

عنوان مقاله:

CYCLIC ۳-۱۳ FRICTIONAL BEHAVIOR OF SOIL-STRUCTURE INTERFACES

محل انتشار:

سومین کنفرانس بین المللی زلزله شناسی و مهندسی زلزله (سال: 1378)

تعداد صفحات اصل مقاله: 10

نویسنده:

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خلاصه مقاله:

A new Cyclic ۳-Dimensional Simple Shear Interface (C³DSSI) testing apparatus was developed by the author to study the behavior of interfaces between two materials under various stress and displacement paths. The apparatus is capable of applying monotonic as well as cyclic loads in three perpendicular directions, simultaneously. Both load-controlled and displacement-controlled cycles can be performed. It is possible to generate rotational paths (elliptical or circular) on the interface plane by combining the sinusoidal cycles. Various boundary conditions in the direction normal to the interface plane such as constant normal stress or constant normal stiffness can be also generated by C³DSSI. A closed-loop computer-controlled system is used to apply the loads and record the data. Stress-displacement relationship, volume-change behavior, and strength of an interface between a steel plate and silica sand were thoroughly investigated under various stress paths.

کلمات کلیدی:

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1290395>

