

Name: Dr. Badal L. Chauhan	
Designation: Asst. Prof.	
Department: Physics	
Qualification: MSc, GSET, MPhil, PhD	
Teaching Experience: 3 Years	
Areas of research interest: Growth and characterization of bulk and ultrathin transition metal chalcogenides (TMCs) for Optoelectronic applications	

Books Published			
Sr.	Title & Publisher	Year	ISBN
1	Elastic Properties of Liquid Binary Alloy	2020	978-620-0-27381-9

Papers Published			
Sr.	Title & Journal	Year	DOI
1	Liquid-phase exfoliation of WSe ₂ nanosheets for ITO/WSe ₂ photodetector Journal of Materials Science: Materials in Electronics	2022	10.1007/s10854-022-08019-w
2	Self-powered photodetector based on liquid phase exfoliated Cu–WSe ₂ nanosheets Journal of Optical Materials	2022	10.1016/j.optmat.2022.112931
3	Enhanced photoresponse of In _x Mo _{1-x} S ₂ (X = 0.05 and 0.1) nanosheets for PEC type photodetector Journal of Optical Materials	2022	10.1016/j.optmat.2022.112973
4	Influence on electrical properties of pristine bulk Bi ₂ Se ₃ compound by substitutional doping of 'In Journal of Materials Science: Materials in Electronics	2023	10.1007/s10854-022-09607-6
5	Self-powered photodetectors based on In _x Mo _{1-x} S ₂ crystals Journal of Optical Materials	2023	10.1016/joptmat.2022.113409
6	Flexible paper-based piezo-resistive sensor functionalized by MoS ₂ nanosheets Journal of Materials Science: Materials in Electronics	2023	10.1007/s10854-023-10319-8
7	Synergistic exploration of dye degradation and pulse photoresponse using MoS ₂ nanosheets: Towards sustainable remediation and optoelectronic advancements Journal of Optical Materials	2024	10.1016/j.optmat.2023.114783

8	Alloy Engineered Cryotronically Stable Polymorphic Strained Photo Detector Functionalized by Palladium Enriched Tin Diselenide Nanosheets Journal of Alloy and Compound	2024	10.1016/j.jallcom.2024.176128
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Awards Received			
Sr.	Award Name	Organization	Year
1	National fellowship under the OBC scheme for Research. (NFO-2018-19-OBC-GUJ-71826	University Grants Commission of India (UGC)	2018-19