

Paper: “Avances en Biocerámicas para la Regeneración Ósea: De Materiales Bioinertes a Compuestos Bioactivos”

Submitted: 19 December 2023

Accepted: 09 May 2024

Published: 31 May 2024

Corresponding Author: Jay Molino

Doi: [10.19044/esj.2024.v20n15p1](https://doi.org/10.19044/esj.2024.v20n15p1)

Peer review:

Reviewer 1: Blinded

Reviewer 2: Ana Gabriela Hernandez Puga
Universidad Autónoma de Querétaro, Querétaro, México

Reviewer 3: Blinded

ESJ Manuscript Evaluation Form 2024

This form is designed to summarize the manuscript peer review that you have completed and to ensure that you have considered all appropriate criteria in your review. Your review should provide a clear statement, to the authors and editors, of the modifications necessary before the paper can be published or the specific reasons for rejection.

Please respond within the appointed time so that we can give the authors timely responses and feedback.

NOTE: ESJ promotes peer review procedure based on scientific validity and technical quality of the paper (not perceived the impact). You are also not required to do proofreading of the paper. It could be recommended as part of the revision.

ESJ editorial office would like to express its special gratitude for your time and efforts. Our editorial team is a substantial reason that stands ESJ out from the crowd!

| | |
|---|--|
| Date Manuscript Received: | Date Review Report Submitted: February 22 nd , 2024 |
| Manuscript Title: Avances en Biocerámicas para la Regeneración Ósea: De Materiales Bioinertes a Compuestos Bioactivos | |
| ESJ Manuscript Number: 0108/24 | |
| You agree your name is revealed to the author of the paper: Yes/ <u>No</u> | |
| You approve, your name as a reviewer of this paper, is available in the “review history” of the paper: <u>Yes</u> /No | |
| You approve, this review report is available in the “review history” of the paper: <u>Yes</u> /No | |

Evaluation Criteria:

Please give each evaluation item a numeric rating on a 5-point scale, along with a thorough explanation for each point rating.

| <i>Questions</i> | <i>Rating Result</i> [Poor] 1-5 [Excellent] |
|--|--|
| 1. The title is clear and it is adequate to the content of the article. | 4 |
| <i>(Please insert your comments)</i> El título del artículo es adecuado, no obstante, se sugiere puntualizar que se trata de una revisión del desarrollo de las biocerámicas. | |
| 2. The abstract clearly presents objects, methods and results. | 4 |

| | |
|---|----------|
| <i>(Please insert your comments)</i> | |
| El abstract plantea los puntos relevantes de la revision, sin embargo, no se describen los métodos empleados para la revision de la literatura. | |
| 3. There are few grammatical errors and spelling mistakes in this article. | 4 |
| <i>(Please insert your comments)</i> | |
| Existen algunos errores de redacción en el texto, favor de revisar, por ej. “biomatreiales”. | |
| 4. The study methods are explained clearly. | 2 |
| <i>(Please insert your comments)</i> | |
| El manuscrito no incluye la metodología empleada para la revision de la literatura. | |
| 5. The results are clear and do not contain errors. | 5 |
| <i>(Please insert your comments)</i> | |
| Los resultados de la busqueda de la literatura y la discusión de los mismos son adecuados. La Tabla 1 requiere de edición para mejorar su comprensión. | |
| 6. The conclusions or summary are accurate and supported by the content. | 5 |
| <i>(Please insert your comments)</i> | |
| Las conclusiones van acorde al análisis de la literatura. | |
| 7. The references are comprehensive and appropriate. | 3 |
| <i>(Please insert your comments)</i> | |
| Las referencias son adecuadas. Sin embargo, se encuentran en distintos formatos a lo largo del texto, se solicita unificarlas de acuerdo a los criterios de la revista. | |

Overall Recommendation (mark an X with your recommendation) :

| | |
|--|-------------------------------------|
| Accepted, no revision needed | <input type="checkbox"/> |
| Accepted, minor revision needed | <input checked="" type="checkbox"/> |
| Return for major revision and resubmission | <input type="checkbox"/> |
| Reject | <input type="checkbox"/> |

Comments and Suggestions to the Author(s):

El manuscrito presenta una revision de las bioceramicas empleadas para la regeneración ósea de acuerdo al tipo de material y evolución a lo largo del tiempo. Se presenta una introducción adecuada al tema de estudio y de los tópicos de relevancia.

Se comparten las siguientes observaciones para mejorar la descripción de los tópicos:

1. El manuscrito carece de metodología para la búsqueda de la literatura presentada. Incluir los métodos empleados.
2. En el texto se menciona que: *“el 70% de la composición del tejido óseo es de naturaleza inorgánica, lo que incluye al colágeno”*. El colágeno es una proteína, por lo que su naturaleza es orgánica. Favor de revisar.
3. En la sección “Propiedades de los biomateriales...” sería oportuno incluir una breve descripción de algunos materiales que se empleen en el área clínica por tipo de propiedad física, con el objetivo de mejorar su comprensión dado que esto es la base de la evolución de las biocerámicas.
4. ¿Existe una aplicación para las “Mezclas de vidrios magnéticos y vitrocerámicas” diferente al tratamiento de cáncer?. Si es así, indicarla.
5. En la Tabla 1. Tipos de biocerámicas; no es clara la división entre materiales de 1a, 2da y 3ra generación. Referenciar los ejemplos en la sección: “Tipos de biocerámicos”.
6. Ya sea en la Tabla 1 o en el texto, incluir la vida media de las biocerámicas, para tener una mejor comprensión de las ventajas y desventajas mencionadas.
7. En general, es necesaria una mayor integración de los tipos de biocerámicos y sus ejemplos, incluyendo ventajas y desventajas de los mismos.

ESJ Manuscript Evaluation Form 2024

This form is designed to summarize the manuscript peer review that you have completed and to ensure that you have considered all appropriate criteria in your review. Your review should provide a clear statement, to the authors and editors, of the modifications necessary before the paper can be published or the specific reasons for rejection.

Please respond within the appointed time so that we can give the authors timely responses and feedback.

NOTE: ESJ promotes peer review procedure based on scientific validity and technical quality of the paper (not perceived the impact). You are also not required to do proofreading of the paper. It could be recommended as part of the revision.

The copyrights of the report are on the publisher and the data can be used for research purposes. *ESJ editorial office would like to express its special gratitude for your time and efforts. Our editorial team is a substantial reason that stands ESJ out from the crowd!*

| | |
|---|-------------------------------|
| University/Country: Universidad Tecnológica de la Mixteca | |
| Date Manuscript Received: 21-02-2024 | Date Review Report Submitted: |
| Manuscript Title: Advances in Bioceramics for Bone Regeneration: From Bioinert Materials to Bioactive Compounds | |
| ESJ Manuscript Number: 0108/24 | |
| You agree your name is revealed to the author of the paper: Yes | |
| You approve, your name as a reviewer of this paper, is available in the “review history” of the paper: | |
| You approve, this review report is available in the “review history” of the paper: Yes | |

Evaluation Criteria:

Please give each evaluation item a numeric rating on a 5-point scale, along with a thorough explanation for each point rating.

| <i>Questions</i> | <i>Rating Result</i> [Poor] 1-5 [Excellent] |
|--|--|
| 1. The title is clear and it is adequate to the content of the article. | 4 |
| <i>The title presents content consistent with the work but more studies on other new biomaterials need to be documented since only two different types are documented.</i> | |

| | |
|---|----------|
| 2. The abstract presents objects, methods, and results. | 3 |
| <i>In the summary only objects and results are presented. The methods of how they are obtained, applied and developed are not mentioned. Authors are asked to be clearer in this section throughout the manuscript.</i> | |
| 3. There are a few grammatical errors and spelling mistakes in this article. | 2 |
| <i>There are grammatical and spelling errors, which must be corrected by the authors, such as those found on pages 3, 4, 5, 7 and the other errors indicated in the attached document.</i> | |
| 4. The study methods are explained clearly. | 3 |
| <i>As mentioned in point 1, the authors are asked to be clearer and more explicit in the methods of obtaining, applying and developing at least the materials mentioned in the present document.</i> | |
| 5. The results are clear and do not contain errors. | 3 |
| <i>They are clear about the application, but there is no mention in any section of the document of the techniques or methods of how they are obtained from a materials engineering point of view.</i> | |
| 6. The conclusions or summary are accurate and supported by the content. | 3 |
| <i>Most of them are supported by the literature reflected in the document, but the mechanical properties and how they help or affect the development of these new biomaterials are not mentioned in any of the two sections evaluated.</i> | |
| 7. The references are comprehensive and appropriate. | 2 |
| <i>Authors are asked to adhere to the APA Standard regarding how they should be referenced, since they are not described in a homogeneous way, in addition to clarifying why they use different formats, as indicated in the attached file.</i> | |

Overall Recommendation (mark an X with your recommendation) :

| | |
|--|----------|
| Accepted, no revision needed | |
| Accepted, minor revision needed | X |
| Return for major revision and resubmission | |
| Reject | |

Comments and Suggestions to the Author(s):

The authors are requested to carry out an exhaustive spelling and grammatical review, in addition to making or clarifying the suggestions indicated in the attached document mainly because there is no mention

of the method of obtaining the new materials mentioned in the document from a scientific point or materials engineering, On the other hand, because it is not referenced in some sections, in addition to using different ways of referencing.