

Title:

Recent developments in high-performance structural systems and devices for earthquake resilient infrastructure

Summary:

The traditional seismic design philosophy allows buildings to experience significant inelastic response to dissipate energy at plastic hinge regions when subjected to moderate-to-strong earthquakes. Such design philosophy has proved adequate in terms of achieving life safety but results in damage and residual drifts, and therefore, in significant repair costs and downtime. To address this issue, there is a growing interest in developing high-performance structural systems and devices with the goal of achieving low-damage behaviour and earthquake resilience. The main objective of this mini-symposium (MS) is to report recent developments in high-performance structural systems and devices for earthquake resilient infrastructure. In particular, the MS invites papers presenting research or real-life applications on self-centering frames, rocking structures, replaceable structural components, dampers and isolators, advanced materials in civil engineering, or other structural systems for low-damage seismic performance. The MS is expected to provide an international forum for exchanging innovative ideas, identifying future perspectives and challenges, and promoting collaborations.

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