Stephen Pierce

List of Publications by Year
in descending order

30	451	933264 10	752573 20
papers	citations	h-index	g-index

31	31	31	433
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	<italic>In Situ</italic> Diagnostics and Prognostics of Solder Fatigue in IGBT Modules for Electric Vehicle Drives. IEEE Transactions on Power Electronics, 2015, 30, 1535-1543.	5.4	148
2	Spatial calibration of large volume photogrammetry based metrology systems. Measurement: Journal of the International Measurement Confederation, 2015, 68, 189-200.	2.5	33
3	Machine learning at the interface of structural health monitoring and non-destructive evaluation. Philosophical Transactions Series A, Mathematical, Physical, and Engineering Sciences, 2020, 378, 20190581.	1.6	32
4	Generation and reception of ultrasonic guided waves in composite plates using conformable piezoelectric transmitters and optical-fiber detectors. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 1999, 46, 72-81.	1.7	30
5	Continuous monitoring of an intentionally-manufactured crack using an automated welding and in-process inspection system. Materials and Design, 2020, 191, 108655.	3.3	27
6	Vision guided robotic inspection for parts in manufacturing and remanufacturing industry. Journal of Remanufacturing, 2021, 11, 49-70.	1.6	22
7	Quantifying impacts on remote photogrammetric inspection using unmanned aerial vehicles. Engineering Structures, 2020, 209, 109940.	2.6	21
8	A Phased Array Ultrasound Roller Probe for Automated in-Process/Interpass Inspection of Multipass Welds. IEEE Transactions on Industrial Electronics, 2021, 68, 12781-12790.	5.2	18
9	In-process calibration of a non-destructive testing system used for in-process inspection of multi-pass welding. Materials and Design, 2020, 195, 108981.	3.3	18
10	Autonomous Ultrasonic Inspection Using Unmanned Aerial Vehicle. , 2018, , .		15
11	Feed forward control of welding process parameters through on-line ultrasonic thickness measurement. Journal of Manufacturing Processes, 2021, 64, 576-584.	2.8	10
12	Intentional weld defect process: From manufacturing by robotic welding machine to inspection using TFM phased array. AIP Conference Proceedings, 2019, , .	0.3	9
13	Non-contact in-process ultrasonic screening of thin fusion welded joints. Journal of Manufacturing Processes, 2021, 64, 445-454.	2.8	9
14	Detection of ultrasonic Lamb waves in composite plates using optical-fibres. , 0, , .		8
15	Implementation and evaluation of an autonomous airborne ultrasound inspection system. Nondestructive Testing and Evaluation, 2022, 37, 1-21.	1.1	8
16	Automatic ultrasonic robotic array. , 2013, , .		6
17	A Novel Complete-Surface-Finding Algorithm for Online Surface Scanning with Limited View Sensors. Sensors, 2021, 21, 7692.	2.1	6
18	A cost-function driven adaptive welding framework for multi-pass robotic welding. Journal of Manufacturing Processes, 2021, 67, 545-561.	2.8	5

#	Article	IF	Citations
19	Bipartite Guidance, Navigation and Control Architecture for Autonomous Aerial Inspections Under Safety Constraints. Journal of Intelligent and Robotic Systems: Theory and Applications, 2019, 95, 1049-1061.	2.0	4
20	P0-8 Robotic Based Reconfigurable Lamb Wave Scanner for Non-Destructive Evaluation. , 2007, , .		3
21	An automated miniature robotic vehicle inspection system. AIP Conference Proceedings, 2014, , .	0.3	3
22	Evaluation of Coded Excitations for Autonomous Airborne Ultrasonic Inspection. , 2019, , .		3
23	Autonomous, Digital-Twin Free Path Planning and Deployment for Robotic NDT: Introducing LPAS: Locate, Plan, Approach, Scan Using Low Cost Vision Sensors. Applied Sciences (Switzerland), 2022, 12, 5288.	1.3	3
24	Numerical and analytical modeling of optical fibers for ultrasound detection. , 2011, , .		2
25	Multi-aperture beamforming for automated large structure inspection using ultrasonic phased arrays. AIP Conference Proceedings, 2019, , .	0.3	2
26	Using Coded Excitation to maintain Signal to Noise for FMC+TFM on Attenuating Materials. , 2019, , .		2
27	Dry-Coupled Airborne Ultrasonic Inspection Using Coded Excitation. , 2020, , .		2
28	Conformable eddy current array delivery. AIP Conference Proceedings, 2016, , .	0.3	1
29	Reconstruction of refractive index maps using photogrammetry. Inverse Problems in Science and Engineering, 2021, 29, 2696-2718.	1.2	1
30	Introducing a new method for efficient visualization of complex shape 3D ultrasonic phased-array C-scans. , 2017, , .		0