Liu, L., Tan, K.K., Chen, S., Teo, C.S., Lee, T.H.

Identification and compensation of hysteretic dynamics of piezoelectric actuators for accurate and fast scanning


Nguyen, H.T.M., Huang, S., Tan, K.K.

Robust control for optimal operation of a reproductive assisting platform


Su, Y., Tan, K.K., Lee, T.H.

Computation delay compensation for real time implementation of robust model predictive control


Tan, K.K., Huang, S., Teo, C.S., Yang, R.

Controller design of eddy current braking in an air bearing system


Huang, S., Tan, K.K., Lee, T.H.

Fault diagnosis and fault-tolerant control in linear drives using the Kalman filter

Tan, K.K., Huang, S., Liang, W., Yu, S.

Development for precise positioning of air bearing stages


Su, Y., Tan, K.K., Lee, T.H.

Tube based quasi-min-max output feedback MPC for LPV systems?


Shim, V.A., Tan, K.C., Tan, K.K.

A hybrid estimation of distribution algorithm for solving the multi-objective multiple traveling salesman problem


Shim, V.A., Tan, K.C., Tan, K.K.

A hybrid adaptive evolutionary algorithm in the domination-based and decomposition-based frameworks of multi-objective optimization


Tan, K.K., Huang, S., Liang, W., Al Mamun, A., Koh, E.K., Zhou, H.

Development of a spherical air bearing positioning system


Su, Y., Tan, K.K.

Comments on "output feedback model predictive control for LPV systems based on quasi-min-max algorithm"

Tan, K.K., Liaw, H.C., Zhou, H.

**Guest Editorial**


Huang, S., Tan, K.K.

*Intelligent friction modeling and compensation using neural network approximations*


Liu, L., Tan, K.K., Teo, C.S., Chen, S.-L., Lee, T.H.

*Development of an Approach Toward Comprehensive Identification of Hysteretic Dynamics in Piezoelectric Actuators*


Liu, L., Tan, K.K., Chen, S.-L., Huang, S., Lee, T.H.

*SVD-based Preisach hysteresis identification and composite control of piezo actuators*


Chen, S.-L., Tan, K.K., Huang, S.

*Identification of coulomb friction-impeded systems with a triple-relay feedback apparatus*


Tan, K.K., Tang, K.Z., Putra, A.S., Pu, X., Huang, S., Lee, T.H., Ng, S.C., Tan, L.G.

*An auto-perfusing umbilical cord blood collection instrument*

Huang, S., Tan, K.K.

**A soft technique for measuring friction force using neural network**


Nguyen, M.H.T., Tan, K.K., Huang, S.

**Enhanced predictive ratio control of interacting systems**


Su, Y., Tan, K.K., Lee, T.H.

**Comments on "model predictive control for systems with stochastic multiplicative uncertainty and probabilistic constraints" [Automatica 45 (2009) 167172]**


Lee, T.H., Tan, K.K., Huang, S.

**Adaptive friction compensation with a dynamical friction model**

(2011) IEEE/ASME Transactions on Mechatronics, 16 (1), art. no. 5411804, pp. 133-140.

Sun, J., Ng, J.H., Fuh, J.Y.H., Wong, Y.S., Thian, E.S., Yang, R., Tan, K.K.

**Fabrication of electronics devices with multi-material drop-on-demand dispensing system**


Zhou, H., Liang, W., Li, Y., Xing, L., Tan, K.K.

**Semi-automated tissue microarrays maker**

Sun, J., Yang, R., Tan, K.K., Fuh, J.Y.H., Wong, Y.S., Ng, J.H.

*Performance characterization of drop-on-demand micro-dispensing system with multi-printheads*


Tan, K.K., Lv, J.C., Yi, Z., Huang, S.

*Adaptive multiple minor directions extraction in parallel using a PCA neural network*


Tan, K.K., Huang, S.

*Problem and solution of designing an air bearing system*


Tan, K.K., Huang, S.N., Teo, C.S., Yang, R.

*Damping estimation and control of a contactless brake system using an eddy current*


Putra, A.S., Jiang, Q.Q., Tan, K.K., Huang, S., Lee, T.H.

*Microdispensing system via the contacting method*


Guo, Y., Tan, K.K.

*High efficient crossing-order decoupling in Vold-Kalman filtering order tracking based on independent component analysis*

Chen, S.-L., Tan, K.K., Huang, S., Teo, C.S.

**Modeling and compensation of ripples and friction in permanent-magnet linear motor using a hysteretic relay**


Tan, K.-K., Tang, K.-Z., Su, Y., Lee, T.-H., Hang, C.-C.

**Deadtime compensation via setpoint variation**


Huang, S., Tan, K.K.

**Hardware-in-the-loop simulation for the development of an experimental linear drive**


Tan, K.-K., Tang, K.-Z., Ng, V., Tay, A., Yen, S.-C., Lee, T.-H.

**Bridging physics to electronics - An outreach effort**


Tan, K.K., Genalo, L.J., Verner, I.M.

**Guest editorial: Special issue on outreach to prospective electrical, electronics, and computer engineering students**


Lee, T.H., Tan, K.K., Tang, K.Z.

**Deadtime compensation via setpoint variation**

Chen, S.-L., Tan, K.K., Huang, S.

Limit cycles induced in type-1 linear systems with PID-type of relay feedback


Automated haematopoietic stem cells harvesting machine

Tan, K.K., Tay, A., Shao, Z., Huang, S., Lee, T.H.

Predictive ratio control for interacting processes

Sun, J., Poo, A.N., Chew, C.M., Ang, M.H., Hong, G.S., De Silva, C.W., Tan, K.K.

Optimization of mechatronic design quotient using genetic algorithm in vibration controllers for flexible beams

Tan, K.K., Zhang, Y., Huang, S., Wong, Y.S., Lee, T.H.

Decoupled tracking and thermal monitoring of non-stationary targets

Huang, S., Tan, K.K., Lee, T.H.

Adaptive sliding-mode control of piezoelectric actuators
Huang, S.N., Tan, K.K., Lee, T.H.

*Sliding-mode monitoring and control of linear drives*


*Ex utero harvest of hematopoietic stem cells from placenta/umbilical cord with an automated collection system*


Tang, K.Z., Tan, K.K., Goh, Y.H., Tay, A., Huang, S.N., Lee, T.H.

*Development of a framework and system for remote electronics experiments*


Tan, K.K., Genalo, L.J., Verner, I.M.

*Guest editorial outreach to prospective engineering students*


Guo, Y., Tan, K.K.

*Order-crossing removal in Gabor order tracking by independent component analysis*


Tan, K.K., Huang, S., Tang, K.Z.

*Robust computer-controlled system for intracytoplasmic sperm injection and subsequent cell electro-activation*

Huang, S., Tan, K.K.

**Fault detection and diagnosis based on modeling and estimation methods**


Chen, S.-L., Tan, K.K., Huang, S.

**Friction modeling and compensation of servomechanical systems with dual-relay feedback approach**


Tan, K.K., Zhao, S., Huang, S., Lee, T.H., Tay, A.

**A new repetitive control for LTI systems with input delay**


Tan, K.K., Huang, S.N., Zhang, Y., Lee, T.H.

**Distributed fault detection in industrial system based on sensor wireless network**


Tan, K.K., Chua, K.Y., Zhao, S., Yang, S., Tham, M.T.

**Repetitive control approach towards automatic tuning of Smith predictor controllers**


Huang, S.N., Tan, K.K., Lee, T.H.

**Neural network learning algorithm for a class of interconnected nonlinear systems**

Tan, K.K., Huang, S., Lee, T.H.

Decentralized adaptive controller design of large-scale uncertain robotic systems


Huang, S., Tan, K.K., Tang, K.Z., Lee, T.H.

Fault detection and accommodation control for a class of nonlinear systems

(2008) IFAC Proceedings Volumes (IFAC-PapersOnline), 17 (1 PART 1), .

Chan, B.W., Tan, K.K., Tang, K.Z.

Development of a computer-controlled intelligent physiotherapy system


Chen, S.-L., Huang, S., Tan, K.K.

Relay-based force ripple and friction modeling for the permanent magnet linear motor


Chan, B.W., Tan, K.K., Tang, K.Z.

Development of a computer-controlled intelligent physiotherapy system


Sun, J., Poo, A.N., Ang, M.H., Chew, C.M., Hong, G.S., Tan, K.K., De Silva, C.W.

Evaluation and optimization of passive vibration controller design for flexible beams

Tay, A., Tan, K.K., Zhao, S., Lee, T.H.

*Predictive ratio control of multizone thermal processing system in lithography*

(2008) IFAC Proceedings Volumes (IFAC-PapersOnline), 17 (1 PART 1), .

Zhang, Y., Huang, S., Tan, K.K.

*Vision-assisted thermal monitoring system for CNC machine surveillance*


Zhang, Y., Tan, K.K., Huang, S.

*Software based vision system for automated cell injection*


Lv, J.C., Tan, K.K., Yi, Z., Huang, S.

*Stability and chaos of a class of learning algorithms for ICA neural networks*


Chen, S.-L., Tan, K.K., Huang, S.

*Two-layer binary tree data-driven model for valve stiction*


Tan, K.K., Tay, E.B., Ong, K.C., Leong, C.-Y.

*Mobile real-time feedback system for education*

Teo, C.-S., Tan, K.-K., Lim, S.-Y.

Dynamic geometric compensation for Gantry stage using iterative learning control

Putra, A.S., Huang, S., Tan, K.K., Panda, S.K., Lee, T.H.

Self-sensing actuation with adaptive control in applications with switching trajectory

Huang, S.N., Tan, K.K., Lee, T.H.

Adaptive neural network algorithm for control design of rigid-link electrically driven robots

Huang, S., Tan, K.K., Hong, G.S., Wong, Y.S.

Cutting force control of milling machine

Chen, S.L., Tan, K.K., Huang, S.N.

Friction modelling of servomechanical systems with dual-relay feedback

Chen, S.L., Tan, K.K., Huang, S.N.

Limit cycles in a class of systems under PID-type of relay feedback
Putra, A.S., Huang, S., Tan, K.K., Panda, S.K., Lee, T.H.

**Design, modeling, and control of piezoelectric actuators for intracytoplasmic sperm injection**


Wu, X., Tay, A., Ho, W.K., Tan, K.K.

**Real-time estimation and control of photoresist properties in microlithography**


Putra, A.S., Huang, S., Tan, K.K., Ng, S.C., Panda, S.K., Lee, T.H., Tay, A.

**Piezo-assisted intra-cytoplasmic sperm injection: A comparative study of two penetration techniques**


Huang, S.N., Tan, K.K., Lee, T.H.

**Automated fault detection and diagnosis in mechanical systems**


Teo, C.S., Tan, K.K., Lim, S.Y., Huang, S., Tay, E.B.

**Dynamic modeling and adaptive control of a H-type gantry stage**


Huang, S., Tan, K.K., Lee, T.H., Putra, A.S.

**Adaptive control of mechanical systems using neural networks**

Giam, T.S., Tan, K.K., Huang, S.

**Precision coordinated control of multi-axis gantry stages**


Putra, A.S., Tan, K.K., Lee, T.H., Panda, S.K., Huang, S.N., Zhao, S.

**Compensation of nonlinearities in a piezoelectric stack actuator with application in intra-cytoplasmic sperm injection**


Huang, S.N., Tan, K.K., Wong, Y.S., de Silva, C.W., Goh, H.L., Tan, W.W.

**Tool wear detection and fault diagnosis based on cutting force monitoring**