John Ball

List of Publications by Year
in descending order

54 papers	1,067 citations	623574 14 h-index	434063 31 g-index
55 all docs	55 docs citations	55 times ranked	1292 citing authors

#	Article	IF	Citations
1	Comprehensive survey of deep learning in remote sensing: theories, tools, and challenges for the community. Journal of Applied Remote Sensing, 2017, 11, 1.	0.6	435
2	LiDAR and Camera Detection Fusion in a Real-Time Industrial Multi-Sensor Collision Avoidance System. Electronics (Switzerland), 2018, 7, 84.	1.8	70
3	State-of-the-art review of athletic wearable technology: What 113 strength and conditioning coaches and athletic trainers from the USA said about technology in sports. International Journal of Sports Science and Coaching, 2020, 15, 26-40.	0.7	65
4	Wearable Stretch Sensors for Human Movement Monitoring and Fall Detection in Ergonomics. International Journal of Environmental Research and Public Health, 2020, 17, 3554.	1.2	56
5	Semantic Segmentation with Transfer Learning for Off-Road Autonomous Driving. Sensors, 2019, 19, 2577.	2.1	51
6	Prediction of Student Academic Performance Using a Hybrid 2D CNN Model. Electronics (Switzerland), 2022, 11, 1005.	1.8	25
7	Closing the Wearable Gap: Mobile Systems for Kinematic Signal Monitoring of the Foot and Ankle. Electronics (Switzerland), 2018, 7, 117.	1.8	22
8	Closing the Wearable Gapâ€"Part II: Sensor Orientation and Placement for Foot and Ankle Joint Kinematic Measurements. Sensors, 2019, 19, 3509.	2.1	22
9	Fusion of an Ensemble of Augmented Image Detectors for Robust Object Detection. Sensors, 2018, 18, 894.	2.1	20
10	Response of GNSS-R on Dynamic Vegetated Terrain Conditions. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2019, 12, 1599-1611.	2.3	20
11	Closing the Wearable Gapâ€"Part VI: Human Gait Recognition Using Deep Learning Methodologies. Electronics (Switzerland), 2020, 9, 796.	1.8	19
12	Closing the Wearable Gapâ€"Part III: Use of Stretch Sensors in Detecting Ankle Joint Kinematics During Unexpected and Expected Slip and Trip Perturbations. Electronics (Switzerland), 2019, 8, 1083.	1.8	18
13	Level set segmentation of remotely sensed hyperspectral images. , 0, , .		17
14	A Graph-based Ant-like Approach to Optimal Path Planning. , 2020, , .		17
15	Closing the Wearable Gapâ€"Part V: Development of a Pressure-Sensitive Sock Utilizing Soft Sensors. Sensors, 2020, 20, 208.	2.1	17
16	Special Section Guest Editorial: Feature and Deep Learning in Remote Sensing Applications. Journal of Applied Remote Sensing, 2018, 11, 1.	0.6	15
17	Wearables for Biomechanical Performance Optimization and Risk Assessment in Industrial and Sports Applications. Bioengineering, 2022, 9, 33.	1.6	14
18	Closing the Wearable Gapâ€"Part IV: 3D Motion Capture Cameras Versus Soft Robotic Sensors Comparison of Gait Movement Assessment. Electronics (Switzerland), 2019, 8, 1382.	1.8	12

#	Article	IF	Citations
19	Machine Learning and Embedded Computing in Advanced Driver Assistance Systems (ADAS). Electronics (Switzerland), 2019, 8, 748.	1.8	11
20	Rollover-Free Path Planning for Off-Road Autonomous Driving. Electronics (Switzerland), 2019, 8, 614.	1.8	11
21	Towards automated segmentation and classification of masses in mammograms. , 2004, 2004, 1814-7.		10
22	Fatigue Testing of Wearable Sensing Technologies: Issues and Opportunities. Materials, 2021, 14, 4070.	1.3	10
23	CaT: CAVS Traversability Dataset for Off-Road Autonomous Driving. IEEE Access, 2022, 10, 24759-24768.	2.6	10
24	Passive Tracking of the Electrochemical Impedance of a Hybrid Electric Vehicle Battery and State of Charge Estimation through an Extended and Unscented Kalman Filter. Batteries, 2018, 4, 52.	2.1	8
25	Estimating the Number of Sources via Deep Learning. , 2019, , .		8
26	Closing the Wearable Gap-Part VII: A Retrospective of Stretch Sensor Tool Kit Development for Benchmark Testing. Electronics (Switzerland), 2020, 9, 1457.	1.8	8
27	Robust estimation of the number of coherent radar signal sources using deep learning. IET Radar, Sonar and Navigation, 2021, 15, 431-440.	0.9	7
28	Multi-LiDAR placement, calibration, co-registration, and processing on a Subaru Forester for off-road autonomous vehicles operations. , 2019, , .		7
29	Genetic programming based Choquet integral for multi-source fusion. , 2017, , .		6
30	State-of-the-Art and Gaps for Deep Learning on Limited Training Data in Remote Sensing. , 2018, , .		6
31	Closing the Wearable Gapâ€"Part IX: Validation of an Improved Ankle Motion Capture Wearable. IEEE Access, 2021, 9, 114022-114036.	2.6	5
32	Traversability mapping in off-road environment using semantic segmentation. , 2021, , .		5
33	Radar and Radio Signal Processing. Electronics (Switzerland), 2017, 6, 64.	1.8	4
34	Deep Learning Hyperspectral Image Classification using Multiple Class-Based Denoising Autoencoders, Mixed Pixel Training Augmentation, and Morphological Operations. , 2018, , .		4
35	Closing the Wearable Gapâ€"Part VIII: A Validation Study for a Smart Knee Brace to Capture Knee Joint Kinematics. Biomechanics, 2021, 1, 152-162.	0.5	4
36	Runway assessment via remote sensing. , 2015, , .		3

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37	Screening Mississippi River Levees Using Texture-Based and Polarimetric-Based Features from Synthetic Aperture Radar Data. Electronics (Switzerland), 2017, 6, 29.	1.8	3
38	A Kinematic Modeling Framework for Prediction of Instantaneous Status of Towing Vehicle Systems. SAE International Journal of Passenger Cars - Mechanical Systems, 0, 11, 177-190.	0.4	3
39	Fusion of diverse features and kernels using LP-norm based multiple kernel learning in hyperspectral image processing. , 2016, , .		2
40	CLODD based band group selection. , 2016, , .		2
41	Recursive Multi-Scale Image Deraining With Sub-Pixel Convolution Based Feature Fusion and Context Aggregation. IEEE Access, 2020, 8, 177495-177505.	2.6	2
42	A Generalized Fuzzy Extension Principle and Its Application to Information Fusion. IEEE Transactions on Fuzzy Systems, 2021, 29, 2726-2738.	6.5	2
43	Fusion of heterogeneous bands and kernels in hyperspectral image processing. Journal of Applied Remote Sensing, 2019, 13, 1.	0.6	2
44	Adaptive hyperspectral pixel unmixing using best bands analysis and dc insensitive singular value decomposition. , 0, , .		1
45	Using wavelets to categorize student attention patterns. , 2016, , .		1
46	Direction of arrival estimation for conformal arrays on real-world impulsive acoustic signals. Proceedings of Meetings on Acoustics, 2017, , .	0.3	1
47	Radar Angle of Arrival System Design Optimization Using a Genetic Algorithm. Electronics (Switzerland), 2017, 6, 24.	1.8	1
48	Preliminary Results of a GNSS-R Simulation to Sense Canopy Parameters. , 2018, , .		1
49	Thermal Imaging for Rapid Noninvasive On-site Insulation Diagnostics. , 2019, , .		1
50	Deterioration of textile vs. electronic components over time in athletic wearable devices. , 2021, , .		1
51	Engaging Students in an Automotive Autonomy Sensor Processing Class: Incorporating active learning and high-fidelity, physics-based autonomy simulation into class projects. IEEE Signal Processing Magazine, 2021, 38, 122-132.	4.6	1
52	Multispectral sensor design using performance measure-based hyperspectral band grouping. , 2015, , .		0
53	Measuring conflict in a multi-source environment as a normal measure. , 2015, , .		0
54	Hybrid Feature Extraction Model to Categorize Student Attention Pattern and Its Relationship with Learning. Electronics (Switzerland), 2022, 11, 1476.	1.8	0