## عنوان مقاله:

Impact of additive manufacturing on advances in the design and production of the dental implants

## محل انتشار:

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## خلاصه مقاله:

Dental implants are one of the restoration methods used to revitalize the function of a lost tooth. The natural tooth has a unique structure and composition that enable it to withstand mastication loads at different rates and angles of applying load in the wet and warm environment of the mouth. To simulate such behavior, the structure, material, and parameters of the design (implant diameter and length, abutment connection, etc.) in the dental implants are under unremitting study. A favorable dental implant should have sufficient strength and ultimate fatigue life on behalf of minimum displacement. It should be wear-resistant to keep the crown profile on the occlusal surface and remain in touch with other teeth. In the review, the effect of the usage of additive manufacturing on the quality of the ۳D printed dental implant parts and important guidelines of design, have been studied and analyzed. Collected results are, based on finite element studies and experimental, empirical, and statistical investigations.

## کلمات کلیدی:

Dental implants, crown, Abutment, Additive Manufacturing, ۳D printing