

**Influence of Passengers on the Vibration Suppression Performance of Primary Damping Control  
System of Railway Vehicles**

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To improve the ride comfort in railway vehicles, we are developing a primary suspension damping force control system for suppressing the vertical bending vibration of the car body. The excellent vibration suppression performance of the system has been confirmed by vehicle running tests without on-board passengers. Previous researches, however, indicated that passengers have an influence on the characteristics of elastic vibration of the car body. This paper reports the results of vibration excitation tests of the railway vehicle equipped with this control system with/without passenger on the rolling stock testing plant, and verifies that the system could provide the good vibration suppression performance regardless of the on-board passengers.