

Abstract Details

Title: Improvement Stability Control Theories for Agricultural Transport Systems

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Abstract: The design and management of farming transport systems is facing a series of defy. The target of growing vehicle mobility and reduction soil stress has always been in the center of notice. Comprising trailer wheels in the generate of pulling force could be beneficial in both cases. In this way, the mobility of the transport system could be secured even in heavy soil situation, and the soil damage could be reduced. In spite of the potential features, trailer bump is not presently practical. The cause for this is the shortage of proper integrity measures. The origin of this problem is the force produced by the trailer protrusion effective on the drawbar, which can bring the tractor into an unstable state, causing the tractor to curl over or the vehicle train to jack-knife. To avert such incident, a control system must be advanced which can realize the beginning of unstable vehicle behavior and either by admonition or intervention help to keep the stable state of the vehicle.

Keywords: Vehicle-train; agricultural transport systems; stability.