Alexander Heifetz

List of Publications by Year
in descending order

42	743	933447 10	642732 23
papers	citations	h-index	g-index

50	50	50	576
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Compression of Pulsed Infrared Thermography Data With Unsupervised Learning for Nondestructive Evaluation of Additively Manufactured Metals. IEEE Access, 2022, 10, 9094-9107.	4.2	5
2	Software-Defined Ultrasonic Communication System With OFDM for Secure Video Monitoring. IEEE Access, 2022, 10, 47309-47321.	4.2	4
3	Monitoring accelerated alkali-silica reaction in concrete prisms with petrography and electrical conductivity measurements. Materials and Structures/Materiaux Et Constructions, 2022, 55, 1.	3.1	0
4	Classification of computed thermal tomography images with deep learning convolutional neural network. Journal of Applied Physics, 2022, 131, .	2.5	5
5	Unsupervised Learning for Detection of Defects in Pulsed Infrared Thermography of Metals. , 2022, , .		0
6	Monitoring of Temperature Measurements for Different Flow Regimes in Water and Galinstan with Long Short-Term Memory Networks and Transfer Learning of Sensors. Computation, 2022, 10, 108.	2.0	3
7	Transmission of Images on High-Temperature Nuclear-Grade Metallic Pipe with Ultrasonic Elastic Waves. Nuclear Technology, 2021, 207, 604-616.	1.2	4
8	Qualification of 3-D Printed Mortar With Electrical Conductivity Measurements. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-8.	4.7	4
9	Spatial Temporal Denoised Thermal Source Separation in Images of Compact Pulsed Thermography System for Qualification of Additively Manufactured Metals. , 2021, , .		6
10	Quality Control of Additively Manufactured Metallic Structures with Machine Learning of Thermography Images. Jom, 2020, 72, 4682-4694.	1.9	20
11	Detection of Defects in Additively Manufactured Stainless Steel 316L with Compact Infrared Camera and Machine Learning Algorithms. Jom, 2020, 72, 4244-4253.	1.9	27
12	Neural Learning Based Blind Source Separation for Detection of Material Defects in Pulsed Thermography Images. , 2020, , .		13
13	Thermal tomography 3D imaging of additively manufactured metallic structures. AIP Advances, 2020, 10, .	1.3	10
14	Contoured PPM-EMAT Design for Ultrasonic Communication On Metallic Pipe Channels. , 2020, , .		6
15	Performance Evaluation of High-Temperature Ultrasonic Communication System. , 2020, , .		5
16	Monitoring of dielectric permittivity in accelerated alkali-silica reaction concrete with microwave backscattering. Materials and Structures/Materiaux Et Constructions, 2020, 53, 1.	3.1	4
17	Transmission of Images With Ultrasonic Elastic Shear Waves on a Metallic Pipe Using Amplitude Shift Keying Protocol. IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 2020, 67, 1192-1200.	3.0	21
18	Ultrasonic Communication in Solid Channels using OFDM. , 2020, , .		0

#	Article	IF	Citations
19	Software-Defined Ultrasonic Communication System Based on Time-reversal Signal Processing. , 2020, , .		7
20	Ultrasonic Communication Systems for Data Transmission. , 2019, , .		7
21	Pulse Shaping and Matched Filters for EMAT Communication System. , 2019, , .		11
22	Time Reversal Signal Processing for Ultrasonic Communication through Metal Channels. , 2019, , .		13
23	Pulsed Thermal Tomography Nondestructive Evaluation of Additively Manufactured Reactor Structural Materials. , 2019, , .		1
24	Applying EMAT for Ultrasonic Communication Through Steel Plates and Pipes. , 2018, , .		19
25	A High-Performance Communication Platform for Ultrasonic Applications. , 2018, , .		10
26	Software Defined Ultrasonic System for Communication Through Solid Structures. , 2018, , .		12
27	Ultrasonic Communication System Design Using Electromagnetic Acoustic Transducer. , 2018, , .		14
28	Long-range monostatic remote sensing of geomaterial structure weak vibrations. AIP Conference Proceedings, 2018, , .	0.4	0
29	Evaluation of microwave cavity gas sensor for in-vessel monitoring of dry cask storage systems. AIP Conference Proceedings, 2018, , .	0.4	0
30	Eigendecomposition model of resistance temperature detector with applications to S-CO2 cycle sensing. Nuclear Engineering and Design, 2017, 311, 60-68.	1.7	2
31	Development of microwave and impedance spectroscopy methods for in-situ nondestructive evaluation of alkali silica reaction in concrete. AIP Conference Proceedings, 2017, , .	0.4	3
32	Architecture of an ultrasonic experimental platform for information transmission through solids. , 2017, , .		3
33	Turbine Bypass, Mass Inventory, and Mixed-Mode Generator Power Control of S-CO₂Recompression Cycle. Nuclear Technology, 2015, 189, 268-277.	1.2	15
34	Maximum Likelihood Localization of Radioactive Sources Against a Highly Fluctuating Background. IEEE Transactions on Nuclear Science, 2015, 62, 3274-3282.	2.0	22
35	Detection of nuclear sources in search survey using dynamic quantum clustering of gamma-ray spectral data. European Physical Journal Plus, 2014, 129, 1.	2.6	7
36	Fuzzy-Logic Radioisotope Identifier for Gamma Spectroscopy in Source Search. IEEE Transactions on Nuclear Science, 2013, 60, 3014-3024.	2.0	33

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37	Microwave Remote Sensing of Ionized Air. IEEE Geoscience and Remote Sensing Letters, 2011, 8, 617-620.	3.1	3
38	Millimeter-wave scattering from neutral and charged water droplets. Journal of Quantitative Spectroscopy and Radiative Transfer, 2010, 111, 2550-2557.	2.3	23
39	TERAHERTZ SUBWAVELENGTH STRUCTURES FOR SENSING AND NDE. , 2010, , .		1
40	Millimeter wave detection of nuclear radiation: An alternative detection mechanism. Review of Scientific Instruments, 2009, 80, 084702.	1.3	10
41	Photonic Nanojets. Journal of Computational and Theoretical Nanoscience, 2009, 6, 1979-1992.	0.4	335
42	Robust detection of deeply subwavelength pits in simulated optical data-storage disks using photonic jets. Applied Physics Letters, 2008, 92, 211102.	3.3	48