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An adaptive fuzzy predictive control of nonlinear processes based on Multi-Kernel least squares support vector regression

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Highlights

- 1) An adaptive Takagi-Sugeno system based on Multi-Kernel Least Squares Support Vector Regression (adaptive TS-LSSVR) was introduced for system identification.
- 2) The adaptive TS-LSSVR system was integrated within the generalized predictive controller (GPC).
- 3) The proposed adaptive TS-LSSVR GPC controller was used to control nonlinear systems.
- 4) The adaptive TS-LSSVR GPC controller has shown good performance in controlling nonlinear systems. Also, the proposed controller copes well with additional disturbances.

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