ... Rana, Abhimanyu Published: Mar 2019 in RSC Advances DOI: 10.1039/C8RA08919A Web of Science accession number: WOS:000462644300052	10
Proton/Metal-Ligand Stability Constants of Complexes of Sr(II), Cr(II), and Al(III) with N-Phthaloyl Aminoacid and Benzimidazole Derivatives in Dioxane-Water Mixture Authors (5): Tekade, Pradip V.; Bajaj, Sonal ... Bandwal, Priyanka Published: Dec 2018 in Russian Journal of Physical Chemistry A DOI: 10.1134/S0036024418120427 Web of Science accession number: WOS:000453064000043	0
Specific Molecular Interactions of Dihydropyridine Moiety in Polar and Non-Polar Solvents at Various Concentrations and Temperatures 303-318K on Ultrasonic Data Authors (4): Tekade, Pradip V.; Tale, Bhagyashri U. ... Authankar, Nandini Published: Dec 2018 in Russian Journal of Physical Chemistry A DOI: 10.1134/S0036024418120415 Web of Science accession number: WOS:000453064000025	1
Ultrasonic Studies on Molecular Interactions of N-Phthaloylglycine in Protic and Aprotic Solvents at 303-318 K Authors (3): Tekade, Pradip; Tale, Bhagyashri; Bajaj, Sonal Published: Dec 2018 in Russian Journal of Physical Chemistry A DOI: 10.1134/S0036024418130228 Web of Science accession number: WOS:000459511500011	0

Stability Constants of Complexes of Cr(II) and Sr(II) with Quinazoline and Dihydropyridine in Dioxane-Water Mixture on Spectrophotometric Data Authors (5): Tekade, Pradip V.; Bajaj, Sonal D. ... Sadmake, Sonali Published: Nov 2018 in Russian Journal of Physical Chemistry A DOI: 10.1134/S0036024418110419 Web of Science accession number: WOS:000447676200018	1
Enhancement of photovoltaic performance of polyaniline/graphene composite-based dye-sensitized solar cells by adding TiO₂ nanoparticles Authors (3): Nemade, Kailash; Dudhe, Priyanka; Tekade, Pradip Published: Sep 2018 in Solid State Sciences DOI: 10.1016/J.SOLIDSTATESCIENCES.2018.07.009 Web of Science accession number: WOS:000441881100014	17
Strengthening of photovoltaic and supercapacitive properties of graphene oxide-polyaniline composite by dispersion of alpha-Al₂O₃ nanoparticles Authors (3): Nemade, Kailash; Tekade, Pradip; Dudhe, Priyanka Published: Aug 2018 in Chemical Physics Letters DOI: 10.1016/J.CPLETT.2018.07.018 Web of Science accession number: WOS:000440458100105	8
In Vitro Study of Interactions of Carboxamide Derivatives of Amino Acid with BSA: Ultrasonic Interferometer Authors (3): Thakare, Shrikant Bandupant; Tekade, Pradip Vitthalrao; Pisuddes, Ajay Madhukarrao Published: Jun 2018 in Orbital - The Electronic Journal of Chemistry DOI: 10.17807/ORBITAL.V10I5.1161 Web of Science accession number: WOS:000439075500007	0
Carbon allocation and partitioning in <i>Populus tremuloides</i> are modulated by ectomycorrhizal fungi under phosphorus limitation Authors (3): Shinde, Shalaka; Naik, Dhiraj; Cumming, Jonathan R. Published: Jan 2018 in Tree Physiology DOI: 10.1093/TREEPHYS/TPX117 Web of Science accession number: WOS:000422839600005	11
Comparative Binding Analysis of Pyrimidine Derivative to BSA: Equilibrium, FTIR and Acoustical Study Authors (3): Pisudde, Ajay Madhukarrao; Tekade, Pradip Vitthalrao; Thakare, Shrikant Bandupant Published: Jan 2018 in Orbital - The Electronic Journal of Chemistry DOI: 10.17807/ORBITAL.V10I2.1116 Web of Science accession number: WOS:000431042700005	1
IN VITRO BINDING STUDY OF 4HDDD TO BSA AT PHYSIOLOGICAL PH: ACOUSTICAL AND THERMODYNAMIC STUDY Authors (5): Pisudde, Ajay; Tekade, Pradip ... Petare, Sandip Published: 2018 in Heterocyclic Letters Web of Science accession number: WOS:000433625400014	1

Double Catalytic Kinetic Resolution (DoCKR) of Acyclic anti-1,3-Diols: The Additive Horeau Amplification

27

Authors (7): Merad, Jeremy; Borkar, Prashant ... Bressy, Cyril

Published: Dec 2017 in *Angewandte Chemie International Edition*

DOI: 10.1002/ANIE.201709844

Web of Science accession number: WOS:000417200600047

Microwave Assisted Fast Synthesis of CuO Nanoflakes: Catalytic Application in the Synthesis of 1,4-Dihydropyridine

5

Authors (4): Bajaj, S. D.; Tekade, P. V. ... Borkar, P. G.

Published: Oct 2017 in *Acta Physica Polonica A*

DOI: 10.12693/APHYSPOLA.132.1294

Web of Science accession number: WOS:000415880900015

Enhanced catalytic activity without the use of an external light source using microwave-synthesized CuO nanopetals

5

Authors (6): Lakhotiya, Govinda; Bajaj, Sonal ... Rana, Abhimanyu

Published: May 2017 in *Beilstein Journal of Nanotechnology*

DOI: 10.3762/BJNANO.8.118

Web of Science accession number: WOS:000406245900001

Synthesis of diethyl 4-(phenyl-substituted)-2,6-dimethyl-1,4-dihydropyridine-3,5-dicarboxylates catalyzed by CoCl₂/K-10 montmorillonite in water and their antimicrobial activity

5

Authors (5): Bajaj, S. D.; Mahodaya, O. A. ... Kukade, Suraj D.

Published: Mar 2017 in *Russian Journal of General Chemistry*

DOI: 10.1134/S1070363217030264

Web of Science accession number: WOS:000400085600026
