

Fuzzy-PID controlled lift feedback fin stabilizer (PDF)

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Title: Fuzzy-PID controlled lift feedback fin stabilizer

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摘要: Conventional PID controllers are widely used in fin stabilizer control systems, but they have time-variations, nonlinearity, and uncertainty influencing their control effects. A lift feedback fuzzy-PID control method was developed to better deal with these problems, and this lift feedback fin stabilizer system was simulated under different sea condition. Test results showed the system has better anti-rolling performance than traditional fin-angle PID control systems.

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备注/Memo: The "Ship Control Engineering" emphasis project of 211 Engineering in the tenth five-year plan

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