Kok Kiong Tan

List of Publications by Citations

106 papers	1,787 citations	25 h-index	38 g-index
136 ext. papers	2,242 ext. citations	4.5 avg, IF	5.26 L-index

#	Paper	IF	Citations
106	Decentralized control design for large-scale systems with strong interconnections using neural networks. *IEEE Transactions on Automatic Control*, **2003**, 48, 805-810	5.9	89
105	Vision-Servo System for Automated Cell Injection. *IEEE Transactions on Industrial Electronics*, **2009**, 56, 231-238	8.9	88
104	Fault Diagnosis and Fault-Tolerant Control in Linear Drives Using the Kalman Filter. *IEEE Transactions on Industrial Electronics*, **2012**, 59, 4285-4292	8.9	81
103	Learning locality-constrained collaborative representation for robust face recognition. *Pattern Recognition*, **2014**, 47, 2794-2806	7.7	77
102	Development of a Genetic-Algorithm-Based Nonlinear Model Predictive Control Scheme on Velocity and Steering of Autonomous Vehicles. *IEEE Transactions on Industrial Electronics*, **2016**, 63, 6970-6977	8.9	75
101	Modeling and Compensation of Ripples and Friction in Permanent-Magnet Linear Motor Using a Hysteretic Relay. *IEEE/ASME Transactions on Mechatronics*, **2010**, 15, 586-594	5.5	73
100	Adaptive Friction Compensation With a Dynamical Friction Model. *IEEE/ASME Transactions on Mechatronics*, **2011**, 16, 133-140	5.5	71
99	Intelligent Friction Modeling and Compensation Using Neural Network Approximations. *IEEE Transactions on Industrial Electronics*, **2012**, 59, 3342-3349	8.9	66
98	Adaptive Sliding-Mode Control of Piezoelectric Actuators. *IEEE Transactions on Industrial Electronics*, **2009**, 56, 3514-3522	8.9	55
97	Design, Modeling, and Control of Piezoelectric Actuators for Intracytoplasmic Sperm Injection. *IEEE Transactions on Control Systems Technology*, **2007**, 15, 879-890	4.8	49
96	Friction modeling and adaptive compensation using a relay feedback approach. *IEEE Transactions on Industrial Electronics*, **2001**, 48, 169-176	8.9	49
95	Integrated Mechatronic Design in the Flexure-Linked Dual-Drive Gantry by Constrained Linear Quadratic Optimization. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 2408-2418	8.9	43
94	Adaptive online correction and interpolation of quadrature encoder signals using radial basis functions. *IEEE Transactions on Control Systems Technology*, **2005**, 13, 370-377	4.8	43
93	Power-Efficient Interrupt-Driven Algorithms for Fall Detection and Classification of Activities of Daily Living. *IEEE Sensors Journal*, **2015**, 15, 1377-1387	4	39
92	Development of an Approach Toward Comprehensive Identification of Hysteretic Dynamics in Piezoelectric Actuators. *IEEE Transactions on Control Systems Technology*, **2013**, 21, 1834-1845	4.8	37
91	Data-Based Tuning of Reduced-Order Inverse Model in Both Disturbance Observer and Feedforward With Application to Tray Indexing. *IEEE Transactions on Industrial Electronics*, **2017**, 64, 5492-5501	8.9	33
90	Lumbar Ultrasound Image Feature Extraction and Classification with Support Vector Machine. *Ultrasound in Medicine and Biology*, **2015**, 41, 2677-89	3.5	33

89	Vision-based approach towards lane line detection and vehicle localization. *Machine Vision and Applications*, **2016**, 27, 175-191	2.8	33
88	Sliding Mode Disturbance Observer-based Motion Control for a Piezoelectric Actuator-based Surgical Device. *Asian Journal of Control*, **2018**, 20, 1194-1203	1.7	30
87	A Family of Fuzzy Learning Algorithms for Robust Principal Component Analysis Neural Networks. *IEEE Transactions on Fuzzy Systems*, **2010**, 18, 217-226	8.3	29
86	Force estimation and failure detection based on disturbance observer for an ear surgical device. *ISA Transactions*, **2017**, 66, 476-484	5.5	28
85	Motion Control for Piezoelectric-Actuator-Based Surgical Device Using Neural Network and Extended State Observer. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 402-412	8.9	28
84	Composite jerk feedforward and disturbance observer for robust tracking of flexible systems. *Automatica*, **2017**, 80, 253-260	5.7	27
83	Re-visiting the tympanic membrane vicinity as core body temperature measurement site. *PLoS ONE*, **2017**, 12, e0174120	3.7	27
82	An improvement on stable adaptive control for a class of nonlinear systems. *IEEE Transactions on Automatic Control*, **2004**, 49, 1398-1403	5.9	26
81	Intelligent Friction Compensation: A Review. *IEEE/ASME Transactions on Mechatronics*, **2019**, 24, 1763-1774	7.5	25
80	Friction Modeling and Compensation of Servomechanical Systems With Dual-Relay Feedback Approach. *IEEE Transactions on Control Systems Technology*, **2009**, 17, 1295-1305	4.8	24
79	Internet-based monitoring of distributed control systems-An undergraduate experiment. *IEEE Transactions on Education*, **2002**, 45, 128-134	2.1	24
78	Integral terminal sliding-mode-based adaptive integral backstepping control for precision motion of a piezoelectric ultrasonic motor. *Mechanical Systems and Signal Processing*, **2020**, 144, 106856	7.8	20
77	A novel constrained H optimization algorithm for mechatronics design in flexure-linked biaxial gantry. *ISA Transactions*, **2017**, 71, 467-479	5.5	20
76	Hardware-in-the-Loop Simulation for the Development of an Experimental Linear Drive. *IEEE Transactions on Industrial Electronics*, **2010**, 57, 1167-1174	8.9	20
75	A Novel Adaptive Jerk Control With Application to Large Workspace Tracking on a Flexure-Linked Dual-Drive Gantry. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 5353-5363	8.9	20
74	Contact Force Control on Soft Membrane for an Ear Surgical Device. *IEEE Transactions on Industrial Electronics*, **2018**, 65, 9593-9603	8.9	19
73	Toward Comprehensive Modeling and Large-Angle Tracking Control of a Limited-Angle Torque Actuator With Cylindrical Halbach. *IEEE/ASME Transactions on Mechatronics*, **2015**, 1-1	5.5	17
72	Parameter space optimization towards integrated mechatronic design for uncertain systems with generalized feedback constraints. *Automatica*, **2019**, 105, 149-158	5.7	16

71	Development of a Spherical Air Bearing Positioning System. *IEEE Transactions on Industrial Electronics*, **2012**, 59, 3501-3509	8.9	16
70	Three Dimensional Collision Avoidance for Multi Unmanned Aerial Vehicles Using Velocity Obstacle. *Journal of Intelligent and Robotic Systems: Theory and Applications*, **2020**, 97, 227-248	2.9	16
69	Robust Decentralized Controller Synthesis in Flexure-Linked H-Gantry by Iterative Linear Programming. *IEEE Transactions on Industrial Informatics*, **2019**, 15, 1698-1708	11.9	15
68	Identification of Coulomb Friction-Impeded Systems With a Triple-Relay Feedback Apparatus. *IEEE Transactions on Control Systems Technology*, **2012**, 20, 726-737	4.8	15
67	Stabilization system on an office-based ear surgical device by force and vision feedback. *Mechatronics*, **2017**, 42, 1-10	3	14
66	Global Convergence of GHA Learning Algorithm With Nonzero-Approaching Adaptive Learning Rates. *IEEE Transactions on Neural Networks*, **2007**, 18, 1557-1571		14
65	Adaptive sliding mode enhanced disturbance observer-based control of surgical device. *ISA Transactions*, **2019**, 90, 178-188	5.5	12
64	Mitigation of Vehicle Distribution in an EV Sharing Scheme for Last Mile Transportation. *IEEE Transactions on Intelligent Transportation Systems*, **2015**, 16, 2631-2641	6.1	12
63	Signal-Transformation-Based Repetitive Control of Spiral Trajectory for Piezoelectric Nanopositioning Stages. *IEEE/ASME Transactions on Mechatronics*, **2020**, 25, 1634-1645	5.5	12
62	Precision motion control with a high gain disturbance compensator for linear motors. *ISA Transactions*, **2004**, 43, 399-412	5.5	12
61	Path planning of collision avoidance for unmanned ground vehicles: A nonlinear model predictive control approach. *Proceedings of the Institution of Mechanical Engineers Part I: Journal of Systems and Control Engineering*, **2021**, 235, 222-236	1	12
60	A novel approach to neuraxial anesthesia: application of an automated ultrasound spinal landmark identification. *BMC Anesthesiology*, **2019**, 19, 57	2.4	11
59	Active vibration isolation based on model reference adaptive control. *International Journal of Systems Science*, **2014**, 45, 97-108	2.3	11
58	Limit cycles induced in type-1 linear systems with PID-type of relay feedback. *International Journal of Systems Science*, **2009**, 40, 1229-1239	2.3	10
57	Collision Avoidance Design on Unmanned Aerial Vehicle in 3D Space. *Unmanned Systems*, **2018**, 06, 277-295	3	10
56	Computation delay compensation for real time implementation of robust model predictive control. *Journal of Process Control*, **2013**, 23, 1342-1349	3.9	9
55	An RBF neural network approach to geometric error compensation with displacement measurements only. *Neural Computing and Applications*, **2017**, 28, 1235-1248	4.8	9
54	Compensation of hysteresis in piezoelectric actuator with iterative learning control. *Journal of Control Theory and Applications*, **2010**, 8, 176-180		9

53	Ultrasound guided automatic localization of needle insertion site for epidural anesthesia **2013**,		8
52	Repetitive control approach towards automatic tuning of Smith predictor controllers. *ISA Transactions*, **2009**, 48, 16-23	5.5	8
51	Real-time automatic spinal level identification with ultrasound image processing **2015**,		7
50	Multirate-Based Composite Controller Design of Piezoelectric Actuators for High-Bandwidth and Precision Tracking. *IEEE Transactions on Control Systems Technology*, **2014**, 22, 816-821	4.8	7
49	Stability and Chaos of a Class of Learning Algorithms for ICA Neural Networks. *Neural Processing Letters*, **2008**, 28, 35-47	2.4	7
48	Geometrical error compensation of machines with significant random errors. *ISA Transactions*, **2005**, 44, 43-53	5.5	7
47	Adaptive parameter and gain RISE control of a flexure-based dual-drive H-gantry **2016**,		7
46	Enhanced sensitivity shaping by data-based tuning of disturbance observer with non-binomial filter. *ISA Transactions*, **2019**, 85, 284-292	5.5	7
45	Force Feedback Control Assisted Tympanostomy Tube Insertion. *IEEE Transactions on Control Systems Technology*, **2017**, 25, 1007-1018	4.8	6
44	Disturbance Compensation by Reference Profile Alteration With Application to Tray Indexing. *IEEE Transactions on Industrial Electronics*, **2019**, 66, 9406-9416	8.9	6
43	Autonomous vehicle velocity and steering control through nonlinear model predictive control scheme **2016**,		6
42	Adaptive Control of Mechanical Systems Using Neural Networks. *IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews*, **2007**, 37, 897-903		6
41	Assistive technology for ultrasound-guided central venous catheter placement. *Journal of Medical Ultrasonics (2001)*, **2018**, 45, 41-57	1.4	4
40	Problem and solution of designing an air bearing system **2010**,		4
39	An Innovative Design for In-Vitro Fertilization Oocyte Retrieval Systems. *IEEE Transactions on Industrial Informatics*, **2013**, 9, 1892-1899	11.9	3
38	Vision approach towards fully self-reverse parking system **2014**,		3
37	Computation delay compensation for real time implementation of robust model predictive control **2012**,		3
36	Parameter Space Optimization Towards Constrained Controller Design With Application to Tray Indexing. *IEEE Transactions on Industrial Electronics*, **2020**, 67, 5575-5585	8.9	3

35	Data-Driven Model-Free Iterative Tuning Approach for Smooth and Accurate Tracking **2018**,		3
34	Selective precision motion control using weighted sensor fusion approach **2013**,		2
33	Disturbance observer based small force detection for an ultrasonic motor with application to a surgical device **2015**,		2
32	Stabilization for an ear surgical device using force feedback and vision-based motion compensation **2014**,		2
31	Fault Simulator Based on a Hardware-in-the-Loop Technique. *IEEE Transactions on Systems, Man and Cybernetics, Part C: Applications and Reviews*, **2012**, 42, 1135-1139		2
30	Predictive Ratio Control for Interacting Processes. *Industrial & Engineering Chemistry Research*, **2009**, 48, 10515-10521	3.9	2
29	Feedforward Control With Disturbance Prediction for Linear Discrete-Time Systems. *IEEE Transactions on Control Systems Technology*, **2019**, 27, 2340-2350	4.8	2
28	Intelligent Motion Control of Ultrasonic Motor for an Ear Surgical Device **2018**,		2
27	Predictive feedforward control **2016**,		1
26	Robust precision positioning control on linear ultrasonic motor **2013**,		1
25	Alignment Motion Control for an Automated Human Ear Surgery via Vision-Servoing. *Asian Journal of Control*, **2017**, 19, 482-493	1.7	1
24	A novel robust, continuous, PID-assisted control for precision tracking of flexible systems a case study on timing belts **2017**,		1
23	Application of design of experiments to feature selection in ventilation tube applicator **2015**,		1
22	Capacitive-Based Contact Sensing for Office-Based Ventilation Tube Applicator for Otitis Media With Effusion Treatment. *IEEE Sensors Journal*, **2015**, 15, 3926-3933	4	1
21	Mechatronic design of an office-based ventilation tube applicator for patients with Otitis Media with Effusion **2013**,		1
20	Identification and control of linear dynamics with input Preisach hysteresis **2010**,		1
19	Text extraction from images captured via mobile and digital devices **2009**,		1
18	Compensation of hysteresis in piezoelectric actuator with iterative learning control **2009**,		1

17	Relay-based force ripple and friction modeling for the permanent magnet linear motor **2008**,		1
16	Development of an intelligent surgical instrument for otitis media with effusion. *ISA Transactions*, **2016**, 65, 567-576	5.5	1
15	Teaching of Automation and Control Engineering Practice - A Case Study **2018**,		1
14	Machine learning approach to needle insertion site identification for spinal anesthesia in obese patients. *BMC Anesthesiology*, **2021**, 21, 246	2.4	0
13	Data-Driven Tuning Method for LQR Based Optimal PID Controller **2019**,		0
12	Adaptive Robust Impedance Control for an Ear Surgical Device with Soft Interaction. *IEEE/ASME Transactions on Mechatronics*, **2021**, 1-1	5.5	0
11	Set-point manipulation approach towards online performance improvement in existing process control loops. *ISA Transactions*, **2017**, 70, 458-464	5.5	
10	Design and development of a secure multi-access, cross-platform telemedicine application – MEETING ROOM. *Australian Journal of Electrical and Electronics Engineering*, **2015**, 12, 194-203	0.6	
9	Decoupled tracking and thermal monitoring of non-stationary targets. *ISA Transactions*, **2009**, 48, 449-57	5.5	
8	Force-Based Supervisory Control Assisted Surgery. *Advances in Industrial Control*, **2021**, 61-84	0.3	
7	Optimal and Robust Contact Force Control on Soft Membrane. *Advances in Industrial Control*, **2021**, 109-131	0.3	
6	Stabilization System Based on Vision-Assisted Force Feedback. *Advances in Industrial Control*, **2021**, 85-108	0.3	
5	Force-Position Control for Fast Tube Insertion. *Advances in Industrial Control*, **2021**, 133-156	0.3	
4	Robust Impedance Control of Constrained Piezoelectric Actuator-Based End-Effector. *Advances in Industrial Control*, **2021**, 157-178	0.3	
3	Advanced Disturbance Observer-Based Failure Detection for Force Sensor. *Advances in Industrial Control*, **2021**, 179-198	0.3	
2	Disturbance Observer-Based Force Estimation Without Force Sensors. *Advances in Industrial Control*, **2021**, 29-59	0.3	
1	Intelligent vision guide for automatic ventilation grommet insertion into the tympanic membrane. *International Journal of Medical Robotics and Computer Assisted Surgery*, **2016**, 12, 18-31	2.9	