APL Materials
Special Topic: Materials Challenges and Synthesis Science of Emerging Quantum Materials

Close

Volume 2437, Issue 1
17 August 2022

TECHNOLOGIES AND MATERIALS FOR RENEWABLE ENERGY, ENVIRONMENT AND SUSTAINABILITY: TMREES21Gr
28–30 May 2021
Athens, Greece

RESEARCH ARTICLE| AUGUST 17 2022

Short review on the prospect of laser cladding for aluminum based alloys composite for automotive industries

O. Agboola;

O. S. I. Fayomi;

A. Ayoola;

A. O. Ayeni;

E. E. Alagbe;

E. R. Sadiku;

P. Popoola

Author & Article Information
AIP Conf. Proc. 2437, 020128 (2022)
https://doi.org/10.1063/5.0092512

- Share Icon**Share**
- Tools Icon**Tools**

Laser cladding is a growing technological method that utilizes a navigating high power laser for melting a small region of the substrate; it has a function of trapping and melting entering powder particles. Hence, the process leads to the development of a new stratum. Aluminum alloy Matrix composites afford properties suchlike high wear resistance, high tensile strength, lightweight; this composites is finding wide applications in automotive industry. This review presents a brief discussion on laser cladding for aluminum base alloys for automotive industry with emphasis on aluminum alloys matrix composite for automotive industry.

Topics
Alloys, **Materials synthesis and processing**, **Materials properties**, **Lasers**, **Industry**, **Review**

Phytochemical analysis of bioactive compounds in ethanolic extract of *Sterculia quadrifida* R.Br.

Thermal properties of samples prepared from polylactic acid by 3D printing

MRI image processing method on brain tumors: A review

Related Content

Angle-resolved photoemission calculations of WTe_2 compared to experiment

AIP Conference Proceedings (July 2019)

Effect of annealing on the properties of Cu_2SnS_3 thin films using spin coating

AIP Conference Proceedings (May 2019)

Gold nanoparticles as theranostics: An overview

AIP Conf. Proc. (September 2023)

An inherently stable boundary-condition-transfer algorithm for muffler analysis

J. Acoust. Soc. Am. (July 2005)

Short overview on the mitigation of corrosion in coal gasification plant

AIP Conference Proceedings (August 2022)

- Online ISSN 1551-7616
- Print ISSN 0094-243X