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**عنوان مقاله:**

Failure modeling of brittle materials in dynamic loading via the Gurson plastic – damage model

**محل انتشار:**

هشتمین کنگره بین المللی مهندسی عمران (سال: 1388)

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**خلاصه مقاله:**

In this paper a method is developed to model the RC concrete behavior with an emphasis on tension and compression damage, micro crack losure effect in cyclic loading and irreversible strains in plastic state. The tension of concrete produces the micro and macro crack exhibition and growth (degradation). The compaction of concrete is physically a collapse of the material voids and movement of micro cracks (softening), which produces plastic strains. The model is based on the damage and plasticity in porous materials, which is implemented in dynamic problems. Finally, numerical examples are presented to verify the accuracy of model in static, cyclic and dynamic loadings.

**کلمات کلیدی:**

Gurson, plasticity, brittle, damage, dynamic

**لینک ثابت مقاله در پایگاه سیویلیکا:**

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