



SDI Review Form 1.6

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| Journal Name: | Journal of Materials Science Research and Reviews |
| Manuscript Number: | Ms_JMSRR_45533 |
| Title of the Manuscript: | Advanced Multi-layered Thermal Barrier Coatings - An Overview |
| Type of the Article | Review Paper |

General guideline for Peer Review process:

This journal'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 guideline for Peer Review process, reviewers are requested to visit this link: (<http://www.sciencedomain.org/page.php?id=sd-general-editorial-policy#Peer-Review-Guideline>)

PART 1: Review Comments

| | Reviewer's comment | 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) |
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| Compulsory REVISION comments | <ul style="list-style-type: none"> The authors use a lot of abbreviations, which sometimes is difficult to follow. I strongly advice preparing a list of abbreviations for this article. The article doesn't contain the Fig. 1, which is referred in the text (page 12, line 274) The article doesn't contain the Fig. 2, which is referred in the text (page 15, line 365) Shouldn't the "Nano-structured TBC" be a new section or subsection of the article? (page 15, line 367) | |
| Minor REVISION comments | <ul style="list-style-type: none"> Please explain the abbreviations "HVOF, APS or EB-PVD" (page 2, line 43) Is the "MCrAlY" name correct? I think that the first capital letter should stand for some metal element? Should it be "MgCrAlY"? (page 3, line 56) – please explain when appears it the text for the first time. Please explain the "SIFCO" abbreviation. (page 5, line 107) Please explain the "CYSZ" abbreviation. (page 12, line 289) Please explain the "FGM" abbreviation. (page 14, line 339) Please explain the "GZ" abbreviation. (page 17, line 409) | |
| Optional/General comments | <ul style="list-style-type: none"> The article lacks graphs and figures, which are very helpful to illustrate the described matter. I highly recommend considering addition of some figures (usually an author of a review article can get the right to re-print of figures from the publisher free of charge). Please change: "attack of the blade materials" to "attack on the blade materials" (page 1, line 22) | |

PART 2:

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



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Reviewer Details:

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