Masayoshi Tomizuka

List of Publications by Year in Descending Order

308 papers	6,842 citations	40 h-index	72 g-index
358 ext. papers	8,742 ext. citations	3 avg, IF	6.45 L-index

#	Paper	IF	Citations
308	Guest Editorial Introduction to the Focused Section on Adaptive Learning and Control for Advanced Mechatronics Systems. *IEEE/ASME Transactions on Mechatronics*, **2022**, 1-4	5.5	1
307	Offline-Online Learning of Deformation Model for Cable Manipulation With Graph Neural Networks. *IEEE Robotics and Automation Letters*, **2022**, 7, 5544-5551	4.2	2
306	Robotic Cable Routing with Spatial Representation. *IEEE Robotics and Automation Letters*, **2022**, 7, 5687-5694	4.2	2
305	SceGene: Bio-Inspired Traffic Scenario Generation for Autonomous Driving Testing. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-16	6.1	0
304	Trajectory Splitting: A Distributed Formulation for Collision Avoiding Trajectory Optimization **2021**,		2
303	Trajectory Optimization for Manipulation of Deformable Objects: Assembly of Belt Drive Units **2021**,		2
302	. *IEEE Transactions on Automatic Control*, **2021**, 66, 5554-5560	5.9	13
301	Long-Term Trajectory Prediction of the Human Hand and Duration Estimation of the Human Action. *IEEE Robotics and Automation Letters*, **2021**, 1-1	4.2	1
300	Neural-Network-Based Iterative Learning Control for Multiple Tasks. *IEEE Transactions on Neural Networks and Learning Systems*, **2021**, 32, 4178-4190	10.3	10
299	IDE-Net: Interactive Driving Event and Pattern Extraction From Human Data. *IEEE Robotics and Automation Letters*, **2021**, 6, 3065-3072	4.2	2
298	Human-Aware Robot Task Planning Based on a Hierarchical Task Model. *IEEE Robotics and Automation Letters*, **2021**, 6, 1136-1143	4.2	2
297	Socially-Compatible Behavior Design of Autonomous Vehicles With Verification on Real Human Data. *IEEE Robotics and Automation Letters*, **2021**, 6, 3421-3428	4.2	2
296	Learning Variable Impedance Control via Inverse Reinforcement Learning for Force-Related Tasks. *IEEE Robotics and Automation Letters*, **2021**, 6, 2225-2232	4.2	12
295	Feedback-based Digital Higher-order Terminal Sliding Mode for 6-DOF Industrial Manipulators **2021** ,		2
294	Enable faster and smoother spatio-temporal trajectory planning for autonomous vehicles in constrained dynamic environment. *Proceedings of the Institution of Mechanical Engineers, Part D: Journal of Automobile Engineering*, **2021**, 235, 1101-1112	1.4	5
293	On Robust Stability and Performance With a Fixed-Order Controller Design for Uncertain Systems. *IEEE Transactions on Systems, Man, and Cybernetics: Systems*, **2021**, 1-13	7.3	5
292	Practical Fractional-Order Variable-Gain Super-Twisting Control with Application to Wafer Stages of Photolithography Systems. *IEEE/ASME Transactions on Mechatronics*, **2021**, 1-1	5.5	3

291	Spatio-Temporal Graph Dual-Attention Network for Multi-Agent Prediction and Tracking. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-14	6.1	3
290	Interpretable End-to-End Urban Autonomous Driving With Latent Deep Reinforcement Learning. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-11	6.1	16
289	. *IEEE Transactions on Industrial Electronics*, **2021**, 1-1	8.9	2
288	Simplified Realization of Zero Phase Error Tracking. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2021**, 143,	1.6	3
287	Autonomous Ground Vehicle Lane-Keeping LPV Model-Based Control: Dual-Rate State Estimation and Comparison of Different Real-Time Control Strategies. *Sensors*, **2021**, 21,	3.8	10
286	Online Learning of Unknown Dynamics for Model-Based Controllers in Legged Locomotion. *IEEE Robotics and Automation Letters*, **2021**, 6, 8442-8449	4.2	5
285	Continual Multi-Agent Interaction Behavior Prediction With Conditional Generative Memory. *IEEE Robotics and Automation Letters*, **2021**, 6, 8410-8417	4.2	3
284	Labels Are Not Perfect: Inferring Spatial Uncertainty in Object Detection. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-14	6.1	3
283	. *IEEE Transactions on Intelligent Transportation Systems*, **2021**, 1-17	6.1	3
282	RAIN: Reinforced Hybrid Attention Inference Network for Motion Forecasting **2021**,		2
281	. *IEEE/ASME Transactions on Mechatronics*, **2020**, 25, 1961-1970	5.5	15
280	Towards Efficient Human-Robot Collaboration With Robust Plan Recognition and Trajectory Prediction. *IEEE Robotics and Automation Letters*, **2020**, 5, 2602-2609	4.2	17
279	Nonlinear Control With High-Gain Extended State Observer for Position Tracking of Electro-Hydraulic Systems. *IEEE/ASME Transactions on Mechatronics*, **2020**, 25, 2610-2621	5.5	18
278	A Review of Manufacturing Process Control. *Journal of Manufacturing Science and Engineering, Transactions of the ASME*, **2020**, 142,	3.3	4
277	Development of a new compact and light velocity-based mechanical safety device for a rehabilitation assist suit. *Journal of Advanced Mechanical Design, Systems and Manufacturing*, **2020**, 14, JAMDSM0101-JAMDSM0101	0.6	
276	Fractional-Order Variable-Gain Super-Twisting Control With Application to Wafer Stages of Photolithography Systems **2020**,		2
275	Expressing Diverse Human Driving Behavior with Probabilistic Rewards and Online Inference **2020**,		3
274	Efficient Sampling-Based Maximum Entropy Inverse Reinforcement Learning With Application to Autonomous Driving. *IEEE Robotics and Automation Letters*, **2020**, 5, 5355-5362	4.2	15

273	Precise Linear-Motor Synchronization Control via Cross-Coupled Second-Order Discrete-Time Fractional-Order Sliding Mode. *IEEE/ASME Transactions on Mechatronics*, **2020**, 1-1	5.5	14
272	Experimental Evaluation of Human Motion Prediction Toward Safe and Efficient Human Robot Collaboration **2020**,		2
271	H Control Using Linear Parameter Varying Approach for Motion Control Systems Under Communication Delays: Application to PMSM. *Journal of Electrical Engineering and Technology*, **2020** , 15, 1797-1809	1.4	0
270	Generic Tracking and Probabilistic Prediction Framework and Its Application in Autonomous Driving. *IEEE Transactions on Intelligent Transportation Systems*, **2020**, 21, 3634-3649	6.1	17
269	Interaction-aware Multi-agent Tracking and Probabilistic Behavior Prediction via Adversarial Learning **2019**,		19
268	Coordination and Trajectory Prediction for Vehicle Interactions via Bayesian Generative Modeling **2019**,		7
267	Behavior Planning of Autonomous Cars with Social Perception **2019**,		11
266	Wasserstein Generative Learning with Kinematic Constraints for Probabilistic Interactive Driving Behavior Prediction **2019**,		14
265	Multi-modal Probabilistic Prediction of Interactive Behavior via an Interpretable Model **2019**,		12
264	Track deformable objects from point clouds with structure preserved registration. *International Journal of Robotics Research*, **2019**, 027836491984143	5.7	7
263	Adaptive Probabilistic Vehicle Trajectory Prediction Through Physically Feasible Bayesian Recurrent Neural Network **2019**,		5
262	Efficient Grasp Planning and Execution With Multifingered Hands by Surface Fitting. *IEEE Robotics and Automation Letters*, **2019**, 4, 3995-4002	4.2	7
261	A Remote Control Strategy for an Autonomous Vehicle with Slow Sensor Using Kalman Filtering and Dual-Rate Control. *Sensors*, **2019**, 19,	3.8	6
260	. *IEEE/ASME Transactions on Mechatronics*, **2019**, 24, 2040-2051	5.5	7
259	Development of a knee joint assist suit with a velocity-based mechanical safety device (Transient response analysis of the safety device and experiments). *Transactions of the JSME (in Japanese)*, **2019**, 85, 19-00146-19-00146	0.2	1
258	Bayesian Persuasive Driving **2019**,		2
257	Precise Correntropy-based 3D Object Modelling With Geometrical Traffic Prior **2019**,		1
256	Robust Deformation Model Approximation for Robotic Cable Manipulation **2019**,		8

255	Deep Imitation Learning for Autonomous Driving in Generic Urban Scenarios with Enhanced Safety **2019**,		22
254	Conditional Generative Neural System for Probabilistic Trajectory Prediction **2019**,		40
253	The Experimental Realization of an Artificial Low-Reynolds-Number Swimmer with Three-Dimensional Maneuverability **2019**,		5
252	Constructing a Highly Interactive Vehicle Motion Dataset **2019**,		9
251	Human Motion Prediction using Semi-adaptable Neural Networks **2019**,		13
250	Interaction-aware Decision Making with Adaptive Strategies under Merging Scenarios **2019**,		16
249	Prediction of Human Arm Target for Robot Reaching Movements **2019**,		6
248	Model-free Deep Reinforcement Learning for Urban Autonomous Driving **2019**,		55
247	Energy-Efficient Control for an Unmanned Ground Vehicle in a Wireless Sensor Network. *Journal of Sensors*, **2019**, 2019, 1-16	2	6
246	Interpretable Modelling of Driving Behaviors in Interactive Driving Scenarios based on Cumulative Prospect Theory **2019**,		12
245	Interactive Prediction for Multiple, Heterogeneous Traffic Participants with Multi-Agent Hybrid Dynamic Bayesian Network **2019**,		5
244	Generic Prediction Architecture Considering both Rational and Irrational Driving Behaviors **2019**,		6
243	A Position-Based Friction Error Model and Its Application to Parameter Identification. *IEEE Access*, **2019**, 7, 7759-7767	3.5	2
242	A frequency-shaping methodology for discrete-time sliding mode control. *International Journal of Control*, **2019**, 92, 1662-1671	1.5	3
241	Distributed Conflict Resolution for Connected Autonomous Vehicles. *IEEE Transactions on Intelligent Vehicles*, **2018**, 3, 18-29	5	45
240	A Double Disturbance Observer Design for Compensation of Unknown Time Delay in a Wireless Motion Control System. *IEEE Transactions on Control Systems Technology*, **2018**, 26, 675-683	4.8	8
239	A Framework for Manipulating Deformable Linear Objects by Coherent Point Drift. *IEEE Robotics and Automation Letters*, **2018**, 3, 3426-3433	4.2	21
238	Reference Modulation for Performance Enhancement in Motion Control Systems **2018**,		1

237	Improving Efficiency of Autonomous Vehicles by V2V Communication **2018**,		5
236	Discrete-time nonlinear damping backstepping control with observers for rejection of low and high frequency disturbances. *Mechanical Systems and Signal Processing*, **2018**, 104, 436-448	7.8	16
235	Efficient Trajectory Optimization for Robot Motion Planning **2018**,		2
234	Real-Time Grasp Planning for Multi-Fingered Hands by Finger Splitting **2018**,		4
233	Probabilistic Prediction of Interactive Driving Behavior via Hierarchical Inverse Reinforcement Learning **2018**,		30
232	Generic Probabilistic Interactive Situation Recognition and Prediction: From Virtual to Real **2018**,		13
231	Towards a Fatality-Aware Benchmark of Probabilistic Reaction Prediction in Highly Interactive Driving Scenarios **2018**,		14
230	Courteous Autonomous Cars **2018**,		22
229	Grasp Planning for Customized Grippers by Iterative Surface Fitting **2018**,		2
228	Probabilistic Prediction of Vehicle Semantic Intention and Motion **2018**,		50
227	Continuous Decision Making for On-road Autonomous Driving under Uncertain and Interactive Environments **2018**,		13
226	Generic Vehicle Tracking Framework Capable of Handling Occlusions Based on Modified Mixture Particle Filter **2018**,		17
225	Cooperative Driving Based on Negotiation with Persuasion and Concession **2018**,		2
224	Development of a knee joint assist suit with a velocity-based mechanical safety device (Frequency response analysis of the safety device and experiments). *Transactions of the JSME (in Japanese)*, **2018**, 84, 18-00314-18-00314	0.2	2
223	Characterization of Active/Passive Pneumatic Actuators for Assistive Devices **2018**,		2
222	A Framework for Probabilistic Generic Traffic Scene Prediction **2018**,		12
221	Zero-shot Deep Reinforcement Learning Driving Policy Transfer for Autonomous Vehicles based on Robust Control **2018**,		10
220	Deep Hierarchical Reinforcement Learning for Autonomous Driving with Distinct Behaviors **2018**,		11

219	A Fast Integrated Planning and Control Framework for Autonomous Driving via Imitation Learning **2018**,		18
218	Fusing Bird□ Eye View LIDAR Point Cloud and Front View Camera Image for 3D Object Detection **2018**,		9
217	Optimal Control Parameterization for ActivelPassive EXoskeleton with Variable Impedance Actuator **2018**,		2
216	. *IEEE/ASME Transactions on Mechatronics*, **2018**, 23, 2671-2680	5.5	15
215	Non-uniform Multi-rate Estimator based Periodic Event-Triggered Control for resource saving. *Information Sciences*, **2018**, 459, 86-102	7.7	11
214	Optimal preview control for a linear continuous-time stochastic control system in finite-time horizon. *International Journal of Systems Science*, **2017**, 48, 129-137	2.3	40
213	High-Gain-Observer-Based Integral Sliding Mode Control for Position Tracking of Electrohydraulic Servo Systems. *IEEE/ASME Transactions on Mechatronics*, **2017**, 22, 2695-2704	5.5	41
212	Real-Time Finger Gaits Planning for Dexterous Manipulation. *IFAC-PapersOnLine*, **2017**, 50, 12765-12772	0.7	5
211	Design of arbitrary-order robust iterative learning control based on robust control theory. *Mechatronics*, **2017**, 47, 67-76	3	15
210	Spatially-partitioned environmental representation and planning architecture for on-road autonomous driving **2017**,		40
209	Speed profile planning in dynamic environments via temporal optimization **2017**,		16
208	A design methodology for disturbance observer with application to precision motion control: An H-infinity based approach **2017**,		12
207	Convex feasible set algorithm for constrained trajectory smoothing **2017**,		16
206	State estimation for deformable objects by point registration and dynamic simulation **2017**,		13
205	Robust dexterous manipulation under object dynamics uncertainties **2017**,		4
204	Distributed and cooperative optimization-based iterative learning control for large-scale building temperature regulation **2017**,		4
203	**2017**,		20
202	Boundary layer heuristic for search-based nonholonomic path planning in maze-like environments **2017**,		1

201	Real-time collision avoidance algorithm on industrial manipulators **2017**,		7
200	Development of a knee joint assist suit with hardware-based safety devices (Proposal and design of the assist suit). *Transactions of the JSME (in Japanese)*, **2017**, 83, 17-00279-17-00279	0.2	3
199	Safe and feasible motion generation for autonomous driving via constrained policy net **2017**,		6
198	Real-time robust finger gaits planning under object shape and dynamics uncertainties **2017**,		4
197	A guided search framework in multiple model control **2017**,		1
196	Discrete-Time Reduced-Complexity Youla Parameterization for Dual-Input Single-Output Systems. *IEEE Transactions on Control Systems Technology*, **2016**, 24, 302-309	4.8	7
195	Motion control of series-elastic actuators **2016**,		2
194	Iterative design of feedback and feedforward controller with input saturation constraint for building temperature control **2016**,		4
193	Enhanced wide-spectrum vibration suppression based on adaptive loop shaping **2016**,		2
192	Enabling safe freeway driving for automated vehicles **2016**,		21
191	Multirate iterative learning control for enhanced motion performance with application to wafer scanner systems **2016**,		1
190	Discrete-Time H-Infinity Synthesis of Frequency-Shaped Sliding Mode Control for Suppression of Vibration With Multiple Peak Frequencies **2016**,		2
189	Human guidance programming on a 6-DoF robot with collision avoidance **2016**,		6
188	Robotic manipulation of deformable objects by tangent space mapping and non-rigid registration **2016**,		11
187	Autonomous alignment of peg and hole by force/torque measurement for robotic assembly **2016**,		26
186	Robust impedance control with applications to a series-elastic actuated system **2016**,		8
185	Multi-rate Observer Based Sliding Mode Control with Frequency Shaping for Vibration Suppression Beyond Nyquist Frequency**This work was sponsored by Western Digital Corporation.. *IFAC-PapersOnLine*, **2016**, 49, 13-18	0.7	8
184	Extended state observer with phase compensation to estimate and suppress high-frequency disturbances **2016**,		7

183	Zero time delay input shaping for smooth settling of industrial robots **2016**,		2
182	Design of a Passive Upper Limb Exoskeleton for Macaque Monkeys. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2016**, 138,	1.6	3
181	A non-conservatively defensive strategy for urban autonomous driving **2016**,		34
180	Control-oriented model of a turbocharged engine airpath with discrete-time considerations **2016**,		1
179	Teach industrial robots peg-hole-insertion by human demonstration **2016**,		28
178	Optimization-based constrained iterative learning control with application to building temperature control systems **2016**,		5
177	Path-constrained trajectory planning for robot service life optimization **2016**,		1
176	Overview and new results in disturbance observer based adaptive vibration rejection with application to advanced manufacturing. *International Journal of Adaptive Control and Signal Processing*, **2015**, 29, 1459-1474	2.8	24
175	Clinical impact of gait training enhanced with visual kinematic biofeedback: Patients with Parkinson's disease and patients stable post stroke. *Neuropsychologia*, **2015**, 79, 332-43	3.2	43
174	Preview control for impulse-free continuous-time descriptor systems. *International Journal of Control*, **2015**, 88, 1142-1149	1.5	24
173	Design and torque-mode control of a cable-driven rotary series elastic actuator for subject-robot interaction **2015**,		14
172	Modified Preview Control for a Wireless Tracking Control System With Packet Loss. *IEEE/ASME Transactions on Mechatronics*, **2015**, 20, 299-307	5.5	33
171	Flatness-Based Nonlinear Control for Position Tracking of Electrohydraulic Systems. *IEEE/ASME Transactions on Mechatronics*, **2015**, 20, 197-206	5.5	47
170	Probabilistic Approach to Modeling and Parameter Learning of Indirect Drive Robots From Incomplete Data. *IEEE/ASME Transactions on Mechatronics*, **2015**, 20, 1036-1045	5.5	2
169	Introduction and initial exploration of an Active/Passive Exoskeleton framework for portable assistance **2015**,		8
168	Robust principal component analysis for iterative learning control of precision motion systems with non-repetitive disturbances **2015**,		6
167	Robust time delay compensation in a wireless motion control system with double disturbance observers **2015**,		5
166	Statistical Learning Algorithms to Compensate Slow Visual Feedback for Industrial Robots. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2015**, 137,	1.6	14

165	Dual-Stage Adaptive Friction Compensation for Precise Load Side Position Tracking of Indirect Drive Mechanisms. *IEEE Transactions on Control Systems Technology*, **2015**, 23, 164-175	4.8	20
164	A novel integrated chassis controller for full drive-by-wire vehicles. *Vehicle System Dynamics*, **2015**, 53, 215-236	2.8	59
163	Optimal Decoupled Disturbance Observers for Dual-Input Single-Output Systems. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2014**, 136,	1.6	11
162	Dual-Stage Iterative Learning Control for MIMO Mismatched System With Application to Robots With Joint Elasticity. *IEEE Transactions on Control Systems Technology*, **2014**, 22, 1350-1361	4.8	40
161	Nonlinear Controller With the Dead-Zone and Saturation for Optical Disk Drive Systems in the Presence of External Shocks. *IEEE/ASME Transactions on Mechatronics*, **2014**, 19, 1458-1463	5.5	5
160	New Repetitive Control With Improved Steady-State Performance and Accelerated Transient. *IEEE Transactions on Control Systems Technology*, **2014**, 22, 664-675	4.8	77
159	A terminal sliding mode based torque distribution control for an individual-wheel-drive vehicle. *Journal of Zhejiang University: Science A*, **2014**, 15, 681-693	2.1	16
158	Discrete-time Frequency-shaped Sliding Mode Control for Audio-vibration Rejection in Hard Disk Drives. *IFAC Postprint Volumes IPPV / International Federation of Automatic Control*, **2014**, 47, 6843-6848		3
157	Fusion of Computer, Communication, and Control Technologies: Needs and Strategies **2014**, 147-157		
156	A guidance robot for the visually impaired: System description and velocity reference generation **2014**,		1
155	An Overview on Study of Identification of Driver Behavior Characteristics for Automotive Control. *Mathematical Problems in Engineering*, **2014**, 2014, 1-15	1.1	40
154	Feedforward Input Generation Based on Neural Network Prediction in Multi-Joint Robots1. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2014**, 136,	1.6	2
153	Ensuring safety in human-robot coexistence environment **2014**,		19
152	Kinematic design and analysis for a macaque upper-limb exoskeleton with shoulder joint alignment **2014**,		1
151	An improved delay-dependent stability criterion for linear uncertain systems with multiple time-varying delays. *International Journal of Control*, **2014**, 87, 861-873	1.5	14
150	Design of kinematic controller for real-time vision guided robot manipulators **2014**,		3
149	Improving Control Performance by Minimizing Jitter in RT-WiFi Networks **2014**,		14
148	Fast planning of well conditioned trajectories for model learning **2014**,		10

147	Direct Joint Space State Estimation in Robots With Multiple Elastic Joints. *IEEE/ASME Transactions on Mechatronics*, **2014**, 19, 697-706	5.5	12
146	Real-time nonlinear programming by amplitude modulation. *International Journal of Control, Automation and Systems*, **2013**, 11, 742-751	2.9	1
145	Robust Performance Enhancement Using Disturbance Observers for Hysteresis Compensation Based on Generalized Prandtl□Ishlinskii Model. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2013**, 135,	1.6	17
144	Optimal preview control for discrete-time descriptor causal systems in a multirate setting. *International Journal of Control*, **2013**, 86, 844-854	1.5	17
143	Corrections to "A minimum parameter adaptive approach for rejecting multiple narrow-band disturbances with application to hard disk drives" [Mar 12 408-415]. *IEEE Transactions on Control Systems Technology*, **2013**, 21, 1996-1996	4.8	
142	On the time-optimal trajectory planning and control of robotic manipulators along predefined paths **2013**,		8
141	Robust tracking performance and disturbance rejection for a class of nonlinear systems using disturbance observers **2013**,		3
140	Network-Based Rehabilitation System for Improved Mobility and Tele-Rehabilitation. *IEEE Transactions on Control Systems Technology*, **2013**, 21, 1980-1987	4.8	26
139	Torque Mode Control of a Cable-Driven Actuating System by Sensor Fusion. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2013**, 135,	1.6	21
138	A nonlinear feedback controller for aerial self-righting by a tailed robot **2013**,		28
137	Design of force compensator with variable gain for bilateral control system under time delay **2013**,		3
136	Control methodologies for precision positioning systems **2013**,		6
135	Fall-prediction algorithm using a neural network for safety enhancement of elderly **2013**,		5
134	Selective model inversion and adaptive disturbance observer for rejection of time-varying vibrations on an active suspension **2013**,		3
133	A Compact Rotary Series Elastic Actuator for Human Assistive Systems. *IEEE/ASME Transactions on Mechatronics*, **2012**, 17, 288-297	5.5	202
132	A Minimum Parameter Adaptive Approach for Rejecting Multiple Narrow-Band Disturbances With Application to Hard Disk Drives. *IEEE Transactions on Control Systems Technology*, **2012**, 20, 408-415	4.8	72
131	Signal Optimization at Urban Highway Rail Grade Crossings Using an Online Adaptive Priority Strategy. *Journal of Transportation Engineering*, **2012**, 138, 479-484		9
130	A sensor-based approach for error compensation of industrial robotic workcells **2012**,		2

129	Robot end-effector sensing with position sensitive detector and inertial sensors **2012**,		17
128	Compensation of packet loss for a network-based rehabilitation system **2012**,		6
127	A network-based monitoring system for rehabilitation **2012**,		4
126	Design of a network-based mobile gait rehabilitation system **2012**,		14
125	Load side state estimation in robot with joint elasticity **2012**,		5
124	Design of a Rehabilitation Device Based on a Mechanical Link System. *Journal of Mechanisms and Robotics*, **2012**, 4,	2.2	6
123	Cancellation of Unnatural Reaction Torque in Variable-Gear-Ratio. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2012**, 134,	1.6	11
122	Adaptive Output Regulation for the Rejection of a Periodic Disturbance With an Unknown Frequency. *IEEE Transactions on Control Systems Technology*, **2011**, 19, 1296-1304	4.8	38
121	Optimization-Based Constrained Iterative Learning Control. *IEEE Transactions on Control Systems Technology*, **2011**, 19, 1613-1621	4.8	72
120	Time-varying complementary filtering for attitude estimation **2011**,		6
119	Control algorithms for prevention of impacts in rehabilitation systems **2011**,		4
118	Multiple model adaptive estimation of satellite attitude using MEMS gyros **2011**,		4
117	A lizard-inspired active tail enables rapid maneuvers and dynamic stabilization in a terrestrial robot **2011**,		12
116	Gait Phase-Based Control for a Rotary Series Elastic Actuator Assisting the Knee Joint. *Journal of Medical Devices, Transactions of the ASME*, **2011**, 5,	1.3	24
115	Time-varying complementary filtering for attitude estimation **2011**,		3
114	Gait phase-based smoothed sliding mode control for a rotary series elastic actuator installed on the knee joint **2010**,		1
113	Optimal plant shaping for high bandwidth disturbance rejection in discrete disturbance observers **2010**,		7
112	Robust disturbance observer design for a power-assist electric bicycle **2010**,		5

111	Robust multi-objective control for systems involving human-in-the-loop passivity constraints with application to electric power steering **2010**,		2
110	Six-DOF maglev nano precision microstage development **2010**,		1
109	Convergence Analysis of a Steerable Nip Mechanism for Full Sheet Control in Printing Devices. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2010**, 132,	1.6	2
108	Design of a mobile gait monitoring system **2010**,		2
107	Full Sheet Control Using Steerable Nips. *IEEE/ASME Transactions on Mechatronics*, **2010**, 15, 48-58	5.5	7
106	Design of the Tracking Controller for Holographic Digital Data Storage. *IEEE/ASME Transactions on Mechatronics*, **2010**, 15, 242-252	5.5	6
105	Control of an Exoskeleton for Realization of Aquatic Therapy Effects. *IEEE/ASME Transactions on Mechatronics*, **2010**, 15, 191-200	5.5	22
104	Output Saturation in Electric Motor Systems: Identification and Controller Design. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2010**, 132,	1.6	6
103	A compact rotary series elastic actuator for knee joint assistive system **2010**,		2
102	Fuzzy Stabilization of Nonlinear Systems under Sampled-Data Feedback: An Exact Discrete-Time Model Approach. *IEEE Transactions on Fuzzy Systems*, **2010**,	8.3	17
101	Global Exponential Stabilization of an Underactuated Nonholonomic Airship. *Transactions of the Society of Instrument and Control Engineers*, **2009**, 45, 99-104	0.1	3
100	Robotic rehabilitation treatments: Realization of aquatic therapy effects in exoskeleton systems **2009**,		8
99	Robust engine torque control by iterative learning control **2009**,		2
98	Design of iterative learning controller based on frequency domain linear matrix inequality **2009**,		6
97	An Iterative Learning Control design for Self-Servowriting in Hard Disk Drives using L1 optimal control **2009**,		1
96	Iterative learning control with saturation constraints **2009**,		9
95	Robust fixed-structure controller design of electric power steering systems **2009**,		6
94	Kinematic Kalman Filter (KKF) for Robot End-Effector Sensing. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2009**, 131,	1.6	27

93	The stability of limit cycles in nonlinear systems. *Nonlinear Dynamics*, **2009**, 56, 269-275	5	18
92	Impedance Compensation of SUBAR for Back-Drivable Force-Mode Actuation. *IEEE Transactions on Robotics*, **2009**, 25, 512-521	6.5	63
91	A mobile gait monitoring system for gait analysis **2009**,		19
90	Control of Rotary Series Elastic Actuator for Ideal Force-Mode Actuation in Human-Robot Interaction Applications. *IEEE/ASME Transactions on Mechatronics*, **2009**, 14, 105-118	5.5	265
89	Projection-Based Iterative Learning Control for Wafer Scanner Systems. *IEEE/ASME Transactions on Mechatronics*, **2009**, 14, 388-393	5.5	59
88	Control of Exoskeletons Inspired by Fictitious Gain in Human Model. *IEEE/ASME Transactions on Mechatronics*, **2009**, 14, 689-698	5.5	60
87	DYNAMIC ANALYSES AND ROBUST STEERING CONTROLLER DESIGN FOR AUTOMATED LANE GUIDANCE OF HEAVY-DUTY VEHICLES. *Asian Journal of Control*, **2008**, 2, 140-154	1.7	5
86	Stability of Controlled Mechanical Systems With Ideal Coulomb Friction. *Journal of Dynamic Systems, Measurement and Control, Transactions of the ASME*, **2008**, 130,	1.6	4
85	Mechanical design and impedance compensation of SUBAR (Sogang University's Biomedical Assist Robot) **2008**,		14
84	Suppression of vibration due to transmission error of harmonic drives using peak filter with acceleration feedback **2008**,		1
83	OpenSHM: Open Architecture Design of Structural Health Monitoring Software in Wireless Sensor Nodes **2008**,		2
82	Iterative learning control design for synchronization of wafer and reticle stages **2008**,		21
81	Smooth and continuous human gait phase detection based on foot pressure patterns **2008**,		22
80	A disturbance observer approach to detecting and rejecting narrow-band disturbances in hard disk drives **2008**,		6
79	Estimation of abnormalities in a human gait using sensor-embedded shoes **2008**,		2
78	Self-tuning control of time-varying systems based on generalized minimum variance criterion **2007**,		2
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