

## عنوان مقاله:

On the costly-effective application of FRP sheets to masonry arch railway bridge strengthening

## محل انتشار:

سومین کنفرانس بین المللی پژوهش های کاربردی در مهندسی سازه و مدیریت ساخت (سال: 1398)

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## خلاصه مقاله:

This paper studies the minimum-cost strengthening of masonry arch railway bridges through optimal attachment of Fiber-Reinforced Polymer (FRP) sheets together with jacketing by reinforced concrete and shotcrete measures. For this aim, the Sahand-Goltappeh bridge, as a case study, is studied subjected to ordinary train pass. Finally, the strengthening cost is minimized pursuing following goals: i) the bridge s load-carrying-capacity is increased; and, ii) the response values of the bridge are reduced to a certain limit. The strengthening cost is estimated based on Iranian prices list for railway construction services. The results show that strengthening costs can be reduced by optimal utilization of FRPs.

## کلمات کلیدی:

FRP sheet, cost minimization, bridge strengthening

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/917735>

