Xin Wang

List of Publications by Year
in descending order

59 papers	**954** citations	687220 **13** h-index	501076 **28** g-index
59 all docs	**59** docs citations	**59** times ranked	**689** citing authors

#	Article	IF	Citations
1	Automated pavement crack detection and segmentation based on two‐step convolutional neural network. Computer-Aided Civil and Infrastructure Engineering, 2020, 35, 1291-1305.	6.3	195
2	Automated Pavement Crack Segmentation Using U-Net-Based Convolutional Neural Network. IEEE Access, 2020, 8, 114892-114899.	2.6	141
3	Effects of graphite oxide and single-walled carbon nanotubes as diesel additives on the performance, combustion, and emission characteristics of a light-duty diesel engine. Energy, 2018, 161, 70-80.	4.5	73
4	Broadband Nonlinear Photonics in Few‐Layer Borophene. Small, 2021, 17, e2006891.	5.2	42
5	Bandgap Engineering of Hydroxy‐Functionalized Borophene for Superior Photo‐Electrochemical Performance. Angewandte Chemie - International Edition, 2020, 59, 23559-23563.	7.2	41
6	Investigation on universal tool wear measurement technique using image-based cross-correlation analysis. Measurement: Journal of the International Measurement Confederation, 2021, 169, 108489.	2.5	33
7	Improving combustion characteristics of diesel and biodiesel droplets by graphite oxide addition for diesel engine applications. International Journal of Energy Research, 2017, 41, 2258-2267.	2.2	31
8	Modal and stress analysis of gear train design in portal axle using finite element modeling and simulation. Journal of Mechanical Science and Technology, 2012, 26, 575-589.	0.7	26
9	Scattering noise estimation of range-gated imaging system in turbid condition. Optics Express, 2010, 18, 21147.	1.7	25
10	Graphite Oxide Nanoparticle as a Diesel Fuel Additive for Cleaner Emissions and Lower Fuel Consumption. Energy & Fuels, 0, , .	2.5	23
11	Anomalously enhanced thermal performance of carbon-nanotubes coated micro heat pipes. Energy, 2021, 214, 118909.	4.5	20
12	Underwater Object Detection and Reconstruction Based on Active Single-Pixel Imaging and Super-Resolution Convolutional Neural Network. Sensors, 2021, 21, 313.	2.1	18
13	Network Data Acquisition and Monitoring System for Intensive Care Mechanical Ventilation Treatment. IEEE Access, 2021, 9, 91859-91873.	2.6	18
14	Stochastic Modelling of Respiratory System Elastance for Mechanically Ventilated Respiratory Failure Patients. Annals of Biomedical Engineering, 2021, 49, 3280-3295.	1.3	15
15	A Study into the Effects of Factors Influencing an Underwater, Single-Pixel Imaging System's Performance. Photonics, 2019, 6, 123.	0.9	13
16	Theoretical analysis of thermal response in biological skin tissue subjected to multiple laser beams. Case Studies in Thermal Engineering, 2021, 24, 100853.	2.8	13
17	<title>Image enhancement for radiography inspection</title>. , 2005, , .		12
18	Development CT-based three-dimensional complex skull model for Finite element analysis. , 2012, , .		12

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19	Range compensation for accurate 3D imaging system. Applied Optics, 2016, 55, 153.	2.1	12
20	A laboratory prototype of automatic pavement crack sealing based on a modified 3D printer. International Journal of Pavement Engineering, 2022, 23, 2969-2980.	2.2	12
21	Stable and tunable single frequency Nd:GSAG laser around 943Ânm. Applied Optics, 2013, 52, 7302.	2.1	11
22	Thermoelastic response of a one-dimensional semi-infinite rod heated by a moving laser pulse. Canadian Journal of Physics, 2016, 94, 953-959.	0.4	11
23	Improved Range Estimation Model for Three-Dimensional (3D) Range Gated Reconstruction. Sensors, 2017, 17, 2031.	2.1	11
24	Imaging of hidden object using passive mode single pixel imaging with compressive sensing. Laser Physics Letters, 2018, 15, 126201.	0.6	11
25	Active Mode Single Pixel Imaging in the Highly Turbid Water Environment Using Compressive Sensing. IEEE Access, 2019, 7, 159390-159401.	2.6	11
26	Radiographic Image Segmentation for Weld Inspection Using a Robust Algorithm. Research in Nondestructive Evaluation, 2005, 16, 131-142.	0.5	10
27	Influence of target reflection on three-dimensional range gated reconstruction. Applied Optics, 2016, 55, 6588.	2.1	10
28	3D Transparent Object Detection and Reconstruction Based on Passive Mode Single-Pixel Imaging. Sensors, 2020, 20, 4211.	2.1	8
29	Performance analysis of photo-electrochemical photodetector based on liquid-phase exfoliation few-layered graphdiyne nanosheets. Nanophotonics, 2021, 10, 2833-2845.	2.9	8
30	Feature pyramid network with self-guided attention refinement module for crack segmentation. Structural Health Monitoring, 2023, 22, 672-688.	4.3	8
31	Surface Measurement Using Compressed Wavefront Sensing. Photonic Sensors, 2019, 9, 115-125.	2.5	7
32	Anomalously enhanced thermal conductivity of graphite-oxide nanofluids synthesized via liquid-phase pulsed laser ablation. Case Studies in Thermal Engineering, 2021, 25, 100993.	2.8	7
33	Efficient Spatially-Variant Single-Pixel Imaging Using Block-Based Compressed Sensing. Journal of Signal Processing Systems, 2021, 93, 1323-1337.	1.4	7
34	A spectral splitting planar solar concentrator with a linear compound parabolic lightguide for optical fiber daylighting. Renewable Energy, 2021, 179, 778-787.	4.3	6
35	3D finite element simulation of magnetic particle inspection. , 2010, , .		5
36	Theoretical 3D Model of Thermoelastic Damping in Laminated Rectangular Plate Resonators. International Journal of Structural Stability and Dynamics, 2018, 18, 1850158.	1.5	5

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37	Programmable spatially variant single-pixel imaging based on compressive sensing. Journal of Electronic Imaging, 2021, 30, .	0.5	5
38	Characterizing the performance impacts of target surface on underwater pulse laser ranging system. Journal of Quantitative Spectroscopy and Radiative Transfer, 2020, 255, 107267.	1.1	5
39	A brief review on 2D and 3D image reconstruction using single-pixel imaging. Laser Physics, 2020, 30, 095204.	0.6	5
40	Transparent Object Reconstruction Based on Compressive Sensing and Super-Resolution Convolutional Neural Network. Photonic Sensors, 2022, 12, 1.	2.5	5
41	A hybrid method for pavement crack width measurement. Measurement: Journal of the International Measurement Confederation, 2022, 197, 111260.	2.5	5
42	Parametric Optimization of the Output Shaft of a Portal Axle using Finite Element Analysis. Strojniski Vestnik/Journal of Mechanical Engineering, 2013, 10, 613-619.	0.6	3
43	Effect of indirect irradiation on surface morphology of Au film by nanosecond laser. Applied Physics A: Materials Science and Processing, 2017, 123, 1.	1.1	3
44	Generation of radiographic techniques for digital radiography applications. Insight: Non-Destructive Testing and Condition Monitoring, 2009, 51, 327-331.	0.3	2
45	Underwater Turbulence Detection Using Gated Wavefront Sensing Technique. Sensors, 2018, 18, 798.	2.1	2
46	Non-line-of-sight transparent object detection and reconstruction based on passive single-pixel imaging. Laser Physics Letters, 2021, 18, 025204.	0.6	2
47	Preliminary study on visual guidance for autonomous vehicle in rain forest terrain. , 2010, , .		1
48	Computational model considerations of defect detection in pipes with bends using focused guided wave. Journal of the Chinese Institute of Engineers, Transactions of the Chinese Institute of Engineers,Series A/Chung-kuo Kung Ch'eng Hsuch K'an, 2016, 39, 785-793.	0.6	1
49	Theoretical and experimental investigation into the influence factors for range gated reconstruction. Photonic Sensors, 2016, 6, 359-365.	2.5	1
50	Parametric Study of Defect Detection in Pipes with Bend Using Guided Ultrasonic Waves. MATEC Web of Conferences, 2016, 71, 02003.	0.1	1
51	Performance of range gated reconstruction: a theoretical analysis. Proceedings of SPIE, 2017, , .	0.8	1
52	Safe Mechanical Ventilation Treatment Settings for Respiratory Failure Patients. IFAC-PapersOnLine, 2021, 54, 115-120.	0.5	1
53	Using MTF for automated gated imaging system in turbid medium. , 2010, , .		0
54	Buck DC-DC converter for embedded control system. , 2011, , .		0

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55	Gated imaging for multi-layer wave-front sensing and surface reconstruction. , 2013, , .		0
56	Torsional Strength Analysis of Output Shaft in Portal Axle Using Finite Element Analysis. Applied Mechanics and Materials, 2013, 284-287, 996-1000.	0.2	0
57	Range reconstruction model for 3D gated imaging. , 2013, , .		0
58	Multi-layer surface profiling using gated wavefront sensing. , 2015, , .		0
59	Stochastic integrated model-based protocol for volume-controlled ventilation setting. BioMedical Engineering OnLine, 2022, 21, 13.	1.3	0