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Title: Hybrid force/position control of robotic arms
manipulating in uncertain environment based on adaptive
fuzzy sliding mode control

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- An extended adaptive fuzzy sliding mode control (AFSMC) for hybrid force/position control of robotic manipulators is presented.
- The presented controller requires the minimum information about the dynamic structure and physical properties of the system and environment.
- It is not necessary to determine the bounds of uncertainties ahead of time. They are determined based on some adaptation laws.
- The implementation of the controller is easy in relation to other robust adaptive methods.
- The results indicate the superior performance and robustness of the proposed controller in comparison with classical methods such as SMC.

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