Luzheng Bi

List of Publications by Year
in descending order

74	1,404	471061	360668
papers	citations	17	35
		h-index	g-index

75	75	75	1153
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Effects of Cognitive Distraction on Upper Limb Movement Decoding From EEG Signals. IEEE Transactions on Biomedical Engineering, 2023, 70, 166-174.	2.5	1
2	Sliding-Mode Nonlinear Predictive Control of Brain-Controlled Mobile Robots. IEEE Transactions on Cybernetics, 2022, 52, 5419-5431.	6.2	17
3	Noninvasive neural signal-based detection of soft and emergency braking intentions of drivers. Biomedical Signal Processing and Control, 2022, 72, 103330.	3.5	6
4	Detecting Driver Cognition Alertness State From Visual Activities in Normal and Emergency Scenarios. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 19497-19510.	4.7	1
5	Using Non-linear Dynamics of EEG Signals to Classify Primary Hand Movement Intent Under Opposite Hand Movement. Frontiers in Neurorobotics, 2022, 16, 845127.	1.6	4
6	A Novel Control Framework of Brain-Controlled Vehicle Based on Fuzzy Logic and Model Predictive Control. IEEE Transactions on Intelligent Transportation Systems, 2022, 23, 21777-21789.	4.7	1
7	Human Behavior Model-Based Predictive Control of Longitudinal Brain-Controlled Driving. IEEE Transactions on Intelligent Transportation Systems, 2021, 22, 1361-1374.	4.7	16
8	An Experience of Teaching Advanced Control Engineering (ACE) for Postgraduate Students. Lecture Notes in Computer Science, 2021, , 255-264.	1.0	0
9	Detection of Emergency Braking Intention From Soft Braking and Normal Driving Intentions Using EMG Signals. IEEE Access, 2021, 9, 131637-131647.	2.6	5
10	Adaptive Brain-Machine Interface of Brain-Controlled Vehicles Using Semi-MIM and TSVM. , 2021, , .		0
11	Hierarchical Decoding Model of Upper Limb Movement Intention From EEG Signals Based on Attention State Estimation. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2021, 29, 2008-2016.	2.7	5
12	EMG-Based 3D Hand Motor Intention Prediction for Information Transfer from Human to Robot. Sensors, 2021, 21, 1316.	2.1	11
13	A vision–based surface displacement/strain measurement technique based on robust edge–enhanced transform and algorithms for high spatial resolution. Structural Control and Health Monitoring, 2021, 28, e2797.	1.9	7
14	Decoding Single-Hand and Both-Hand Movement Directions From Noninvasive Neural Signals. IEEE Transactions on Biomedical Engineering, 2021, 68, 1932-1940.	2.5	20
15	Edge-guided Adversarial Network Based on Contrastive Learning for Image-to-Image Translation. , 2021, , .		0
16	Detection Method of Targets in Videos Using Non-Invasive Brain-Computer Interface. , 2021, , .		0
17	Model Predictive-Based Shared Control for Brain-Controlled Driving. IEEE Transactions on Intelligent Transportation Systems, 2020, 21, 630-640.	4.7	28
18	Neural correlates and detection of braking intention under critical situations based on the power spectra of electroencephalography signals. Science China Information Sciences, 2020, 63, 1.	2.7	2

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19	Brain-Controlled Leader-Follower Robot Formation Based on Model Predictive Control. , 2020, , .		3
20	Modeling of Human Operator Behavior for Brain-Actuated Mobile Robots Steering. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2020, 28, 2063-2072.	2.7	1
21	Fuzzy-Based Shared Control for Brain-controlled Mobile Robot. , 2020, , .		2
22	Discrete-Time Integral Sliding Mode Control for Brain-Controlled Mobile Robots. , 2020, , .		1
23	Detection of Driver Emergency Steering Intention Using EMG Signal. , 2020, , .		2
24	Hand Movement Direction Decoding from EEG Signals under Dual Movement Tasks. , 2020, , .		1
25	Using Noninvasive Neural Signal to Recognize Single- and Multi-task States of Operators. , 2020, , .		1
26	Driving Intention Decoding from EMG Signals for Human-Vehicle Interaction. , 2020, , .		2
27	Combined Lateral and Longitudinal Control of EEG Signals-Based Brain-Controlled Vehicles. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 1732-1742.	2.7	16
28	EEG-based Universal Prediction Model of Emergency Braking Intention for Brain-controlled Vehicles*. , 2019, , .		4
29	EEG-Based Adaptive Driver-Vehicle Interface Using Variational Autoencoder and PI-TSVM. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 2025-2033.	2.7	25
30	A Novel Event-Related Potential-Based Brain–Computer Interface for Continuously Controlling Dynamic Systems. IEEE Access, 2019, 7, 38721-38729.	2.6	12
31	A review on EMG-based motor intention prediction of continuous human upper limb motion for human-robot collaboration. Biomedical Signal Processing and Control, 2019, 51, 113-127.	3.5	236
32	An EEG-Based Multi-Classification Method of Braking Intentions for Driver-Vehicle Interaction. , 2019, , .		3
33	EEG-Based Recognition Method of Intentional and Unintentional Hand Movement. , 2019, , .		2
34	EEG Signals-Based Longitudinal Control System for a Brain-Controlled Vehicle. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2019, 27, 323-332.	2.7	22
35	EEG-Based Detection of Driver Emergency Braking Intention for Brain-Controlled Vehicles. IEEE Transactions on Intelligent Transportation Systems, 2018, 19, 1766-1773.	4.7	57
36	Neural Signature and Classification of Emergency Braking Intention Based on Effective Connectivity. , 2018, , .		3

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37	A Single-Trial Event-Related Potential Estimation Based on Independent Component Analysis and Kalman Smoother. , 2018, , .		2
38	A Novel Method of Emergency Situation Detection for a Brain-Controlled Vehicle by Combining EEG Signals With Surrounding Information. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1926-1934.	2.7	27
39	Parallel tracker for visual object tracking. , 2018, , .		0
40	Mathematical Modeling of EEG Signals-Based Brain-Control Behavior. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2018, 26, 1535-1543.	2.7	8
41	A novel EEG-based detection method of emergency situations for assistive vehicles. , 2017, , .		8
42	Queuing Network Modeling of Driver EEG Signals-Based Steering Control. IEEE Transactions on Neural Systems and Rehabilitation Engineering, 2017, 25, 1117-1124.	2.7	31
43	Effects of illumination and noise on the performance of a P300 brain-computer interface for assistive vehicles. , 2017, , .		4
44	Model predictive control for a brain-controlled mobile robot. , 2017, , .		8
45	Motion velocity estimation from electroencephalography signals with extreme learning machine. , 2017, , .		0
46	A shared controller for brain-controlled assistive vehicles. , 2016, , .		12
47	A brain signals-based interface between drivers and in-vehicle devices. , 2016, , .		0
48	Development of a Driver Lateral Control Model by Integrating Neuromuscular Dynamics Into the Queuing Network-Based Driver Model. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 2479-2486.	4.7	24
49	Queuing network modeling of brain-controlled vehicles. , 2015, , .		0
50	Detecting Driver Normal and Emergency Lane-Changing Intentions With Queuing Network-Based Driver Models. International Journal of Human-Computer Interaction, 2015, 31, 139-145.	3.3	28
51	Using EEG to recognize emergency situations for brain-controlled vehicles. , 2015, , .		13
52	A Brainâ€"Computer Interface-Based Vehicle Destination Selection System Using P300 and SSVEP Signals. IEEE Transactions on Intelligent Transportation Systems, 2015, 16, 274-283.	4.7	64
53	A driver-vehicle interface based on ERD/ERS potentials and alpha rhythm. , 2014, , .		3
54	Dual-Task Modeling of Driving Lateral Control with a Motor Distraction Task. , 2014, , .		1

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55	Using a Head-up Display-Based Steady-State Visually Evoked Potential Brain–Computer Interface to Control a Simulated Vehicle. IEEE Transactions on Intelligent Transportation Systems, 2014, 15, 959-966.	4.7	81
56	A speed and direction-based cursor control system with P300 and SSVEP. Biomedical Signal Processing and Control, 2014, 14, 126-133.	3.5	37
57	Using Queuing Network and Logistic Regression to Model Driving with a Visual Distraction Task. International Journal of Human-Computer Interaction, 2014, 30, 32-39.	3.3	14
58	A new SSVEP brain-computer interface based on a head up display. , 2013, , .		1
59	A Driver Lateral and Longitudinal Control Model Based on Queuing Network Cognitive Architecture. , 2013, , .		1
60	A Head-Up Display-Based P300 Brain–Computer Interface for Destination Selection. IEEE Transactions on Intelligent Transportation Systems, 2013, 14, 1996-2001.	4.7	53
61	Using Bayesian Networks with Human Personality and Situation Information to Detect Emotion States from EEG. , 2013, , .		0
62	EEG-Based Brain-Controlled Mobile Robots: A Survey. IEEE Transactions on Human-Machine Systems, 2013, 43, 161-176.	2.5	299
63	A SSVEP brain-computer interface with the hybrid stimuli of SSVEP and P300. , 2013, , .		0
64	A P300 brain-computer interface for controlling a mobile robot by issuing a motion command. , 2013, , .		0
65	Inferring driver intentions using a driver model based on queuing network. , 2013, , .		10
66	A brain-computer interface in the context of a head up display system. , 2012, , .		6
67	Queuing Network Modeling of Driver Lateral Control With or Without a Cognitive Distraction Task. IEEE Transactions on Intelligent Transportation Systems, 2012, 13, 1810-1820.	4.7	34
68	Detecting emergency situations by monitoring drivers' states from EEG. , 2012, , .		9
69	Modeling Driver Vehicle Control in a Cognitive Architecture. , 2011, , .		1
70	Using the Support Vector Regression Approach to Model Human Performance. IEEE Transactions on Systems, Man and Cybernetics, Part A: Systems and Humans, 2011, 41, 410-417.	3.4	20
71	Effects of Symmetry and Number of Compositional Elements on Chinese Users' Aesthetic Ratings of Interfaces: Experimental and Modeling Investigations. International Journal of Human-Computer Interaction, 2011, 27, 245-259.	3.3	19
72	Using Image-Based Metrics to Model Pedestrian Detection Performance With Night-Vision Systems. IEEE Transactions on Intelligent Transportation Systems, 2009, 10, 155-164.	4.7	25

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73	Application and Contrast in Brain-Computer Interface between Hilbert-Huang Transform and Wavelet Transform. , 2008, , .		31
74	Study on Real-time Detection of Alertness Based on EEG. , 2007, , .		13