

**Simulation of Behavior of Passengers aboard Commuter Train in the Event of
Level Crossing Accident**

Koji OMINO Kazuma NAKAI Hiroaki SHIROTO Daisuke SUZUKI

In order to discuss safety of passengers aboard a train car, we analyzed passengers' behaviors in the event of a train collision by using a numerical simulation. Supposing a commuter train collided with a car at a level crossing, we discussed the key points and ways to reduce the probability of causing the injuries of passengers seated on bench seats. As a result, it has been found out that the devices, such as some handrails installed on a bench seat to divide appropriately the passengers sitting on the seat, can reduce passengers' damages. Furthermore, it has been also found out that a proper shape of divider installed on the seat can also them.