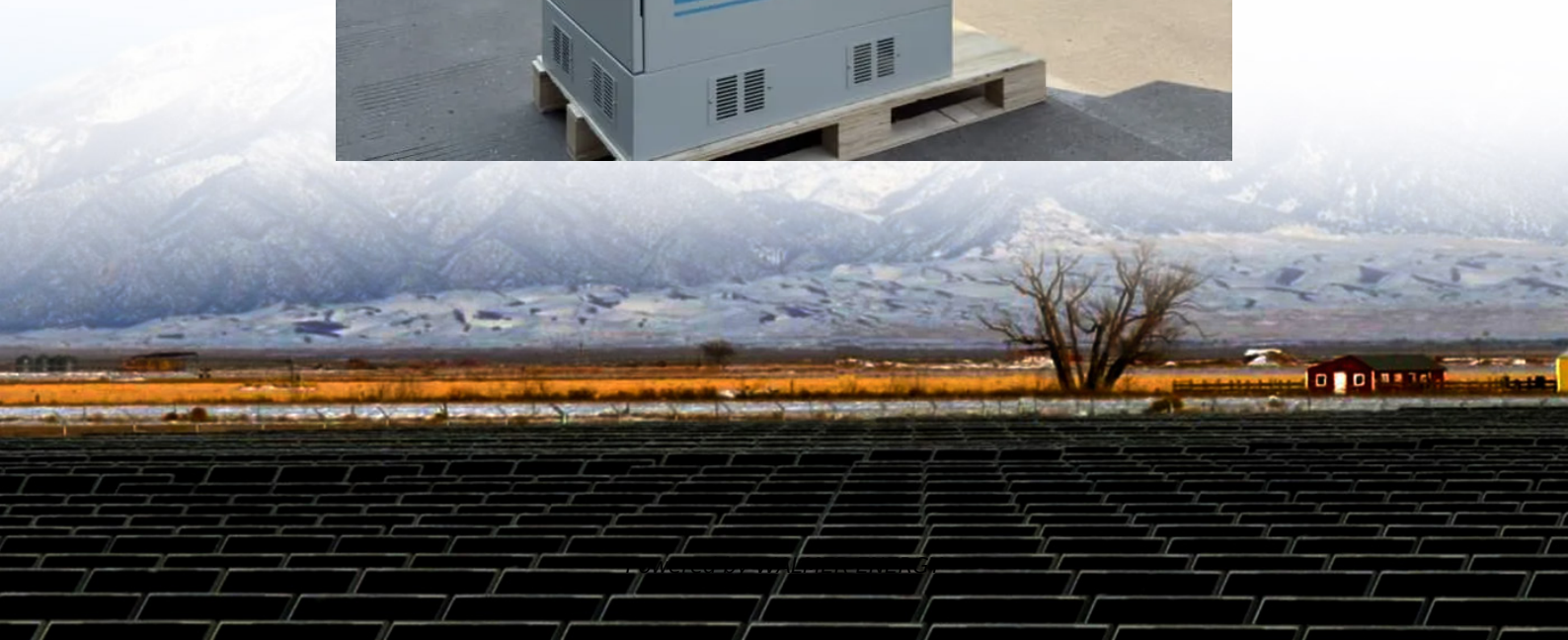


Cost-effectiveness analysis of earthquake-resistant folding containers for mining





Overview

This study proposes an efficient optimization framework for the earthquake-resistance system of continuous skew overpasses based on a cost-related objective function. The cable-sliding modular exp.

How effective is seismic retrofitting?

Seismic retrofitting is a critical strategy for enhancing the resilience of aging infrastructure in earthquake-prone regions, where outdated construction methods often fail to meet modern seismic safety standards. This study evaluated the effectiveness of three advanced retrofitting techniques—.

Are seismic retrofitted structures cost-effective?

Using a combination of analytical modelling and scaled shake table experiments, the study simulated the seismic performance of retrofitted structures under varying load conditions. Statistical analyses, including ANOVA, were conducted to assess the significance of differences between techniques. a cost-effectiveness score of 8.5 out of 10.

Can seismic retrofitting improve disaster resilience and public safety in earthquake-prone regions?

These measures, combined with continued research, can significantly improve disaster resilience and public safety in earthquake-prone regions. Seismic retrofitting has emerged as a critical engineering intervention for addressing the vulnerabilities of aging infrastructure in earthquake-prone regions.

Do metaheuristic optimization algorithms improve structural performance under seismic loads?

Studies by Kaveh (2017) emphasize the critical role of metaheuristic optimization algorithms in civil engineering, particularly for enhancing structural performance under seismic loads. This work aligns with developing advanced computational tools for modeling and simulating earthquake scenarios.



Cost-effectiveness analysis of earthquake-resistant folding container

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Seismic retrofitting techniques for aging infrastructure in ...

Keywords: Seismic retrofitting, aging infrastructure, earthquake-prone regions, base isolation, fiber-reinforced composites, energy dissipation devices, disaster resilience, structural ...

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