

[Review Form 2](#)

Book Name:	Current Research Progress in Physical Science
Manuscript Number:	Ms_BPR_2568
Title of the Manuscript:	Investigation of Phonon Vibrational Modes in Ga, Al, Fe, Co, Ni, and Zn Doped (110)-Oriented PBCO Thin Films
Type of the Article	Book chapter

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback <i>(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)</i>
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimum of 3-4 sentences may be required for this part.	This chapter provides insights into the phonon vibrational modes in doped PrBa ₂ Cu ₃ O ₇ (PBCO) thin films, which is crucial for understanding the material properties and potential applications in electronics and superconductivity. By examining the effects of different metal dopants, the research contributes to the broader understanding of how these substitutions affect the structural and vibrational properties of PBCO. The comprehensive Raman scattering analysis presented in the paper helps elucidate the changes in vibrational modes due to metal doping. This is important for researchers focusing on material characterization and those interested in the effects of doping on high-temperature superconductors	
Is the title of the article suitable? (If not please suggest an alternative title)	Yes	
Is the abstract of the article comprehensive? Do you suggest the addition (or deletion) of some points in this section? Please write your suggestions here.	The abstract of the article provides a comprehensive overview of the study, highlighting key findings and methodologies.	
Are subsections and structure of the manuscript appropriate?	The manuscript under review is structured to provide a comprehensive investigation into the phonon vibrational modes in doped PBCO thin films	
Please write a few sentences regarding the scientific correctness of this manuscript. Why do you think that this manuscript is scientifically robust and technically sound? A minimum of 3-4 sentences may be required for this part.	The study provides a detailed analysis of Raman scattering in both pure and doped PBCO thin films, which is crucial for understanding the effects of metal doping on phonon vibrational modes. This comprehensive approach ensures that the findings are well-supported by experimental data. The manuscript employs Raman scattering, a well-established technique for studying vibrational modes in materials. This method is appropriate for the investigation of phonon modes and provides reliable data on the structural changes induced by doping. The authors refer to previous studies of similar materials, such as YBCO, to contextualize their findings. This comparison helps validate their results and demonstrates an understanding of the broader scientific landscape. The manuscript includes a thorough discussion of the results, explaining the observed Raman modes and their implications for the crystal structure and symmetry of the doped PBCO thin films. This detailed analysis adds depth to the study and supports the conclusions drawn by the authors.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. =	Overall, while the manuscript appears to have a solid foundation of references, ensuring the inclusion of recent studies would enhance its scientific robustness and demonstrate engagement with the latest research developments. To ensure the manuscript reflects the latest advancements, the authors could consider including more recent studies on Raman scattering in doped thin films, particularly those published in the last five years. This would help demonstrate the current relevance of their research.	

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Minor REVISION comments Is the language/English quality of the article suitable for scholarly communications?	The language quality of the article is suitable for scholarly communications	
Optional/General comments	The authors could consider including more recent studies on Raman scattering in doped thin films, particularly those published in the last five years.	

PART 2:

	<u>Reviewer's comment</u>	<u>Author's comment (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)</u>
<u>Are there ethical issues in this manuscript?</u>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

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