

BPI Review Form 070520

Book Name:	<u>Current Innovations in Chemical and Materials Sciences</u>
Manuscript Number:	Ms_BPR_22
Title of the Manuscript:	IRRADIATION EFFECTS ON AMMONIUM PENTA BORATE (APB) SINGLE CRYSTALS
Type of the Article	Book Chapter

BPI Review Form 070520

PART 1: Review Comments

	Reviewer's comment	Author's comment <i>(If agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. Authors must write his/her feedback here)</i>
Is the manuscript important for the scientific community? Please write a few sentences explaining your answer	The manuscript titled "Irradiation Effects on Ammonium Penta Borate (APB) Single Crystals" investigates the impact of swift heavy ion (SHI) irradiation on APB single crystals. The study examines changes in the optical, structural, and dielectric properties of the crystals following irradiation and utilizes techniques such as UV-visible spectroscopy, atomic force microscopy (AFM), and scanning electron microscopy (SEM) to analyze the effects. The findings suggest modifications in optical absorbance, surface morphology, and structural integrity due to irradiation. The manuscript contributes valuable insights into the behavior of APB crystals under SHI irradiation, which can be significant for fields such as materials science, solid-state physics, and optoelectronics. Therefore, it holds importance for the scientific community by expanding the understanding of radiation-induced effects on crystalline materials and their potential applications.	
Is the title of the article suitable? Do you have any alternative Title in your mind?	The title "Irradiation Effects on Ammonium Penta Borate (APB) Single Crystals" is suitable as it accurately reflects the content and focus of the manuscript.	
Is the abstract of the article comprehensive? If your answer is No, please provide suggestions	The abstract provides a concise overview of the study's objectives, methods, and findings. It mentions the irradiation of APB single crystals with swift heavy ions, the observed changes in UV-visible spectrum and surface damage, and the use of AFM and SEM for analysis. However, it could be made more comprehensive by including specific quantitative results or observations from the AFM and SEM analyses. Additionally, providing a brief statement about the implications or significance of the findings would enhance the abstract's completeness.	
Do you think the English quality of the article is suitable for scholarly communications? If your answer is No, please provide suggestions	Yes	
Please provide your comments regarding the appropriateness of different sections of the manuscript.	The manuscript appears to follow a standard structure for scientific articles, with sections including Introduction, Experimental, Results and Discussion, and Conclusion. Each section seems appropriately titled and organized, providing clear delineation of the study's background, methodology, findings, and conclusions. The introduction sets the context by discussing the relevance of borate crystals and the specific focus on APB. The experimental section details the methods used for crystal preparation and irradiation, providing sufficient information for reproducibility. Results and Discussion present the obtained data and interpretations, while the conclusion summarizes the key findings and their implications. Overall, the sections appear appropriately structured for a scientific manuscript.	
Do you think that the references in the manuscript are proper, recent and sufficient? If you have any suggestions, please write here.	YES	

BPI Review Form 070520

PART 2:

	Reviewer's comment	Author's comment <i>(if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

Reviewer Details:

Name:	Somarouthu V G V A Prasad
Department, University & Country	Pithapur Rajah's Government College, India