

Review Form 3

Book Name:	Current Research Progress in Physical Science
Manuscript Number:	Ms_BPR_4069
Title of the Manuscript:	Intensity dependent third order optical nonlinearity of zinc-tetraphenyl porphyrin ultrathin film in nano-second regime
Type of the Article	Book Chapter

General guidelines for the Peer Review process:

This Book's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lack of Novelty**', provided the manuscript is scientifically robust and technically sound. To know the complete guidelines for the Peer Review process, reviewers are requested to visit this link:

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Special note:

A research paper already published in a journal can be published as a Book Chapter in an expanded form with proper copyright approval.

Source Article:

This chapter is an extended version of the article published by the same author(s) in the following journal.

AIP Conference Proceedings, 2115, 030287, 2019.

Available: <https://doi.org/10.1063/1.5113126>

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PART 1: 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. A minimum of 3-4 sentences may be required for this part.	This manuscript provides valuable insights into the nonlinear optical properties of Zinc-Tetraphenyl Porphyrin (ZnTPP) thin films, which are crucial for advancing optoelectronic device fabrication. The findings, particularly the observation of reverse saturation absorption and self-defocusing effects, contribute to the ongoing research in designing materials for high-intensity laser applications. The work also highlights the potential of ZnTPP ultrathin films as efficient candidates for nonlinear optical devices, enhancing our understanding of their properties under nanosecond laser pulses.	
Is the title of the article suitable? (If not please suggest an alternative title)	The title is relevant and accurately reflects the content of the manuscript.	
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 is well-structured and provides a comprehensive summary of the research. However, it can benefit from the following additions: - Briefly mention the significance of ZnTPP in comparison to other nonlinear optical materials. - Highlight the practical implications of the findings in optoelectronic device fabrication.	
Is the manuscript scientifically, correct? Please write here.	The manuscript is scientifically sound and well-supported by experimental results. The analysis of nonlinear absorption and refraction, along with the supporting data from the Z-scan technique, is detailed and convincing. The explanation of excited-state absorption (ESA) mechanisms is consistent with established theories.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form.	The references are relevant, recent, and sufficient. However, to enhance the breadth of citations, consider adding references that discuss the application of nonlinear optical materials in practical device fabrication or other porphyrin-based studies.	
Is the language/English quality of the article suitable for scholarly communications?	The language is clear and suitable for scholarly communication. Minor grammatical improvements and rephrasing can enhance readability.	
Optional/General comments	The manuscript would benefit from a stronger emphasis on the novelty of the findings in the introduction and conclusion sections. Adding a graphical abstract may enhance the paper’s visual appeal and accessibility to a broader audience.	

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PART 2:

	Reviewer's comment	Author's comment (if agreed with the reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Are there ethical issues in this manuscript?	<i>(If yes, Kindly please write down the ethical issues here in detail)</i> No ethical concerns are apparent in this manuscript.	
Are there competing interest issues in this manuscript?	There are no indications of competing interests in this manuscript.	
If plagiarism is suspected, <u>please provide related proofs or web links.</u>	nil	

PART 3: Declaration of Competing Interest of the Reviewer:

“I declare that I have no competing interest as a reviewer”
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PART 4: Objective Evaluation:

Guideline	MARKS of this manuscript
Give OVERALL MARKS you want to give to this manuscript (Highest: 10 Lowest: 0) <u>Guideline:</u> Accept As It Is: (>9-10) Minor Revision: (>8-9) Major Revision: (>7-8) Serious Major revision: (>5-7) Rejected (with repairable deficiencies and may be reconsidered): (>3-5) Strongly rejected (with irreparable deficiencies.): (>0-3)	9.0

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Editorial Comments (This section is reserved for the comments from book editorial office and editors):

	Author's Feedback

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