Estela Bicho

List of Publications by Year
in descending order

88 papers	1,473 citations	430442 18 h-index	395343 33 g-index
95 all docs	95 docs citations	95 times ranked	1289 citing authors

#	Article	IF	Citations
1	Human–Robot Interaction in Industrial Settings: Perception of Multiple Participants at a Crossroad Intersection Scenario with Different Courtesy Cues. Robotics, 2022, 11, 59.	2.1	6
2	Trajectory tracking for the inspection of deformable objects considering manipulability of a 7-DoF serial manipulator. , 2022, , .		0
3	A Data Recording Mobile Application to Create Datasets of Vehicle Users' Routines. , 2022, , .		1
4	A neural integrator model for planning and value-based decision making of a robotics assistant. Neural Computing and Applications, 2021, 33, 3737-3756.	3.2	14
5	Dynamic Identification of Stop Locations from GPS Trajectories Based on Their Temporal and Spatial Characteristics. Lecture Notes in Computer Science, 2021, , 347-359.	1.0	3
6	A Human-like Upper-limb Motion Planner: Generating naturalistic movements for humanoid robots. International Journal of Advanced Robotic Systems, 2021, 18, 172988142199858.	1.3	14
7	A dynamic neural field model of continuous input integration. Biological Cybernetics, 2021, 115, 451-471.	0.6	8
8	Discrimination of idiopathic Parkinson's disease and vascular parkinsonism based on gait time series and the levodopa effect. Journal of Biomechanics, 2021, 125, 110214.	0.9	7
9	Continual Learning of Human-like Arm Postures. , 2021, , .		0
10	A Multivariate Randomized Controlled Experiment about the Effects of Mindfulness Priming on EEG Neurofeedback Self-Regulation Serious Games. Applied Sciences (Switzerland), 2021, 11, 7725.	1.3	3
11	Rapid Learning of Complex Sequences With Time Constraints: A Dynamic Neural Field Model. IEEE Transactions on Cognitive and Developmental Systems, 2021, 13, 853-864.	2.6	9
12	Ergonomics and Human Factors as a Requirement to Implement Safer Collaborative Robotic Workstations: A Literature Review. Safety, 2021, 7, 71.	0.9	23
13	Autonomous Vehicles on the Factory Floor: An Approach to Safety. , 2021, , .		0
14	Parkinson's Disease and Fabry Disease: Clinical, Biochemical and Neuroimaging Analysis of Three Pedigrees. Journal of Parkinson's Disease, 2020, 10, 141-152.	1.5	14
15	FIBR3DEmul—an open-access simulation solution for 3D printing processes of FDM machines with 3+ actuated axes. International Journal of Advanced Manufacturing Technology, 2020, 106, 3609-3623.	1.5	10
16	A safe autonomous stacker in human shared workspaces. , 2020, , .		3
17	Human-Like Arm Motion Generation: A Review. Robotics, 2020, 9, 102.	2.1	31
18	Differential width discrimination task for active and passive tactile discrimination in humans. MethodsX, 2020, 7, 100852.	0.7	4

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19	Towards Endowing Collaborative Robots with Fast Learning for Minimizing Tutors' Demonstrations: What and When to Do?. Advances in Intelligent Systems and Computing, 2020, , 368-378.	0.5	2
20	Gait Characteristics and Their Discriminative Ability in Patients with Fabry Disease with and Without White-Matter Lesions. Lecture Notes in Computer Science, 2020, , 415-428.	1.0	0
21	Global Implications of Human Tendencies Towards Automated Driving and Human Driver Availability in Autonomous Vehicles. Lecture Notes in Computer Science, 2020, , 179-192.	1.0	2
22	Attractor dynamics approach to joint transportation by autonomous robots: theory, implementation and validation on the factory floor. Autonomous Robots, 2019, 43, 589-610.	3.2	10
23	Numerical analysis of the shape of bump solutions in a neuronal model of working memory. AIP Conference Proceedings, 2019, , .	0.3	0
24	Gait stride-to-stride variability and foot clearance pattern analysis in Idiopathic Parkinson's Disease and Vascular Parkinsonism. Journal of Biomechanics, 2019, 92, 98-104.	0.9	16
25	Gait classification of patients with Fabry's disease based on normalized gait features obtained using multiple regression models. , 2019, , .		4
26	Automatic Denavit-Hartenberg Parameter Identification for Serial Manipulators. , 2019, , .		15
27	Motion Control for Autonomous Tugger Vehicles in Dynamic Factory Floors Shared with Human Operators. , 2019, , .		3
28	Neural Field Model for Measuring and Reproducing Time Intervals. Lecture Notes in Computer Science, 2019, , 327-338.	1.0	4
29	Position-based kinematics for 7-DoF serial manipulators with global configuration control, joint limit and singularity avoidance. Mechanism and Machine Theory, 2018, 121, 317-334.	2.7	69
30	Artificial Neural Networks Classification of Patients with Parkinsonism based on Gait. , 2018, , .		9
31	Teaching/learning PBL activity: Gantry crane control system implementation. , 2017, , .		1
32	A software framework for the implementation of Dynamic Neural Field control architectures for human-robot interaction. , 2017, , .		0
33	Different protocols for analyzing behavior and adaptability in obstacle crossing in Parkinson’s disease. Clinical Interventions in Aging, 2017, Volume 12, 1843-1857.	1.3	7
34	Towards temporal cognition for robots: A neurodynamics approach. , 2017, , .		3
35	Application of Machine Learning in Postural Control Kinematics for the Diagnosis of Alzheimer's Disease. Computational Intelligence and Neuroscience, 2016, 2016, 1-15.	1.1	37
36	Compensatory Postural Adjustments in an Oculus Virtual Reality Environment and the Risk of Falling in Alzheimer's Disease. Dementia and Geriatric Cognitive Disorders Extra, 2016, 6, 252-267.	0.6	23

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37	Multi-constrained joint transportation tasks by teams of autonomous mobile robots using a dynamical systems approach. , 2016, , .		33
38	Multi-bump solutions in a neural field model with external inputs. Physica D: Nonlinear Phenomena, 2016, 326, 32-51.	1.3	24
39	Combining Spatial and Parametric Working Memory in a Dynamic Neural Field Model. Lecture Notes in Computer Science, 2016, , 411-418.	1.0	4
40	Combining intention and emotional state inference in a dynamic neural field architecture for human-robot joint action. Adaptive Behavior, 2016, 24, 350-372.	1.1	5
41	Superquadrics objects representation for robot manipulation. AIP Conference Proceedings, 2016, , .	0.3	2
42	Experiential Learning of Robotics Fundamentals Based on a Case Study of Robot-Assisted Stereotactic Neurosurgery. IEEE Transactions on Education, 2016, 59, 119-128.	2.0	4
43	Compensatory postural adjustments in Parkinson's disease assessed via a virtual reality environment. Behavioural Brain Research, 2016, 296, 384-392.	1.2	20
44	Role of the Visual and Auditory Systems in Postural Stability in Alzheimer's Disease. Journal of Alzheimer's Disease, 2015, 46, 441-449.	1.2	19
45	Learning joint representations for order and timing of perceptual-motor sequences: A dynamic neural field approach. , 2015, , .		5
46	Review of Robotic Technology for Stereotactic Neurosurgery. IEEE Reviews in Biomedical Engineering, 2015, 8, 125-137.	13.1	75
47	The effect of levodopa on postural stability evaluated by wearable inertial measurement units for idiopathic and vascular Parkinson's disease. Gait and Posture, 2015, 41, 459-464.	0.6	23
48	Off-line simulation inspires insight: A neurodynamics approach to efficient robot task learning. Neural Networks, 2015, 72, 123-139.	3.3	14
49	Global vs. local nonlinear optimization techniques for human-like movement of an anthropomorphic robot. AIP Conference Proceedings, 2015, , .	0.3	0
50	Nonlinear optimization for human-like synchronous movements of a dual arm-hand robotic system. AIP Conference Proceedings, 2015, , .	0.3	2
51	Special session: Dynamic interactions between visual experiences, actions and word learning. , 2014, , .		0
52	Learning a musical sequence by observation: A robotics implementation of a dynamic neural field model. , 2014, , .		8
53	Validation of a stereo camera system to quantify brain deformation due to breathing and pulsatility. Medical Physics, 2014, 41, 113502.	1.6	27
54	Analysis of postural kinetics data using Artificial Neural Networks in Alzheimer's Disease. , 2014, , .		2

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55	Postural Stability Analysis with Inertial Measurement Units in Alzheimer's Disease. Dementia and Geriatric Cognitive Disorders Extra, 2014, 4, 22-30.	0.6	37
56	A Dynamic Neural Field Approach to Natural and Efficient Human-Robot Collaboration. , 2014, , 341-365.		9
57	ON OBSERVATIONAL LEARNING OF HIERARCHIES IN SEQUENTIAL TASKS: A DYNAMIC NEURAL FIELD MODEL. , 2014, , .		2
58	Robotic implantation of intracerebral electrodes for Deep Brain Stimulation. , 2013, , .		2
59	A socially assistive robot for people with motor impairments. , 2013, , .		2
60	A Self-Tunable Dynamic Vibration Absorber: Analysis, Modulation and Simulation for Parkinsonian Tremors. , 2013, , .		1
61	Transportation of long objects in unknown cluttered environments by a team of robots: A dynamical systems approach. , 2013, , .		5
62	A self-tunable dynamic vibration absorber: Parkinson's Disease's tremor suppression. , 2013, , .		6
63	Generating human-like movements on an anthropomorphic robot using an interior point method. , 2013, , .		1
64	Robotic Assisted Deep Brain Stimulation Neurosurgery: First Steps on System Development. , 2013, , .		2
65	A Self-Tunable Dynamic Vibration Absorber for Tremor Suppression. , 2013, , .		1
66	The power of prediction: Robots that read intentions. , 2012, , .		10
67	Multi-robot cognitive formations. , 2012, , .		0
68	Human-Like Movement of an Anthropomorphic Robot: Problem Revisited. , 2011, , .		2
69	Neuro-cognitive mechanisms of decision making in joint action: A human–robot interaction study. Human Movement Science, 2011, 30, 846-868.	0.6	58
70	A Dynamic Field Model of Ordinal and Timing Properties of Sequential Events. Lecture Notes in Computer Science, 2011, , 325-332.	1.0	5
71	A dynamic field approach to goal inference, error detection and anticipatory action selection in human-robot collaboration. Advances in Interaction Studies, 2011, , 135-164.	1.0	11
72	Attractor dynamics approach to formation control: theory and application. Autonomous Robots, 2010, 29, 331-355.	3.2	53

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73	Integrating verbal and nonverbal communication in a dynamic neural field architecture for human-robot interaction. Frontiers in Neurorobotics, 2010, 4, .	1.6	28
74	A dynamic neural field architecture for a pro-active assistant robot. , 2010, , .		4
75	Robot formations: Robots allocation and leader-follower pairs. , 2008, , .		12
76	On the development of intention understanding for joint action tasks. , 2007, , .		10
77	Object transportation by multiple mobile robots controlled by attractor dynamics: theory and implementation. , 2007, , .		9
78	Goal-directed imitation for robots: A bio-inspired approach to action understanding and skill learning. Robotics and Autonomous Systems, 2006, 54, 353-360.	3.0	66
79	A dynamic model for action understanding and goal-directed imitation. Brain Research, 2006, 1083, 174-188.	1.1	58
80	The dynamic neural field approach to cognitive robotics. Journal of Neural Engineering, 2006, 3, R36-R54.	1.8	111
81	Autonomous flight trajectory generation via attractor dynamics. , 2005, , .		5
82	Action Understanding and Imitation Learning in a Robot-Human Task. Lecture Notes in Computer Science, 2005, , 261-268.	1.0	3
83	Attractor dynamics generates robot formation: from theory to implementation. , 2004, , .		11
84	The dynamic approach to autonomous robotics demonstrated on a low-level vehicle platform. Robotics and Autonomous Systems, 1997, 21, 23-35.	3.0	86
85	Target position estimation, target acquisition, and obstacle avoidance. , 0, , .		6
86	Using attractor dynamics to control autonomous vehicle motion. , 0, , .		8
87	A dynamical systems approach to behavior-based formation control. , 0, , .		57
88	Formation control for multiple mobile robots: a non-linear attractor dynamics approach. , 0, , .		32