

Chee-Meng Chew

List of Publications by Year in descending order

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Version: 2024-02-01

112
papers

1,899
citations

516561

16
h-index

330025

37
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115
all docs

115
docs citations

115
times ranked

1623
citing authors

#	ARTICLE	IF	CITATIONS
1	CNS Learns Stable, Accurate, and Efficient Movements Using a Simple Algorithm. Journal of Neuroscience, 2008, 28, 11165-11173.	1.7	271
2	A model of force and impedance in human arm movements. Biological Cybernetics, 2004, 90, 368-75.	0.6	121
3	Stability and motor adaptation in human arm movements. Biological Cybernetics, 2006, 94, 20-32.	0.6	118
4	New extensometer to measure in vivo uniaxial mechanical properties of human skin. Journal of Biomechanics, 2008, 41, 931-936.	0.9	60
5	Dynamic bipedal walking assisted by learning. Robotica, 2002, 20, 477-491.	1.3	52
6	Robot gait synthesis using the scheme of human motions skills development. Mechanism and Machine Theory, 2009, 44, 541-558.	2.7	35
7	A frog-inspired swimming robot based on dielectric elastomer actuators. , 2017, , .		33
8	A uniform biped gait generator with offline optimization and online adjustable parameters. Robotica, 2007, 25, 549-565.	1.3	31
9	Blind walking of a planar bipedal robot on sloped terrain. , 0, , .		29
10	Distance Between a Point and a Convex Cone in n -Dimensional Space: Computation and Applications. IEEE Transactions on Robotics, 2009, 25, 1397-1412.	7.3	29
11	Edge and Corner Detection for Unorganized 3D Point Clouds with Application to Robotic Welding. , 2018, , .		29
12	Series damper actuator: a novel force/torque control actuator. , 0, , .		28
13	Development of propulsion mechanism for Robot Manta Ray. , 2015, , .		27
14	Development of a compact double-disk magneto-rheological fluid brake. Robotica, 2007, 25, 493-500.	1.3	26
15	PointAtrousNet: Point Atrous Convolution for Point Cloud Analysis. IEEE Robotics and Automation Letters, 2019, 4, 4035-4041.	3.3	26
16	Pattern generation for bipedal walking on slopes and stairs. , 2008, , .		25
17	A geometric approach to automated fixture layout design. CAD Computer Aided Design, 2010, 42, 202-212.	1.4	25
18	A Haptic Knob with a Hybrid Ultrasonic Motor and Powder Clutch Actuator. , 2007, , .		24

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19	Adjustable Bipedal Gait Generation using Genetic Algorithm Optimized Fourier Series Formulation. , 2006, , .		22
20	Towards More Possibilities: Motion Planning and Control for Hybrid Locomotion of Wheeled-Legged Robots. IEEE Robotics and Automation Letters, 2020, 5, 3723-3730.	3.3	20
21	ACHIEVING ENERGY-EFFICIENT BIPEDAL WALKING TRAJECTORY THROUGH GA-BASED OPTIMIZATION OF KEY PARAMETERS. International Journal of Humanoid Robotics, 2009, 06, 609-629.	0.6	19
22	A GJK-based approach to contact force feasibility and distribution for multi-contact robots. Robotics and Autonomous Systems, 2011, 59, 194-207.	3.0	18
23	Novel Functional Task-Based Gait Assistance Control of Lower Extremity Assistive Device for Level Walking. IEEE Transactions on Industrial Electronics, 2016, 63, 1096-1106.	5.2	18
24	A walking pattern generator for biped robots on uneven terrains. , 2010, , .		17
25	Object detection and motion planning for automated welding of tubular joints. , 2016, , .		17
26	A Relationship Between Sweep Angle of Flapping Pectoral Fins and Thrust Generation. Journal of Mechanisms and Robotics, 2019, 11, .	1.5	16
27	Muscle force estimation with surface EMG during dynamic muscle contractions: A wavelet and ANN based approach. , 2013, 2013, 4589-92.		15
28	Motion intent recognition for control of a lower extremity assistive device (LEAD). , 2013, , .		11
29	Adaptation to load variations of a planar biped: Height control using robust adaptive control. Robotics and Autonomous Systems, 2001, 35, 1-22.	3.0	10
30	BIO-INSPIRED LOCOMOTION CONTROL WITH COORDINATION BETWEEN NEURAL OSCILLATORS. International Journal of Humanoid Robotics, 2009, 06, 585-608.	0.6	10
31	Human-aided robotic grasping. , 2012, , .		10
32	A novel variable stiffness mechanism with linear spring characteristic for machining operations. Robotica, 2017, 35, 1627-1637.	1.3	10
33	Efficient Procedures for Form-Closure Grasp Planning and Fixture Layout Design. Journal of Manufacturing Science and Engineering, Transactions of the ASME, 2009, 131, .	1.3	9
34	Application of deep neural network in estimation of the weld bead parameters. , 2015, , .		9
35	PointAtrousGraph: Deep Hierarchical Encoder-Decoder with Point Atrous Convolution for Unorganized 3D Points. , 2020, , .		9
36	Series damper actuator system based on MR fluid damper. Robotica, 2006, 24, 699-710.	1.3	8

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37	Truncated Fourier series formulation for bipedal walking balance control. <i>Robotica</i> , 2010, 28, 81-96.	1.3	8
38	Humanoid robot push recovery through walking phase modification. , 2010, , .		8
39	Collision-free path planning for multi-pass robotic welding. , 2015, , .		8
40	Optimal trajectory generation for bipedal robots. , 2007, , .		7
41	Non-invasive prediction of skin flap shrinkage: A new concept based on animal experimental evidence. <i>Journal of Biomechanics</i> , 2008, 41, 1668-1674.	0.9	7
42	Push recovery controller for bipedal robot walking. , 2009, , .		7
43	PUSH RECOVERY THROUGH WALKING PHASE MODIFICATION FOR BIPEDAL LOCOMOTION. <i>International Journal of Humanoid Robotics</i> , 2013, 10, 1350022.	0.6	7
44	Autonomous robot navigation via intrinsic evolution. , 0, , .		6
45	Frontal plane algorithms for dynamic bipedal walking. <i>Robotica</i> , 2004, 22, 29-39.	1.3	6
46	Optimization of Mechatronic Design Quotient Using Genetic Algorithm in Vibration Controllers for Flexible Beams. <i>JVC/Journal of Vibration and Control</i> , 2009, 15, 1603-1626.	1.5	6
47	A numerical solution to the ray-shooting problem and its applications in robotic grasping. , 2009, , .		6
48	Feedforward Compensation for Suppression of Seam Boundary Error Propagation in Robotic Welding Systems. <i>IEEE/ASME Transactions on Mechatronics</i> , 2018, 23, 1919-1929.	3.7	6
49	Explore Bravely: Wheeled-Legged Robots Traverse in Unknown Rough Environment. , 2020, , .		6
50	Fast Equilibrium Test and Force Distribution for Multicontact Robotic Systems. <i>Journal of Mechanisms and Robotics</i> , 2010, 2, .	1.5	5
51	Iterative learning control for biped walking. , 2010, , .		5
52	Development and control of a lower extremity assistive device (LEAD) for gait rehabilitation. , 2013, 2013, 6650367.		5
53	Muscle force estimation method with surface EMG for a lower extremities rehabilitation device. , 2013, , .		5
54	Effect of pectoral fin kinematics on manta ray propulsion. <i>Modern Physics Letters B</i> , 2018, 32, 1840025.	1.0	5

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55	EPN: Edge-Aware PointNet for Object Recognition from Multi-View 2.5D Point Clouds. , 2019, , .		5
56	Effects of root chord movement on thrust generation of oscillatory pectoral fins. Bioinspiration and Biomimetics, 2021, 16, 036009.	1.5	5
57	Robotic welding for filling shape-varying geometry using weld profile control with data-driven fast input allocation. Mechatronics, 2021, 79, 102657.	2.0	5
58	Coordination between oscillators: An important feature for robust bipedal walking. , 2008, , .		4
59	Proposal of Augmented Linear Inverted Pendulum model for bipedal gait planning. , 2010, , .		4
60	Development of intuitive human-machine interface based on Electromyography for assistive robot (KAAD). , 2011, , .		4
61	Novel time-frequency approach for muscle fatigue detection based on sEMG. , 2012, , .		4
62	Standing posture modeling and control for a humanoid robot. , 2013, , .		4
63	Improving Force Control using Zero Coupling Impedance Criterion in Series Manipulator Systems. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 549-554.	0.4	4
64	Bipedal locomotion control using a four-compartmental central pattern generator. , 0, , .		3
65	Property analysis for series MR-fluid actuator system. , 0, , .		3
66	Optimized Joint-Torques Trajectory Planning for Bipedal Walking Robots. , 2008, , .		3
67	Self-localization of humanoid robots with fish-eye lens in a soccer field. , 2010, , .		3
68	First implementation results on FAT based adaptive control for a lower extremity rehabilitation device. , 2013, , .		3
69	Functional task based assistance during walking for a Lower Extremity Assistive Device. , 2014, , .		3
70	Automated bead layout methodology for robotic multi-pass welding. , 2015, , .		3
71	Design of feedforward filling control for joining thick materials using robotic welding systems. , 2016, , .		3
72	Effects of pectoral fins' spanwise flexibility on forward thrust generation. , 2017, , .		3

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73	Dense RGB-D SLAM with Planes Detection and Mapping. , 2019, , .		3
74	The use of teleoperation for humanoid walking: a first look. , 0, , .		2
75	Real-time bipedal walking adjustment modes using Truncated Fourier Series formulation. , 2007, , .		2
76	Coordination in CPG and its Application on Bipedal Walking. , 2008, , .		2
77	Design of series damper actuator. Robotica, 2009, 27, 379-387.	1.3	2
78	REAL-TIME BIPEDAL WALKING GAIT ADJUSTMENT MODES BASED ON A TRUNCATED FOURIER SERIES MODEL. International Journal of Humanoid Robotics, 2010, 07, 95-126.	0.6	2
79	Assistive grasping in teleoperation using infra-red proximity sensors. , 2013, , .		2
80	A coordination-based CPG structure for 3D walking control. Robotica, 2013, 31, 777-788.	1.3	2
81	An intuitive and efficient switching particle filter for real-time vision-based localization. , 2013, , .		2
82	FAT based adaptive control for a lower extremity rehabilitation device: Simulation results. , 2013, , .		2
83	Moving Horizontal Reference Map For Bipedal Robot Walking Over Uneven Terrain. IFAC Postprint Volumes IPPV / International Federation of Automatic Control, 2013, 46, 577-582.	0.4	2
84	Teleoperation grasp assistance using infra-red sensor array. Robotica, 2015, 33, 986-1002.	1.3	2
85	Precise pose and assembly detection of generic tubular joints based on partial scan data. Neural Computing and Applications, 0, , 1.	3.2	2
86	Autonomous Stride-Frequency and Step-Length Adjustment for Bipedal Walking Control. Studies in Computational Intelligence, 2007, , 189-198.	0.7	2
87	Trajectory Generator for Rhythmic Motion Control of Robot using Neural Oscillators. , 2007, , .		2
88	Inverse dynamics control for series damper actuator based on MR fluid damper. , 0, , .		1
89	Autonomous bipedal walking pace supervision under perturbations. , 2007, , .		1
90	A New Distance Algorithm and Its Application to General Force-Closure Test. , 2008, , .		1

#	ARTICLE	IF	CITATIONS
91	Intuitive interaction for robotic grasping. , 2012, , .		1
92	A mathematical model for surface roughness of ship hull grit blasting. , 2016, , .		1
93	Precise Detection of Pose and Assembly Error Based on Partial Scan Data for Fabrication of Tubular Joints. , 2018, , .		1
94	Reliable and Adjustable Biped Gait Generation for Slopes Using a GA Optimized Fourier Series Formulation. , 2006, , 187-194.		1
95	Frontal plane algorithms for dynamic bipedal walking. , 0, , .		0
96	Mechatronic Design Quotient Approach in Beam Vibration Suppression Design using Linear Dampers. , 2006, , .		0
97	Evaluation and optimization of passive vibration controller design for flexible beams. Conference Proceedings IEEE International Conference on Systems, Man, and Cybernetics, 2008, , .	0.0	0
98	Planning bipedal walking gait using augmented Linear Inverted Pendulum model. , 2010, , .		0
99	3D reconstruction of complex weld geometry based on adaptive sampling. , 2015, , .		0
100	Identification and reconstruction of complex weld geometry based on modified entropy. , 2015, , .		0
101	Design of a semi-automatic robotic system for ship hull surface blasting. , 2016, , .		0
102	DESIGN OF A GLASS-WALL CLIMBING ROBOT USING PASSIVE SUCTION CUPS. , 2017, , .		0
103	Learning Geometric Constraints of Actions from Demonstrations for Manipulation Task Planning. , 2018, , .		0
104	Input Allocation for Partially-Identified Redundant Control and Its Application to Precision Motion Systems. , 2018, , .		0
105	Object Detection for Texture-less Tubular Joints using Hierarchical CAD Tree. , 2018, , .		0
106	Modelling of abrasive blasting process from viewpoint of energy exchange. , 2018, , .		0
107	Design of adaptive weld quality monitoring for multipleâ€conditioned robotic welding tasks. Asian Journal of Control, 0, , .	1.9	0
108	Using Virtual Model Control and Genetic Algorithm to Obtain Stable Bipedal Walking Gait Through Optimizing the Ankle Torque. , 2007, , .		0

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109	COMPLIANT FOOT SYSTEM DESIGN FOR BIPEDAL ROBOT WALKING OVER UNEVEN TERRAIN. , 2013, , .		0
110	BIPED WALKING OVER ROUGH TERRAIN BY ADAPTIVE GROUND REFERENCE MAP. , 2013, , .		0
111	OPTIMIZATION OF "WHEEL-PARALLEL-IN-WHEEL"™ FOR A COMPACT CLIMBING ROBOT. , 2017, , .		0
112	Biologically Inspired Motion Planning in Robotics. , 2006, , 201-219.		0