SCIENCE COLLEGE, KOKRAJHAR

Link of the papers published by the faculty members

(2018-2024)

Name of the faculty member	Title of paper	Department of the teacher	Name of journal	Link to article / paper / abstract of the article
Dr. Ashok Singh	Influence of climatic indices (AMO, PDO, and ENSO) and temperature on rainfall in the Northeast Region of India	Physics	*SN Applied Sciences*	https://doi.org/10.1007/s42452-020-03527-y
	Long-term Rainfall Data Analysis of the Major Stations of Brahmaputra Plain in Northeast Region of India	Physics	*Indian Journal of Science and Technology*	https://doi.org/10.17485/ijst/2020/v13i08/149815
	Investigating the electronic and nonlinear optical properties of fullerene by substituting N, P, As, and Sb in the lattice structure: a DFT study	Physics	*Applied Physics A*	https://doi.org/10.1007/s00339-020-3300-7
	Rainfall Trends in six districts of Assam during the period 1950-2013	Physics	*Research Journal of Chemical and Environmental Sciences*	https://doi.org/10.17485/IJST/v15i10.109

Dr. Bikash Dey	Room temperature ferromagnetism, optical band gap widening in Mg-doped ZnO compounds for spintronics applications	Physics	*Ceramics International*	https://doi.org/10.1016/j.ceramint.2023.08.267
	Room Temperature d^0 Ferromagnetism of Ag:ZnO Compounds	Physics	*Journal of Superconductivity and Novel Magnetism*	https://doi.org/10.1007/s10948-023-06514-7
	Influence of K/Mg co-doping in tuning room temperature d0 ferromagnetism, optical and transport properties of ZnO compounds for spintronics applications	Physics	*Journal of Alloys and Compounds*	https://doi.org/10.1016/j.jallcom.2022.167874
	Influence of Na/Mg co-doping in tuning microstructure, transport, optical and magnetic properties ofTiO_2 compounds for spintronics applications	Physics	*Magnetochemistry*	https://doi.org/10.3390/magnetochemistry8110150
	Crystal structure, microstructure, optical, dielectric, and magnetic properties of TiO_2 nanoparticles	Physics	*Journal of Materials Science: Materials in Electronics*	https://doi.org/10.1007/s10854-022-09111-x
	Observation of room temperature d^0 ferromagnetism, bandgap narrowing, zero dielectric loss, dielectric enhancement in highly transparent p-type Na-doped rutile TiO_2 compounds for spintronics applications	Physics	*Journal of Alloys and Compounds*	https://doi.org/10.1016/j.jallcom.2022.167442.
	Room temperature d^0 ferromagnetism, band-gap reduction, and high optical transparency in p-type K-doped ZnO compounds for spintronics applications	Physics	*Journal of Materials Science in Semiconductor processing*	https://doi.org/10.1016/j.mssp.2022.106798
	Crystal Structure, Optical and Dielectric Properties of Ag:ZnO Composite Like Compounds	Physics	*Journal of Materials Science: Materials in Electronics*	10.1007/s10854-021-07560-4

Dr. Biswajit Nath	Jackfruit (*Artocarpus heterophyllus*) seed as an effective heterogeneous base catalyst towards biodiesel synthesis from soybean oil	Chemistry	*Korean Journal of Chemical Engineering*	https://link.springer.com/journal/11814
	Agricultural waste-based heterogeneous catalyst for production of biodiesel: A ranking study by VIKOR method.	Chemistry	*International Journal of Energy Research*	https://doi.org/10.1155/2023/7208754
	Musa champa peduncle waste-derived efficient catalyst: Studies of biodiesel synthesis, reaction kinetics and thermodynamics	Chemistry	*Energy*	https://doi.org/10.1016/j.energy.2023.126976
	Post-harvest waste to value-added materials: *Musa champa* plant as renewable and highly effective base catalyst for *Jatropha curcas* oil-based biodiesel production	Chemistry	*Bioresource Technology Report*	https://doi.org/10.1016/j.biteb.2023.101338
	Production of renewable biodiesel using metal organic frameworks based materials as efficient heterogeneous catalysts	Chemistry	*Journal of Cleaner Production*	https://doi.org/10.1016/j.jclepro.2022.131955
	Biodiesel production from mixed oils: A sustainable approach towards industrial biofuel production.	Chemistry	*Chemical Engineering Journal Advance*	https://doi.org/10.1016/j.ceja.2022.100284
	Waste Musa paradisiaca plant: An efficient heterogeneous basecatalyst for fast production of biodiesel	Chemistry	*Journal of Cleaner Production*	https://doi.org/10.1016/j.jclepro.2021.127089
	Waste Musa paradisiaca plant: An efficient heterogeneous base catalyst for fast production of biodiesel	Chemistry	*Journal of Cleaner Production*	https://doi.org/10.1016/j.jclepro.2021.127089
	Utilization of renewable and sustainable basic heterogeneous catalyst from Heteropanax fragrans (Kesseru) for effective synthesis of biodiesel from Jatropha curcas oil	Chemistry	*Fuel*	https://doi.org/10.1016/j.fuel.2020.119357
	Synthesis and characterization of heterogeneous catalyst from sugarcane bagasse: Production of jatropha seed oil methyl esters	Chemistry	*Current Research in Green and Sustainable Chemistry*	https://doi.org/10.1016/j.crgsc.2021.100082

	Yellow oleander (Thevetia peruviana) seed as a potential bioresource for industrial applications	Chemistry	*Mini-Reviews in Organic Chemistry MROC*	http://dx.doi.org/10.2174/1570193X17666191230122142
	Waste to value addition: Utilization of waste Brassica nigra plant derived novel green heterogeneous base catalyst for effective synthesis of biodiesel	Chemistry	*Journal of Cleaner Production*	https://doi.org/10.1016/j.jclepro.2019.118112
	Analysis of Some Physico-Chemical Parameters of Various Bottled Drinking Water Available in Kokrajhar Town, Assam, India	Chemistry	*International Journal of Emerging Science and Engineering*	https://www.ijese.org/
	Application of agro-waste derived materials as heterogeneous base catalysts for biodiesel synthesis	Chemistry	*Journal of Renewable and Sustainable Energy*	https://doi.org/10.1063/1.5043328
Dr. Fariha Jabeen	Feeding Biology of *Barilius bendelisis* (Hamilton 1807) from the Hillstreams of Manas River, Assam, India.	Zoology	*Environment and Ecology*	https://doi.org/10.60151/envec/BIHE5989
	A study on the food and feeding habits of the Chocolate Mahseer from Jiyabharali River of Sonitpur District, Assam, India	Zoology	*Indian Journal of Natural Sciences*	*www.transoindia.org.in*
Dr. Femina Brahma	Multiferroic Behaviour solid solution in 'Bi' doped SmFeO3-BaTiO3 Perovskite System.	Physics	*Ceramics International.*	https://doi.org/10.1016/j.ceramint.2022.03.087
	Structural and electrical investigation of 'Bi' doped SmFeO3-BaTiO3 perovskite system	Physics	*Materials Today Proceedings*	https://doi.org/10.1016/j.matpr.2021.09.362
	Investigation of multifunctional characteristics in SmFeO3-BaTiO3 perovskite system for devices	Physics	*Materials Science in Semiconductor Processing*	https://doi.org/10.1016/j.mssp.2021.106071
	Investigation of multifunctional characteristics in SmFeO3-BaTiO3 perovskite system for devices	Physics	*Materials Science in Semiconductor Processing*	http://dx.doi.org/10.1016/j.mssp.2021.106071
	Synthesis and characterization of revived double perovskite Ba0.5Sr1.5FeVO6	Physics	*Journal of Materials Science: Materials in*	https://doi.org/10.1007/s10854-019-

			Electronics	02822-8
Dr. Jwngma Narzary	A study on Ecology of Amphibians breeding habitats of Kokrajhar district, Assam, India.	Zoology	*International Journal of Scientific Research in Biological*	www.ijsdr.org
	Degradation of Amphibian breeding habitats due to road construction in Kokrajhar district, Assam, India**.**	Zoology	*International Journal of Science and Engineering development Research*	IJSDR2002064,www.ijsdr.org
	A study on traditional fish preservation method and certain ethnomedicinal fishes of Bodo tribe of Kokrajhar district, Assam, India.	Zoology	*International Journal of Scientific Research in Biological Science*	https://doi.org/10.26438/ijsrbs/v6i5.6770
Dr. Kushal Choudhury	A Faunistic Survey of Toger Beetles (Coleptera:Carabidae:Cicindalinae) in Chakrachla WLS and Adjoining Reverine Ecosystem in Assam, India	Zoology	*Journal of Thretened Taxa*	https://doi.org/10.11609/jott.5609.12.15.17129-17137
	Proximate and mineral compositions of *Samia cynthia ricini* and *Dytiscus marginalis*, commonly consumed by the Bodo tribe in Assam, India	Zoology	*Bulletin of the National Research Center*	https://doi.org/10.1186/s42269-020-00411-y
	Butterflies of Guma Researve Forest of Western Assam	Zoology	*Journal of Ad. Research*	http://dx.doi.org/10.22192/ijarbs.2020.07.12.005
Dr. Manika Das	Effect of Castor, Ricinus communis L. and banayan, Ficus benghalensis L. plants on economic traits of eri silkworm, Samia ricini Donovan (Lepidoptera: Saturniidae).	Zoology	*International Journal of Tropical Insect science*	https://doi.org/10.1007/s42690-022-00919-y

Dr. Mehdi Al Kausor	Polyaniline (PANI) Grafted Hierarchical Heterostructure Nanocomposites for Photocatalytic Degradation of Organic Pollutants in Waste Water: A Review	Chemistry	*Surfaces and Interfaces*	https://doi.org/10.1016/j.surfin.2022.102079
	Graphene oxide based semiconductor photocatalysts for degradation of organic dye in waste water: A review on fabrication, performance enhancement and challenges	Chemistry	*Inorganic Chemistry Communications*	https://doi.org/10.1016/j.inoche.2021.108630
	Ag_3PO_4-based Nanocomposites and their Applications in Photodegradation of Toxic Organic Dye Contaminated Wastewater: Review on Material Design to Performance Enhancement.	Chemistry	*Journal of Saudi Chemical Society*	https://doi.org/10.1016/j.jscs.2019.09.001
	Facile Fabrication of N-TiO_2/Ag_3PO_4@GO Nanocomposite toward Photodegradation of Organic Dye under Visible Light	Chemistry	*Inorganic Chemistry Communications*	https://doi.org/10.1007/s11051-020-04829-3
	Synthesis, Characterization and Application of Graphene-based Silver Orthophosphate Nanocomposite in Organic Dye Degradation	Chemistry	*Desalination and Water Treatment*	https://doi.org/10.5004/dwt.2019.23386
	Analysis of Some Physico-Chemical Parameters of Various Bottled Drinking Water Available in Kokrajhar Town, Assam, India	Chemistry	*International Journal of Emerging Science and Engineering*	https://www.ijese.org
	Nutritive and nutritional analyses of Chanda nama consumed by the Bodos of Kokrajhar District, BTAD, Assam.	Chemistry	*International Journal of Fundamental and Applied Sciences*	10.59415/ijfas.v7i3.121
Dr. Mohesh Gogoi	Biswa Parivesh Diwas and Cow	Botany	*BioNE*	http://babrone.edu.in/blog/?p=4715
	Assam lemon: A magical fruit	Botany	*BioNE*	http://babrone.edu.in/blog/?p=3790
	Morphological study on rice varieties (Oryza sativa L.) of Parbatjhora sub-division, BTR, Assam India	Botany	*Tropical Plant Research*	https://doi.org/10.22271/tpr.2020.v7.i2.059
	Study on airborne fungal diversity in Kokrajhar	Botany	*Tropical Plant*	https://doi.org/10.2

	Science College Campus, Assam, India.		*Research*	2271/tpr.2019.v6.i2.025
	Estimation of chlorophyll concentration in seven *Citrus* species of Kokrajhar District, BTAD, Assam, India.	Botany	*Tropical Plant Research*	https://doi.org/10.22271/tpr.2020.v7.i2.059
Dr. Sharmistha Chakraborty	The nutrient qualities of the small indigenous fish species Amblypharyngodonmola, most favourite fish food of the local people of kokrahjar, BTAD, Assam, India	Chemistry	*International Journal of All Research Education and Scientific Methods*	https://www.ijaresm.com/
	Nutritive and Nutritional Analses of *Chanda Nama* consumed by the Bodos of Kokrajhar District, BTAD, Assam	Chemistry	*International Journal of Fundamental and Applied Science*	10.59415/ijfas.v7i3.121
	Nutritional Profile of Small Indigenous Food Fish, *Channa Punctatus*	Chemistry	*Journal of Assam Science Society*	https://assmscience society.in
Dr. Sudeep Dey	Properties of Redefined Neutrosophic Composite Relation	Mathematics	*Neutrosophic Systems with Applications*	https://doi.org/10.61356/j.nswa.2023.27
	Separation Axioms in Neutrosophic Topological Spaces	Mathematics	*Neutrosophic Systems with Applications*	http://dx.doi.org/10.5281/zenodo.8195851
	Neutrosophic Pre-compactness	Mathematics	*International Journal of Neutrosophic Science*	https://doi.org/10.54216/IJNS.210110
	Covering properties in neutrosophic topological spaces	Mathematics	*Neutrosophic Sets and Systems*	https://doi.org/10.5281/zenodo.7135370
	Some aspects of countability and covering properties in mixed fuzzy topological space	Mathematics	*Afrika Matematika*	https://doi.org/10.1007/s13370-022-01000-0
	Redefined neutrosophic composite relation and its application in medical diagnosis	Mathematics	*International Journal Of Nonlinear Analysis And Applications*	http://dx.doi.org/10.22075/ijnaa.2022.6329
	Relation of Quasi-coincidence for Neutrosophic	Mathematics	Neutrosophic Sets	http://dx.doi.org/10

	Sets		and Systems	.5281/zenodo.5553546
	Neutrosophic point and its neighbourhood structure	Mathematics	*Neutrosophic Sets and Systems*	https://www.scopus.com/sourceid/21100864379
	Mixed Multiset Topological space and Separation Axioms	Mathematics	*Indian Journal of Pure and Applied Mathematics*	https://doi.org/10.1007/s13226-021-00091-y
	Fuzzy Multiset topological Space	Mathematics	*Global Reserch Methodology*	https://ijsrm.net/index.php/ijsrm/article/download/1007/889/1727
Dr. Swarna Kamal Dey	Scientific validation of toxicological and anti-hyperglycemic effect of Bambusa tulda leaf	Chemistry	*Indian Journal of Traditional Knowledge*	http://op.niscair.res.in/index.php/IJTK/article/view/30801
	GC-MS profiling of phytocomponents from hydromethanolic fraction of *Bambusa tulda* Leaf: a potential candidate for anti-diabetic activity	Chemistry	*International Journal of Life Sciences Research*	www.researchgate.net
Mr. Babla Chandra Ghosh	Fixed point results via G-class function in ordered dualistic partial metric spaces	Mathematics /IT	*AIP Conf. Proc. 2768, 020011*	https://doi.org/10.1063/5.0148389
	Some New Fixed -Point Results in non-Archimedean Dislocated Quasi Modular Metric Space Via C-Class and A-Class functions	Mathematics	*Journal of Scientific Research*	https://doi.org/10.37398/JSR.2021.650520
Mr. Harajit Adhikary	An Ethnobotanical Study on Medicinal Plants Used by Bodo Tribe of Daranggiri, Goalpara, Assam, India	Botany	*Botanica*	www.arba.ac.in
Mr. Rabindra Mahato	A Comprehensive Study of Soft X-ray Absorption Features in GX 13+1 using Newton observations	Physics	*Galaxies*	https://doi.org/10.3390/galaxies11050106
	The pandemic/epidemic and solar terrestrial relation: A brief study with special reference to COVID-19	Physics	*International Journal of Electronics and Applied Research*	http://dx.doi.org/10.33665/IJEAR.2021.v07i02.003

	Effect of internet usage and experience on consumers Decision Making Regarding online Air Ticket Purchase in Guwahati, Assam	Physics	*Journal of the Gujrat Research Society*	http://gujaratresearchsociety.in
	Wind Profiling features and atmospheric dynamics: A few first observations from ST Radar of Gauhati University	Physics	*International Journal of Electronics and Applied Research*	10.33665/IJEAR.2019.v06i02.004
Mr. Sanjay Kumar Thakur	Enumeration of cyclic verticesand components over the congruence a^11 ≡ b(mod n).	Mathematics	*Notes on NumberTheory and Discrete Mathematics*	https://doi.org/10.7546/nntdm.2023.29.3.525-537
	The structure of the powerdigraph connected with thecongruence a^11 ≡ b (mod n)	Mathematics	*Proyecciones Journalof Mathematics*	http://dx.doi.org/10.22199/issn.0717-6279-5600
	Indigenous Traditional Knowledge for rice pest management practiced by different ethnic communities in Kokrajhar district of Assam (BTAD)	Mathematics	*Journal of the Gujarat Research Society*	http://gujaratresearchsociety.in
	Effectiveness of Microbial (Entomopathogenic) agents and Botanical extracts against small rice grasshoppers (*Oxya hyla hyla*)	Mathematics	*International Journal of Advanced Science and Technology*	http://sersc.org/journals/index.php/ijast
Mr. Taznur Ahmed	Adsorptive Accumulation of Methylene Blue Dye from Aqueous Effluent by NiFe2O4-GO Nano-adsorbent	Chemistry	*World Journal of Chemical Education*	https://doi.org/10.12691/wjce-9-1-5