

# عنوان مقاله:

Ship Roll Stabilization via Sliding Mode Control and Gyrostabilizer

# محل انتشار:

همایش ملی دریانوردی و حمل و نقل دریایی (سال: 1390)

تعداد صفحات اصل مقاله: 5

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### خلاصه مقاله:

Gyrostabilizer used for reducing roll motion of ships many years ago. However, very large size of traditional gyro stabilizers deduced application of them. Today enhancements in mechanical design and digital control systems cause the gyrostabilizer to be in point of view. This paper improves performance of twin wheel gyro by nonlinear sliding mode control (smc) method. The control strategy is robust and archives a stable system opposed to wave perturbations. Comparison of the smc controller and primary pd controller is realized. Simulation Results are given to demonstrate the performance of the proposed controller

**کلمات کلیدی:** gyrostabilizer, sliding mode control, pd control

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https://civilica.com/doc/142344

