

Ceramic matrix composite materials reinforced with low metal particles content: a review

ABSTRACT

Ceramic composite materials were reinforced by adding metal particles to reduce brittleness. This feature is a critical mechanical property for ceramic materials. The review of this study focus on ceramic materials that has less than 40 vol. % of reinforcement of metal particles and the effect it has on mechanical and thermo mechanical properties. The study showed that the addition of the metal particles with few volume fraction proportions lead to improvement in mechanical and thermal properties.

Keyword: Ceramic matrix; Metal particles; Composite; Mechanical properties; Thermal properties