

The article should normally consist of the following format:

➤ **Article title page**

Title page should consist of Article title, Author(s) name with designation and full affiliation including address (es) of establishment(s) where the work has been carried out.

➤ **An Abstract**

This section displays the objective of article and also outlines the results and conclusions and elucidates the significance of the results (Note that no references should be cited in the abstract) Hence minute amount of plagiarism in abstract will not be tolerated.

➤ **Keywords**

There should be atleast 3-5 relevant keywords that best describes your articles.

➤ **Email**

You are required to provide Email address of all the authors but *Email of corresponding Author is mandatory.

Front page should look like below given screenshot:

Evaluation of Nanostructured Metal-Ceramic Coatings for Solar Thermal Applications

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Abstract

Metal- ceramic thin film coatings has become an area of intense research particularly in applications related solar thermal, heat exchangers, filters, sensor technologies and many other optical applications such as laser windows, mirrors, reflectors and optics for digital projections. The composition of the W-Al₂O₃ thin film coating material, processing conditions and the resulting microstructure and surface finish influences the solar absorptance and thermal emittance behaviour of these coatings. The response of these nano-structured thin film coatings have been characterized using 410-Solar and ET-100 Emissometer. The solar absorptance and thermal emittance of metal-ceramic coatings on metallic substrates with and without consideration of nickel bond layer have been evaluated. Tungsten (W) and Alumina (Al₂O₃) coatings have been deposited using DC and RF magnetron sputtering process.

Keywords: Thin Films, Sputtering, Absorptance and Emittance

➤ Text

It should contain Introduction, Materials and Methods, Literature review, Results, Discussion, and Conclusion

➤ Figures and Tables

All the Figures and Tables are to be numbered and should be suitably cited in the text at their appropriate description

➤ References

The references in the paper should be cited according to the Vancouver/Numbered style. Reference citation should be always in square brackets and before the punctuation. The references should be arranged in proper numeral sequence.

Sample screenshot is shown below:

<p>INTRODCUTION</p> <p>The concentrating solar receiver technology deploys solar absorber coatings to entrap the solar energy. This concentrated solar power technology based on parabolic trough solar collector has gained a great appeal in the field of solar energy. Metal ceramic solar absorber coatings such as W-Al₂O₃, Mo-Al₂O₃, TiAlN₃ etc. are considered as the most stable absorber coatings at elevated temperatures beyond 400 °C [1]. Several solar absorber coatings were presented which were crucial in solar thermal power generation [2].</p> <p>A new type of coating design has been investigated in which metal such as W, Mo and ceramic such as Al₂O₃, SiO₂ are deposited using co-sputtering process, these metal-ceramic coatings possessed desirable optical properties in</p>	<p>deposited thin films [3]. A review of mid-to-high temperature solar selective coatings has been illustrated by Kennedy [4].</p> <p>Tungsten is considered as the potential in solar absorber coating as it owns superior properties such as high solar absorptance, low thermal emittance and noble thermal stability [5-7]. In this research work, tungsten and alumina were sputtered on SS304 substrate with Al₂O₃ as base layer for adhesion and to investigate the effect of nickel bond layer on solar absorptance and thermal emittance and also on the surface morphology and elemental composition of these metal ceramic hybrid coatings.</p> <p>EXPERIMENTAL PROCEDURE</p> <p>The W-Al₂O₃ coatings were deposited on SS304 substrates using co-sputtering of DC and RF</p>
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➤ **Reference Style:**

For Journal Article

Author(s) – Family name and initials. Title of article. Title of journal (Abbreviated and italic) Publication year; Volume (Issue): Pages.

1. Srivastava N, Diwakar M, Ajnara J. Evaluation of Nanostructured Metal Ceramic Coatings for solar thermal Applications. IJNS. 2008; 336(7646): 701–4p. **(Journal publication less than 3 authors)**
2. Hanna JN, McBride WJ, Brookes DL, et al. Hendra virus infection in a veterinarian. Med J Aust. 2006; 185(10): 562–4p. **(Journal publication having more than three authors)**
- 3.. Srivastava N, Diwakar M. Evaluation of Nanostructured Metal Ceramic Coatings for solar thermal Applications. Psychol Sport Exerc. 2007;10(4):422–34p. doi:10.1014/j.psychsport.2007.03.007. **(Electronic article – with DOI number)**

For Book Author(s)

Family name and initials, multiple authors separated by a comma. Title of Book. Edition of book if later than 1st ed. Place of Publication: Publisher Name; Year of Publication.

1. Srivastava N, Diwakar M, Ajnara J, et al. A nursing viewpoint: Pregnancy and childbirth. Chichester, West Sussex, USA: John Wiley & Sons Ltd; 2008. **(Reference to a Book)**
2. Rowlands TE, Haine LS. Acute limb ischaemia. In: Donnelly R, London NJM, editors. ABC of arterial and venous disease. 2nd Edn. West Sussex: Blackwell Publishing; 2009. **(Reference to a Chapter in an Edited Book)**
3. Srivastava N. Cardiovascular Nursing: Rehabilitation Procedures [monograph online]. Sydney, NSW: University of New South Wales Press; 2009 [cited 2009 Nov 10]. Available from: Net Library **(Electronic Book)**