

Review Form2

Book Name:	Chemical and Materials Sciences -Developments and Innovations
Manuscript Number:	Ms_BPR_2046
Title of the Manuscript:	Ceramic, glass and glass-ceramic based composites as bioactive bone cement
Type of the Article	Book chapter

PART 1: Review Comments

Compulsory REVISION comments	Reviewer's comment	Author's Feedback(Please correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
Please write a few sentences regarding the importance of this manuscript for the scientific community. Why do you like (or dislike) this manuscript? A minimumof 3-4 sentences may be required for this part.	This manuscript is significant for the scientific community as it provides a comprehensive review of the current advancements in bone cement materials, focusing on ceramics, glasses, and glass-ceramics. The study addresses crucial aspects such as bioactivity, biodegradability, and mechanical properties, which are essential for developing effective bone cements for orthopedic applications. By discussing recent research on reinforcing materials like alumina, zirconia, and hydroxyapatite, the manuscript contributes valuable insights into improving the performance and reliability of these biomedical materials. This can potentially lead to enhanced clinical outcomes in orthopedic surgery.	
Is the title of the article suitable? (If not please suggest an alternative title)	Title of the Article: The title "Ceramics, glasses and glass-ceramics as bone cements: A review of materials and applications" is suitable as it accurately reflects the content and scope of the manuscript. However, to make it more specific and engaging, a suggested alternative title could be: "Advancements in Bone Cements: A Review of Ceramic, Glass, and Glass-Ceramic Materials and Their Reinforcements for Orthopedic Applications."	
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.	Abstract Evaluation: The abstract is generally comprehensive but could benefit from a few enhancements. It should briefly mention the specific improvements and innovations discussed in the paper, such as new types of reinforcing materials or methods used in recent studies. Adding a sentence about the current gaps in research and how this manuscript addresses them could provide a clearer picture of its contributions.	
Are subsections and structure of the manuscript appropriate?	Structure and Subsections: The manuscript's structure and subsections are appropriate, as they logically cover the development of bone cements, types of materials used, and their applications. Ensuring that each subsection thoroughly explores these topics while maintaining clear and concise headings will improve readability and coherence. The paper should also include sections on methodology, results, and discussions if these are not already present, to provide a complete analysis of the topic. Scientific Correctness and Technical Soundness:	
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 minimumof 3-4 sentences may be required for this part.	The manuscript appears scientifically robust and technically sound due to its focus on well-established materials and their recent advancements. The review of different reinforcing materials and their impact on bone cements is based on current research, which adds credibility to the findings. The paper's inclusion of recent studies and practical applications supports its technical soundness and relevance in the field of	

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	biomaterials. Ensuring that all discussed materials and technologies are supported by empirical evidence and properly cited will further enhance the manuscript’s scientific validity.	
Are the references sufficient and recent? If you have suggestions of additional references, please mention them in the review form. :	References: The references should be sufficient and up-to-date, covering recent advances and key studies in the field. It is important to include the latest research articles to ensure the manuscript reflects the most current developments. If there are any significant recent publications not included, they should be added to provide a comprehensive overview. Checking databases like PubMed, Google Scholar, and relevant journals will help identify any additional references that could strengthen the paper.	
Minor REVISION comments		
Is the language/English quality of the article suitable for scholarly communications?		
Optional/General comments	Clarity and Precision: • Readability: The language should be clear and precise, avoiding ambiguity. Scholarly articles need to convey complex ideas effectively, so sentences should be straightforward and free of jargon where possible. • Technical Terms: Use of technical terminology should be appropriate for the intended audience, but explanations should be provided where necessary to ensure clarity. Grammar and Syntax: • Grammar: The manuscript should be free of grammatical errors, including correct use of tenses, subject-verb agreement, and punctuation. • Syntax: Sentence structure should be varied but logical, with proper use of conjunctions and transitions to guide the reader through the text. Consistency: • Terminology: Consistent use of terms and definitions throughout the manuscript is important. Inconsistencies can confuse readers and undermine the credibility of the work. • Formatting: Adherence to the journal's or conference's formatting guidelines ensures that the manuscript meets professional standards. Academic Tone: • Objectivity: The language should maintain an objective and formal tone, avoiding colloquial expressions or subjective opinions unless clearly marked as such. • Precision: Scientific writing should be precise, presenting data and findings without unnecessary embellishment or generalizations. Suggestions for Improvement: If you find any issues with the language quality, consider the following suggestions: • Editing and Proofreading: A thorough proofreading by a professional editor or a colleague familiar with the field can help correct any errors and improve the overall readability. • Feedback: Getting feedback from peers or mentors can provide additional insights into areas where the language might be improved. If the article meets these criteria, the language quality is likely suitable for scholarly communication. If there are significant issues, addressing them will enhance the manuscript's professionalism and clarity.	

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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:	Yousef Farhaoui
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