3.2.1 Number of papers published per teacher in the Journals notified on UGC website during the last five years (5)

Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISSN number	ent of the Journal /Digital Object Identifier (doi) number		
						Link to website of the Journal	Link to article/paper/abstract of the article	Is it listed in UGC Care list/Scopus/Web of
2016-17								
1.Carbon Sequestration Potential and Edaphic Properties Along the Plantation Age of Rubber in Tripura, Northeastern India.	**Dr. Bal Krishan Choudhury**	**Department of EVS**	Current World Environment 11 (3), 756	2016	EISSN: 2320-8031	http://www.cwejournal.org/	DOI:http://dx.doi.org/10.12944/CWE.11.3.10	UGC CARE-SCIENCE
2. Above ground woody biomass, carbon stocks potential in selected tropical forest patches of Tripura, Northeast India.	**Dr. Bal Krishan Choudhury**	**Department of EVS**	Open Journal of Ecology 6 (10), 598	2016	ISSN Print:2162-1965 ISSN Online:2162-1993	https://www.scirp.org/journal/oje/	https://www.scirp.org/journal/PaperInformation.aspx?PaperID=70814&#abstract	Group-II (Web of Science)
3. Effects of Land Use on the Soil Organic Carbon Storage Potentiality and Edaphic Factors in Tripura, Northeast India.	**Dr. Bal Krishan Choudhury**	**Department of EVS**	American Journal of Climate Change 5 (5), 417-429	2016	Issn Print:2167-9495 Issn Online:2167-9495	https://www.scirp.org/journal/journalarticles.aspx?journalid=1304	https://www.scirp.org/journal/paperinformation.aspx?paperid=70585	
4. Applications of Remote Sensing and GIS in Conservation of Resources	**Dr. Bal Krishan Choudhury**	**Department of EVS**	Remote Sensing & GIS Applications in Environmental Sciences 6 (38), 11	2016				

5. Changes of woody species diversity, horizontal and vertical distribution of stems across interior to outside within a primate rich habitat of Northeast India.	**Dr. Bal Krishan Choudhury**	**Department of EVS**	Journal of Forestry Research 27 (3), not assigned	2016	Issn:1993-0607	https://www.springer.com/journal/11676/	https://www.researchgate.net/publication/305424693_Changes_of_woody_species_diversity_horizontal_and_vertical_distribution_of_stems_across_interior_to_outside_within_a_primate_rich_habitat_of_Northeast_India	Group-II (Web of Science)
6. pH induced interaction of DPPC with a fluorescent dye in Langmuir and Langmuir Blodgett (LB) films.	Dr. Soma Banik	Department of Physics	Molecular Crystals And Liquid Crystals, Taylor & Francis 643 (2017) 255-265	2017	Issn:1542-1406	https://www.tandfonline.com/	https://doi.org/10.1080/15421406.2016.1263103	Group-II (Web of Science)
7.FP-LAPW methodology based theoretical investigation of structural, electronic and optical properties of $Mg_xPb_{1-x}S$, $Mg_xPb_{1-x}Se$ and $Mg_xPb_{1-x}Te$ ternary alloys	Dr. Rahul Bhattacharje e	Department of Physics	Journal of Physics and Chemistry of Solids 100, 57-70	2017	Issn: 0022-3697	https://www.journals.elsevier.com/journal-of-physics-and-chemistry-of-solids	http://dx.doi.org/10.1016%2Fj.jpcs.2016.09.005	Group-II (Web of Science)

8. DFT based FP-LAPW investigation of structural, electronic and optical properties of $Sr_xPb_{1-x}S$, $Sr_xPb_{1-x}Se$ and $Sr_xPb_{1-x}Te$ ternary alloys	Dr. Rahul Bhattacharjee	Department of Physics	Journal of Alloys and Compounds 698, 868-882,	2017	Issn: 0925-8388	https://www.sciencedirect.com/journal/journal-of-alloys-and-compounds	https://doi.org/10.1016/j.jallcom.2016.12.182	Group-II (Web of Science)
9. Theoretical study of structural, electronic and optical properties of $Ba_xPb_{1-x}S$, $Ba_xPb_{1-x}Se$ and $Ba_xPb_{1-x}Te$ ternary alloys using FP-LAPW approach	Dr. Rahul Bhattacharjee	Department of Physics	Journal of Alloys and Compounds 694, 1348-1364	2017	Issn: 0925-8388	https://www.sciencedirect.com/journal/journal-of-alloys-and-compounds	https://doi.org/10.1016/j.jallcom.2016.10.096	Group-II (Web of Science)
10. Stability of J-aggregated species in an indocarbocyanine dye in Langmuir–Blodgett Films	Dr. Subrata Deb	Department of Physics	Journal of Luminescence, Volume 179, 287-296	2017	0022-2313 / 1872-7883	https://www.sciencedirect.com/journal/journal-of-luminescence	https://doi.org/10.1016/j.jlumin.2016.07.027	

11. Comparisons between intragastric and small intestinal delivery of corresponding nutrition in the critically ill: a comprehensive approach and meta-analysis	Dr Amitabha Kar & Sankari Das	Department of Human Physiology	International Journal of Advanced Scientific Research 1(4) 77-83	2016	ISSN: 2456-0421	https://www.allscientificjournal.com/	https://www.allscientificjournal.com/archives/2016/vol1/issue4/1-4-22	
12.Insights about the role of glucocorticoid action in the pathophysiology of the metabolic syndrome	Dr Amitabha Kar & Sankari Das	Department of Human Physiology	International Journal of Advanced Scientific Research, 1(4) 68-76	2016	ISSN: 2456-0421	https://www.allscientificjournal.com/	https://www.allscientificjournal.com/archives/2016/vol1/issue4/1-4-21	
13. A glimpse of fructose, insulin resistance, and metabolic dyslipidemia.	Dr Amitabha Kar & Sankari Das	Department of Human Physiology	International Journal of Advanced Science and Research, 1(7) 37-46	2016	ISSN: 2455-4227	https://www.allsciencejournal.com/	https://www.allsciencejournal.com/search?keyword=A+glimpse+of+fructose%2C+insulin+resistance%2C+and+metabolic+dyslipidemia	

14. A comprehensive biofeedback of beta-hydroxy-beta-methylbutyrate (HMB) on exercise physiology and body composition across varying levels of age, sex, and training experience	Dr Amitabha Kar & Sankari Das	Department of Human Physiology	International Journal of Advanced Science and Research, 1(7) 23-36	2016	ISSN: 2455-4227	https://www.allsciencejournal.com/	https://www.allsciencejournal.com/search?keyword=A+comprehensive+biofeedback+of+beta-hydroxy-beta-methylbutyrate+%28HMB%29+on+exercise+physiology+and+body+composition+across+varying+levels+of+age%2C+sex%2C+and+training+experience	
15. An insight of consequences of body weight on altered expression of nuclear receptors and interrelation of cyclooxygenase-2 in human colorectal cancers	Dr Amitabha Kar & Sankari Das	Department of Human Physiology	International Journal of Applied Research (IJAR), 3 (4)577-584ISSN Print: 2394-7500	2016	ISSN Online: 2394-5869	https://www.allresearchjournal.com/	https://www.allresearchjournal.com/archives/?year=2017&vol=3&issue=4&part=I&ArticleId=3594	https://www.allresearchjournal.com/
2017-2018								
1. Applications of Remote Sensing and GIS in Land Resource Management	Dr Bal krishan Choudhary	Department of EVS	E-PG Pathsala – Module-Environmental Science 6 (29), 18.	2017		https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=0Xvq9yUM2ILDrJ07FvlArQ==	https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=0Xvq9yUM2ILDrJ07FvlArQ==	

2. Do institutions affect Economic Growth? An Empirical Analysis of Selected South Asian Countries	Dr. Jayanti Bhattacharje e	Department of Economics	Asian Journal of Comparative Politics, 2(3), 243-260	2017	2057-8911 / 2057-892X	https://journals.sagepub.com/home/acp	https://doi.org/10.1177%2F2057891116671833	Group-II (Web of Science):Arts & Humanities
3. Effects of barium (Ba) doping on structural, electronic and optical properties of binary strontium chalcogenide semiconductor compounds - A theoretical investigation using DFT based FP-LAPW approach.	Dr. Rahul Bhattacharje e	Department of Physics	Materials Chemistry and Physics 199, 295-312	2017	0254-0584 / 1879-3312	https://www.sciencedirect.com/journal/materials-chemistry-and-physics/vol/115/issue/1	https://doi.org/10.1016/j.matchemphys.2017.06.057	Group-II (Web of Science)
4. Theoretical investigation of structural, electronic and optical properties of $Mg_xBa_{1-x}S$, $Mg_xBa_{1-x}Se$ and $Mg_xBa_{1-x}Te$ ternary alloys using DFT based FP-LAPW approach	Dr. Rahul Bhattacharje e	Department of Physics	Journal of Physics and Chemistry of Solids 110, 15-29	2017	0022-3697 / 1879-2553	https://www.sciencedirect.com/journal/journal-of-physics-and-chemistry-of-solids	https://doi.org/10.1016/j.jpcs.2017.05.015	Group-II (Web of Science)

5. Effects of doping of calcium atom(s) on structural, electronic and optical properties of binary strontium chalcogenides - A theoretical investigation using DFT based FP-LAPW methodology	Dr. Rahul Bhattacharje e	Department of Physics	Solid State Sciences 71, 92-110	2017	1293-2558 / 1873-3085	https://www.sciencedirect.com/journal/solid-state-sciences	http://dx.doi.org/10.1016%2Fj.solidstatesciences.2017.06.010	Group-II (Web of Science)
6. Influence of doping of mercury atom(s) on optoelectronic properties of binary cadmium chalcogenides - A density functional theory based investigation with different exchange-correlation functionals and including spin-orbit coupling	Dr. Rahul Bhattacharje e	Department of Physics	Current Applied Physics 18 (6), 698-716	2018	1567-1739 / 1878-1675	https://www.sciencedirect.com/journal/current-applied-physics	https://doi.org/10.1016/j.cap.2018.03.010	Group-II (Web of Science)

7. Modification of band gaps and optoelectronic properties of binary calcium chalcogenides by means of doping of magnesium atom(s) in rock-salt phase- a first principle based theoretical initiative	Dr. Rahul Bhattacharje e	Department of Physics	Journal of Solid State Chemistry 258, 358-375	2018	0022-4596 / 1095-726X	https://www.sciencedirect.com/journal/journal-of-solid-state-chemistry	https://doi.org/10.1016/j.jssc.2017.10.028	Group-II (Web of Science)
8. Effects of doping of mercury atom (s) on optoelectronic properties of binary zinc chalcogenides-A first principle based theoretical investigation.	Dr. Rahul Bhattacharje e	Department of Physics	Journal of Alloys and Compounds 748, 446-463,	2018	0925-8388 / 1873-4669	https://www.sciencedirect.com/journal/journal-of-alloys-and-compounds	https://doi.org/10.1016/j.jallcom.2018.03.093	Group-II (Web of Science)
9. Modified aggregation pattern of cresyl violet acetate adsorbed on nano clay mineral layers in Langmuir Blodgett film. 353 (2018) 570-580.	Dr. Soma Banik	Department of Physics	Journal of Photo chemistry and Photobiology A: Chemistry	2017	1010-6030 / 1873-2666	https://www.sciencedirect.com/journal/journal-of-photochemistry-and-photobiology-a-chemistry	https://doi.org/10.1016/j.jphotochem.2017.12.013	Group-II (Web of Science)

10. Effect of nano clay Laponite on stability of SHG active J-aggregate of a thiacyanine dye onto LB films	Dr. Subrata Deb	Department of Physics	**Applied Clay Science** 147 (2017) 105–116	2017	0169-1317 / 1872-9053	https://www.sciencedirect.com/journal/applied-clay-science	https://doi.org/10.1016/j.clay.2017.07.013	Group-II (Web of Science)
2018-2019								
1. Economic Integration and South Asia: Exploring Spillover Effects for North-East India	Dr. Jayanti Bhattacharje e	Department of Economics	International Journal of Advance and Innovative Research 5(4), 86-93	2018	2394-7780	https://iaraedu.com/about-journal/index.php	https://iaraedu.com/about-journal/ijair-volume-v-issue-4-xii-october-december.php	
2.Soap Opera and its audience reception:A review of shifting paradigm pp.87-101	Sudeshna Chanda	Department of Sociology	Lokaratna Vol XI-Part 1, 31st March 2018	2018	2347-6427	https://folkloref oundation.org/lokaratna/	https://folklorefoundation.org/wp-content/uploads/2021/07/375427042-Lokaratna-Vol-XI-I-2018.pdf	
3. Determinants of Non-Performing Assets in Banks in India: A Panel Data Analysis	Dr. Jayanti Bhattacharje e	Department of Economics	International Journal of Advance and Innovative Research Vol.5, Issue 3 (IV), 63-68	2018	2394-7780	https://iaraedu.com/about-journal/index.php	https://iaraedu.com/pdf/ijair-volume-5-issue-3-iv-july-september-2018.pdf	

4. Effect of nano clay platelets on the hybrid monolayer of a cationic oxazine dye: In-situ Brewster Angle Microscopic (BAM) study. 5 (2018) 2352-2358.	Dr. Soma Banik	Department of Physics	Materials Today: Proceedings, Elsevier	2018	2214-7853	https://www.sciencedirect.com/journal/materials-today-proceedings	https://doi.org/10.1016/j.matpr.2017.09.241	
5. Study of aggregation behavior of water insoluble metallporphyrin (Zn) in LB film	Dr. Soma Banik	Department of Physics	Materials Today: Proceedings, Elsevier, 5 (2018)	2018	2214-7853	https://www.sciencedirect.com/journal/materials-today-proceedings	https://doi.org/10.1016/j.matpr.2017.09.226	
6. Optoelectronic properties of CaBaX (X=S, Se and Te) alloys: A first principles investigation employing modified Becke–Johnson (mBJ) functional	Dr. Rahul Bhattacharje e	Department of Physics	International Journal of Modern Physics B 33 (07)	2019	0217-9792 / 1793-6578	https://www.worldscientific.com/worldscinet/ijmpb	https://doi.org/10.1142/S0217979219500425	UGC CARE-SCIENCE

7. Density functional calculations of structural, elastic and optoelectronic features of MgxZn1− xS, MgxZn1− xSe and MgxZn1− xTe alloys	Dr. Rahul Bhattacharje e	Department of Physics	Materials Chemistry and Physics 230, 54-77	2019	0254-0584 / 1879-3312	https://www.sciencedirect.com/journal/materials-chemistry-and-physics	https://doi.org/10.1016/j.matchemphys.2019.03.050	UGC CARE-SCIENCE
8. Violence Against Women in Popular Bengali Soap Opera Texts: Interpreting Female Viewer's Reception in Urban Tripura.	Sudeshna Chanda	Department of Sociology	The Eastern Anthropologist, Vol.71, No. 1-2	2018	0012-8686	https://serialsjournals.com/index.php?route=product/product&product_id=377	https://www.academia.edu/40175953/VIOLENCE_AGAINST_WOMEN_IN_POPULAR_BENGALI_SOAP_OPERA_TEXTS_INTERPRETING_FEMALE_VIEWERS_RECEPTION_IN_URBAN_TRIPURA	UGC CARE-Group 1
9. Metachromasia induced in Cationic dyes by neem (Azadiracta indica) Polysaccharide	Dr. Amitabha Saha	Department of Chemistry	International Journal of Science and Research.	2018	2319-7064	https://www.ijsr.net/	https://www.ijsr.net/archive/v7i7/ART20191311.pdf	
9. Major causes of soil degradation in Haora drainage basin, Tripura, India	Hiraxmi Deb Barma		IJSSER	2018	2455-8834	https://ijsser.org/	https://ijsser.org/more2018.php?id=309	
2019-2020								

1. First principles investigations of structural and optoelectronic properties of cubic $Mg_xZn_{1-x}SeyTe_{1-y}$ quaternary semiconductor alloys using FP-LAPW approach.	Dr. Rahul Bhattacharje e	Department of Physics	Applied Physics A 125 (2019) 644-667	2019	0947-8396 / 1432-0630	https://www.researchgate.net/journal/Applied-Physics-A-1432-0630	https://link.springer.com/article/10.1007%2Fs00339-019-2938-5	UGC Care List-II (Web of Science)
2. Structural and optoelectronic properties of cubic $Mg_xZn_{1-x}S_yTe_{1-y}$ semiconductor quaternary alloys-a first principles investigation.	Dr. Rahul Bhattacharje e	Department of Physics	Physica B 574 (2019) 411669 -88	2019	0921-4526 / 1873-2135	https://www.sciencedirect.com/journal/physica-b-condensed-matter	https://doi.org/10.1016/j.physb.2019.411669	UGC Care List-II (Web of Science)
3. Calculations of the structural and optoelectronic properties of cubic $Cd_xZn_{1-x}Se_yTe_{1-y}$ semiconductor quaternary alloys using the DFT-based FP-LAPW approach.	Dr. Rahul Bhattacharje e	Department of Physics	Journal of Computational Electronics (2019) 2-25	2020	1569-8025 / 1572-8137	https://www.springer.com/journal/10825	https://link.springer.com/article/10.1007/s10825-019-01409-0	UGC Care List-II (Web of Science)

4. Density Functional Investigations of Structural, Mechanical and Optoelectronic Properties of BeS_xSe_{1-x}, BeS_xTe_{1-x} and $BeSe_xTe_{1-x}$ Ternary Alloys	Dr. Rahul Bhattacharje e	Department of Physics	Journal of ELECTRONIC MATERIALS (2019) 1-15	2019	0361-5235 / 1543-186X	https://www.researchgate.net/journal/Journal-of-Electronic-Materials-1543-186X	http://dx.doi.org/10.1007/s11664-019-07820-4	UGC Care List-II (Web of Science)
5. First principle investigations of structural and optoelectronic features of cubic $Cd_xZn_{1-x}S_yTe_{1-y}$ quaternary semiconductor alloys.	Dr. Rahul Bhattacharje e	Department of Physics	Optik - International Journal for Light and Electron Optics 201(2020) 163510-28	2020	0030-4026 / 1618-1336	https://www.sciencedirect.com/journal/optik	https://doi.org/10.1016/j.ijleo.2019.163510	UGC Care List-II (Web of Science)
6. Density Functional Calculations of Elastic and Thermal Properties of Zinc-Blende Mercury–Cadmium-Chalcogenide Ternary Alloys	Dr. Rahul Bhattacharje e	Department of Physics	Metals and Materials International	2020	1598-9623 / 2005-4149	https://www.springerprofessional.de/en/metals-and-materials-international/4943136	https://ui.adsabs.harvard.edu/link_gateway/2021MMI....27.3823D/doi:10.1007/s12540-020-00778-7	UGC Care List-II (Web of Science)

7. Density Functional Investigations of Structural, Mechanical and Optoelectronic Properties of BeS_xSe_{1-x}, BeS_xTe_{1-x} and $BeSe_xTe_{1-x}$ Ternary Alloys	Dr. Rahul Bhattacharjee	Department of Physics	Journal of Electronic Materials	2020	0361-5235 / 1543-186X	https://www.researchgate.net/journal/Journal-of-Electronic-Materials-1543-186X	http://dx.doi.org/10.1007/s11664-019-07820-4	UGC Care List-II (Web of Science)
8. Structural, mechanical and optoelectronic features of cubic $Mg_xCd_{1-x}S$, $Mg_xCd_{1-x}Se$ and $Mg_xCd_{1-x}Te$ semiconductor ternary alloys: Theoretical investigations using density functional FP-LAPW approach	Dr. Rahul Bhattacharjee	Department of Physics	Computational Condensed Matter	2020	2352-2143	https://www.sciencedirect.com/journal/computational-condensed-matter	https://doi.org/10.1016/j.cocom.2019.e00448	UGC Care List-II (Web of Science)

9. Structural, mechanical and optoelectronic properties of cubic Be xMg 1-xS , Be xMg 1-xSe and Be xMg 1-xTe semiconductor ternary alloys: a density functional study	Dr. Rahul Bhattacharje e	Department of Physics	Bulletin of Materials Science	2020	0250-4707 / 0973-7669	https://www.springer.com/journal/12034	https://doi.org/10.1007/s12034-019-2006-y	UGC Care List-II (Web of Science)
10. Density functional study on structural and optoelectronic properties of cubic Mg xZn 1-xS ySe 1-y semiconductor quaternary alloys	Dr. Rahul Bhattacharje e	Department of Physics	Pramana - Journal of Physics	2020	0304-4289 / 0973-7111	https://www.researchgate.net/journal/Pramana-0973-7111	http://dx.doi.org/10.1007/s12043-020-01975-0	UGC Care List-II (Web of Science)
11. Cationic and anionic concentration dependent elastic properties of zinc blende specimens within CdxZn1-xSySe1-y quaternary system: Calculations with density functional theory	Dr. Rahul Bhattacharje e	Department of Physics	Solid State Communications	2020	0038-1098 / 1879-2766	https://www.sciencedirect.com/journal/solid-state-communications	https://doi.org/10.1016/j.ssc.2020.114050	UGC Care List-II (Web of Science)

12. Discovery of novel potential selective HDAC8 inhibitors by combine ligand-based, structurebased virtual screening and in-vitro biological evaluation	Dr Samhita Bhowmik	Department of Chemistry	Scientific Reports	2019	2045-2322	https://www.nature.com/srep/	https://www.nature.com/articles/s41598-019-53376-y	UGC Care List-II (Web of Science)
13. Forest Biomass estimation using remote sensing and field inventory: a case study of Tripura, India	Dr. Bal Krishan Choudhury	Department of EVS	Environment Monitoring and Assessment	2019	0167-6369 / 1573-2959	https://www.researchgate.net/journal/Environmental-Monitoring-and-Assessment-1573-2959	https://link.springer.com/article/10.1007%2Fs10661-019-7730-7	UGC Care List-II (Web of Science)
14. Potential Biomass Pools and Edaphic Properties of Plantation Forest in Tripura, India	Dr. Bal Krishan Choudhury	Department of EVS	International Journal of Ecology and Environmental Sciences 45 (4): 369-381, 2019	2019		https://www.researchgate.net/publication/338247884_Potential_Biomass_Pools_and_Edaphic_Properties_of_Plantation_Forest_in_Tripura_India	https://www.researchgate.net/publication/338247884_Potential_Biomass_Pools_and_Edaphic_Properties_of_Plantation_Forest_in_Tripura_India	
2020-2021								

1. Tarashankarer jibon darshan o Arogyaniketan	Dr Nivedita Dhar	Department of Bengali	Ebong Mohua,136 volume, Golekauchawk, Midnapur, W.B	2020				UGC Care List-I
2. Investigation on aeromycoflora in extramural and intramural environment at Udaipur, Gomati District, Tripura	Dr. Sikha Banik	Department of Botany	Indian Journal of Aerobiology	2021				
3. Identification of potential inhibitors of SARS-CoV-2 main protease and spike receptor from 10 important spices through structure-based virtual screening and molecular dynamic study	Dr. Samhita Bhaumik	Department of Chemistry	Journal of Biomolecular Structure and Dynamics	2020	0739-1102 / 1538-0254	https://www.tandfonline.com/journals/tbsd20	https://doi.org/10.1080/07391102.2020.1819883	UGC Care List-II (Web of Science)
4. In Silico Identification of Potential Inhibitors of the Main Protease of SARS-CoV-2 Using Combined Ligand-Based and Structure-Based Drug Design Approach	Dr. Samhita Bhaumik	Department of Chemistry	Eurasian Journa of Medicine and Oncology	2020	2587-2400 / 2587-196X	https://ejmo.org/volume/4/issue/4	https://dx.doi.org/10.14744/ejmo.2020.91768	UGC Care List-II (Web of Science)

5. In Silico Identification of Potential Inhibitors of ADP-Ribose Phosphatase of SARS-CoV-2 nsP3 by Combining E-Pharmacophore-and Receptor-Based Virtual Screening of Database	Dr. Samhita Bhaumik	Department of Chemistry	Chemistry Select	2020	2365-6549	https://chemistry-europe.onlinelibrary.wiley.com/journal/23656549	https://dx.doi.org/10.1002%2Fslct.202001419	UGC Care List-II (Web of Science)
6. Potentiality of Moringa oleifera against SARS-CoV-2: identified by a rational computer aided drug design method	Dr. Samhita Bhaumik	Department of Chemistry	Journal of Biomolecular Structure and Dynamics	2021	0739-1102 / 1538-0254	https://www.tandfonline.com/journals/tbsd20	https://doi.org/10.1080/07391102.2021.1898475	UGC Care List-II (Web of Science)
7. Phytochemicals of Zingiberaceae family exhibit potentiality against SARS-CoV-2 main protease identified by a rational computer-aided drug design	Dr. Samhita Bhaumik	Department of Chemistry	Natural Product Research	2021	1478-6419 / 1478-6427	https://www.tandfonline.com/journals/gnpl20	https://doi.org/10.1080/14786419.2021.1994563	UGC Care List-II (Web of Science)

8. Identification of Potential Scaffolds From the Shrub Justicia Adhatoda Against SARS-CoV-2 Main Protease Target	Dr. Samhita Bhaumik	Department of Chemistry	International Journal of Quantitative Structure-Property Relationships (IJQSPR)	2021	2379-7479/2379-7487	https://www.researchgate.net/journal/International-Journal-of-Quantitative-Structure-Property-Relationships-2379-7487	http://dx.doi.org/10.4018/IJQSPR.2021100104	UGC Care List-I
9. Writing Ordinary Lives;: An Analysis of Selected Women's Memoirs From North-East India	Dr. Somali Saha	Department of English	Langlit: An International Peer-Reviewed Open Access Journal	2021	2349-5189	https://www.langlit.org/	https://drive.google.com/file/d/1rnPuvoeAXe6fpHTy7jJ1sn7-cxj95LkA/view	
10. Metachromasia induced in cationic dyes by Iodine Salt	Dr Amitabha Saha	Department of Chemistry	Internaitonal Journal of Scienc and Reasearch	2020		https://www.ijsr.net/	https://www.ijsr.net/archive/v9i4/SR20410193025.pdf	
11. A Concise Review Report on Induced Breeding of Indian Major Carps through Pituitary Extract and Synthetic Hormone Analogues	Dr. Saumen Chakraborti	Department of Zoology	International Journal of Recent Scientific Research Vol. 11, Issue 11(A), pp. 40011-40016, November, 2020	2020	0976-3031	http://www.recentscientific.com/	http://www.recentscientific.com/concise-review-report-induced-breeding-indian-major-carps-through-pituitary-extract-and-synthetic-ho	
12. Studies on Density, Percentage Composition and Seasonal Variations of Phytoplankton in a Perennial Pond Ecosystem of Tripura, India with a note on Physico-chemical Factors	Dr. Saumen Chakraborti	Department of Zoology	International Journal of Current Microbiology and Applied Sciences 10(07): 662-670, 2021	2021	2319-7706	https://www.ijcmas.com/	https://doi.org/10.20546/ijcmas.2021.1007.072	

13. A Comparative Study on the Occurrence, Density and Seasonal Variations of Phytoplankton and Zooplankton in a Perennial Pond Ecosystem of Tripura, India	Dr. Saumen Chakraborti	Department of Zoology	Applied Ecology and Environmental Sciences Vol. 9, No. 8, 761-768, 2021	2021	2328-3920	http://www.sciepub.com/journal/AEES	https://doi.org/10.12691/aees-9-8-7	
14. A comparative study on the density and seasonal variations of rotifer and copepod fauna in a pond of Tripura, India with a note on water quality parameters	Dr. Saumen Chakraborti	Department of Zoology	International Journal of Fauna and Biological Studies 2021; 8(6): 01-06	2021	2347-2677	https://www.faunajournal.com/	https://doi.org/10.22271/23940522.2021.v8.i6a.855	
15. "Density Functional Calculations of Elastic and Thermal Properties of Zinc-Blende Mercury–Cadmium-Chalcogenide Ternary Alloys."	Dr. Rahul Bhattacharje e	Department of Physics	Metals and Materials International (2020) (SPRINGER)	2020	1598-9623 / 2005-4149	https://www.springer.com/journal/12540	https://ui.adsabs.harvard.edu/link_gateway/2021MMI....27.3823D/doi:10.1007/s12540-020-00778-7	UGC Care List-II (Web of Science)

16. “Density functional calculations of elastic and thermal properties of zinc-blende HgSxSe1− x, HgSxTe1− x and HgSexTe1− x ternary alloys.”	Dr. Rahul Bhattacharje e	Department of Physics	Computational Condensed Matter 24(2020) e00482 Elsevier	2020	2352-2143	https://www.sciencedirect.com/journal/computational-condensed-matter	https://doi.org/10.1016/j.cocom.2020.e00482	UGC Care List-II (Web of Science)
17. “First-principle calculations of structural and optoelectronic properties of cubic Cd x Zn 1− x S y Se 1− y quaternary alloys with modified Becke–Johnson (mBJ) functional.”	Dr. Rahul Bhattacharje e	Department of Physics	Indian Journal of Physics 1-13 Springer India	2020	0973-1458 / 0974-9845	https://www.springer.com/journal/12648	https://ui.adsabs.harvard.edu/link_gateway/2021InJPh..95.2313C/doi:10.1007/s12648-020-01880-7	UGC Care List-II (Web of Science)

18. “Structural, mechanical and optoelectronic properties of cubic BexMg1−xS, BexMg1−xSe, BexMg1−xS, BexMg1−xSe and BexMg1−xTe, BexMg1−xTe semiconductor ternary alloys: a density functional study.”	Dr. Rahul Bhattacharje e	Department of Physics	Bulletin of Materials Science 43 (2020) 1-26 Indian Academy of Sciences	2020	0250-4707 / 0973-7669	https://www.researchgate.net/journal/Bulletin-of-Materials-Science-0973-7669	https://www.researchgate.net/publication/339229024_Structural_mechanical_and_optoelectronic_properties_of_cubic_Be_x_Mg_1-x_S_Be_x_Mg_1-x_Se_and_Be_x_Mg_1-x_Te_semiconductor_ternary_alloys_a_density_functional_study	UGC Care List-II (Web of Science)
19. “Density functional study on structural and optoelectronic properties of cubic Mg x Zn 1 - x S y Se 1 - y semiconductor quaternary alloys.”	Dr. Rahul Bhattacharje e	Department of Physics	Pramana 94 (2021) 1-20 Springer India	2020	0304-4289 / 0973-7111	https://www.springer.com/journal/12043/	http://dx.doi.org/10.1007/s12043-020-01975-0	UGC Care List-II (Web of Science)

20. “Cationic and anionic concentration dependent elastic properties of zinc blende specimens within CdxZn1-xSySe1-y quaternary system: Calculations with density functional theory.”	Dr. Rahul Bhattacharje e	Department of Physics	Solid State Communicatio ns 322 (2020) 114050 Pergamon	2020	0038-1098 / 1879-2766	https://www.sci encedirect.com/ journal/solid-state-communications	https://doi.org/10.101 6/j.ssc.2020.114050	UGC Care List-II (Web of Science)
21. “Density functional study of elastic and thermal properties of cubic mercury┐ zinc-chalcogenide ternary alloys”	Dr. Rahul Bhattacharje e	Department of Physics	Bulletin of Materials Science. 43 (2020) 1-17 Indian Academy of Sciences	2020	0250-4707 / 0973-7669	https://www.spr inger.com/journ al/12034	https://doi.org/10.100 7/s12034-020-02236-x	UGC Care List-II (Web of Science)
22. “Cationic and anionic composition-dependent mechanical and thermal properties of zinc-blende specimens under MgxZn1-xSySe1-y, MgxZn1-xSySe1-y quaternary system: calculations with density functional FP-LAPW scheme.”	Dr. Rahul Bhattacharje e	Department of Physics	The European Physical Journal B 94 (2021) 1-16 SPRINGER	2021	1434-6028 / 1434-6036	https://www.spr inger.com/journ al/10051/	https://doi.org/10.114 0/EPJB%2FS10051-020-00024-4	UGC Care List-II (Web of Science)

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Women's College
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Email: womenscollege1965@gmail.com
Website: womencollege.nic.in

Ref. No: WC/IQAC/SSR-DVV/CR3/3.2.1 *Dated Agartala,* 14 / 9 / 2022

Metric 3.2.1

Number of papers published per teacher in the Journals notified on UGC website during the last five years

As per DVV suggested inputs regarding metric 3.2.1, the link landing to the paper/article, link to the journal website, presence of the paper in the UGC CARE list/Scopus/Web of Science/other are already uploaded in the Self Study Report. However, screenshots of research articles clearly showing the title of the article, affiliation, name of the journal, year and authors name is being provided with a separate document as supporting material in relevance to the metric.

14.9.2022

Principal,

Women's College

Agartala, West Tripura

Principal
Women's College,
Agartala.

Metric 3.2.1

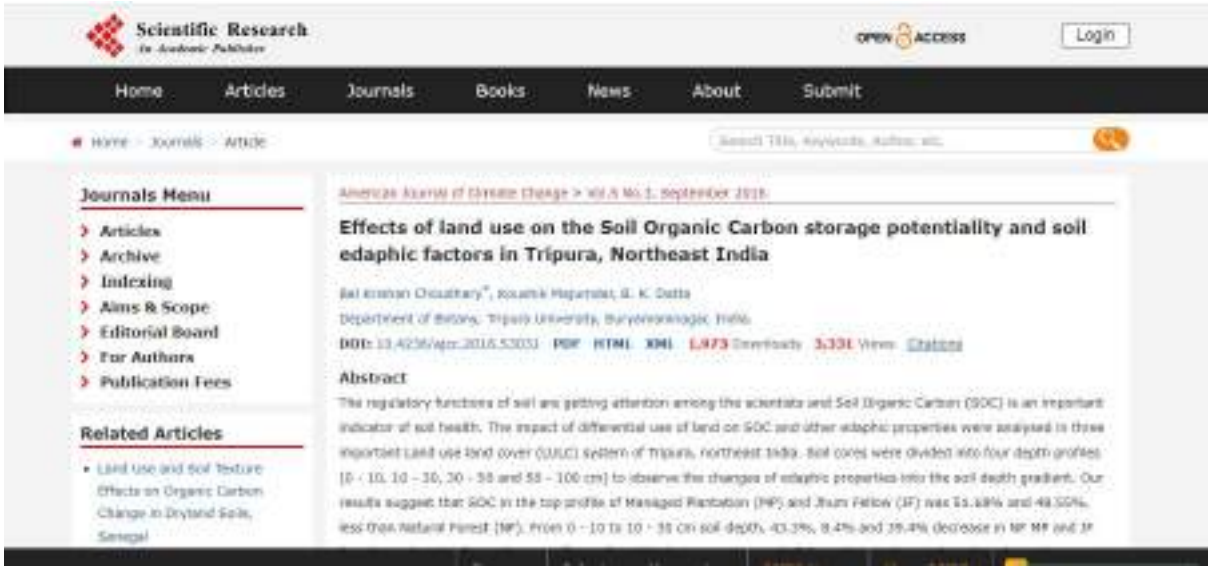
Number of papers published per teacher in the Journals notified on UGC website during the last five years

2016-17

1. Carbon Sequestration Potential and Edaphic Properties Along the Plantation Age of Rubber in Tripura, Northeastern India.by Dr. Bal Krishan Choudhury, Department of EVS

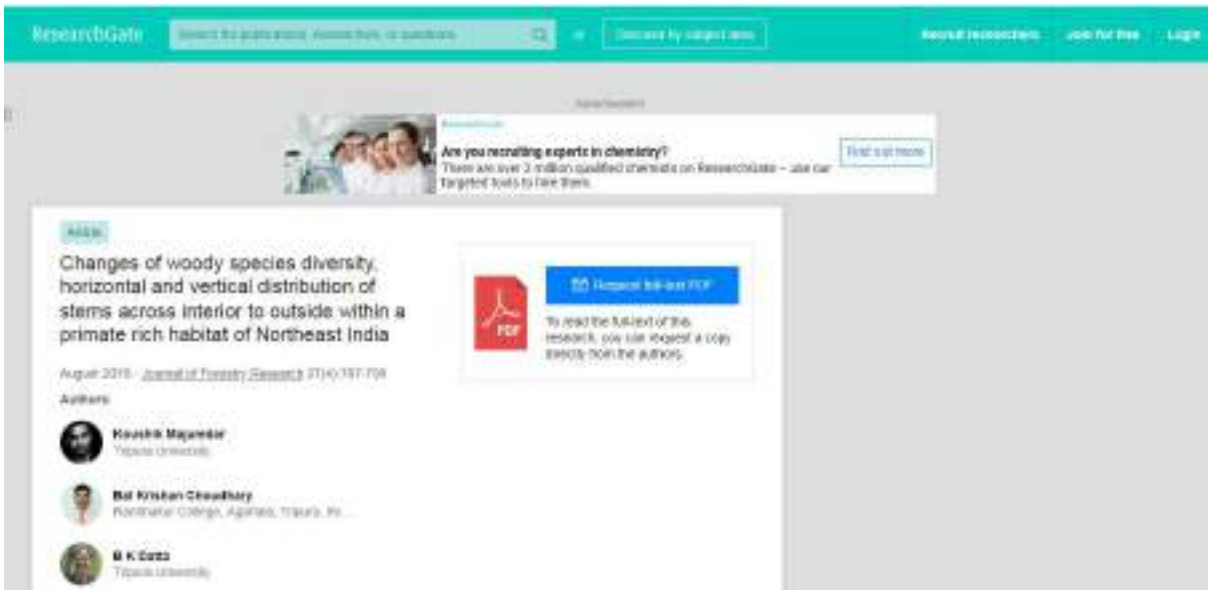
2. Above ground woody biomass, carbon stocks potential in selected tropical forest patches of Tripura, Northeast India-Dr. Bal Krishan Choudhury, Department of EVS

3. Effects of Land Use on the Soil Organic Carbon Storage Potentiality and Edaphic Factors in Tripura, Northeast India- Dr. Bal Krishan Choudhury, Department of EVS



4. Applications of Remote Sensing and GIS in Conservation of Resources- Dr. Bal Krishan Choudhury, Department of EVS

5. Changes of woody species diversity, horizontal and vertical distribution of stems across interior to outside within a primate rich habitat of Northeast India.- Dr. Bal Krishan Choudhury, Department of EVS.

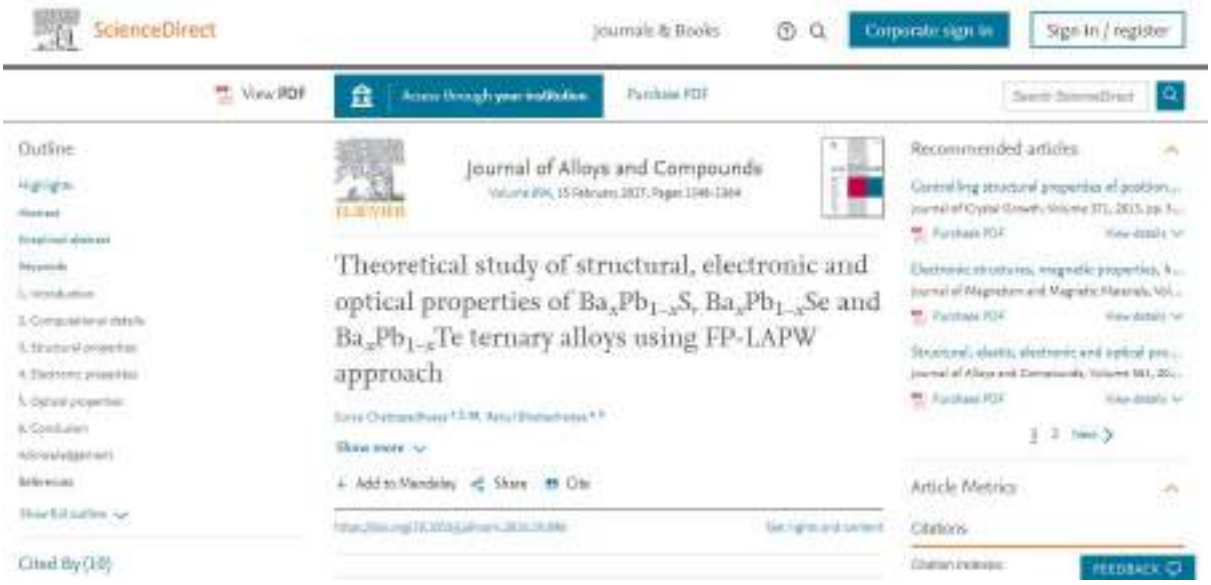


6. pH induced interaction of DPPC with a fluorescent dye in Langmuir and Langmuir Blodgett (LB) films- Dr. Soma Banik, Department of Physics.

7. FP-LAPW methodology based theoretical investigation of structural, electronic and optical properties of MgxPb1− xS, MgxPb1− xSe and MgxPb1− xTe ternary alloys by Dr. Rahul Bhattacharjee, Department of Physics.

8. DFT based FP-LAPW investigation of structural, electronic and optical properties of SrxPb1− xS, SrxPb1− xSe and SrxPb1− xTe ternary alloys by Dr. Rahul Bhattacharjee, Department of Physics.

9. Theoretical study of structural, electronic and optical properties of BaxPb1− xS, BaxPb1− xSe and BaxPb1− xTe ternary alloys using FP-LAPW approach by Dr. Rahul Bhattacharjee, Department of Physics.



10. Stability of J-aggregated species in an indocarbocyanine dye in Langmuir–Blodgett Films by Dr. Subrata Deb, Department of Physics.

11. Comparisons between intragastric and small intestinal delivery of corresponding nutrition in the critically ill: a comprehensive approach and meta-analysis by Dr Amitabha Kar & Sankari Das, Department o Human Physiology.

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13. A glimpse of fructose, insulin resistance, and metabolic dyslipidemia by Dr Amitabha Kar & Sankari Das, Department o Human Physiology.

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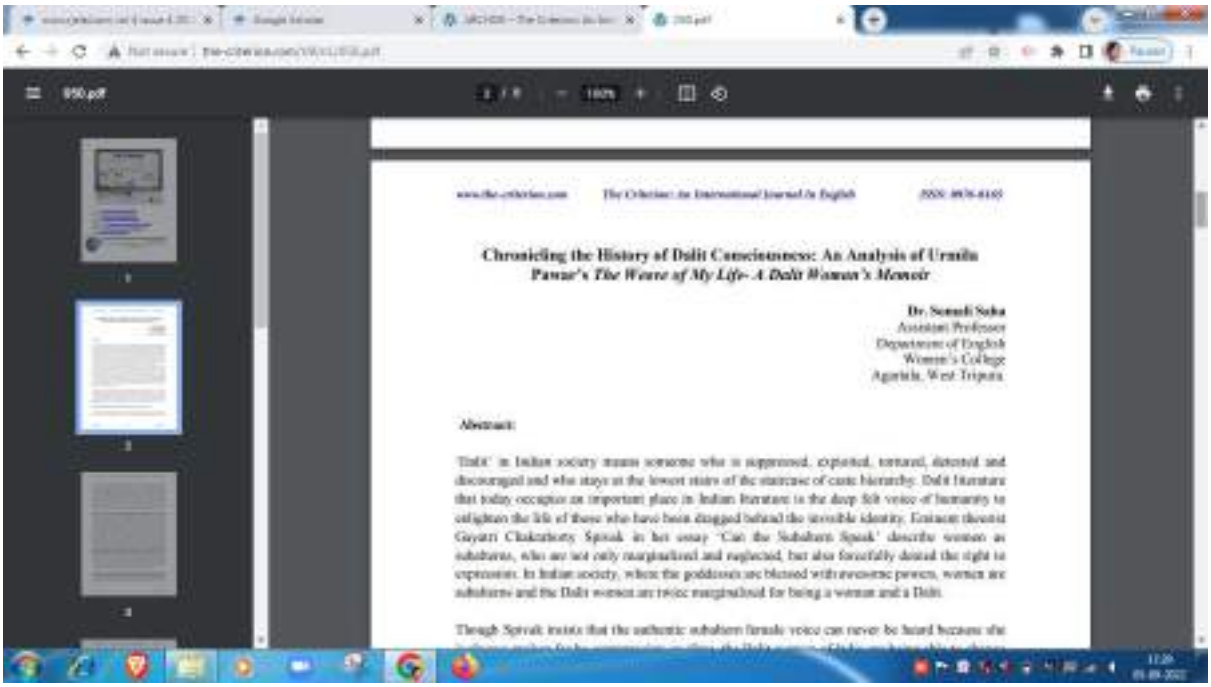
15. **An insight of consequences of body weight on altered expression of nuclear receptors and interrelation of cyclooxygenase-2 in human colorectal cancers** by Dr Amitabha Kar & Sankari Das, Department o Human Physiology.

16. **Chronicling the History of Dalit Consciousness: An Analysis of Urmila Pawar's The Weave of My Life- A Dalit Woman's Memoir-** Dr. Somali Saha, Department of English published in The Criterion: An International Journal in English



17. **Role of Translation in Mainstreaming Dalit Literature- An Analysis of Selected Dalit Autobiographies in Translationn-** Somali Saha published in Research Journal of English Language and Literature- A Peer Reviewed (Referred) International Journal.

18. **Journey From Silence to Eloquence: Specificities of Gender and Patriarchy in a Dalit Woman's Testimonio** – Somali Saha, Department of English, published in Research Journal of English Language and Literature- A Peer Reviewed (Referred) International Journal.

19. **Portrayal of 'New Woman- A Feminist Reading of Tagore's Chandalika and 'Natir Puja'-**Somali Saha published in Research Journal of English Language and Literature- A Peer Reviewed (Referred) International Journal.

Research Journal of English Language and Literature (RELAL)

PORTRAYAL OF 'NEW WOMAN' – A FEMINIST READING OF TAGORE'S CHANDALIKA AND NATIR PUJA

SOMALI SAHA

Assistant Professor, Women's College, Agartala, West Tripura

Metric 3.2.1

Number of papers published per teacher in the Journals notified on UGC website during the last five years

2017-18

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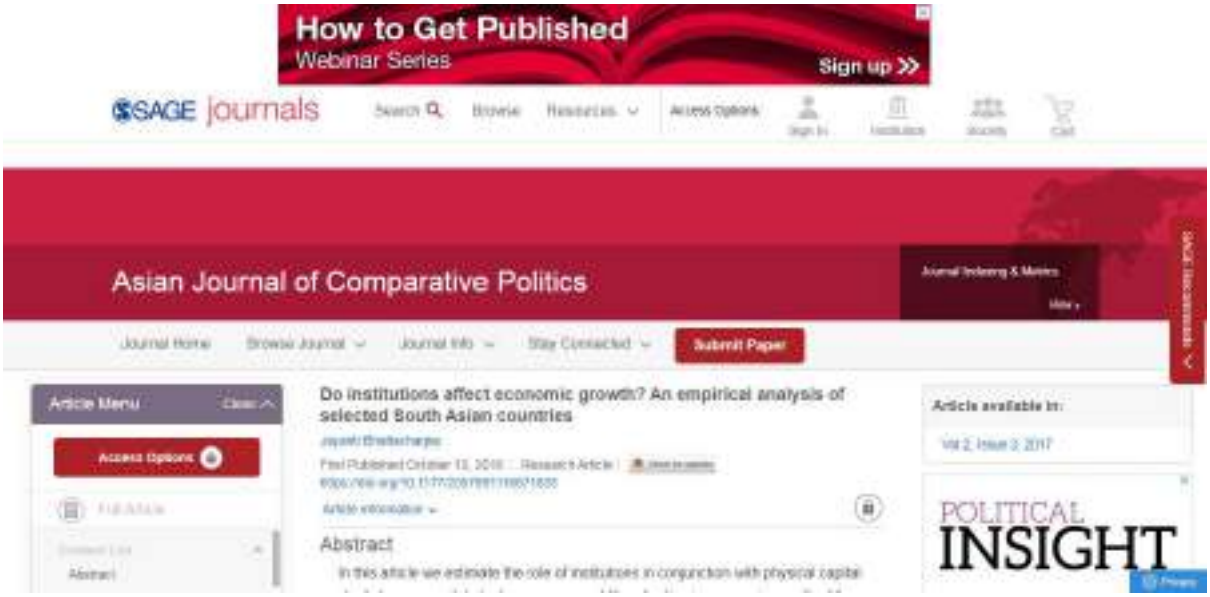
2. Do institutions affect Economic Growth? An Empirical Analysis of Selected South Asian Countries by Dr. Jayanti Bhattacharjee, Department of Economics.



3. Effects of barium (Ba) doping on structural, electronic and optical properties of binary strontium chalcogenide semiconductor compounds - A theoretical investigation using DFT based FP-LAPW approach by Dr. Rahul Bhattacharjee, Department of Physics.

4. Theoretical investigation of structural, electronic and optical properties of MgxBa1− xS, MgxBa1− xSe and MgxBa1− xTe ternary alloys using DFT based FP-LAPW approach by Dr. Rahul Bhattacharjee, Department of Physics.

5. Effects of doping of mercury atom (s) on optoelectronic properties of binary zinc chalcogenides-A first principle based theoretical investigation by Dr. Rahul Bhattacharjee, Department of Physics.

6. Influence of doping of mercury atom(s) on optoelectronic properties of binary cadmium chalcogenides - A density functional theory based investigation with different exchange-correlation functionals and including spin-orbit coupling by Dr. Rahul Bhattacharjee, Department of Physics.

7. Modification of band gaps and optoelectronic properties of binary calcium chalcogenides by means of doping of magnesium atom(s) in rock-salt phase- a first principle based theoretical initiative by Dr. Rahul Bhattacharjee, Department of Physics.

8. Effects of doping of mercury atom (s) on optoelectronic properties of binary zinc chalcogenides-A first principle based theoretical investigation by Dr. Rahul Bhattacharjee, Department of Physics.

9. Modified aggregation pattern of cresyl violet acetate adsorbed on nano clay mineral layers in Langmuir Blodgett film. 353 (2018) 570-580 by Dr. Soma Banik, Department of Physics.

10. Effect of nano clay Laponite on stability of SHG active J-aggregate of a thiacyanine dye onto LB films by Dr. Subrata Deb, Department of Physics.

Metric 3.2.1

Number of papers published per teacher in the Journals notified on UGC website during the last five years

2018-19

1. Economic Integration and South Asia: Exploring Spillover Effects for North-East India by Dr. Jayanti Bhattacharjee, Department of Economics.

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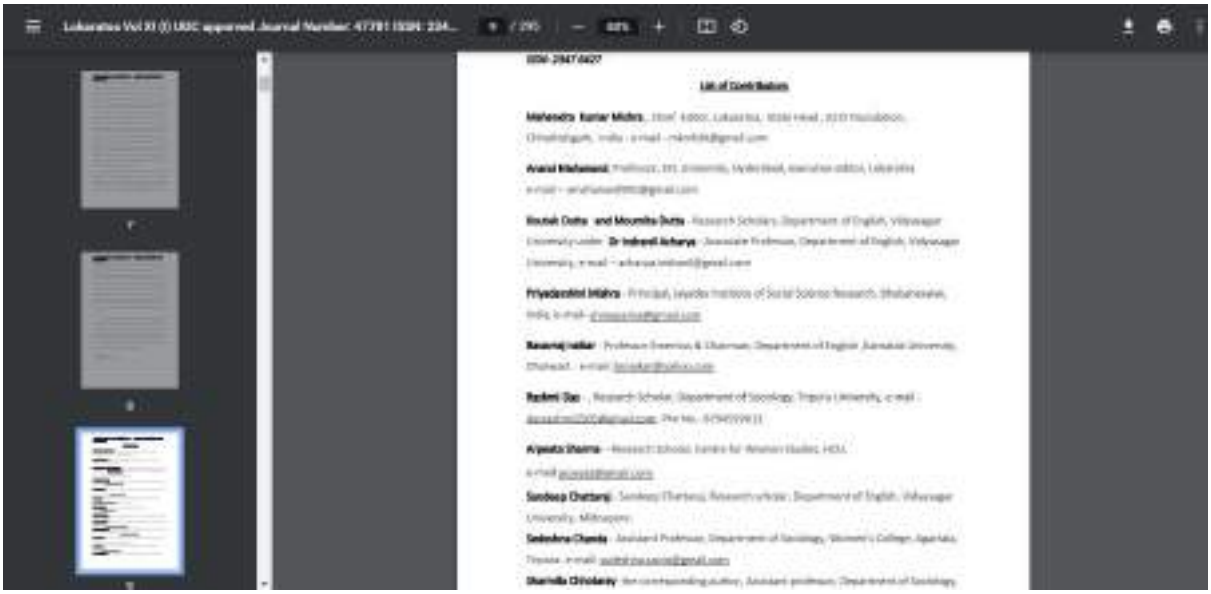

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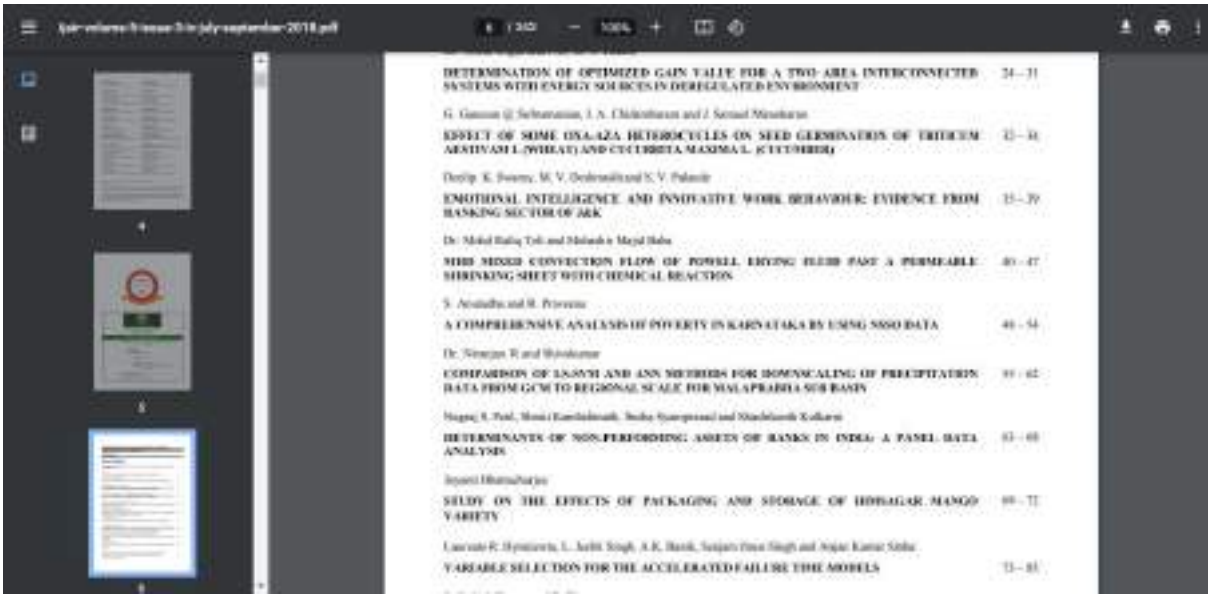
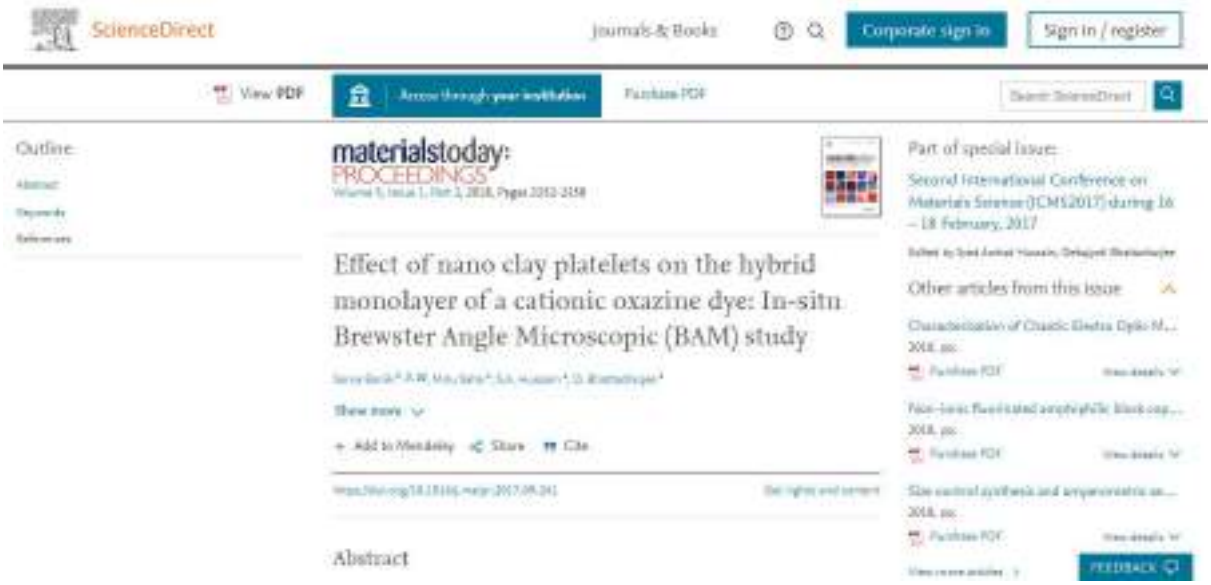


4. Effect of nano clay platelets on the hybrid monolayer of a cationic oxazine dye: In-situ Brewster Angle Microscopic (BAM) study. 5 (2018) 2352-2358 by Dr. Soma Banik, Department of Physics.



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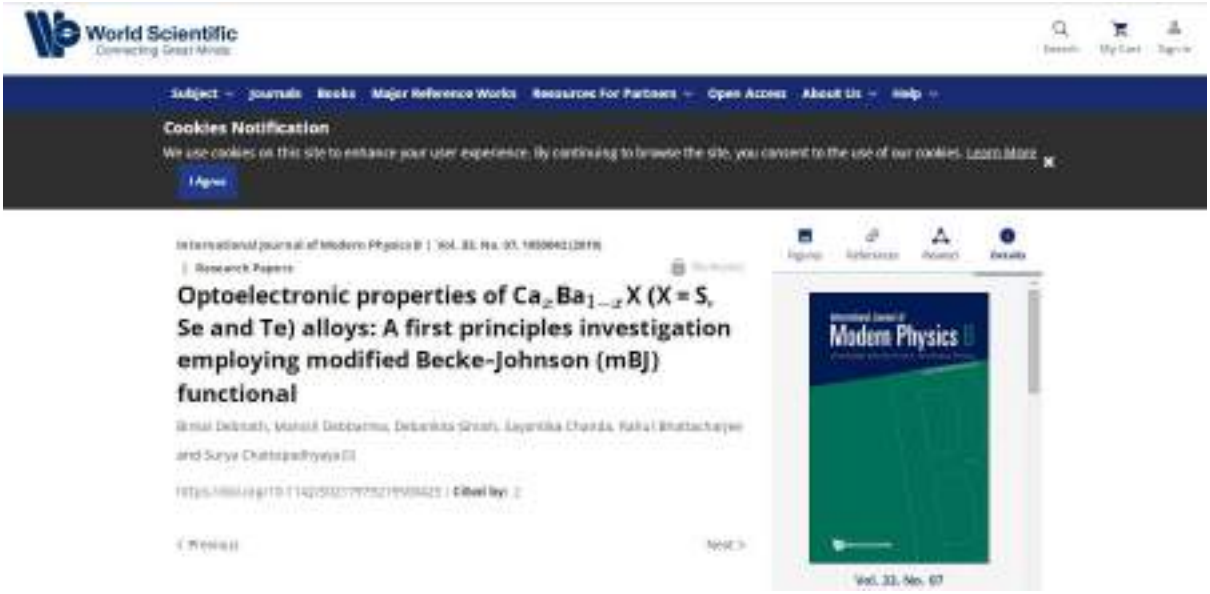
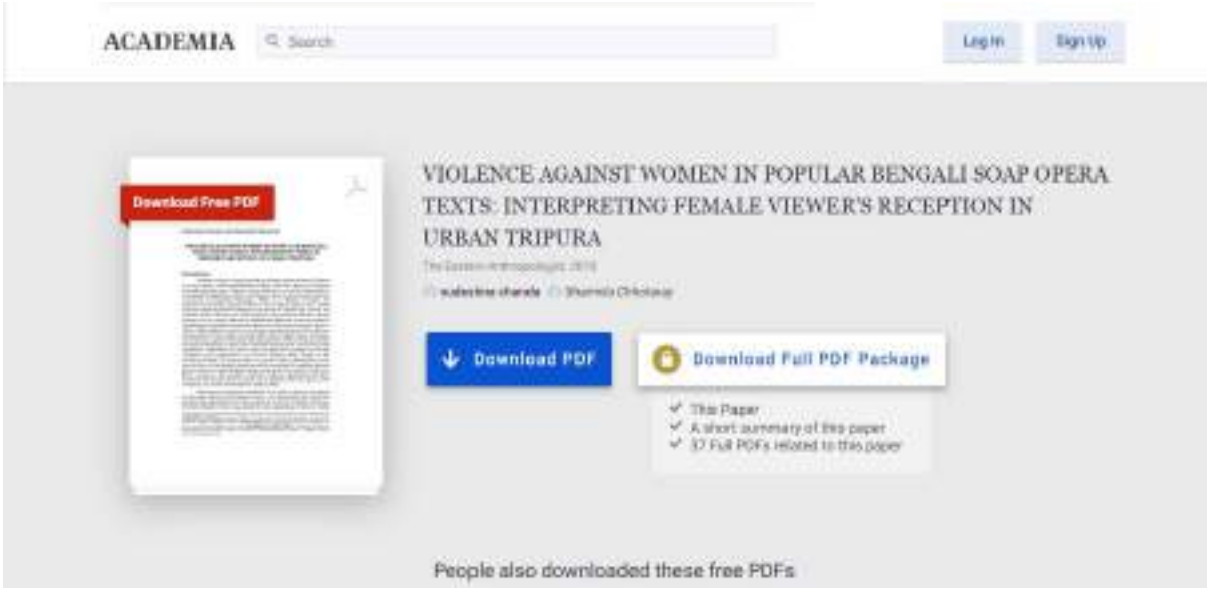
6. Optoelectronic properties of CaBaX (X=S, Se and Te) alloys: A first principles investigation employing modified Becke–Johnson (mBJ) functional by Dr. Rahul Bhattacharjee, Department of Physics.

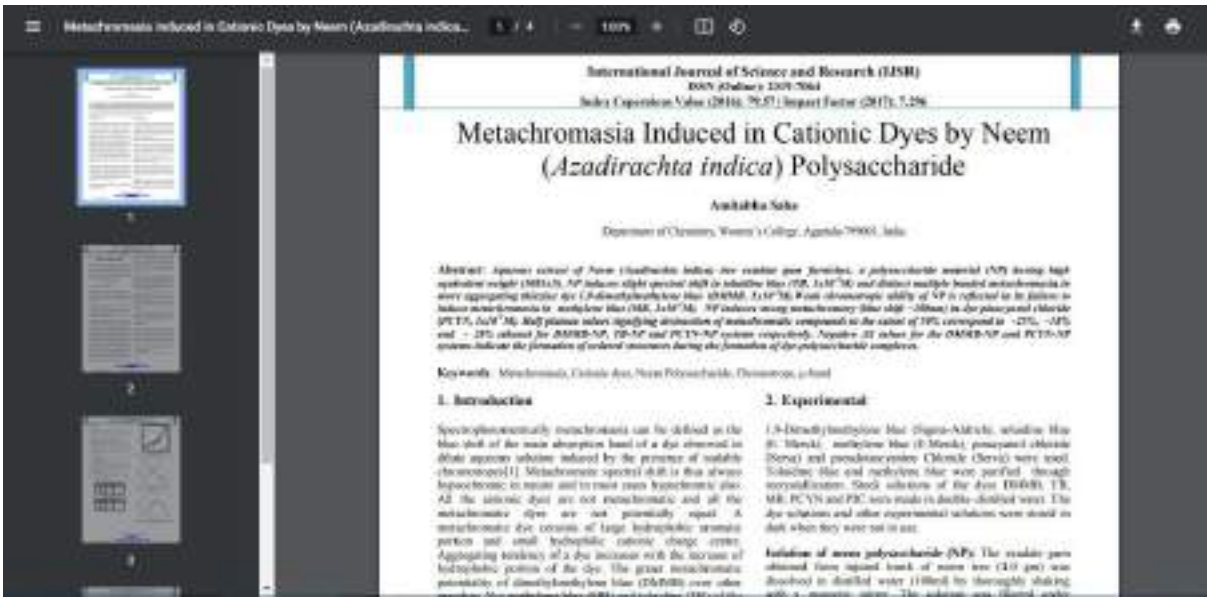


7. Density functional calculations of structural, elastic and optoelectronic features of MgxZn1− xS, MgxZn1− xSe and MgxZn1− xTe alloys by Dr. Rahul Bhattacharjee, Department of Physics.

8. Violence Against Women in Popular Bengali Soap Opera Texts: Interpreting Female Viewer's Reception in Urban Tripura by Sudeshna Chanda, Department of Sociology.



9. Metachromasia induced in Cationic dyes by neem (Azadiracta indica) Polysaccharide by Dr. Amitabha Saha, Department of Chemistry.



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Metric 3.2.1

Number of papers published per teacher in the Journals notified on UGC website during the last five years

2019-20

1. First principles investigations of structural and optoelectronic properties of cubic MgxZn1−xSeyTe1−y quaternary semiconductor alloys using FP‑LAPW approach Dr. Rahul Bhattacharjee, Department of Physics

2. Structural and optoelectronic properties of cubic MgxZn1-xSyTe1-y semiconductor quaternary alloys-a first principles investigation by Dr. Rahul Bhattacharjee, Department of Physics

3. Calculations of the structural and optoelectronic properties of cubic CdxZn1−xSeyTe1−y semiconductor quaternary alloys using the DFT‐based FP‐LAPW approach by Dr. Rahul Bhattacharjee, Department of Physics

4. Density Functional Investigations of Structural, Mechanical and Optoelectronic Properties of BeSxSe1-x, BeSxTe1-x and BeSexTe1-x Ternary Alloys by Dr. Rahul Bhattacharjee, Department of Physics

5. First principle investigations of structural and optoelectronic features of cubic CdxZn1−xSyTe1-y quaternary semiconductor alloys by Dr. Rahul Bhattacharjee, Department of Physics

6. Density Functional Calculations of Elastic and Thermal Properties of Zinc-Blende Mercury–Cadmium-Chalcogenide Ternary Alloys by Dr. Rahul Bhattacharjee, Department of Physics

Density Functional Calculations of Elastic and Thermal Properties of Zinc-Blende Mercury–Cadmium-Chalcogenide Ternary Alloys

Abstract

Density functional calculations are carried out on elastic and thermal properties of zinc-blende specimens within $Hg_xCd_{1-x}S$, $Hg_xCd_{1-x}Se$ and $Hg_xCd_{1-x}Te$ ternary systems. Elastic stiffness constants decrease almost linearly with increasing Hg-concentration in each system. Each cubic sample is mechanically and dynamically stable, elastically anisotropic, compressible against elastic deformation, ductile and fairly plastic. The hardness of specimens in each system reduces almost linearly with enhancement in Hg-composition. Mixed kind of bonding

7. Density Functional Investigations of Structural, Mechanical and Optoelectronic Properties of BeSxSe1−x, BeSxTe1−x and BeSexTe1−x Ternary Alloys by Dr. Rahul Bhattacharjee, Department of Physics

Density Functional Investigations of Structural, Mechanical and Optoelectronic Properties of BeS_xSe_{1-x}, BeS_xTe_{1-x} and $BeSe_xTe_{1-x}$ Ternary Alloys

Abstract

Density functional full-potential linearized augmented plane wave (FP-LAPW) investigations of structural, mechanical and optoelectronic features of cubic BeS_xSe_{1-x}, BeS_xTe_{1-x} and $BeSe_xTe_{1-x}$ ternary alloys are performed. Nonlinear decrease in lattice constant (a_0), but increase in bulk modulus (B_0) and each elastic constant (C_{11}, C_{12} and C_{44}) occurs with increasing dopant chalcogen concentration x in each system. In each specimen, elastic anisotropy, brittleness and dominancy of covalent bonding are observed. Each binary

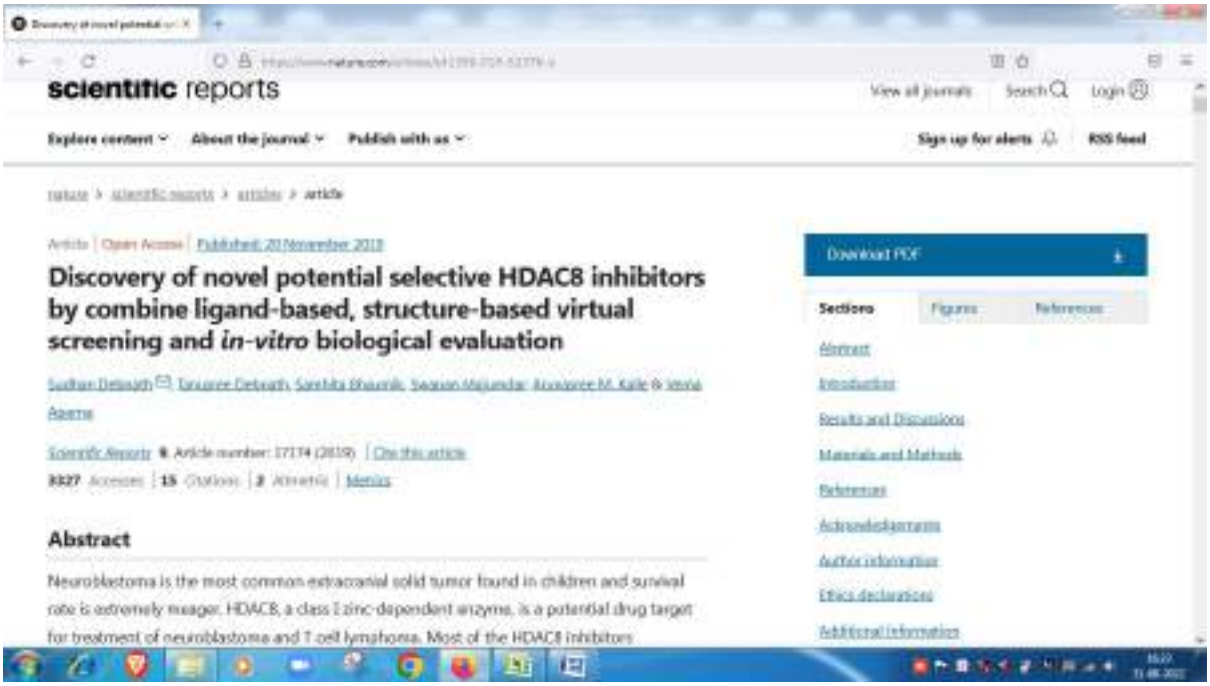
8. Structural, mechanical and optoelectronic properties of cubic Be xMg 1-xS , Be xMg 1-xSe and Be xMg 1-xTe semiconductor ternary alloys: a density functional study by Dr. Rahul Bhattacharjee, Department of Physics

9. Density functional study on structural and optoelectronic properties of cubic Mg xZn 1-xS ySe 1-y semiconductor quaternary alloys by Dr. Rahul Bhattacharjee, Department of Physics

10. Density functional study on structural and optoelectronic properties of cubic Mg xZn 1-xS ySe 1-y semiconductor quaternary alloys by Dr. Rahul Bhattacharjee, Department of Physics

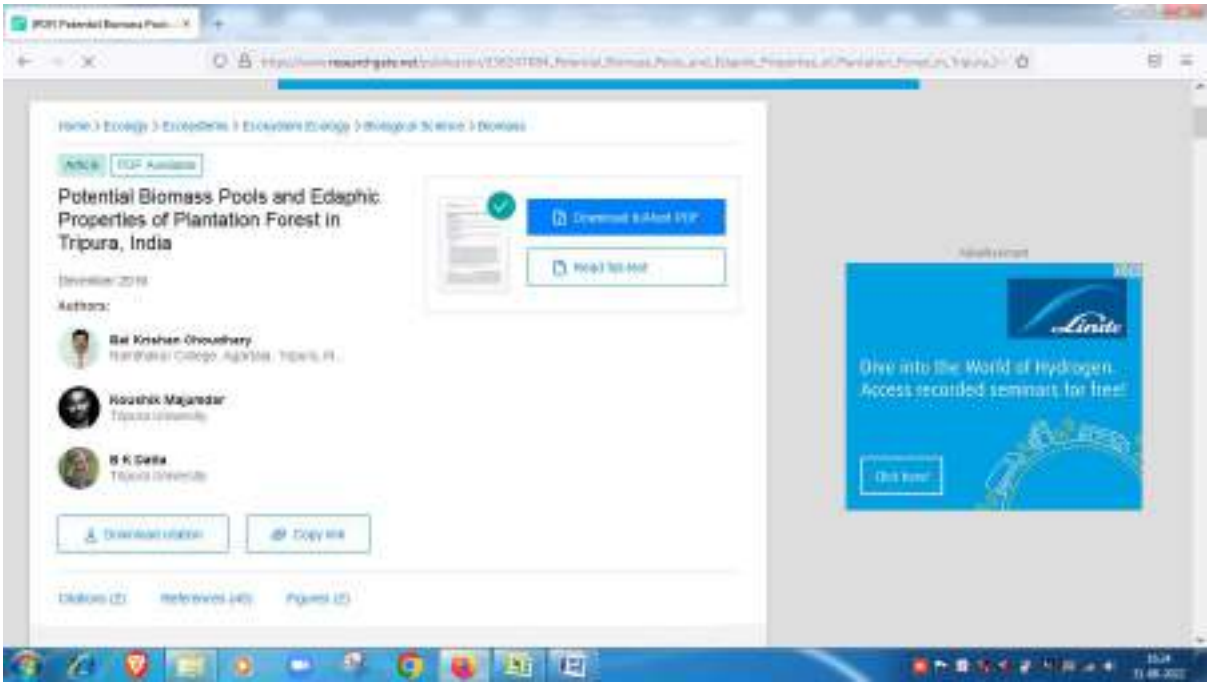
11. Cationic and anionic concentration dependent elastic properties of zinc blende specimens within CdxZn1-xSySe1-y quaternary system: Calculations with density functional theory by Dr. Rahul Bhattacharjee, Department of Physics

12. Discovery of novel potential selective HDAC8 inhibitors by combine ligand-based, structure based virtual screening and in-vitro biological evaluation by Dr. Samhita Bhowmik, Department of Chemistry.



13. Forest Biomass estimation using remote sensing and field inventory: a case study of Tripura, India by Dr. Bal Krishan Choudhury, Department of EVS.

14. Potential Biomass Pools and Edaphic Properties of Plantation Forest in Tripura, India by Dr. Bal Krishan Choudhury, Department of EVS.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Metric 3.2.1

Number of papers published per teacher in the Journals notified on UGC website during the last five years

2020-21

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2. Investigation on aeromycoflora in extramural and intramural environment at Udaipur, Gomati District, Tripura by Dr. Sikha Banik, Department of Botany
3. Identification of potential inhibitors of SARS-CoV-2 main protease and spike receptor from 10 important spices through structure-based virtual screening and molecular dynamic study by Dr. Samhita Bhaumik, Department of Chemistry.

4. In Silico Identification of Potential Inhibitors of the Main Protease of SARS-CoV-2 Using Combined Ligand-Based and Structure-Based Drug Design Approach by Dr. Samhita Bhaumik, Department of Chemistry.

5. In Silico Identification of Potential Inhibitors of ADP-Ribose Phosphatase of SARS-CoV-2 nsP3 by Combining E-Pharmacophore-and Receptor-Based Virtual Screening of Database by Dr. Samhita Bhaumik, Department of Chemistry.

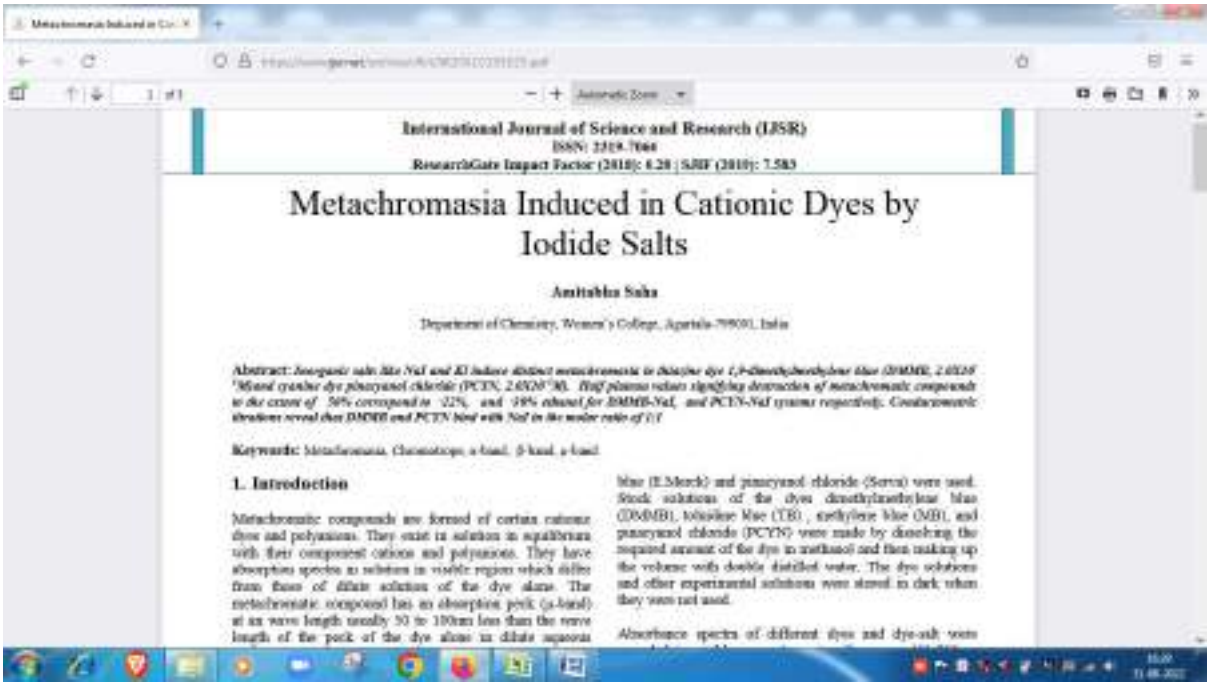
6. Potentiality of Moringa oleifera against SARS-CoV-2: identified by a rational computer aided drug design method by Dr. Samhita Bhaumik, Department of Chemistry.

7. Phytochemicals of Zingiberaceae family exhibit potentiality against SARS-CoV-2 main protease identified by a rational computer-aided drug design by Dr. Samhita Bhaumik, Department of Chemistry.

8. Identification of Potential Scaffolds From the Shrub Justicia Adhatoda Against SARS-CoV-2 Main Protease Target by Dr. Samhita Bhaumik, Department of Chemistry.

9. Writing Ordinary Lives;: An Analysis of Selected Women's Memoirs From North-East India by Dr. Somali Saha, Department of English.

10. Metachromasia induced in cationic dyes by Iodine Salt by Dr Amitabha Saha, Department of Chemistry.



International Journal of Science and Research (IJSR)
ISSN: 2319-7064
ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

Metachromasia Induced in Cationic Dyes by Iodide Salts

Amitabha Saha

Department of Chemistry, Women's College, Agartala-799001, India

Abstract: Inorganic salts like NaI and KI induce distinct metachromasia in thiazine dye 1,9-dimethylmethylene blue (DMMB, 2.0X10⁻⁵M) and cyanine dye pinacyanol chloride (PCYN, 2.0X10⁻⁵M). Huge plateau values signifying destruction of metachromatic compounds in the system of 50% correspond to 22%, and 18% ethanol for DMMB-NaI, and PCYN-NaI systems respectively. Conductometric titrations reveal that DMMB and PCYN bind with NaI in the molar ratio of 1:1

Keywords: Metachromasia, Chromotrope, a-band, β-band, γ-band

1. Introduction

Metachromatic compounds are formed of certain cationic dyes and polyanions. They exist in solution in equilibrium with their component cations and polyanions. They have absorption spectra in solution in visible region which differ from those of dilute solution of the dye alone. The metachromatic compound has an absorption peak (a-band) at an wave length usually 50 to 100nm less than the wave length of the peak of the dye alone in dilute aqueous

blue (E.Merck) and pinacyanol chloride (Serva) were used. Stock solutions of the dyes dimethylmethylene blue (DMMB), toluidine blue (TB) , methylene blue (MB), and pinacyanol chloride (PCYN) were made by dissolving the required amount of the dye in methanol and then making up the volume with double distilled water. The dye solutions and other experimental solutions were stored in dark when they were not used.

Absorbance spectra of different dyes and dye-salt were

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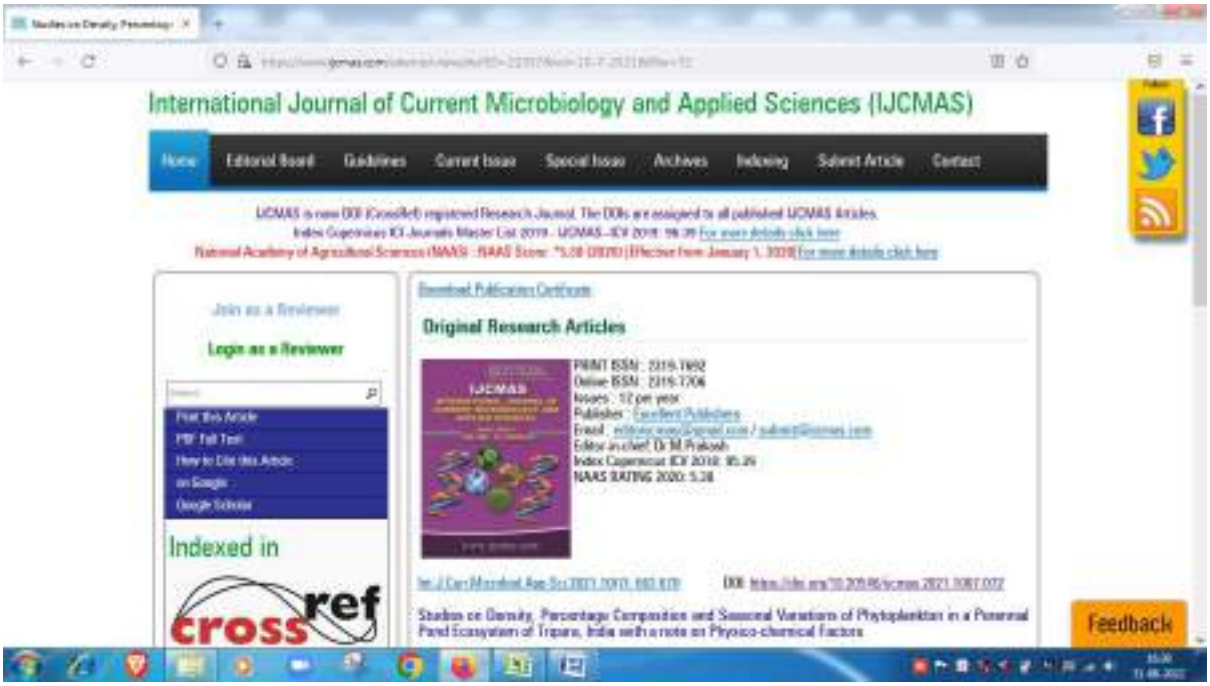

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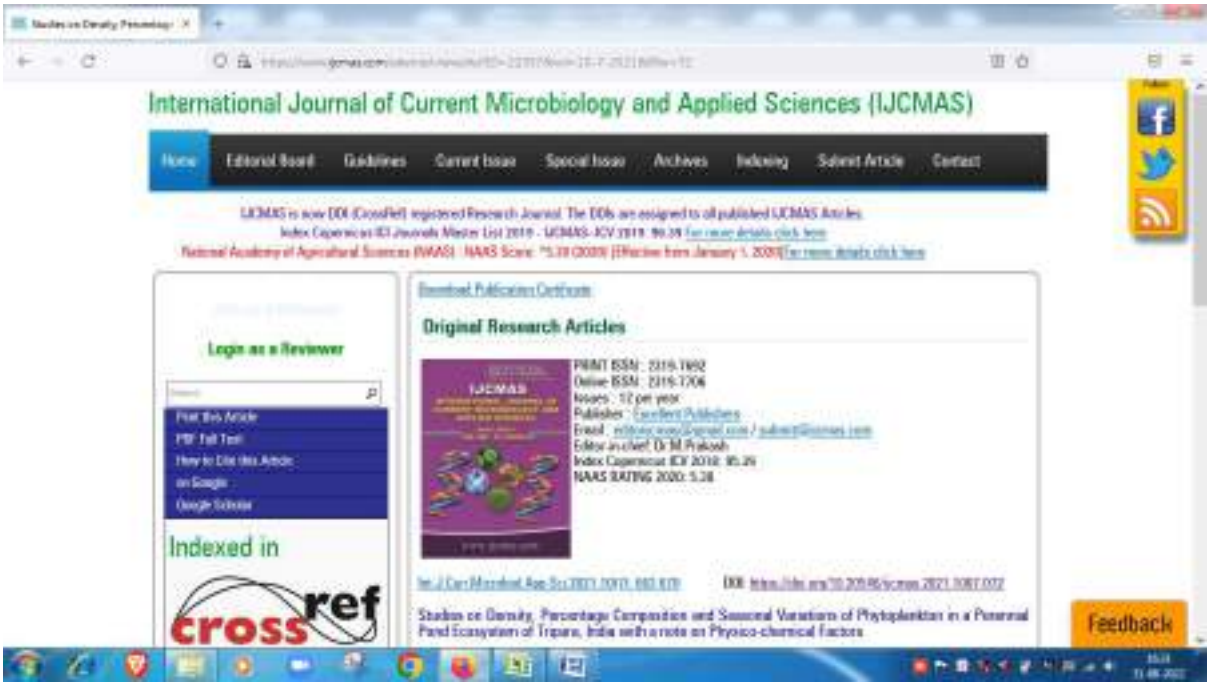

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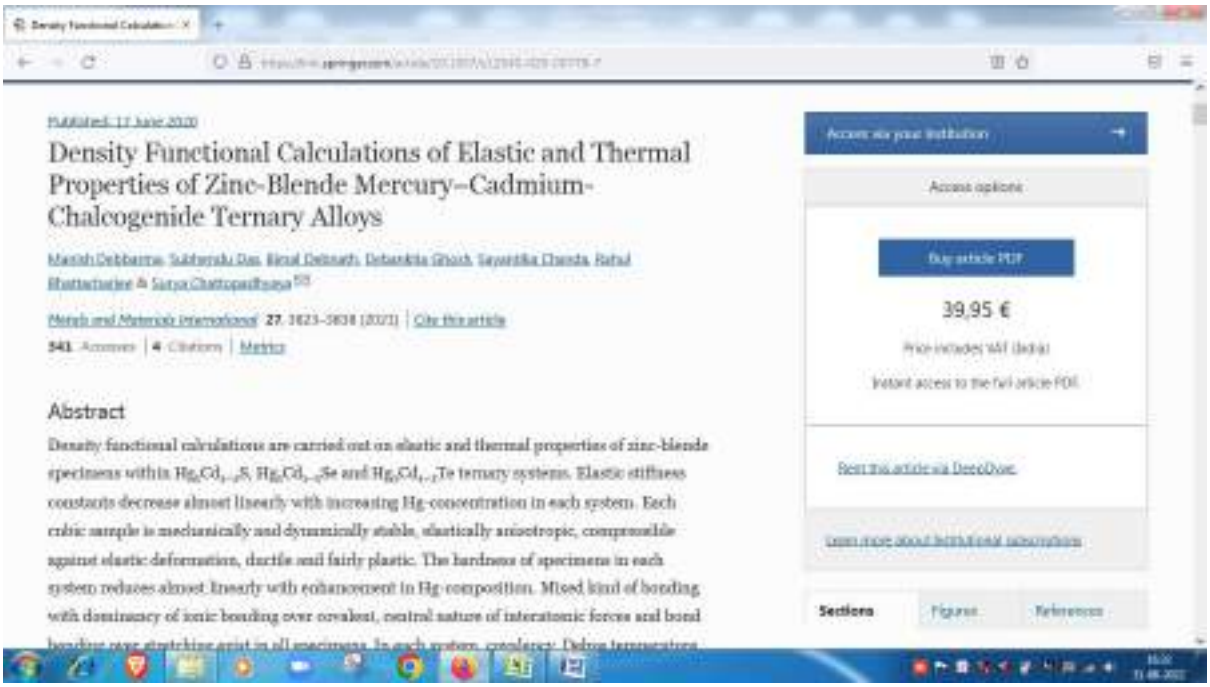

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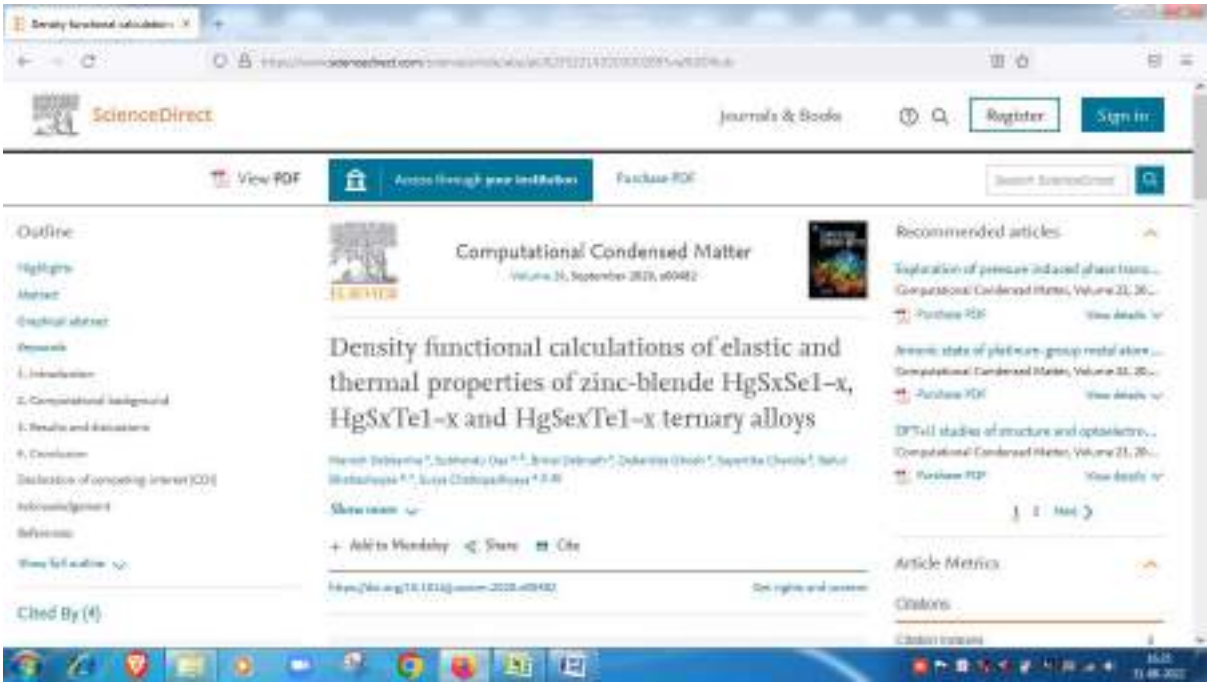

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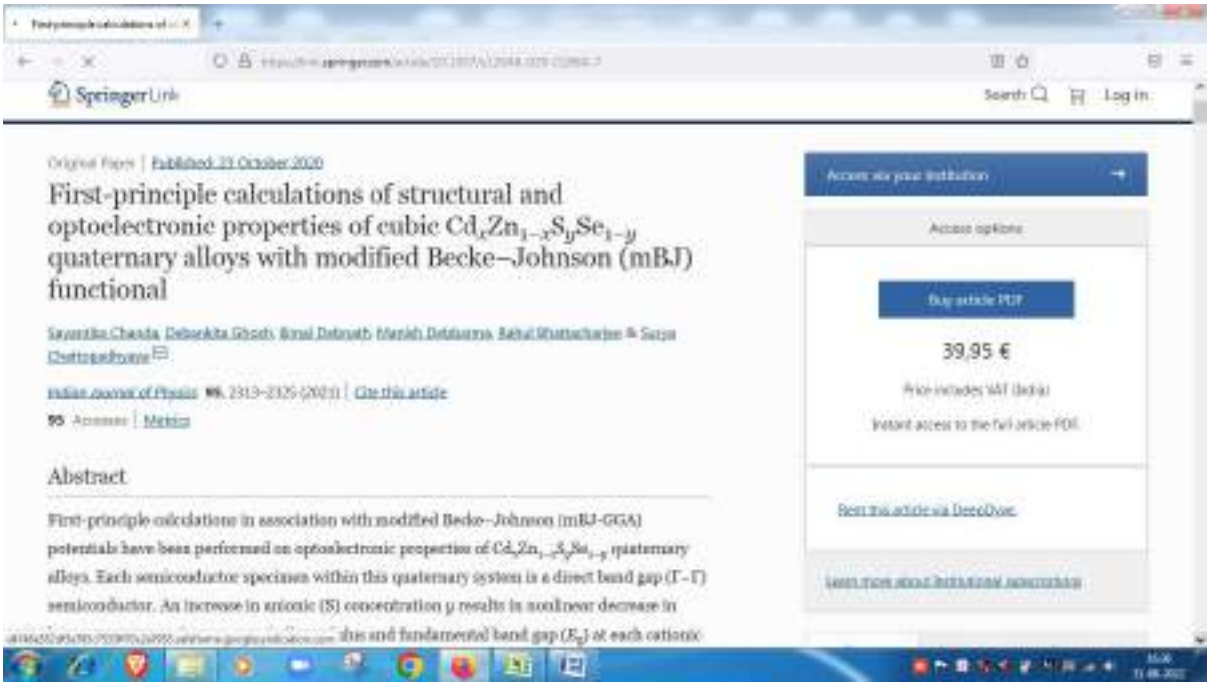

18. “Structural, mechanical and optoelectronic properties of cubic BexMg1−xS, BexMg1−xSe, BexMg1−xS, BexMg1−xSe and BexMg1−xTe, BexMg1−xTe semiconductor ternary alloys: a density functional study.” By Dr. Rahul Bhattacharjee, Department of Physics.

19. “Density functional study on structural and optoelectronic properties of cubic Mg x Zn 1 - x S y Se 1 - y semiconductor quaternary alloys.” By Dr. Rahul Bhattacharjee, Department of Physics.

20. “Cationic and anionic concentration dependent elastic properties of zinc blende specimens within CdxZn1-xSySe1-y quaternary system: Calculations with density functional theory.” By Dr. Rahul Bhattacharjee, Department of Physics.

21. “Density functional study of elastic and thermal properties of cubic mercuryzinc-chalcogenide ternary alloys” by Dr. Rahul Bhattacharjee, Department of Physics.

22. “Cationic and anionic composition-dependent mechanical and thermal properties of zinc-blende specimens under MgxZn1-xSySe1-y, MgxZn1-xSySe1-y quaternary system: calculations with density functional FP-LAPW scheme.” by Dr. Rahul Bhattacharjee, Department of Physics

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Cationic and anionic composition-dependent mechanical and thermal properties of zinc-blende specimens under $Mg_xZn_{1-x}S_ySe_{1-y}$ quaternary system: calculations with density functional FP-LAPW scheme

Debarikha Ghosh, Manish Debbarma, Sayantika Chanda, Bimal Debnath, Rahul Bhattacharjee, Subhendu Das & Surya Chattopadhyaya

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Abstract

Elastic and thermal properties of zinc-blende $Mg_xZn_{1-x}S_ySe_{1-y}$ quaternary alloys and their constituent binary/ternary compounds have been computed through first principles calculations. Elastic stiffness constants of specimens have been increased almost linearly with increasing sulfur composition at any fixed magnesium composition, while reverse trends have been observed with increasing magnesium composition at any fixed sulfur composition in each

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Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISSN number	ent of the Journal /Digital Object Identifier (doi) number		
						Link to website of the Journal	Link to article/paper/abstract of the article	Is it listed in UGC Care list/Scopus/Web of
2016-17								
1.Carbon Sequestration Potential and Edaphic Properties Along the Plantation Age of Rubber in Tripura, Northeastern India.	**Dr. Bal Krishan Choudhury**	**Department of EVS**	Current World Environment 11 (3), 756	2016	EISSN: 2320-8031	http://www.cwejournal.org/	DOI:http://dx.doi.org/10.12944/CWE.11.3.10	UGC CARE-SCIENCE
2. Above ground woody biomass, carbon stocks potential in selected tropical forest patches of Tripura, Northeast India.	**Dr. Bal Krishan Choudhury**	**Department of EVS**	Open Journal of Ecology 6 (10), 598	2016	ISSN Print:2162-1965 ISSN Online:2162-1993	https://www.scirp.org/journal/oje/	https://www.scirp.org/journal/PaperInformation.aspx?PaperID=70814&#abstract	Group-II (Web of Science)
3. Effects of Land Use on the Soil Organic Carbon Storage Potentiality and Edaphic Factors in Tripura, Northeast India.	**Dr. Bal Krishan Choudhury**	**Department of EVS**	American Journal of Climate Change 5 (5), 417-429	2016	Issn Print:2167-9495 Issn Online:2167-9495	https://www.scirp.org/journal/journalarticles.aspx?journalid=1304	https://www.scirp.org/journal/paperinformation.aspx?paperid=70585	
4. Applications of Remote Sensing and GIS in Conservation of Resources	**Dr. Bal Krishan Choudhury**	**Department of EVS**	Remote Sensing & GIS Applications in Environmental Sciences 6 (38), 11	2016				

5. Changes of woody species diversity, horizontal and vertical distribution of stems across interior to outside within a primate rich habitat of Northeast India.	**Dr. Bal Krishan Choudhury**	**Department of EVS**	Journal of Forestry Research 27 (3), not assigned	2016	Issn:1993-0607	https://www.springer.com/journal/11676/	https://www.researchgate.net/publication/305424693_Changes_of_woody_species_diversity_horizontal_and_vertical_distribution_of_stems_across_interior_to_outside_within_a_primate_rich_habitat_of_Northeast_India	Group-II (Web of Science)
6. pH induced interaction of DPPC with a fluorescent dye in Langmuir and Langmuir Blodgett (LB) films.	Dr. Soma Banik	Department of Physics	Molecular Crystals And Liquid Crystals, Taylor & Francis 643 (2017) 255-265	2017	Issn:1542-1406	https://www.tandfonline.com/	https://doi.org/10.1080/15421406.2016.1263103	Group-II (Web of Science)
7.FP-LAPW methodology based theoretical investigation of structural, electronic and optical properties of $Mg_xPb_{1-x}S$, $Mg_xPb_{1-x}Se$ and $Mg_xPb_{1-x}Te$ ternary alloys	Dr. Rahul Bhattacharje e	Department of Physics	Journal of Physics and Chemistry of Solids 100, 57-70	2017	Issn: 0022-3697	https://www.journals.elsevier.com/journal-of-physics-and-chemistry-of-solids	http://dx.doi.org/10.1016%2Fj.jpcs.2016.09.005	Group-II (Web of Science)

8. DFT based FP-LAPW investigation of structural, electronic and optical properties of $Sr_xPb_{1-x}S$, $Sr_xPb_{1-x}Se$ and $Sr_xPb_{1-x}Te$ ternary alloys	Dr. Rahul Bhattacharjee	Department of Physics	Journal of Alloys and Compounds 698, 868-882,	2017	Issn: 0925-8388	https://www.sciencedirect.com/journal/journal-of-alloys-and-compounds	https://doi.org/10.1016/j.jallcom.2016.12.182	Group-II (Web of Science)
9. Theoretical study of structural, electronic and optical properties of $Ba_xPb_{1-x}S$, $Ba_xPb_{1-x}Se$ and $Ba_xPb_{1-x}Te$ ternary alloys using FP-LAPW approach	Dr. Rahul Bhattacharjee	Department of Physics	Journal of Alloys and Compounds 694, 1348-1364	2017	Issn: 0925-8388	https://www.sciencedirect.com/journal/journal-of-alloys-and-compounds	https://doi.org/10.1016/j.jallcom.2016.10.096	Group-II (Web of Science)
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15. An insight of consequences of body weight on altered expression of nuclear receptors and interrelation of cyclooxygenase-2 in human colorectal cancers	Dr Amitabha Kar & Sankari Das	Department of Human Physiology	International Journal of Applied Research (IJAR), 3 (4)577-584ISSN Print: 2394-7500	2016	ISSN Online: 2394-5869	https://www.allresearchjournal.com/	https://www.allresearchjournal.com/archives/?year=2017&vol=3&issue=4&part=I&ArticleId=3594	https://www.allresearchjournal.com/
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1. Applications of Remote Sensing and GIS in Land Resource Management	Dr Bal krishan Choudhary	Department of EVS	E-PG Pathsala – Module-Environmental Science 6 (29), 18.	2017		https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=0Xvq9yUM2ILDrJ07FvlArQ==	https://epgp.inflibnet.ac.in/Home/ViewSubject?catid=0Xvq9yUM2ILDrJ07FvlArQ==	

2. Do institutions affect Economic Growth? An Empirical Analysis of Selected South Asian Countries	Dr. Jayanti Bhattacharje e	Department of Economics	Asian Journal of Comparative Politics, 2(3), 243-260	2017	2057-8911 / 2057-892X	https://journals.sagepub.com/home/acp	https://doi.org/10.1177%2F2057891116671833	Group-II (Web of Science):Arts & Humanities
3. Effects of barium (Ba) doping on structural, electronic and optical properties of binary strontium chalcogenide semiconductor compounds - A theoretical investigation using DFT based FP-LAPW approach.	Dr. Rahul Bhattacharje e	Department of Physics	Materials Chemistry and Physics 199, 295-312	2017	0254-0584 / 1879-3312	https://www.sciencedirect.com/journal/materials-chemistry-and-physics/vol/115/issue/1	https://doi.org/10.1016/j.matchemphys.2017.06.057	Group-II (Web of Science)
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6. Influence of doping of mercury atom(s) on optoelectronic properties of binary cadmium chalcogenides - A density functional theory based investigation with different exchange-correlation functionals and including spin-orbit coupling	Dr. Rahul Bhattacharje e	Department of Physics	Current Applied Physics 18 (6), 698-716	2018	1567-1739 / 1878-1675	https://www.sciencedirect.com/journal/current-applied-physics	https://doi.org/10.1016/j.cap.2018.03.010	Group-II (Web of Science)

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2.Soap Opera and its audience reception:A review of shifting paradigm pp.87-101	Sudeshna Chanda	Department of Sociology	Lokaratna Vol XI-Part 1, 31st March 2018	2018	2347-6427	https://folkloref oundation.org/lokaratna/	https://folklorefoundation.org/wp-content/uploads/2021/07/375427042-Lokaratna-Vol-XI-I-2018.pdf	
3. Determinants of Non-Performing Assets in Banks in India: A Panel Data Analysis	Dr. Jayanti Bhattacharje e	Department of Economics	International Journal of Advance and Innovative Research Vol.5, Issue 3 (IV), 63-68	2018	2394-7780	https://iaraedu.com/about-journal/index.php	https://iaraedu.com/pdf/ijair-volume-5-issue-3-iv-july-september-2018.pdf	

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8. Violence Against Women in Popular Bengali Soap Opera Texts: Interpreting Female Viewer's Reception in Urban Tripura.	Sudeshna Chanda	Department of Sociology	The Eastern Anthropologist, Vol.71, No. 1-2	2018	0012-8686	https://serialsjournals.com/index.php?route=product/product&product_id=377	https://www.academia.edu/40175953/VIOLENCE_AGAINST_WOMEN_IN_POPULAR_BENGALI_SOAP_OPERA_TEXTS_INTERPRETING_FEMALE_VIEWERS_RECEPTION_IN_URBAN_TRIPURA	UGC CARE-Group 1
9. Metachromasia induced in Cationic dyes by neem (Azadiracta indica) Polysaccharide	Dr. Amitabha Saha	Department of Chemistry	International Journal of Science and Research.	2018	2319-7064	https://www.ijsr.net/	https://www.ijsr.net/archive/v7i7/ART20191311.pdf	
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1. First principles investigations of structural and optoelectronic properties of cubic $Mg_xZn_{1-x}SeyTe_{1-y}$ quaternary semiconductor alloys using FP-LAPW approach.	Dr. Rahul Bhattacharje e	Department of Physics	Applied Physics A 125 (2019) 644-667	2019	0947-8396 / 1432-0630	https://www.researchgate.net/journal/Applied-Physics-A-1432-0630	https://link.springer.com/article/10.1007%2Fs00339-019-2938-5	UGC Care List-II (Web of Science)
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4. Density Functional Investigations of Structural, Mechanical and Optoelectronic Properties of BeS_xSe_{1-x}, BeS_xTe_{1-x} and $BeSe_xTe_{1-x}$ Ternary Alloys	Dr. Rahul Bhattacharje e	Department of Physics	Journal of ELECTRONIC MATERIALS (2019) 1-15	2019	0361-5235 / 1543-186X	https://www.researchgate.net/journal/Journal-of-Electronic-Materials-1543-186X	http://dx.doi.org/10.1007/s11664-019-07820-4	UGC Care List-II (Web of Science)
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6. Density Functional Calculations of Elastic and Thermal Properties of Zinc-Blende Mercury–Cadmium-Chalcogenide Ternary Alloys	Dr. Rahul Bhattacharje e	Department of Physics	Metals and Materials International	2020	1598-9623 / 2005-4149	https://www.springerprofessional.de/en/metals-and-materials-international/4943136	https://ui.adsabs.harvard.edu/link_gateway/2021MMI....27.3823D/doi:10.1007/s12540-020-00778-7	UGC Care List-II (Web of Science)

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8. Structural, mechanical and optoelectronic features of cubic MgxCd1−xS, MgxCd1−xSe and MgxCd1−xTe semiconductor ternary alloys: Theoretical investigations using density functional FP-LAPW approach	Dr. Rahul Bhattacharjee	Department of Physics	Computational Condensed Matter	2020	2352-2143	https://www.sciencedirect.com/journal/computational-condensed-matter	https://doi.org/10.1016/j.cocom.2019.e00448	UGC Care List-II (Web of Science)

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10. Density functional study on structural and optoelectronic properties of cubic Mg xZn 1-xS ySe 1-y semiconductor quaternary alloys	Dr. Rahul Bhattacharje e	Department of Physics	Pramana - Journal of Physics	2020	0304-4289 / 0973-7111	https://www.researchgate.net/journal/Pramana-0973-7111	http://dx.doi.org/10.1007/s12043-020-01975-0	UGC Care List-II (Web of Science)
11. Cationic and anionic concentration dependent elastic properties of zinc blende specimens within CdxZn1-xSySe1-y quaternary system: Calculations with density functional theory	Dr. Rahul Bhattacharje e	Department of Physics	Solid State Communications	2020	0038-1098 / 1879-2766	https://www.sciencedirect.com/journal/solid-state-communications	https://doi.org/10.1016/j.ssc.2020.114050	UGC Care List-II (Web of Science)

12. Discovery of novel potential selective HDAC8 inhibitors by combine ligand-based, structurebased virtual screening and in-vitro biological evaluation	Dr Samhita Bhowmik	Department of Chemistry	Scientific Reports	2019	2045-2322	https://www.nature.com/srep/	https://www.nature.com/articles/s41598-019-53376-y	UGC Care List-II (Web of Science)
13. Forest Biomass estimation using remote sensing and field inventory: a case study of Tripura, India	Dr. Bal Krishan Choudhury	Department of EVS	Environment Monitoring and Assessment	2019	0167-6369 / 1573-2959	https://www.researchgate.net/journal/Environmental-Monitoring-and-Assessment-1573-2959	https://link.springer.com/article/10.1007%2Fs10661-019-7730-7	UGC Care List-II (Web of Science)
14. Potential Biomass Pools and Edaphic Properties of Plantation Forest in Tripura, India	Dr. Bal Krishan Choudhury	Department of EVS	International Journal of Ecology and Environmental Sciences 45 (4): 369-381, 2019	2019		https://www.researchgate.net/publication/338247884_Potential_Biomass_Pools_and_Edaphic_Properties_of_Plantation_Forest_in_Tripura_India	https://www.researchgate.net/publication/338247884_Potential_Biomass_Pools_and_Edaphic_Properties_of_Plantation_Forest_in_Tripura_India	
2020-2021								

1. Tarashankarer jibon darshan o Arogyaniketan	Dr Nivedita Dhar	Department of Bengali	Ebong Mohua,136 volume, Golekauchawk, Midnapur, W.B	2020				UGC Care List-I
2. Investigation on aeromycoflora in extramural and intramural environment at Udaipur, Gomati District, Tripura	Dr. Sikha Banik	Department of Botany	Indian Journal of Aerobiology	2021				
3. Identification of potential inhibitors of SARS-CoV-2 main protease and spike receptor from 10 important spices through structure-based virtual screening and molecular dynamic study	Dr. Samhita Bhaumik	Department of Chemistry	Journal of Biomolecular Structure and Dynamics	2020	0739-1102 / 1538-0254	https://www.tandfonline.com/journals/tbsd20	https://doi.org/10.1080/07391102.2020.1819883	UGC Care List-II (Web of Science)
4. In Silico Identification of Potential Inhibitors of the Main Protease of SARS-CoV-2 Using Combined Ligand-Based and Structure-Based Drug Design Approach	Dr. Samhita Bhaumik	Department of Chemistry	Eurasian Journa of Medicine and Oncology	2020	2587-2400 / 2587-196X	https://ejmo.org/volume/4/issue/4	https://dx.doi.org/10.14744/ejmo.2020.91768	UGC Care List-II (Web of Science)

5. In Silico Identification of Potential Inhibitors of ADP-Ribose Phosphatase of SARS-CoV-2 nsP3 by Combining E-Pharmacophore-and Receptor-Based Virtual Screening of Database	Dr. Samhita Bhaumik	Department of Chemistry	Chemistry Select	2020	2365-6549	https://chemistry-europe.onlinelibrary.wiley.com/journal/23656549	https://dx.doi.org/10.1002%2Fslct.202001419	UGC Care List-II (Web of Science)
6. Potentiality of Moringa oleifera against SARS-CoV-2: identified by a rational computer aided drug design method	Dr. Samhita Bhaumik	Department of Chemistry	Journal of Biomolecular Structure and Dynamics	2021	0739-1102 / 1538-0254	https://www.tandfonline.com/journals/tbsd20	https://doi.org/10.1080/07391102.2021.1898475	UGC Care List-II (Web of Science)
7. Phytochemicals of Zingiberaceae family exhibit potentiality against SARS-CoV-2 main protease identified by a rational computer-aided drug design	Dr. Samhita Bhaumik	Department of Chemistry	Natural Product Research	2021	1478-6419 / 1478-6427	https://www.tandfonline.com/journals/gnpl20	https://doi.org/10.1080/14786419.2021.1994563	UGC Care List-II (Web of Science)

8. Identification of Potential Scaffolds From the Shrub Justicia Adhatoda Against SARS-CoV-2 Main Protease Target	Dr. Samhita Bhaumik	Department of Chemistry	International Journal of Quantitative Structure-Property Relationships (IJQSPR)	2021	2379-7479/2379-7487	https://www.researchgate.net/journal/International-Journal-of-Quantitative-Structure-Property-Relationships-2379-7487	http://dx.doi.org/10.4018/IJQSPR.2021100104	UGC Care List-I
9. Writing Ordinary Lives;: An Analysis of Selected Women's Memoirs From North-East India	Dr. Somali Saha	Department of English	Langlit: An International Peer-Reviewed Open Access Journal	2021	2349-5189	https://www.langlit.org/	https://drive.google.com/file/d/1rnPuvoeAXe6fpHTy7jJ1sn7-cxj95LkA/view	
10. Metachromasia induced in cationic dyes by Iodine Salt	Dr Amitabha Saha	Department of Chemistry	Internaitonal Journal of Scienc and Reasearch	2020		https://www.ijsr.net/	https://www.ijsr.net/archive/v9i4/SR20410193025.pdf	
11. A Concise Review Report on Induced Breeding of Indian Major Carps through Pituitary Extract and Synthetic Hormone Analogues	Dr. Saumen Chakraborti	Department of Zoology	International Journal of Recent Scientific Research Vol. 11, Issue 11(A), pp. 40011-40016, November, 2020	2020	0976-3031	http://www.recentscientific.com/	http://www.recentscientific.com/concise-review-report-induced-breeding-indian-major-carps-through-pituitary-extract-and-synthetic-ho	
12. Studies on Density, Percentage Composition and Seasonal Variations of Phytoplankton in a Perennial Pond Ecosystem of Tripura, India with a note on Physico-chemical Factors	Dr. Saumen Chakraborti	Department of Zoology	International Journal of Current Microbiology and Applied Sciences 10(07): 662-670, 2021	2021	2319-7706	https://www.ijcmas.com/	https://doi.org/10.20546/ijcmas.2021.1007.072	

13. A Comparative Study on the Occurrence, Density and Seasonal Variations of Phytoplankton and Zooplankton in a Perennial Pond Ecosystem of Tripura, India	Dr. Saumen Chakraborti	Department of Zoology	Applied Ecology and Environmental Sciences Vol. 9, No. 8, 761-768, 2021	2021	2328-3920	http://www.sciepub.com/journal/AEES	https://doi.org/10.12691/aees-9-8-7	
14. A comparative study on the density and seasonal variations of rotifer and copepod fauna in a pond of Tripura, India with a note on water quality parameters	Dr. Saumen Chakraborti	Department of Zoology	International Journal of Fauna and Biological Studies 2021; 8(6): 01-06	2021	2347-2677	https://www.faunajournal.com/	https://doi.org/10.22271/23940522.2021.v8.i6a.855	
15. "Density Functional Calculations of Elastic and Thermal Properties of Zinc-Blende Mercury–Cadmium-Chalcogenide Ternary Alloys."	Dr. Rahul Bhattacharje e	Department of Physics	Metals and Materials International (2020) (SPRINGER)	2020	1598-9623 / 2005-4149	https://www.springer.com/journal/12540	https://ui.adsabs.harvard.edu/link_gateway/2021MMI....27.3823D/doi:10.1007/s12540-020-00778-7	UGC Care List-II (Web of Science)

16. “Density functional calculations of elastic and thermal properties of zinc-blende HgSxSe1− x, HgSxTe1− x and HgSexTe1− x ternary alloys.”	Dr. Rahul Bhattacharje e	Department of Physics	Computational Condensed Matter 24(2020) e00482 Elsevier	2020	2352-2143	https://www.sciencedirect.com/journal/computational-condensed-matter	https://doi.org/10.1016/j.cocom.2020.e00482	UGC Care List-II (Web of Science)
17. “First-principle calculations of structural and optoelectronic properties of cubic Cd x Zn 1− x S y Se 1− y quaternary alloys with modified Becke–Johnson (mBJ) functional.”	Dr. Rahul Bhattacharje e	Department of Physics	Indian Journal of Physics 1-13 Springer India	2020	0973-1458 / 0974-9845	https://www.springer.com/journal/12648	https://ui.adsabs.harvard.edu/link_gateway/2021InJPh..95.2313C/doi:10.1007/s12648-020-01880-7	UGC Care List-II (Web of Science)

18. “Structural, mechanical and optoelectronic properties of cubic BexMg1−xS, BexMg1−xSe, BexMg1−xS, BexMg1−xSe and BexMg1−xTe, BexMg1−xTe semiconductor ternary alloys: a density functional study.”	Dr. Rahul Bhattacharje e	Department of Physics	Bulletin of Materials Science 43 (2020) 1-26 Indian Academy of Sciences	2020	0250-4707 / 0973-7669	https://www.researchgate.net/journal/Bulletin-of-Materials-Science-0973-7669	https://www.researchgate.net/publication/339229024_Structural_mechanical_and_optoelectronic_properties_of_cubic_Be_x_Mg_1-x_S_Be_x_Mg_1-x_Se_and_Be_x_Mg_1-x_Te_semiconductor_ternary_alloys_a_density_functional_study	UGC Care List-II (Web of Science)
19. “Density functional study on structural and optoelectronic properties of cubic Mg x Zn 1 - x S y Se 1 - y semiconductor quaternary alloys.”	Dr. Rahul Bhattacharje e	Department of Physics	Pramana 94 (2021) 1-20 Springer India	2020	0304-4289 / 0973-7111	https://www.springer.com/journal/12043/	http://dx.doi.org/10.1007/s12043-020-01975-0	UGC Care List-II (Web of Science)

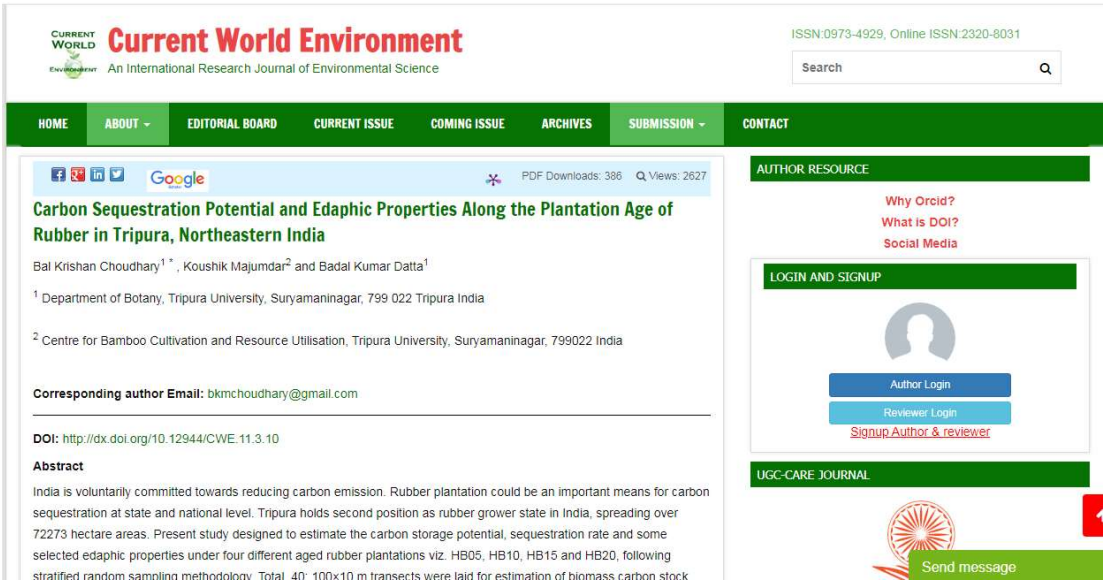
20. “Cationic and anionic concentration dependent elastic properties of zinc blende specimens within CdxZn1-xSySe1-y quaternary system: Calculations with density functional theory.”	Dr. Rahul Bhattacharje e	Department of Physics	Solid State Communicatio ns 322 (2020) 114050 Pergamon	2020	0038-1098 / 1879-2766	https://www.sci encedirect.com/ journal/solid-state-communications	https://doi.org/10.101 6/j.ssc.2020.114050	UGC Care List-II (Web of Science)
21. “Density functional study of elastic and thermal properties of cubic mercury┐ zinc-chalcogenide ternary alloys”	Dr. Rahul Bhattacharje e	Department of Physics	Bulletin of Materials Science. 43 (2020) 1-17 Indian Academy of Sciences	2020	0250-4707 / 0973-7669	https://www.spr inger.com/journ al/12034	https://doi.org/10.100 7/s12034-020-02236-x	UGC Care List-II (Web of Science)
22. “Cationic and anionic composition-dependent mechanical and thermal properties of zinc-blende specimens under MgxZn1-xSySe1-y, MgxZn1-xSySe1-y quaternary system: calculations with density functional FP-LAPW scheme.”	Dr. Rahul Bhattacharje e	Department of Physics	The European Physical Journal B 94 (2021) 1-16 SPRINGER	2021	1434-6028 / 1434-6036	https://www.spr inger.com/journ al/10051/	https://doi.org/10.114 0/EPJB%2FS10051-020-00024-4	UGC Care List-II (Web of Science)

Metric 3.2.1

Number of papers published per teacher in the Journals notified on UGC website during the last five years

2016-17

1. Carbon Sequestration Potential and Edaphic Properties Along the Plantation Age of Rubber in Tripura, Northeastern India.by Dr. Bal Krishan Choudhury, Department of EVS



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Carbon Sequestration Potential and Edaphic Properties Along the Plantation Age of Rubber in Tripura, Northeastern India

Bal Krishan Choudhary[1] *, Koushik Majumdar[2] and Badal Kumar Datta[1]

[1] Department of Botany, Tripura University, Suryamaninagar, 799 022 Tripura India

[2] Centre for Bamboo Cultivation and Resource Utilisation, Tripura University, Suryamaninagar, 799022 India

Corresponding author Email: bkmchoudhary@gmail.com

DOI: http://dx.doi.org/10.12944/CWE.11.3.10

Abstract

India is voluntarily committed towards reducing carbon emission. Rubber plantation could be an important means for carbon sequestration at state and national level. Tripura holds second position as rubber grower state in India, spreading over 72273 hectare areas. Present study designed to estimate the carbon storage potential, sequestration rate and some selected edaphic properties under four different aged rubber plantations viz. HB05, HB10, HB15 and HB20, following stratified random sampling methodology. Total 40; 100x10 m transects were laid for estimation of biomass carbon stock

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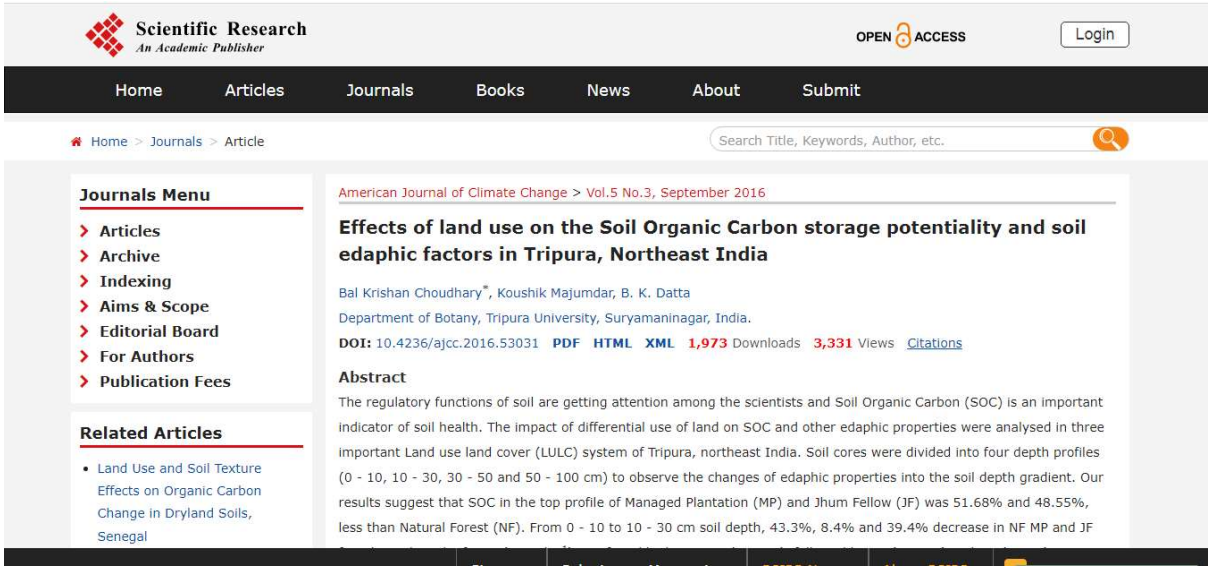
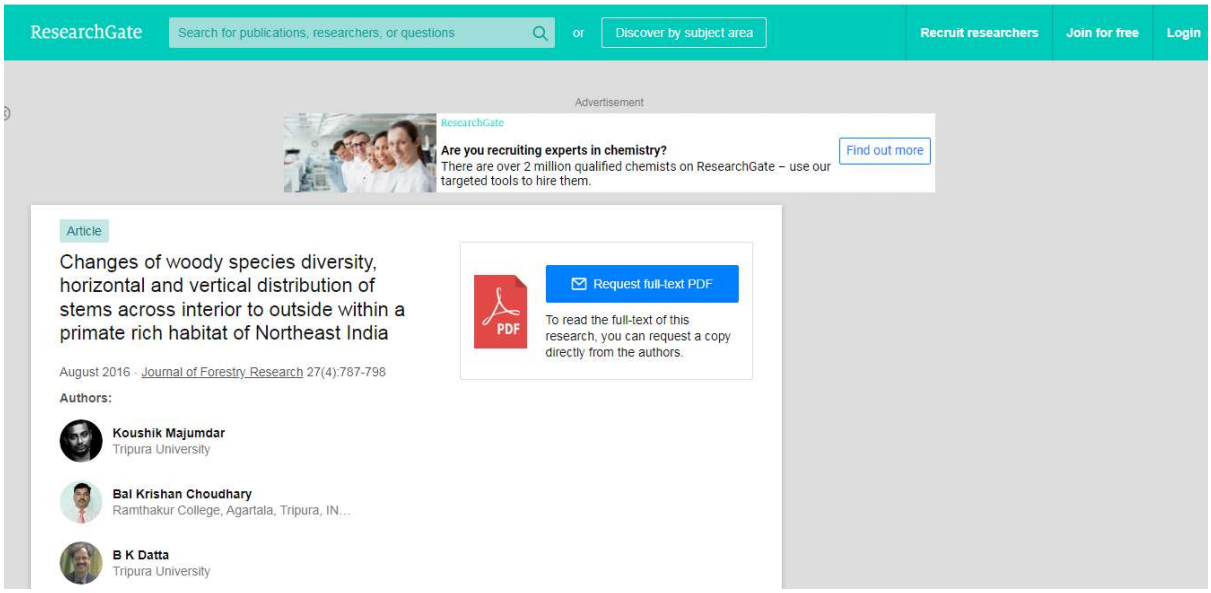
2. Above ground woody biomass, carbon stocks potential in selected tropical forest patches of Tripura, Northeast India-Dr. Bal Krishan Choudhury, Department of EVS

3. Effects of Land Use on the Soil Organic Carbon Storage Potentiality and Edaphic Factors in Tripura, Northeast India- Dr. Bal Krishan Choudhury, Department of EVS

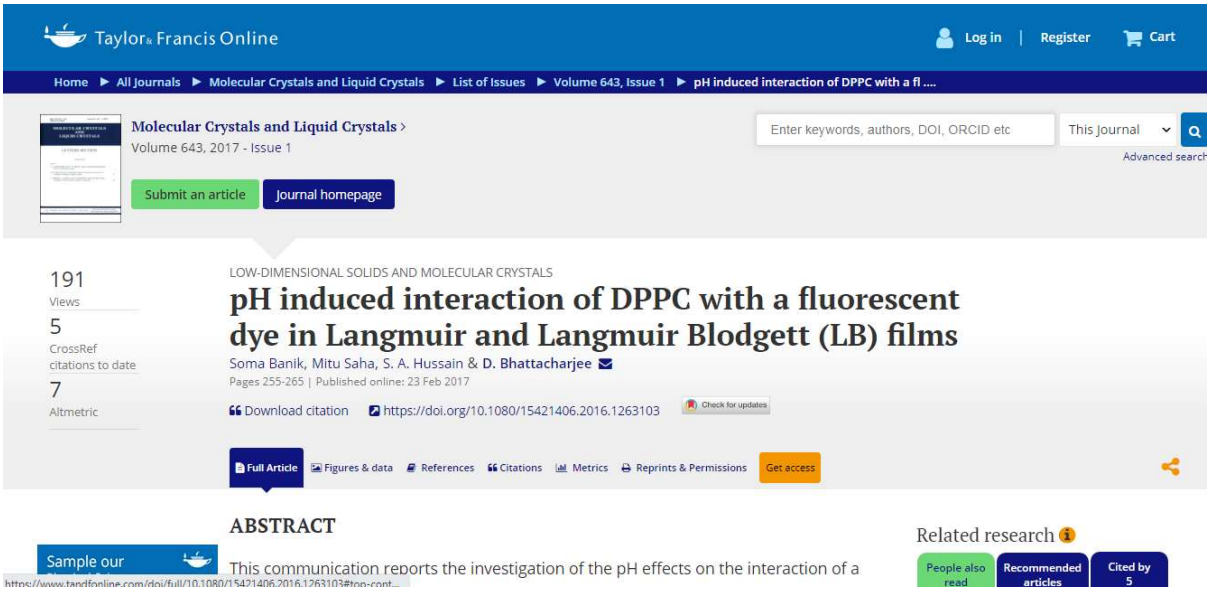


4. Applications of Remote Sensing and GIS in Conservation of Resources- Dr. Bal Krishan Choudhury, Department of EVS

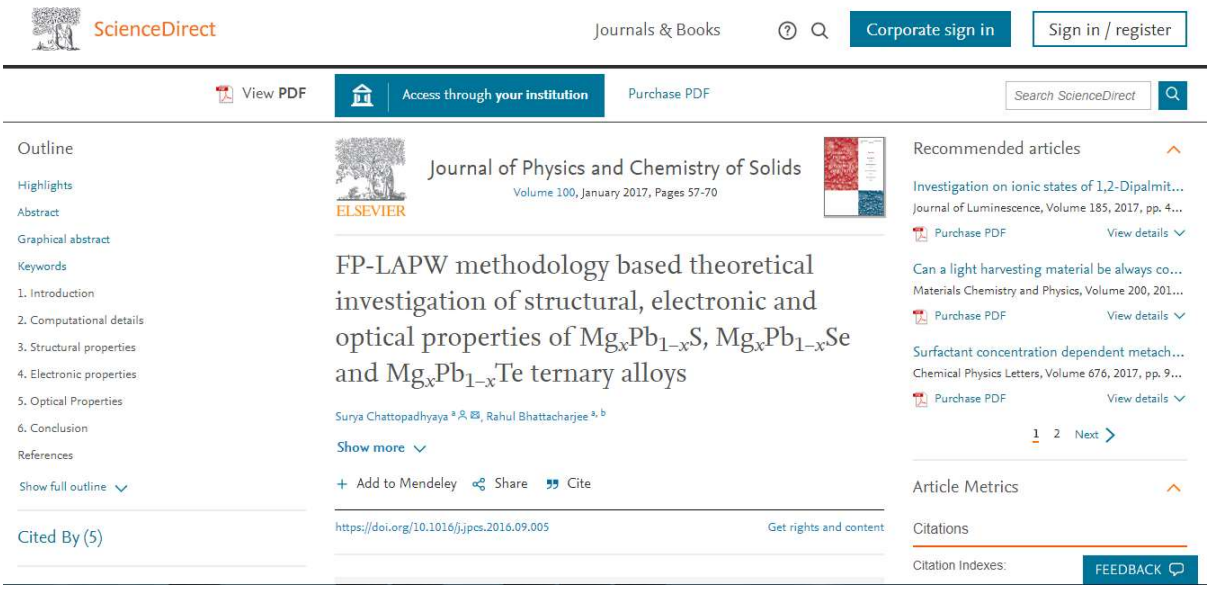
5. Changes of woody species diversity, horizontal and vertical distribution of stems across interior to outside within a primate rich habitat of Northeast India.- Dr. Bal Krishan Choudhury, Department of EVS.



6. pH induced interaction of DPPC with a fluorescent dye in Langmuir and Langmuir Blodgett (LB) films- Dr. Soma Banik, Department of Physics.

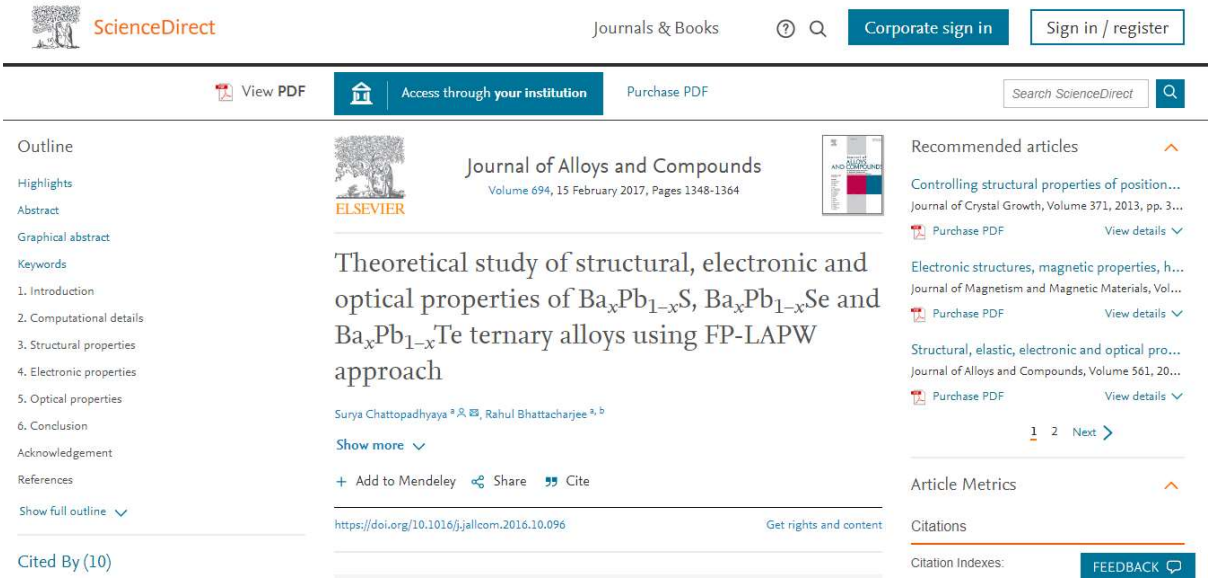


7. FP-LAPW methodology based theoretical investigation of structural, electronic and optical properties of MgxPb1− xS, MgxPb1− xSe and MgxPb1− xTe ternary alloys by Dr. Rahul Bhattacharjee, Department of Physics.



8. DFT based FP-LAPW investigation of structural, electronic and optical properties of SrxPb1− xS, SrxPb1− xSe and SrxPb1− xTe ternary alloys by Dr. Rahul Bhattacharjee, Department of Physics.

9. Theoretical study of structural, electronic and optical properties of BaxPb1− xS, BaxPb1− xSe and BaxPb1− xTe ternary alloys using FP-LAPW approach by Dr. Rahul Bhattacharjee, Department of Physics.



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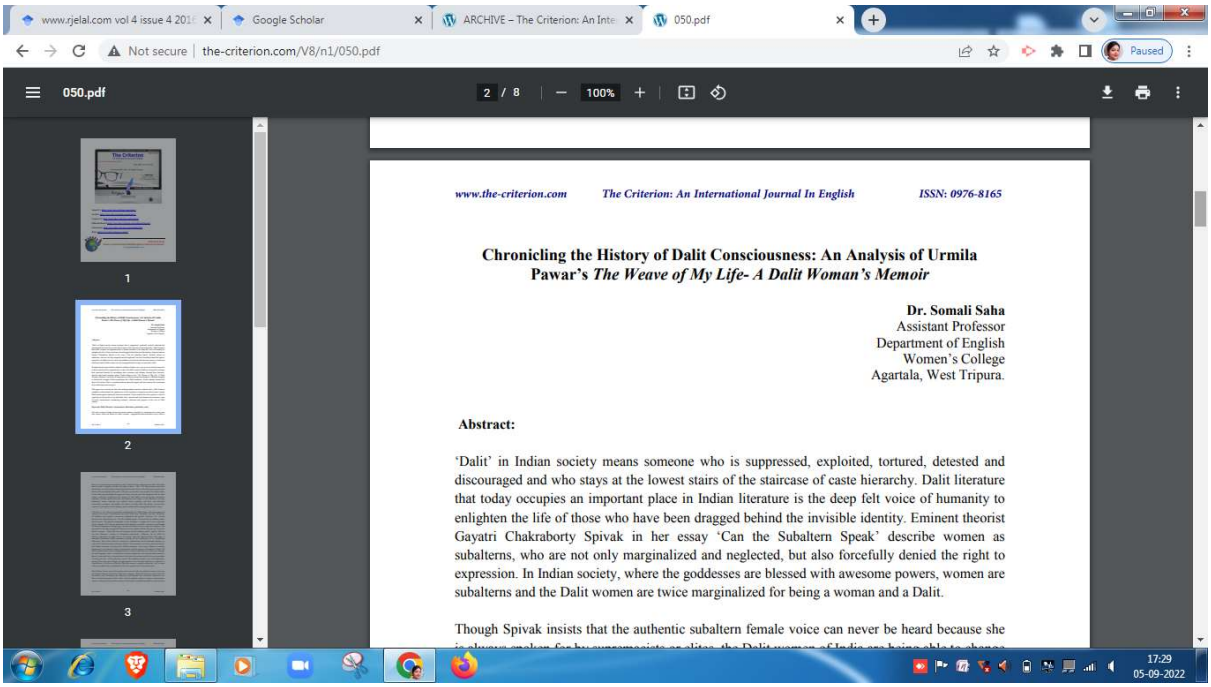
16. **Chronicling the History of Dalit Consciousness: An Analysis of Urmila Pawar's The Weave of My Life- A Dalit Woman's Memoir-** Dr. Somali Saha, Department of English published in The Criterion: An International Journal in English



17. **Role of Translation in Mainstreaming Dalit Literature- An Analysis of Selected Dalit Autobiographies in Translationn-** Somali Saha published in Research Journal of English Language and Literature- A Peer Reviewed (Referred) International Journal.

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Vol.4.Issue 4. 2016
(Oct.Dec.)

RESEARCH ARTICLE

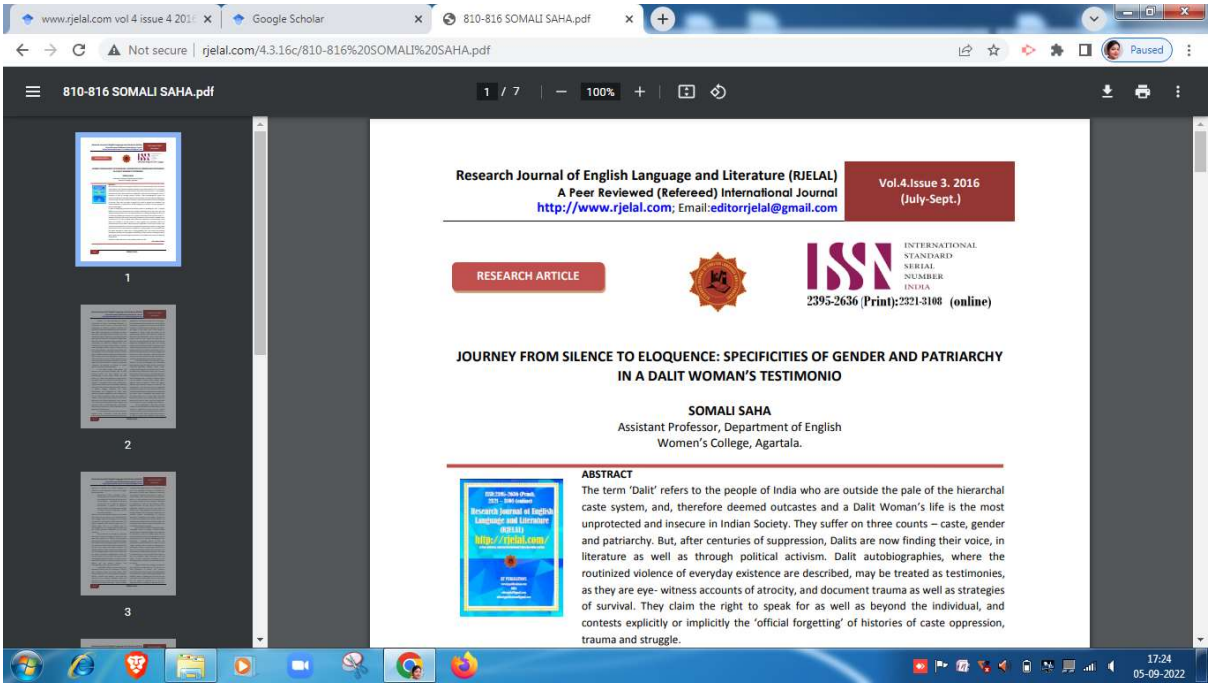
INTERNATIONAL STANDARD SERIAL NUMBER INDIA
2395-2636 (Print):2321-3108 (online)

ROLE OF TRANSLATION IN MAINSTREAMING DALIT LITERATURE – AN ANALYSIS OF SELECTED DALIT AUTOBIOGRAPHIES IN TRANSLATION

SOMALI SAHA
Assistant Professor
Department of English, Women's College, Agartala, West Tripura

ABSTRACT
The rich diversity of human community cannot be appreciated or even understood without the essential tool of translation and it plays an important role in the literary life of India which in its multilingual, multicultural nature, is a microcosm of the whole world. The marginalization of the Dalits in India by the hierarchical upper-castes and the resultant sorrows and sufferings, their culture and beliefs which had been hitherto unrevealed in the mainstream literature is now exposed to the world through the literature of their own. Since many works of Dalit Literature are available in regional languages restricting them to respective regions, English translation of some of the texts seems to be a conduit to take the translated Dalit Literature closer to mainstream literature. Analyzing some translated

18. **Journey From Silence to Eloquence: Specificities of Gender and Patriarchy in a Dalit Woman's Testimonio** – Somali Saha, Department of English, published in Research Journal of English Language and Literature- A Peer Reviewed (Referred) International Journal.



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Vol.4.Issue 3. 2016
(July-Sept.)

RESEARCH ARTICLE

INTERNATIONAL STANDARD SERIAL NUMBER INDIA
2395-2636 (Print):2321-3108 (online)

JOURNEY FROM SILENCE TO ELOQUENCE: SPECIFICITIES OF GENDER AND PATRIARCHY IN A DALIT WOMAN'S TESTIMONIO

SOMALI SAHA
Assistant Professor, Department of English
Women's College, Agartala.

ABSTRACT
The term 'Dalit' refers to the people of India who are outside the pale of the hierarchal caste system, and, therefore deemed outcastes and a Dalit Woman's life is the most unprotected and insecure in Indian Society. They suffer on three counts – caste, gender and patriarchy. But, after centuries of suppression, Dalits are now finding their voice, in literature as well as through political activism. Dalit autobiographies, where the routinized violence of everyday existence are described, may be treated as testimonies, as they are eye- witness accounts of atrocity, and document trauma as well as strategies of survival. They claim the right to speak for as well as beyond the individual, and contests explicitly or implicitly the 'official forgetting' of histories of caste oppression, trauma and struggle.

19. **Portrayal of 'New Woman- A Feminist Reading of Tagore's Chandalika and 'Natir Puja'-**Somali Saha published in Research Journal of English Language and Literature- A Peer Reviewed (Referred) International Journal.

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Vol.4.Issue 4. 2016 (Oct.Dec.)

RESEARCH ARTICLE

INTERNATIONAL STANDARD SERIAL NUMBER INDIA
2395-2636 (Print):2321-3108 (online)

PORTRAYAL OF 'NEW WOMAN' – A FEMINIST READING OF TAGORE'S *CHANDALIKA* AND *NATIR PUJA*

SOMALI SAHA
Assistant Professor, Women's College. Agartala, West Tripura

ABSTRACT

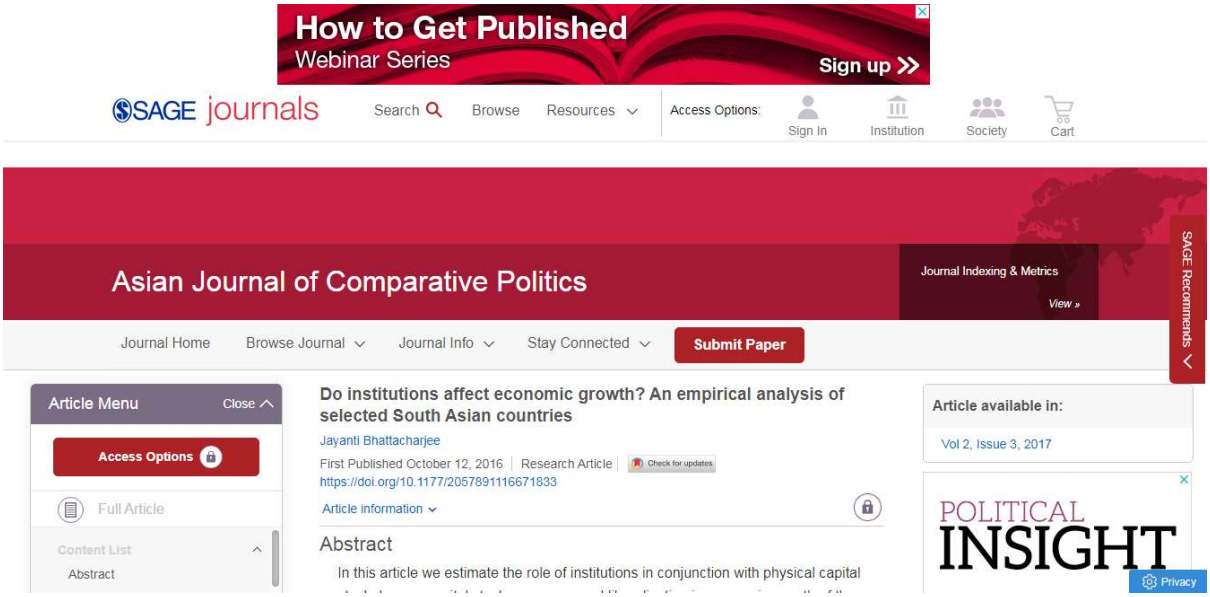
Tagore's portrayal of underprivileged women like Chandalika, Chitrangada or Srimati is a reflection of the idea of the 'new woman' that had emerged from the time of the Bengal Renaissance, and feminism in Rabindranath challenges the traditional view of women as the weaker sex. He urged women to step out of the precincts of their home to pursue education and cultivate their intellect stressing the importance of their autonomous self development. So he chooses the icons of marginality-warriors, untouchables, dancing girls in his women centred dramas to portray the radical nature of his conception of women and the maturation of their self hood. This paper is a humble attempt to showcase how the underprivileged women protest for establishing their identity as 'new women' as reflected in Tagore's *Chandalika* and *Natir Puja*.

Metric 3.2.1

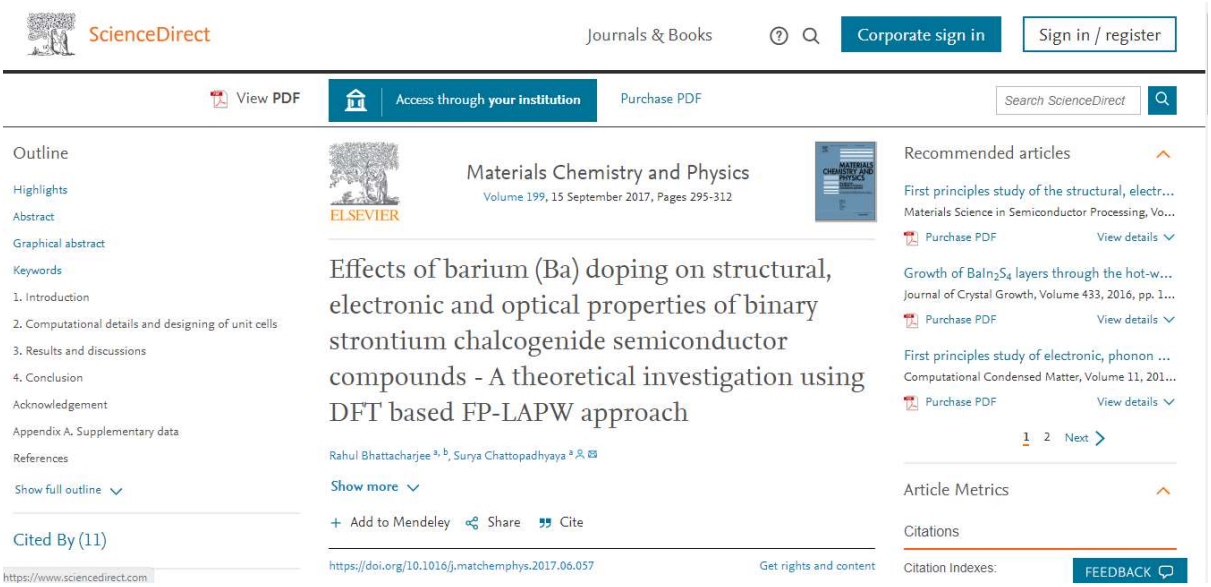
Number of papers published per teacher in the Journals notified on UGC website during the last five years

2017-18

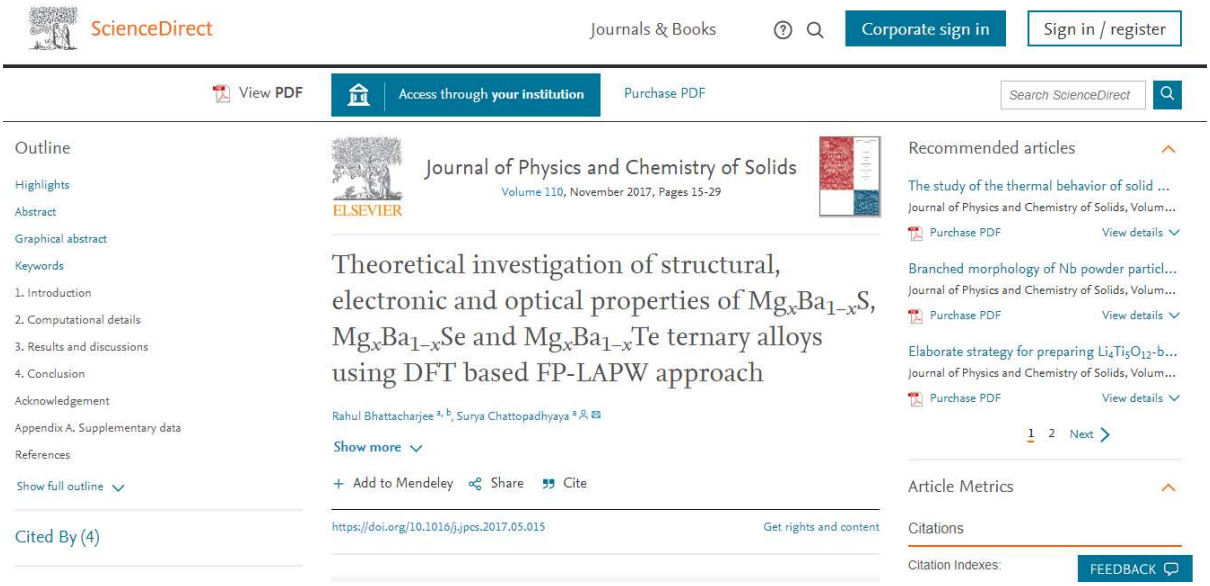
1. Applications of Remote Sensing and GIS in Land Resource Management by Dr Bal krishan Choudhary, Department of EVS.
2. Do institutions affect Economic Growth? An Empirical Analysis of Selected South Asian Countries by Dr. Jayanti Bhattacharjee, Department of Economics.



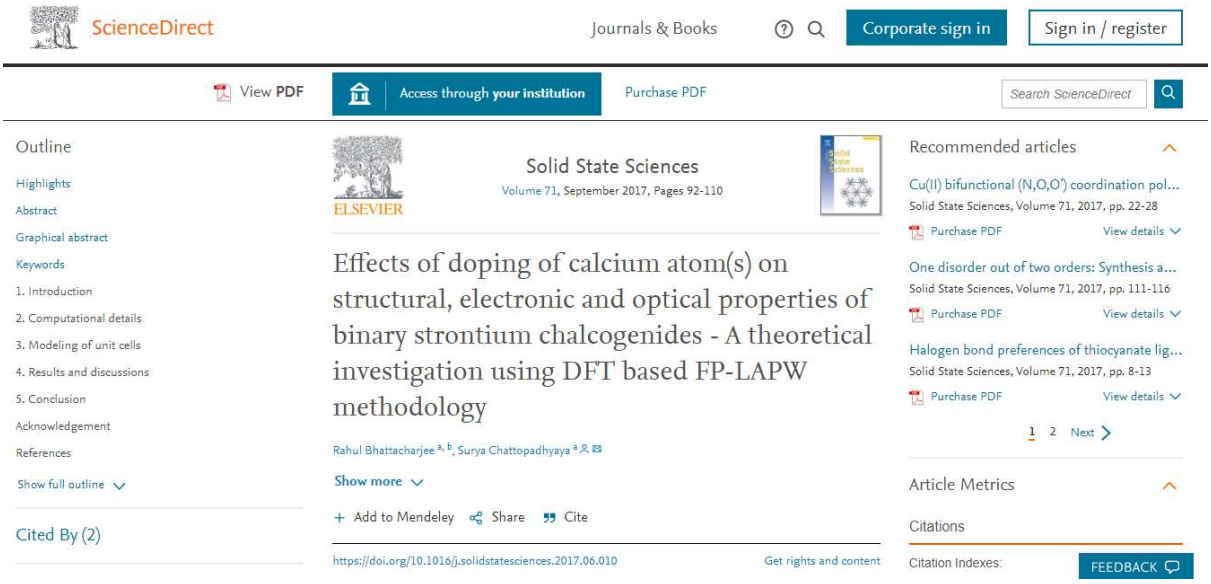
3. Effects of barium (Ba) doping on structural, electronic and optical properties of binary strontium chalcogenide semiconductor compounds - A theoretical investigation using DFT based FP-LAPW approach by Dr. Rahul Bhattacharjee, Department of Physics.



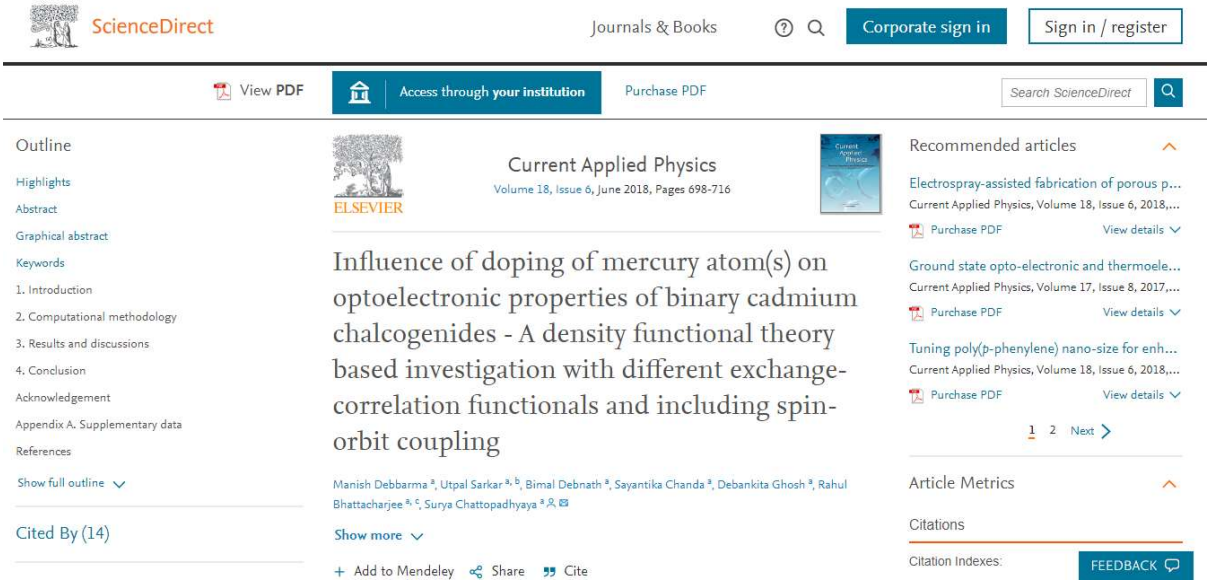
4. Theoretical investigation of structural, electronic and optical properties of MgxBa1− xS, MgxBa1− xSe and MgxBa1− xTe ternary alloys using DFT based FP-LAPW approach by Dr. Rahul Bhattacharjee, Department of Physics.



5. Effects of doping of mercury atom (s) on optoelectronic properties of binary zinc chalcogenides-A first principle based theoretical investigation by Dr. Rahul Bhattacharjee, Department of Physics.



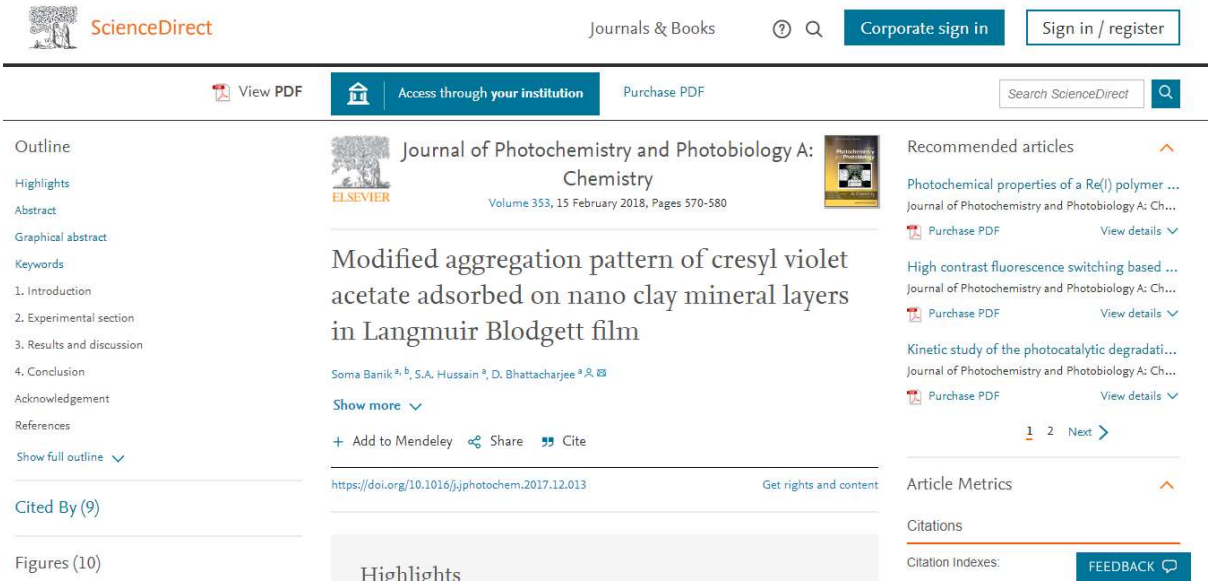
6. Influence of doping of mercury atom(s) on optoelectronic properties of binary cadmium chalcogenides - A density functional theory based investigation with different exchange-correlation functionals and including spin-orbit coupling by Dr. Rahul Bhattacharjee, Department of Physics.



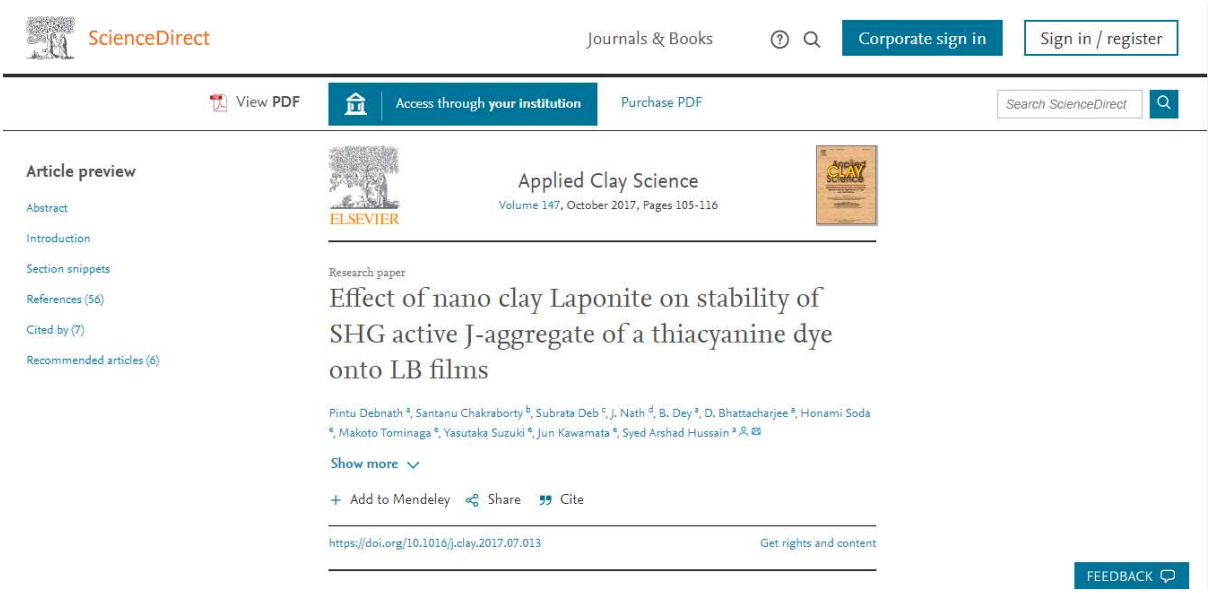
7. Modification of band gaps and optoelectronic properties of binary calcium chalcogenides by means of doping of magnesium atom(s) in rock-salt phase- a first principle based theoretical initiative by Dr. Rahul Bhattacharjee, Department of Physics.

8. Effects of doping of mercury atom (s) on optoelectronic properties of binary zinc chalcogenides-A first principle based theoretical investigation by Dr. Rahul Bhattacharjee, Department of Physics.

9. Modified aggregation pattern of cresyl violet acetate adsorbed on nano clay mineral layers in Langmuir Blodgett film. 353 (2018) 570-580 by Dr. Soma Banik, Department of Physics.



10. Effect of nano clay Laponite on stability of SHG active J-aggregate of a thiacyanine dye onto LB films by Dr. Subrata Deb, Department of Physics.



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2018-19

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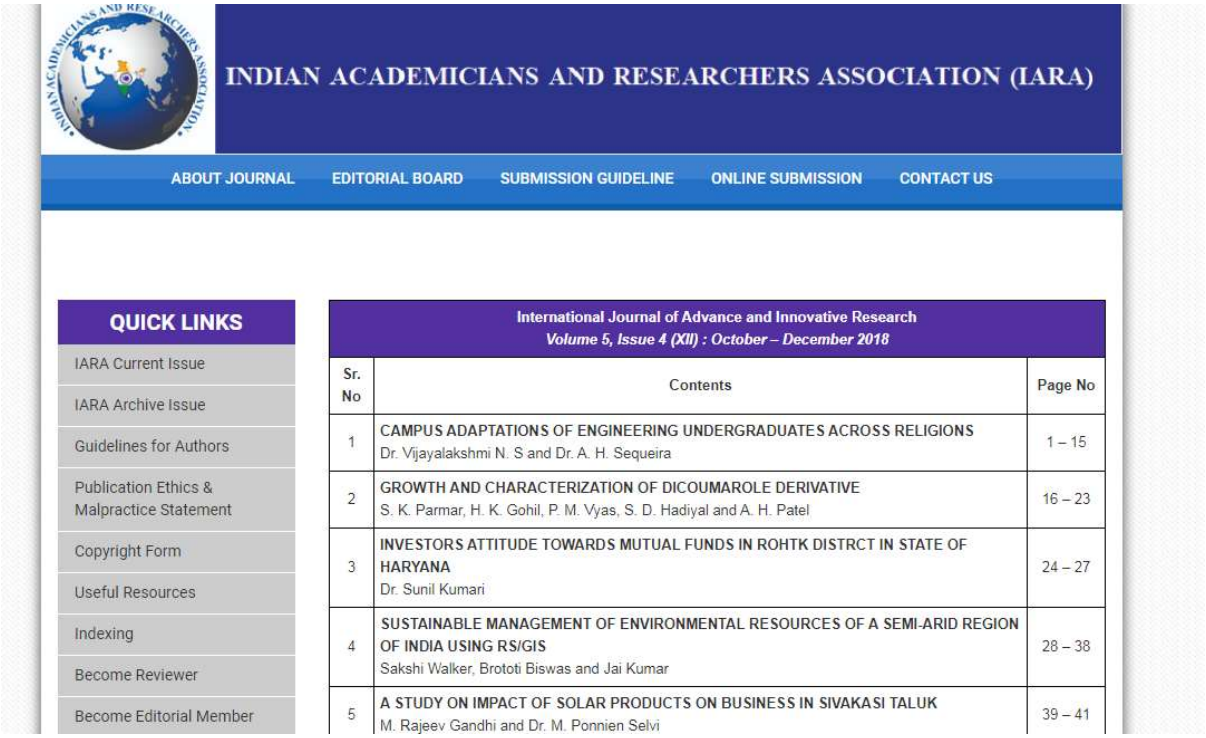

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4	SUSTAINABLE MANAGEMENT OF ENVIRONMENTAL RESOURCES OF A SEMI-ARID REGION OF INDIA USING RS/GIS Sakshi Walker, Brototi Biswas and Jai Kumar	28 – 38
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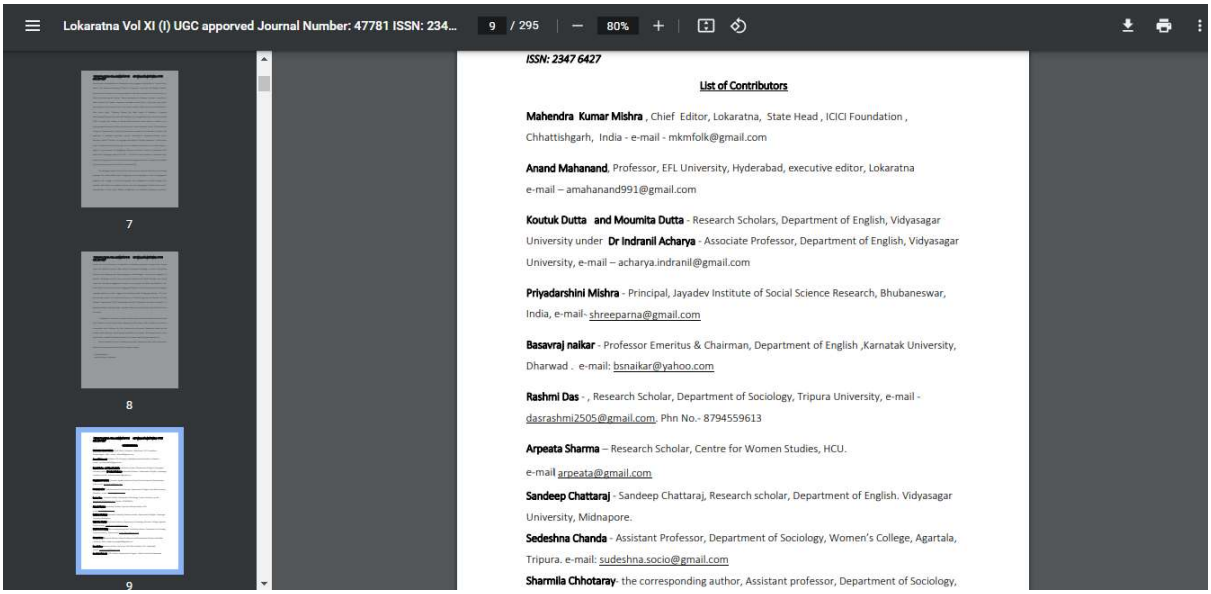

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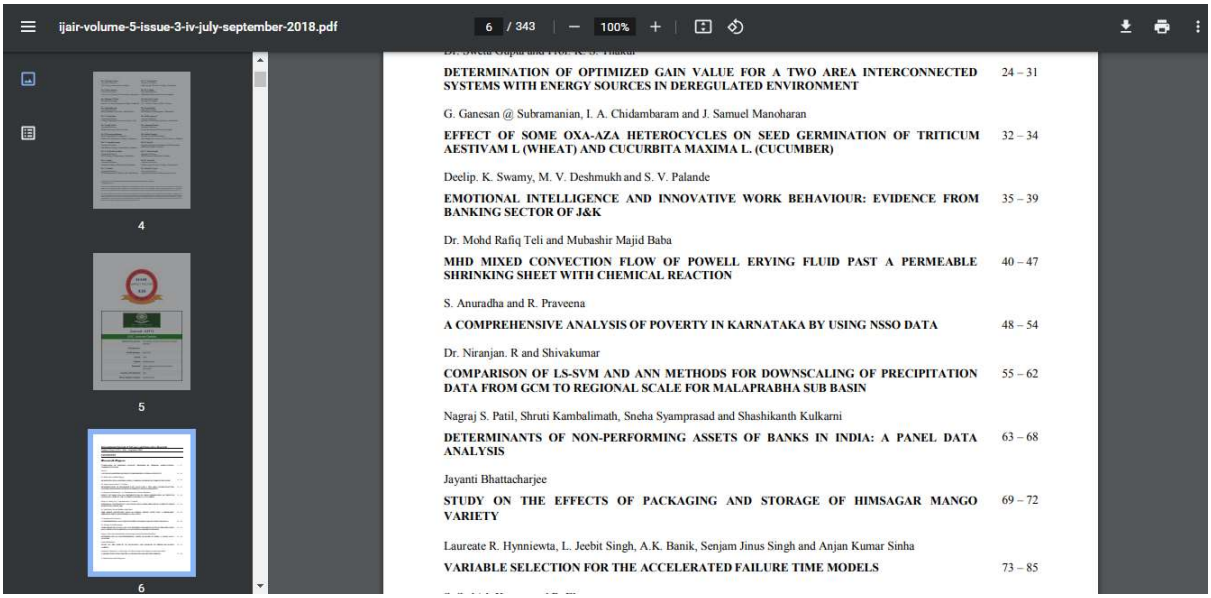

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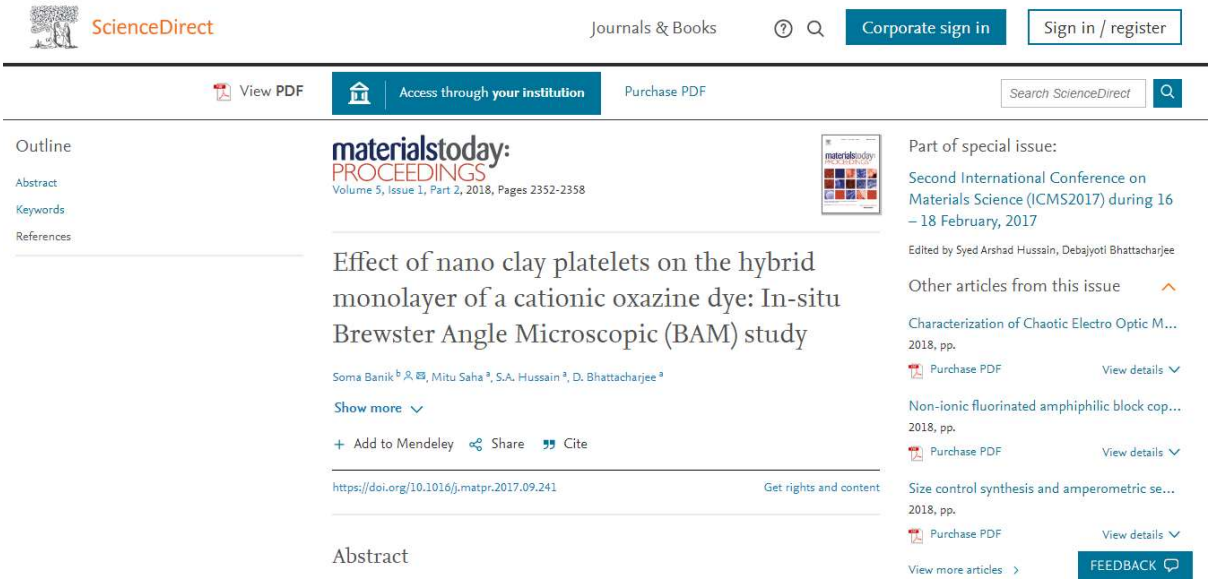

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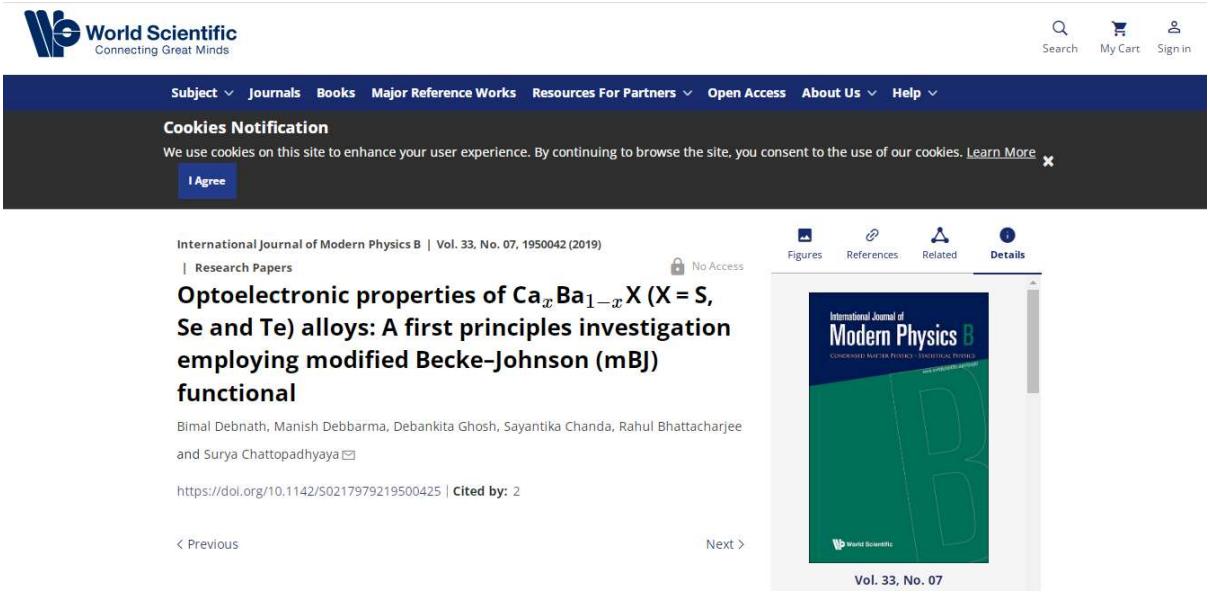
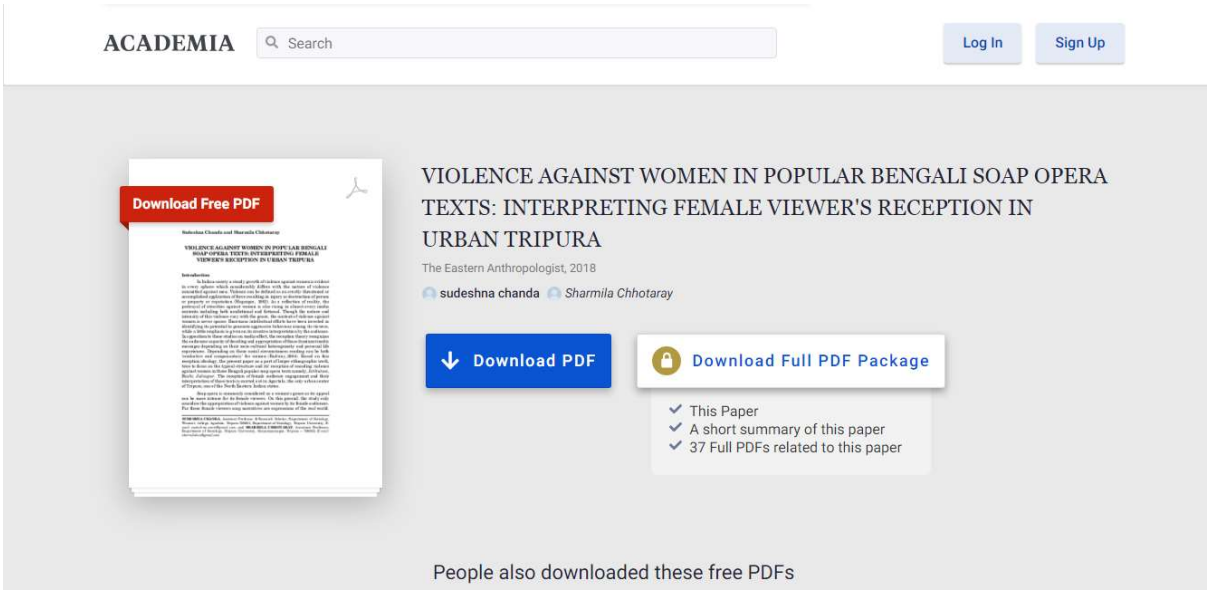
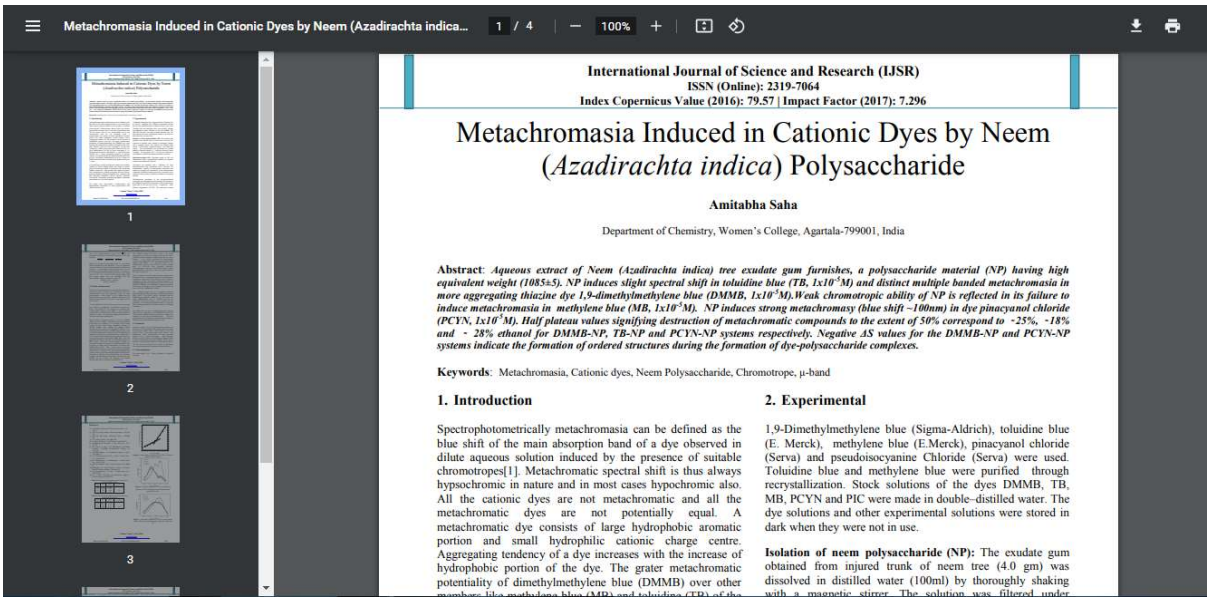


7. Density functional calculations of structural, elastic and optoelectronic features of MgxZn1− xS, MgxZn1− xSe and MgxZn1− xTe alloys by Dr. Rahul Bhattacharjee, Department of Physics.

8. Violence Against Women in Popular Bengali Soap Opera Texts: Interpreting Female Viewer's Reception in Urban Tripura by Sudeshna Chanda, Department of Sociology.



9. Metachromasia induced in Cationic dyes by neem (Azadiracta indica) Polysaccharide by Dr. Amitabha Saha, Department of Chemistry.



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MAJOR CAUSES OF SOIL DEGRADATION IN HAORA DRAINAGE BASIN, TRIPURA, INDIA
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Abstract:
Soil is defined as "the portion of the earth's crust in which land plants can grow, if water and temperature are adequate, at least the minimum nutrients are available, and toxic substances are in low concentration" (Miller and Donahue,
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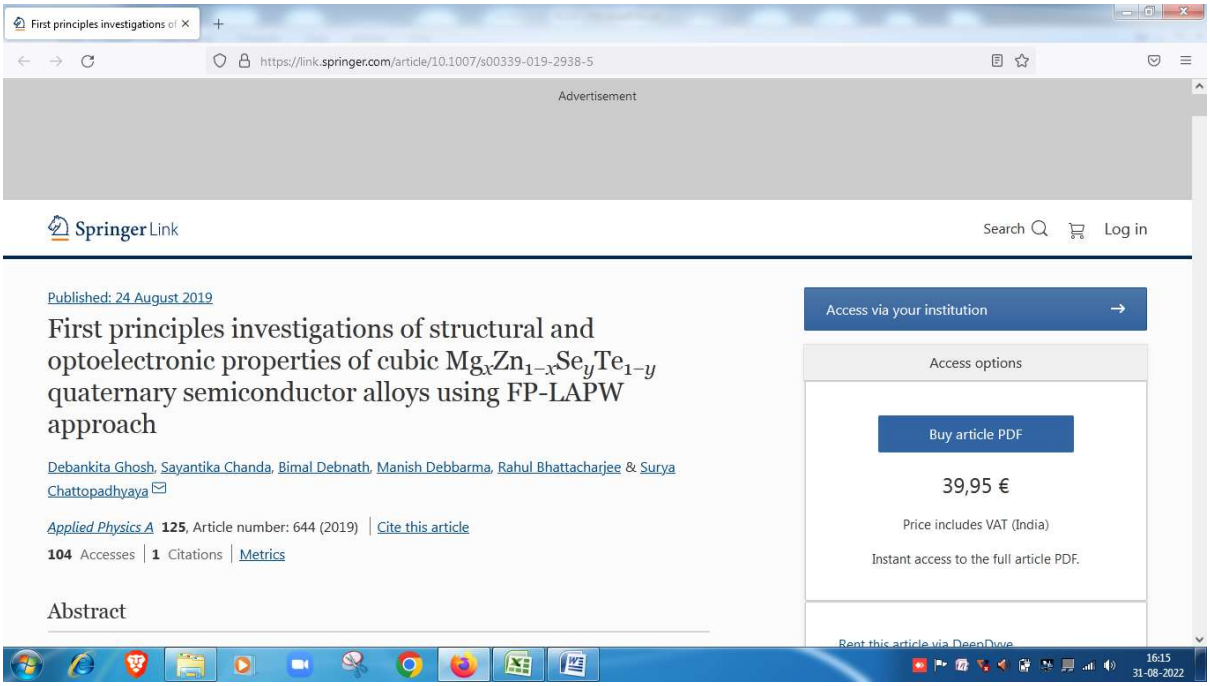
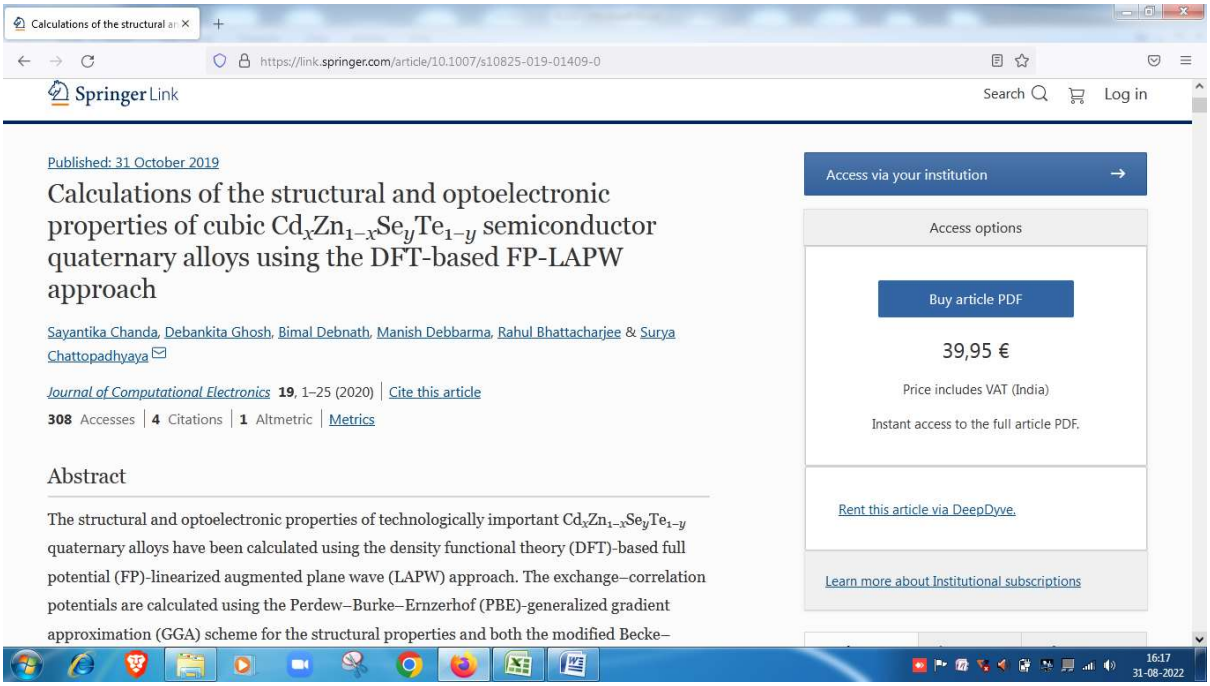


2. Structural and optoelectronic properties of cubic MgxZn1-xSyTe1-y semiconductor quaternary alloys-a first principles investigation by Dr. Rahul Bhattacharjee, Department of Physics

3. Calculations of the structural and optoelectronic properties of cubic CdxZn1−xSeyTe1−y semiconductor quaternary alloys using the DFT-based FP-LAPW approach by Dr. Rahul Bhattacharjee, Department of Physics



4. Density Functional Investigations of Structural, Mechanical and Optoelectronic Properties of BeSxSe1-x, BeSxTe1-x and BeSexTe1-x Ternary Alloys by Dr. Rahul Bhattacharjee, Department of Physics

5. First principle investigations of structural and optoelectronic features of cubic CdxZn1−xSyTe1-y quaternary semiconductor alloys by Dr. Rahul Bhattacharjee, Department of Physics

6. Density Functional Calculations of Elastic and Thermal Properties of Zinc-Blende Mercury–Cadmium-Chalcogenide Ternary Alloys by Dr. Rahul Bhattacharjee, Department of Physics

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Density Functional Calculations of Elastic and Thermal Properties of Zinc-Blende Mercury–Cadmium-Chalcogenide Ternary Alloys

Manish Debbarma, Subhendu Das, Bimal Debnath, Debankita Ghosh, Sayantika Chanda, Rahul Bhattacharjee & Surya Chattopadhyaya

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Abstract

Density functional calculations are carried out on elastic and thermal properties of zinc-blende specimens within $Hg_xCd_{1-x}S$, $Hg_xCd_{1-x}Se$ and $Hg_xCd_{1-x}Te$ ternary systems. Elastic stiffness constants decrease almost linearly with increasing Hg-concentration in each system. Each cubic sample is mechanically and dynamically stable, elastically anisotropic, compressible against elastic deformation, ductile and fairly plastic. The hardness of specimens in each system reduces almost linearly with enhancement in Hg-composition. Mixed kind of bonding

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7. Density Functional Investigations of Structural, Mechanical and Optoelectronic Properties of BeSxSe1−x, BeSxTe1−x and BeSexTe1−x Ternary Alloys by Dr. Rahul Bhattacharjee, Department of Physics

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Density Functional Investigations of Structural, Mechanical and Optoelectronic Properties of BeS_xSe_{1-x}, BeS_xTe_{1-x} and $BeSe_xTe_{1-x}$ Ternary Alloys

Bimal Debnath, Manish Debbarma, Debankita Ghosh, Sayantika Chanda, Rahul Bhattacharjee & Surya Chattopadhyaya

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Abstract

Density functional full-potential linearized augmented plane wave (FP-LAPW) investigations of structural, mechanical and optoelectronic features of cubic BeS_xSe_{1-x}, BeS_xTe_{1-x} and $BeSe_xTe_{1-x}$ ternary alloys are performed. Nonlinear decrease in lattice constant (a_0), but increase in bulk modulus (B_0) and each elastic constant (C_{11}, C_{12} and C_{44}) occurs with increasing dopant chalcogen concentration x in each system. In each specimen, elastic anisotropy, brittleness and dominancy of covalent bonding are observed. Each binary

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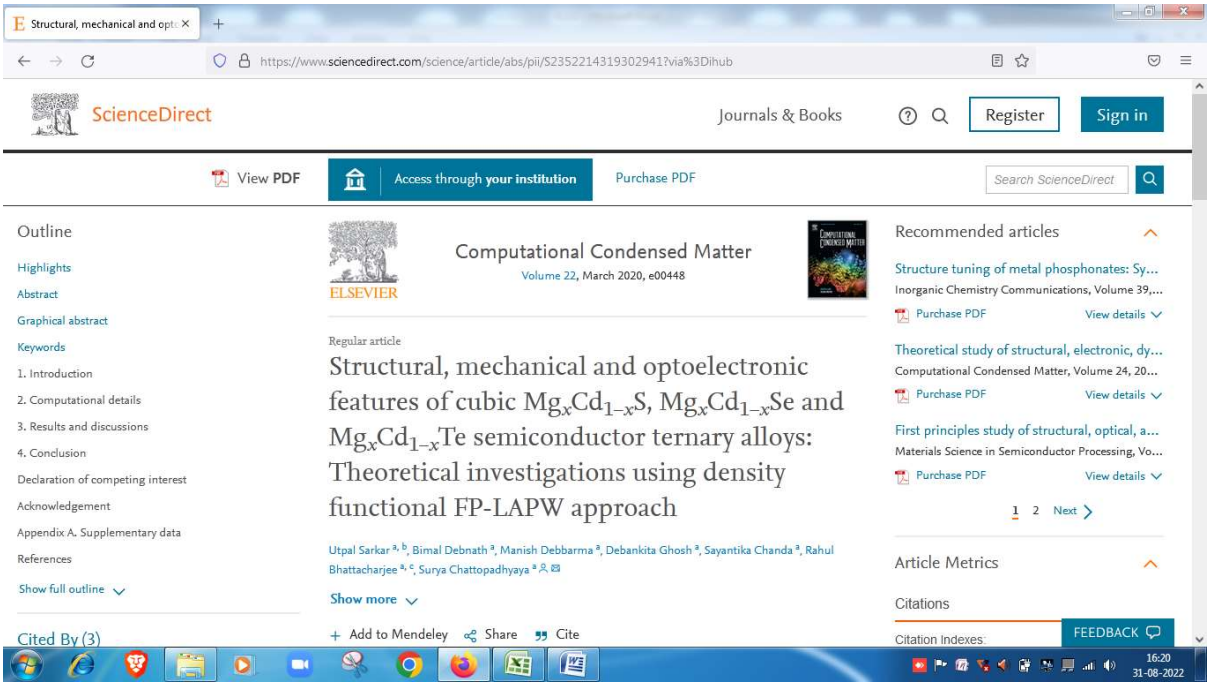
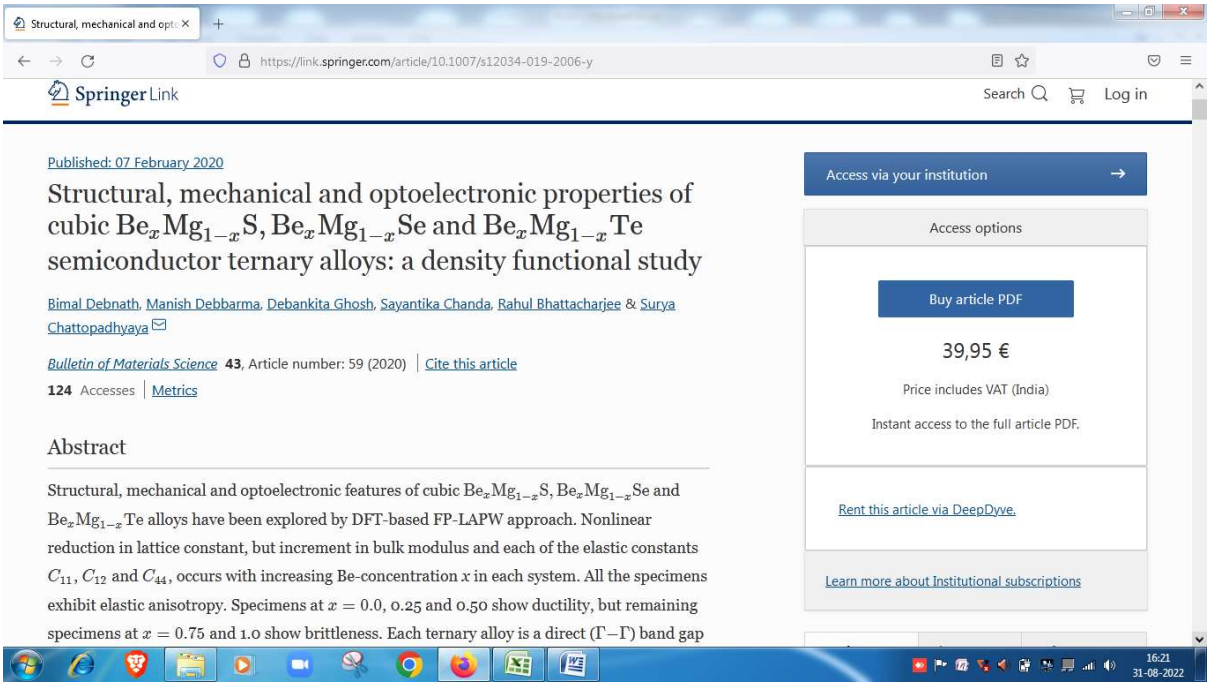


9. Density functional study on structural and optoelectronic properties of cubic Mg xZn 1-xS ySe 1-y semiconductor quaternary alloys by Dr. Rahul Bhattacharjee, Department of Physics



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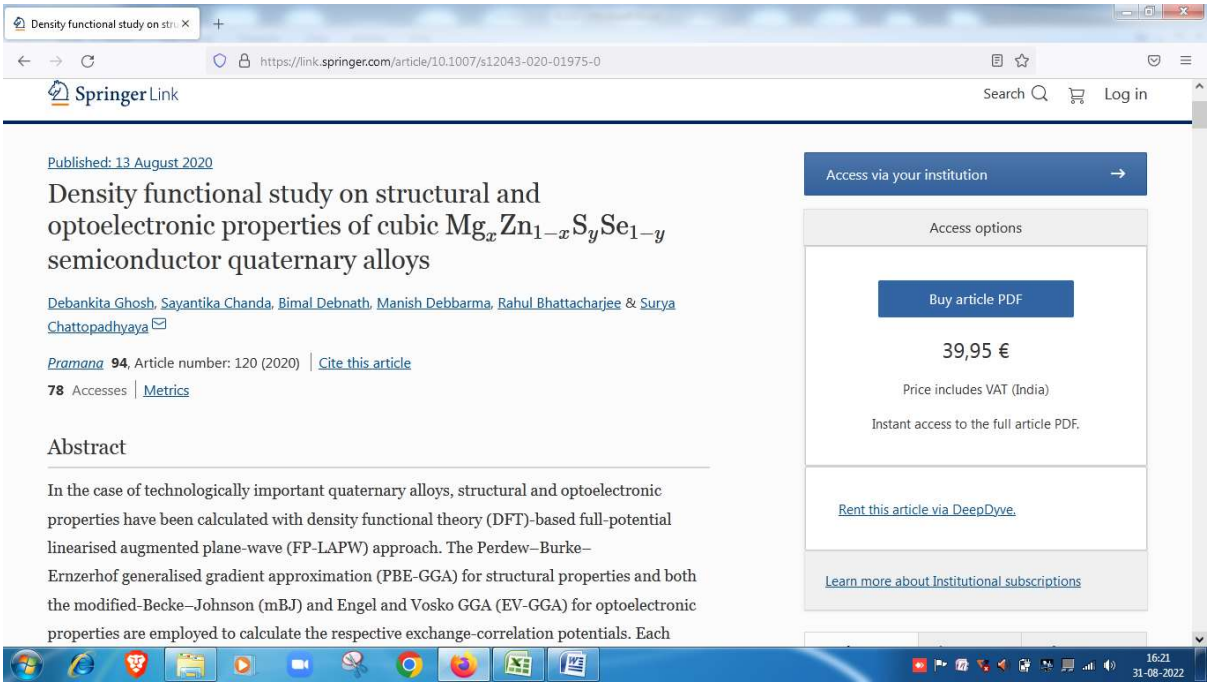

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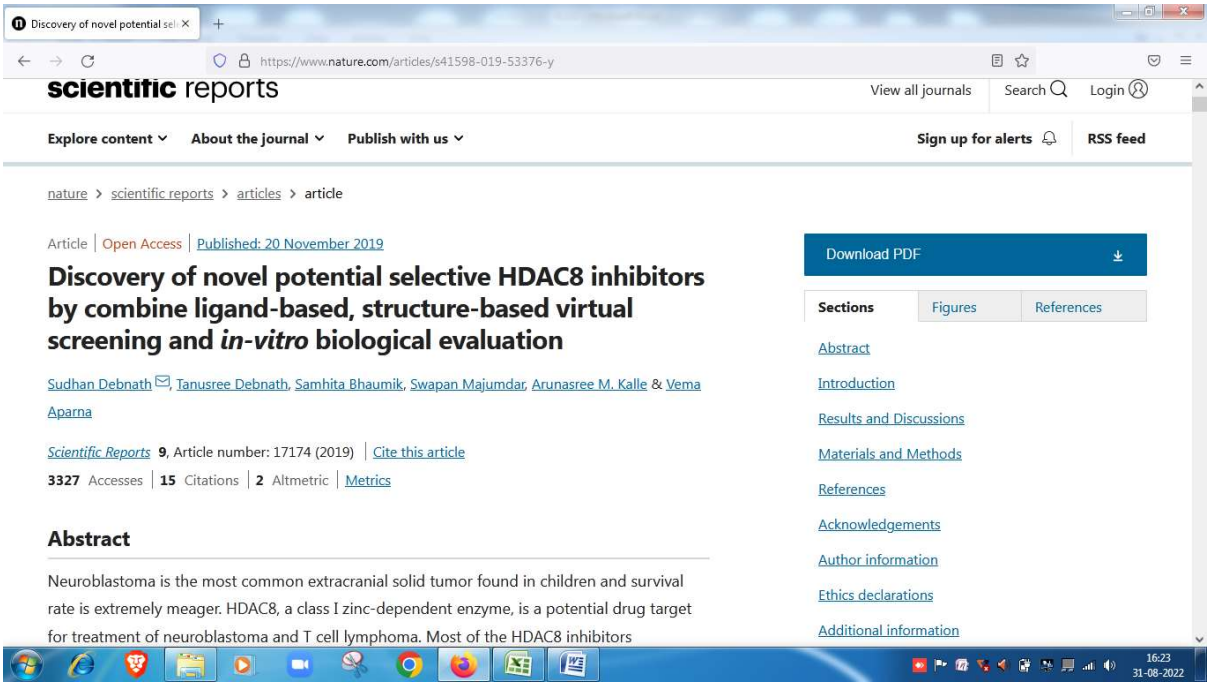

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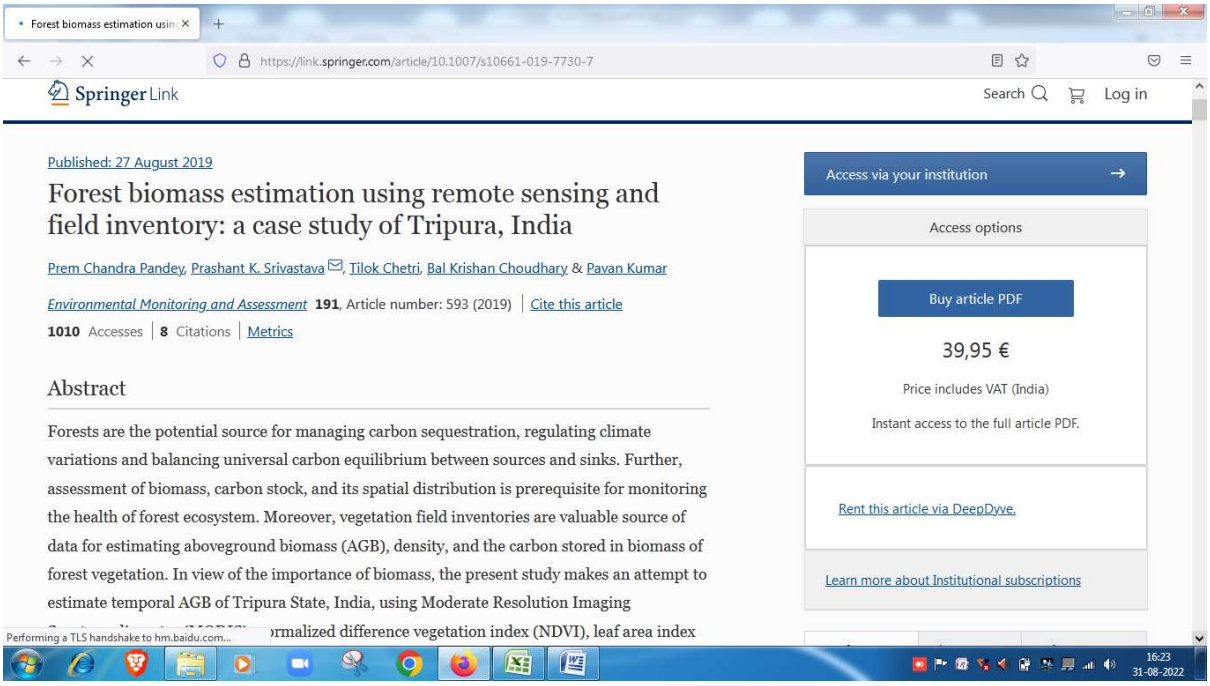
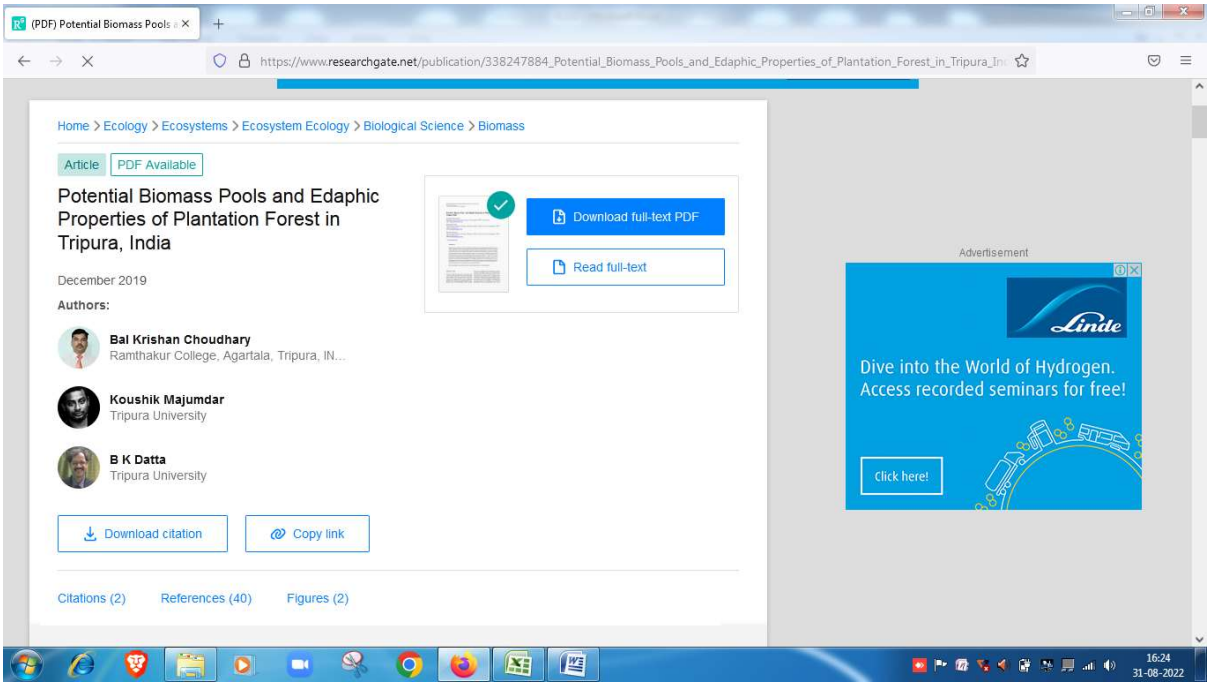


14. Potential Biomass Pools and Edaphic Properties of Plantation Forest in Tripura, India by Dr. Bal Krishan Choudhury, Department of EVS.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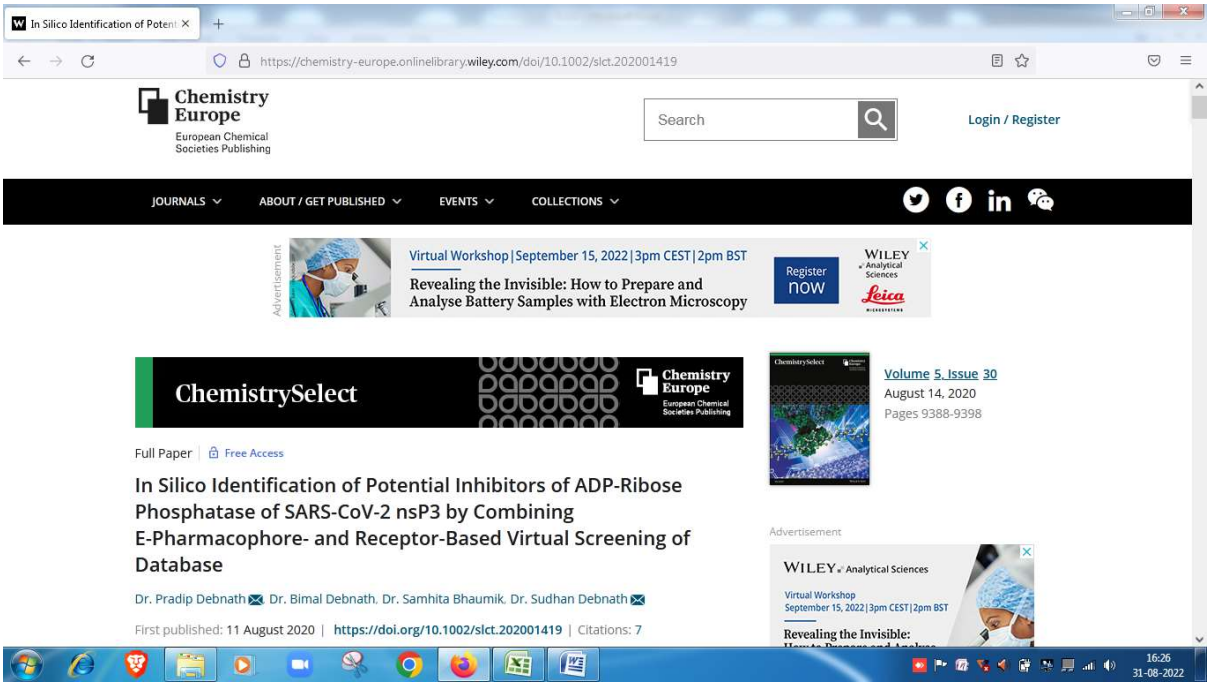
2. Investigation on aeromycoflora in extramural and intramural environment at Udaipur, Gomati District, Tripura by Dr. Sikha Banik, Department of Botany
3. Identification of potential inhibitors of SARS-CoV-2 main protease and spike receptor from 10 important spices through structure-based virtual screening and molecular dynamic study by Dr. Samhita Bhaumik, Department of Chemistry.

4. In Silico Identification of Potential Inhibitors of the Main Protease of SARS-CoV-2 Using Combined Ligand-Based and Structure-Based Drug Design Approach by Dr. Samhita Bhaumik, Department of Chemistry.

5. In Silico Identification of Potential Inhibitors of ADP-Ribose Phosphatase of SARS-CoV-2 nsP3 by Combining E-Pharmacophore-and Receptor-Based Virtual Screening of Database by Dr. Samhita Bhaumik, Department of Chemistry.



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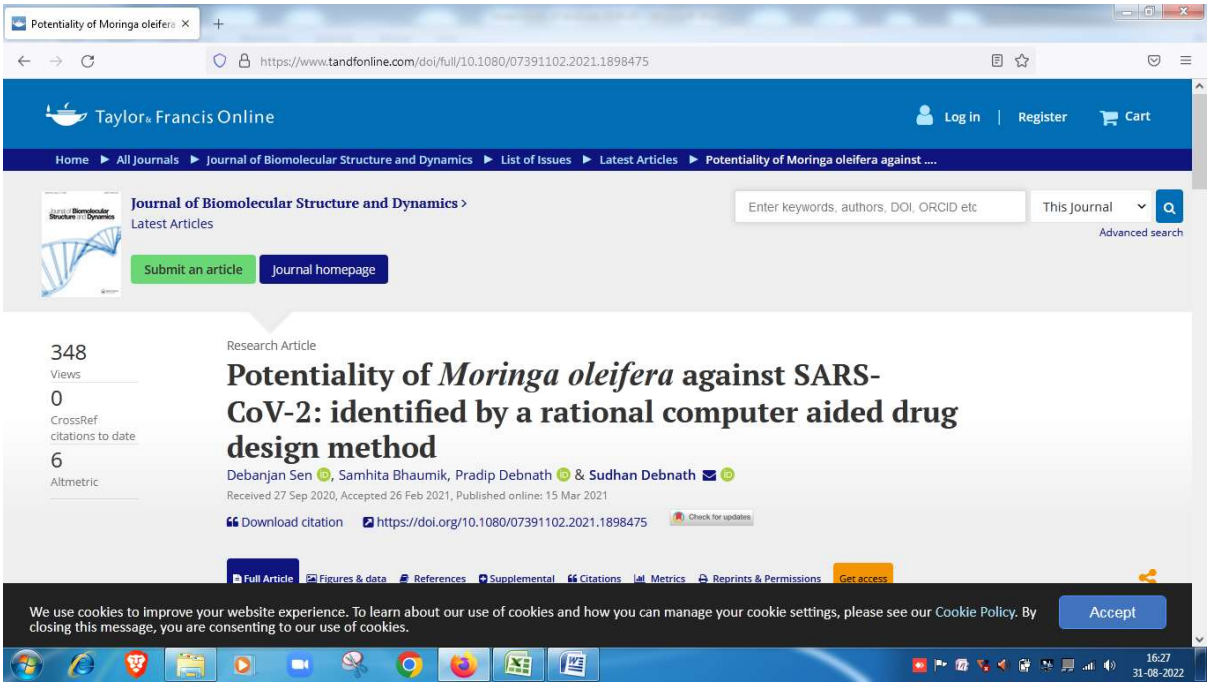
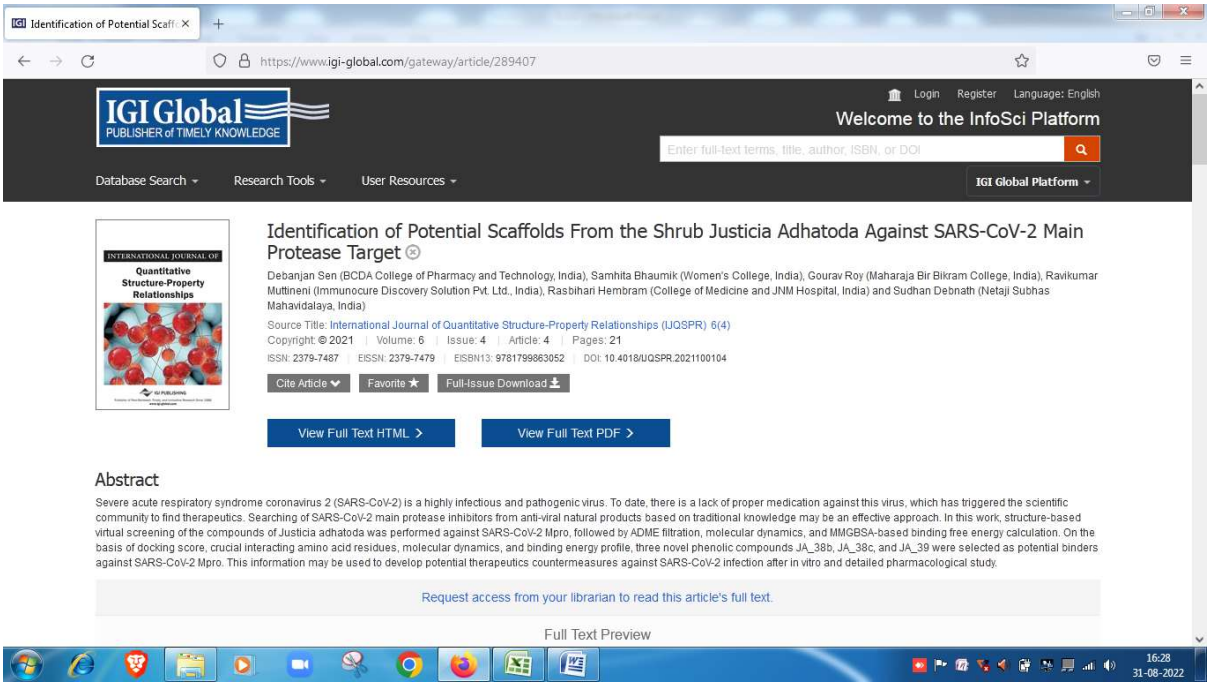


7. Phytochemicals of Zingiberaceae family exhibit potentiality against SARS-CoV-2 main protease identified by a rational computer-aided drug design by Dr. Samhita Bhaumik, Department of Chemistry.

8. Identification of Potential Scaffolds From the Shrub Justicia Adhatoda Against SARS-CoV-2 Main Protease Target by Dr. Samhita Bhaumik, Department of Chemistry.



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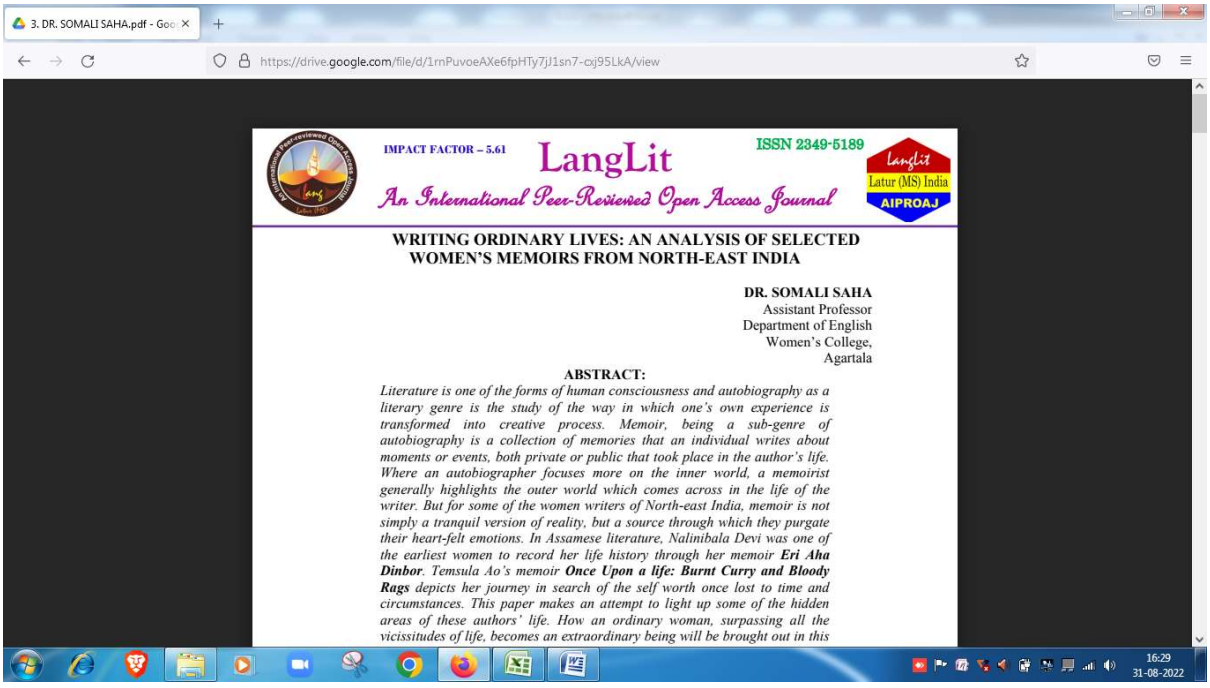
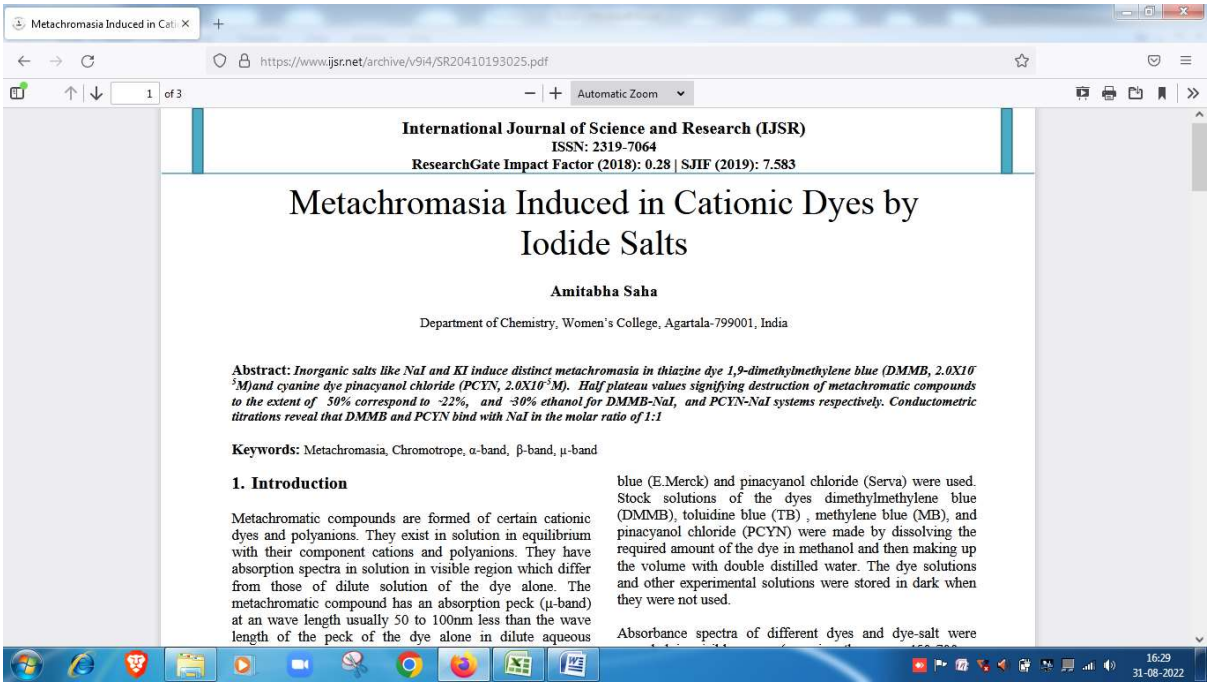


10. Metachromasia induced in cationic dyes by Iodine Salt by Dr Amitabha Saha, Department of Chemistry.



International Journal of Science and Research (IJSR)
ISSN: 2319-7064
ResearchGate Impact Factor (2018): 0.28 | SJIF (2019): 7.583

Metachromasia Induced in Cationic Dyes by Iodide Salts

Amitabha Saha

Department of Chemistry, Women's College, Agartala-799001, India

Abstract: *Inorganic salts like NaI and KI induce distinct metachromasia in thiazine dye 1,9-dimethylmethylene blue (DMMB, 2.0X10^{-5}M)and cyanine dye pinacyanol chloride (PCYN, 2.0X10^{-5}M). Half plateau values signifying destruction of metachromatic compounds to the extent of 50% correspond to ~22%, and ~30% ethanol for DMMB-NaI, and PCYN-NaI systems respectively. Conductometric titrations reveal that DMMB and PCYN bind with NaI in the molar ratio of 1:1*

Keywords: Metachromasia, Chromotrope, α-band, β-band, μ-band

1. Introduction

Metachromatic compounds are formed of certain cationic dyes and polyanions. They exist in solution in equilibrium with their component cations and polyanions. They have absorption spectra in solution in visible region which differ from those of dilute solution of the dye alone. The metachromatic compound has an absorption peck (μ-band) at an wave length usually 50 to 100nm less than the wave length of the peck of the dye alone in dilute aqueous

blue (E.Merck) and pinacyanol chloride (Serva) were used. Stock solutions of the dyes dimethylmethylene blue (DMMB), toluidine blue (TB) , methylene blue (MB), and pinacyanol chloride (PCYN) were made by dissolving the required amount of the dye in methanol and then making up the volume with double distilled water. The dye solutions and other experimental solutions were stored in dark when they were not used.

Absorbance spectra of different dyes and dye-salt were

11. A Concise Review Report on Induced Breeding of Indian Major Carps through Pituitary Extract and Synthetic Hormone Analogues by Dr. Saumen Chakraborti, Department of Zoology.

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A concise review report on induced breeding of indian major carps through pituitary extract and synthetic hormone analogues

Author: Chakrabarti Saumen

Zoology

Indian major carps comes under fishes which do not ordinarily spawn in confined water or stagnant water bodies such as ponds, lakes etc., but spawn usually in inundated terrains of rivers and streams during rainy season . Bulk of the Inland aquaculture production comes from farming of the three Indian Major Carps- Catla, Rohu and Mrigal also known as Gangetic Caps that inhabit the major river systems in the country. Induced breeding techniques have allowed farmers to profitably breed and culture carp fishes that do not naturally reproduce under captive conditions. Hormone administration is the most common method of induced breeding in fishes which the pituitary extract injected into the matured male and female fishes and the hormone induce them to spawn. Successful induced spawning depends upon the dosage of hormone injection, potency of the pituitary gland, gonodal maturity of the recipient fish and the prevailing environmental conditions. such as temperature, water currents and rain. The important environmental factors responsible for induced breeding in Indian major carps are temperature, pH, dissolved oxygen and hardness. Proper care of brood stock is very important for assuring good production of eggs, hatchlings, fry and fingerlings in induced breeding of carp fishes. Several commercially available synthetic ovulating agents in a ready-made form which contained GnRHa and dopamine antagonist such as ovaprim, ovatide are becoming very popular nowadays and found to be efficient and successful spawning agents in different carp fishes. Hormone-induced spawning technique in carp fish has two main strategies, first strategy is the manipulation of culture environment to mimic important characteristics of natural spawning environment of that particular carp fish and the second strategy is the administration of one or more naturally occurring reproductive hormone or their synthetic analogues in brood carp fish through injection or dietary methods. The present paper makes a concise review report on induced breeding of Indian major carps through pituitary extract and synthetic hormone analogues.

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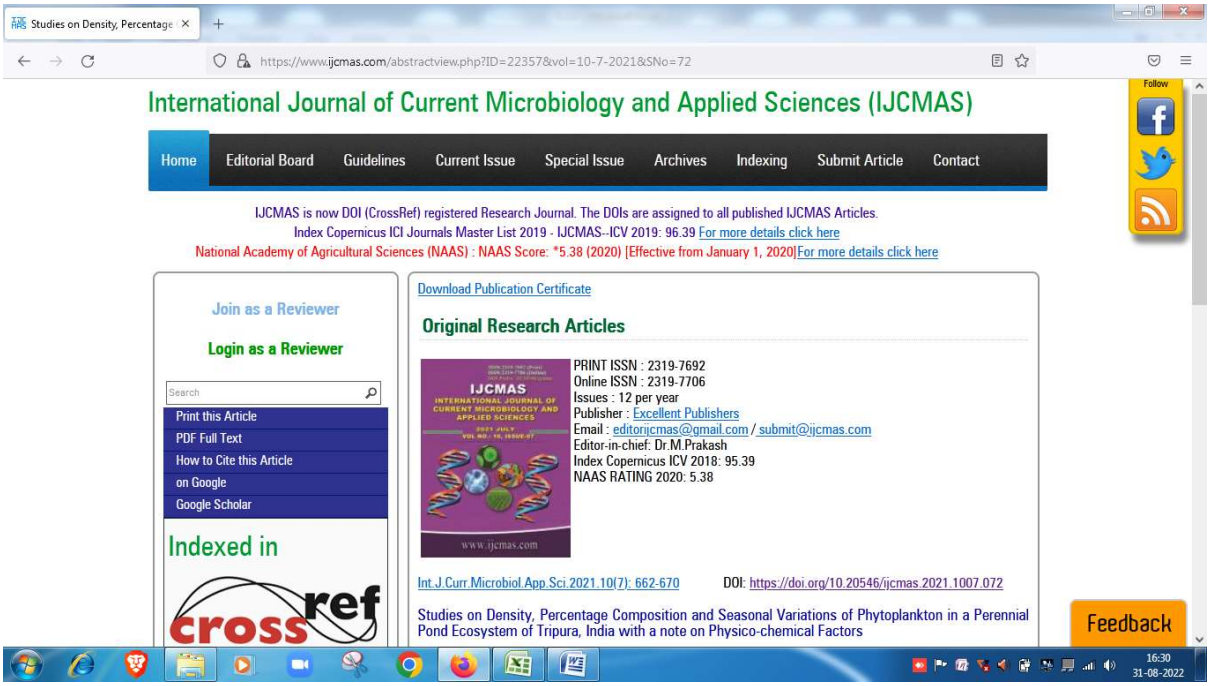
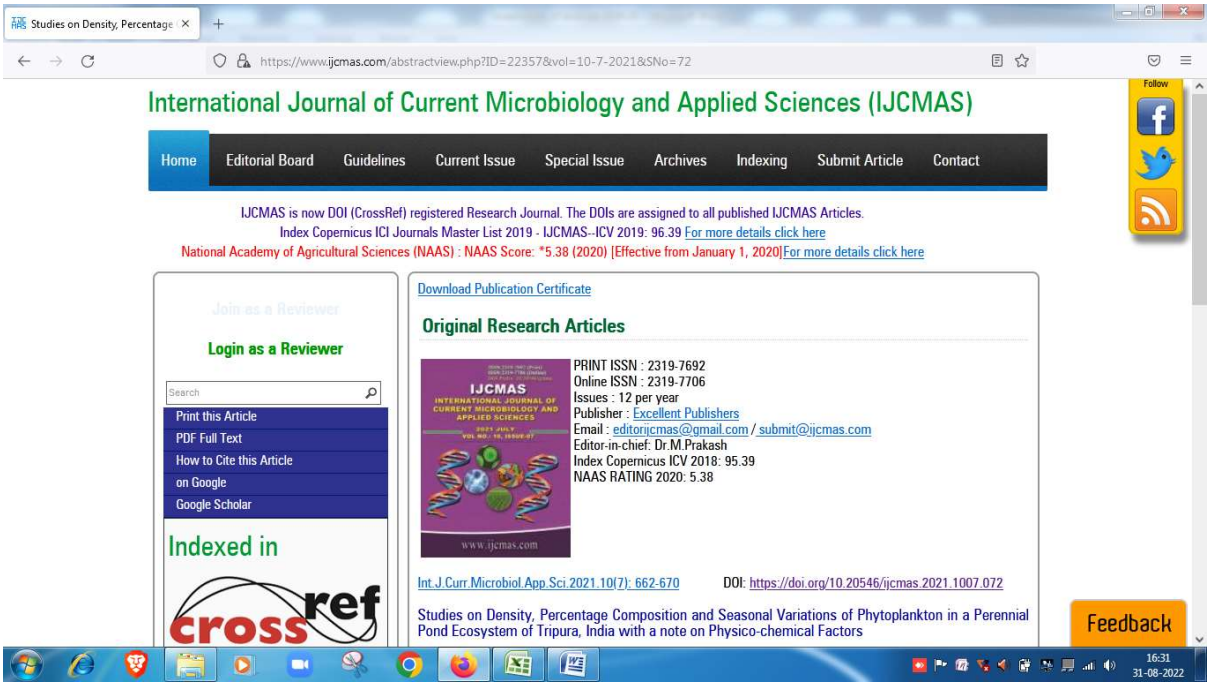
12. Studies on Density, Percentage Composition and Seasonal Variations of Phytoplankton in a Perennial Pond Ecosystem of Tripura, India with a note on Physico-chemical Factors by Dr. Saumen Chakraborti, Department of Zoology.

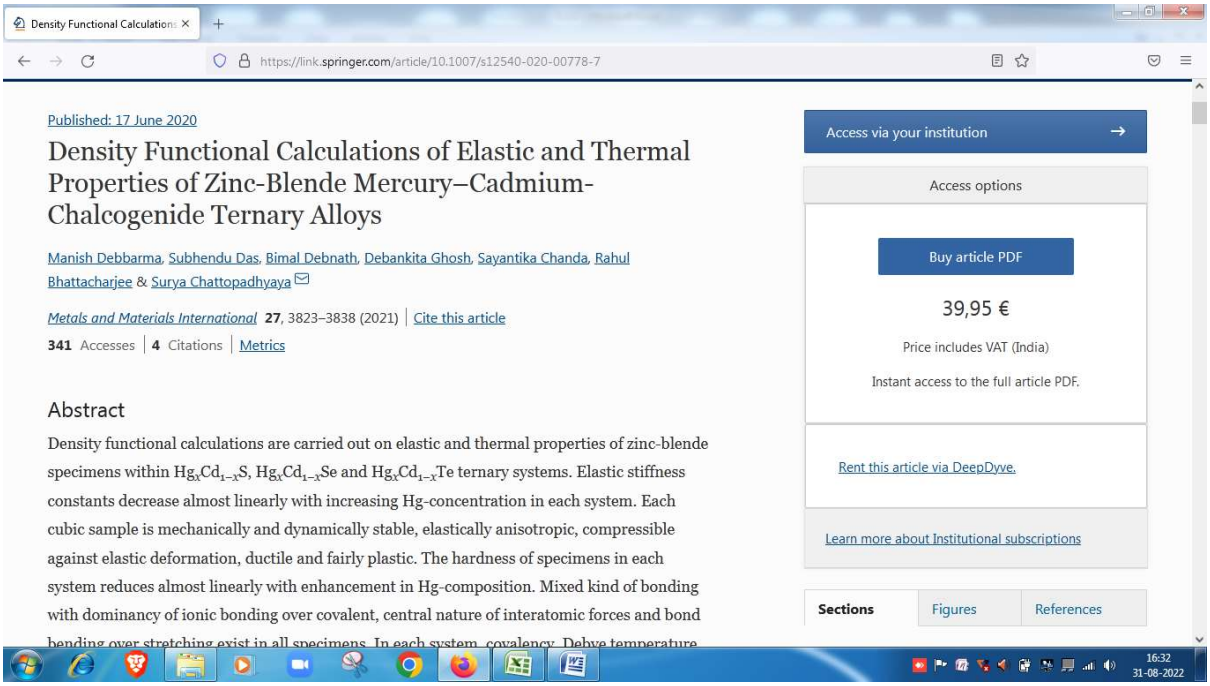


13. A Comparative Study on the Occurrence, Density and Seasonal Variations of Phytoplankton and Zooplankton in a Perennial Pond Ecosystem of Tripura, India by Dr. Saumen Chakraborti, Department of Zoology.

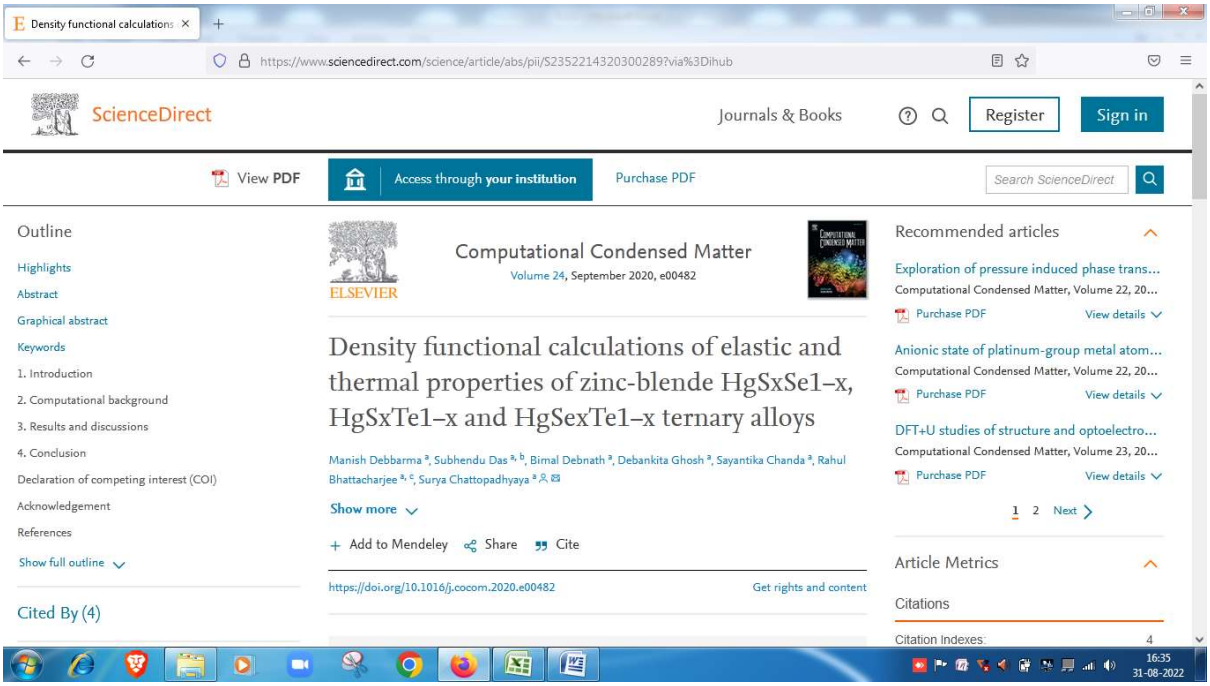


14. A comparative study on the density and seasonal variations of rotifer and copepod fauna in a pond of Tripura, India with a note on water quality parameters by Dr. Saumen Chakraborti, Department of Zoology.

15. Density Functional Calculations of Elastic and Thermal Properties of Zinc‐Blende Mercury–Cadmium‐Chalcogenide Ternary Alloys." By Dr. Rahul Bhattacharjee, Department of Physics.



16. "Density functional calculations of elastic and thermal properties of zinc-blende HgSxSe1− x, HgSxTe1− x and HgSexTe1− x ternary alloys." By Dr. Rahul Bhattacharjee, Department of Physics.



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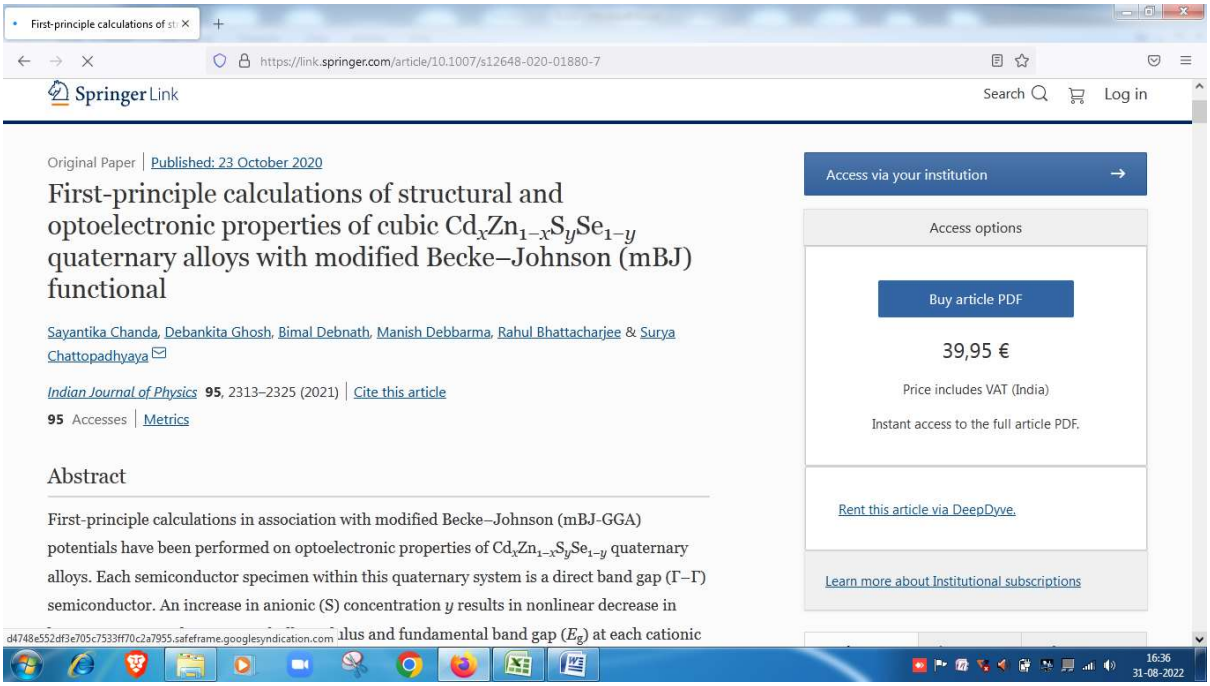
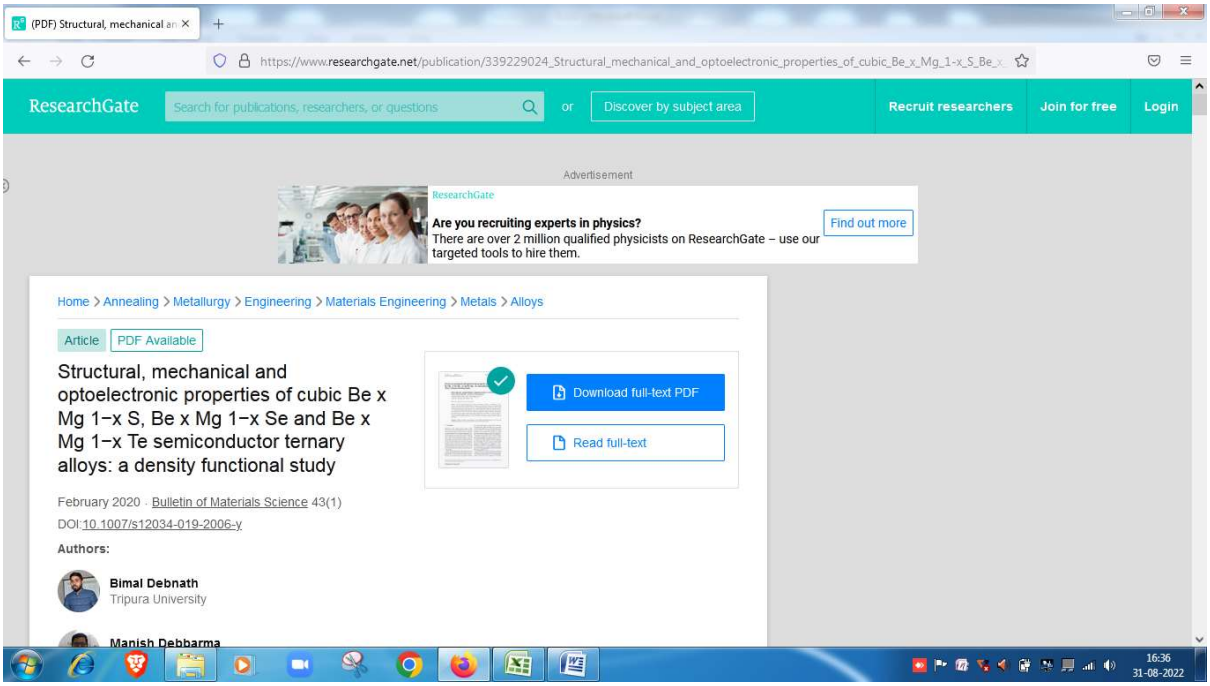
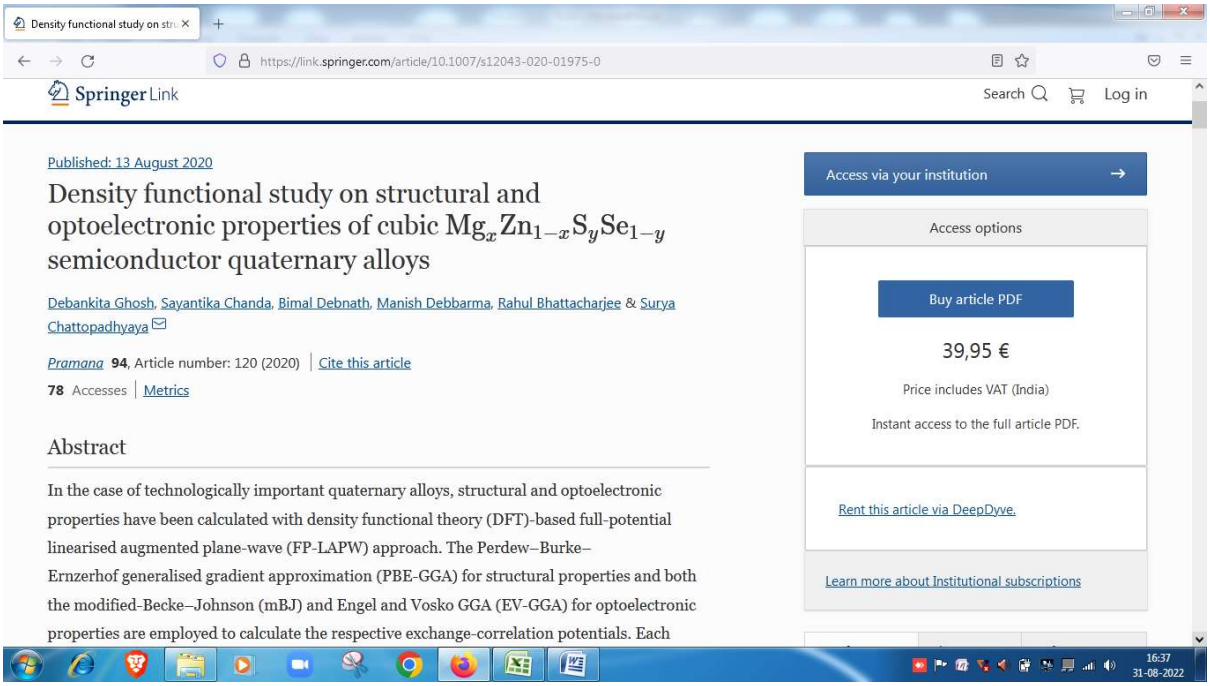


18. “Structural, mechanical and optoelectronic properties of cubic BexMg1−xS, BexMg1−xSe, BexMg1−xS, BexMg1−xSe and BexMg1−xTe, BexMg1−xTe semiconductor ternary alloys: a density functional study.” By Dr. Rahul Bhattacharjee, Department of Physics.



19. “Density functional study on structural and optoelectronic properties of cubic Mg x Zn 1 - x S y Se 1 - y semiconductor quaternary alloys.” By Dr. Rahul Bhattacharjee, Department of Physics.



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21. "Density functional study of elastic and thermal properties of cubic mercuryzinc-chalcogenide ternary alloys" by Dr. Rahul Bhattacharjee, Department of Physics.

22. "Cationic and anionic composition-dependent mechanical and thermal properties of zinc-blende specimens under MgxZn1-xSySe1-y, MgxZn1-xSySe1-y quaternary system: calculations with density functional FP-LAPW scheme." by Dr. Rahul Bhattacharjee, Department of Physics


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Cationic and anionic composition-dependent mechanical and thermal properties of zinc-blende specimens under $Mg_xZn_{1-x}S_ySe_{1-y}$ quaternary system: calculations with density functional FP-LAPW scheme
Debankita Ghosh, Manish Debbarma, Sayantika Chanda, Bimal Debnath, Rahul Bhattacharjee, Subhendu Das & Surya Chattopadhyaya
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Abstract
Elastic and thermal properties of zinc-blende $Mg_xZn_{1-x}S_ySe_{1-y}$ quaternary alloys and their constituent binary/ternary compounds have been computed through first principles calculations. Elastic stiffness constants of specimens have been increased almost linearly with increasing sulfur composition at any fixed magnesium composition, while reverse trends have been observed with increasing magnesium composition at any fixed sulfur composition in each
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