عنوان مقاله:
The Methods of Quasicrystals Producing

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خلاصه مقاله:
Quasicrystals are structures that are both regular and non-periodic. In quasicrystals, there is an iterative rule in the arrangement of atoms, along with abnormal rotational symmetry for crystals, that is, they form patterns that fill space but have no transfer symmetry. These structures are generally made of alloys of aluminum, copper, nickel, magnesium, zinc, zirconium, and titanium. These materials have attracted the attention of many researchers in recent years due to their extraordinary physical and mechanical properties. Due to the extraordinary properties and different production methods, it can be expected that these materials will be used more in different industries in the near future. Therefore, it is very important to study the methods of preparation of these materials. In this article, we first introduce the quasicrystals and their outstanding properties and then examine their common production methods, which include melt spinning, mechanical alloying, coating method, sputtering, physical vapor deposition, and thermal spraying, along with their advantages and disadvantages

کلمات کلیدی:
Quasicrystal, properties, Production Methods