

## عنوان مقاله:

FUZZY RELIABILITY ANALYSIS OF SHEET PILE WALL SEISMIC DESIGN

# محل انتشار:

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### خلاصه مقاله:

Sheet pile wall is a type of retaining wall that is frequently used due to its simple, fast, and easy construction. Uncertainties lead to imprecise analysis and inefficient design of sheet pile walls which result in significant risks. This research investigated overturning and flexural stability of sheet pile wall penetrating into sand under geometric andgeotechnical uncertainties. Seismic impact is considered by Mononobe-Okabe theory and a Fuzzy approach is used to apply uncertainties. Results indicate that a small uncertainty of about 5% can turn a safe situation into failure state

# كلمات كليدى:

Uncertainty, Fuzzy sets theory, Sheet pile wall, Safety factor, Seismic design

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