

## عنوان مقاله:

Observers for vehicle tyre/road forces estimation – A review

## محل انتشار:

اولین کنگره ملی کاربرد مواد و ساخت پیشرفته در صنایع (سال: 1396)

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## خلاصه مقاله:

Tire is the main interface between the vehicle and the road, and all maneuvers controlled by a driver are achieved by the interaction forces between tire and road. In modern vehicle design, tire modeling plays an important role in effectively assessing vehicle handling, ride comfort, and road load analysis. Vehicle dynamics is an essential topic in development of safety driving systems. Complex and integrated control units, controlling the dynamics of the vehicle require precise real time information especially about vehicle dynamics and, preferably, tire/road contact forces. Nevertheless, we still lack an effective and low-cost sensor to measure them directly. The tire-road interface is very difficult to measure directly with sensors, and this is why use of different types of model-based observers is very common in this case. This paper provides a brief analytical overview of the existing methodologies for estimation of tire forces.

## کلمات کلیدی:

vehicle dynamics, tire/road contact forces, estimation, model-based observers

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/673933>

