

# Hoon Sohn

## List of Publications by Year in Descending Order

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The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

201 papers	6,467 citations	40 h-index	75 g-index
231 ext. papers	7,668 ext. citations	4.3 avg, IF	6.38 L-index

#	Paper	IF	Citations
201	Innovative Technologies for Structural Health Monitoring of SFTs: Combination of InfraRed Thermography with Mixed Reality. <i>Lecture Notes in Civil Engineering</i> , <b>2022</b> , 922-928	0.3	0
200	Real-time porosity reduction during metal directed energy deposition using a pulse laser. <i>Journal of Materials Science and Technology</i> , <b>2022</b> , 116, 214-223	9.1	0
199	Detection and localization of fatigue crack using nonlinear ultrasonic three-wave mixing technique. <i>International Journal of Fatigue</i> , <b>2022</b> , 155, 106582	5	4
198	Ultrafast nonlinear ultrasonic measurement using femtosecond laser and modified lock-in detection. <i>Optics and Lasers in Engineering</i> , <b>2022</b> , 150, 106844	4.6	0
197	Femtosecond laser ultrasonic inspection of a moving object and its application to estimation of silicon wafer coating thickness. <i>Optics and Lasers in Engineering</i> , <b>2022</b> , 148, 106778	4.6	1
196	Online melt pool depth estimation in laser metal deposition using a coaxial thermography system. <i>Journal of Laser Applications</i> , <b>2022</b> , 34, 022001	2.1	1
195	Automated visualization of steel structure coating thickness using line laser scanning thermography. <i>Automation in Construction</i> , <b>2022</b> , 139, 104267	9.6	0
194	Structural displacement estimation by fusing vision camera and accelerometer using hybrid computer vision algorithm and adaptive multi-rate Kalman filter. <i>Automation in Construction</i> , <b>2022</b> , 140, 104338	9.6	2
193	Ultrasonic Lamb wave mixing based fatigue crack detection using a deep learning model and higher-order spectral analysis. <i>International Journal of Fatigue</i> , <b>2022</b> , 107028	5	1
192	Estimation of Silicon Wafer Coating Thickness Using Ultrasound Generated by Femtosecond Laser. <i>Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems</i> , <b>2021</b> , 4,	0.9	1
191	Cubic nonlinearity parameter measurement and material degradation detection using nonlinear ultrasonic three-wave mixing.. <i>Ultrasonics</i> , <b>2021</b> , 121, 106670	3.5	2
190	Bridge displacement estimation by fusing accelerometer and strain gauge measurements. <i>Structural Control and Health Monitoring</i> , <b>2021</b> , 28, e2733	4.5	8
189	Evaluation of material degradation using phased array ultrasonic technique with full matrix capture. <i>Engineering Failure Analysis</i> , <b>2021</b> , 120, 105118	3.2	6
188	Mechanical properties estimation of additively manufactured metal components using femtosecond laser ultrasonics and laser polishing. <i>International Journal of Machine Tools and Manufacture</i> , <b>2021</b> , 166, 103745	9.4	11
187	Porosity inspection in directed energy deposition additive manufacturing based on transient thermorefectance measurement. <i>NDT and E International</i> , <b>2021</b> , 122, 102491	4.1	6
186	Laser active thermography for debonding detection in FRP retrofitted concrete structures. <i>NDT and E International</i> , <b>2020</b> , 114, 102285	4.1	8
185	Accelerated cable-stayed bridge construction using terrestrial laser scanning. <i>Automation in Construction</i> , <b>2020</b> , 117, 103269	9.6	8

184	Silicon wafer crack detection using nonlinear ultrasonic modulation induced by high repetition rate pulse laser. <i>Optics and Lasers in Engineering</i> , <b>2020</b> , 129, 106074	4.6	10
183	Remote Inspection of Internal Delamination in Wind Turbine Blades using Continuous Line Laser Scanning Thermography. <i>International Journal of Precision Engineering and Manufacturing - Green Technology</i> , <b>2020</b> , 7, 699-712	3.8	13
182	Online Stress Monitoring Technique Based on Lamb-wave Measurements and a Convolutional Neural Network Under Static and Dynamic Loadings. <i>Experimental Mechanics</i> , <b>2020</b> , 60, 171-179	2.6	6
181	Dynamic Displacement Estimation for Long-Span Bridges Using Acceleration and Heuristically Enhanced Displacement Measurements of Real-Time Kinematic Global Navigation System. <i>Sensors</i> , <b>2020</b> , 20,	3.8	2
180	A Real-Time, Non-Contact Method for In-Line Inspection of Oil and Gas Pipelines Using Optical Sensor Array. <i>Sensors</i> , <b>2019</b> , 19,	3.8	9
179	Development of high-accuracy edge line estimation algorithms using terrestrial laser scanning. <i>Automation in Construction</i> , <b>2019</b> , 101, 59-71	9.6	4
178	Fatigue crack detection in rotating steel shafts using noncontact ultrasonic modulation measurements. <i>Engineering Structures</i> , <b>2019</b> , 196, 109293	4.7	9
177	Micro-crack detection with nonlinear wave modulation technique and its application to loaded cracks. <i>NDT and E International</i> , <b>2019</b> , 107, 102132	4.1	9
176	A mirror-aided laser scanning system for geometric quality inspection of side surfaces of precast concrete elements. <i>Measurement: Journal of the International Measurement Confederation</i> , <b>2019</b> , 141, 420-428	4.6	15
175	Monitoring and instantaneous evaluation of fatigue crack using integrated passive and active laser thermography. <i>Optics and Lasers in Engineering</i> , <b>2019</b> , 119, 9-17	4.6	11
174	Online fatigue crack prognosis using nonlinear ultrasonic modulation. <i>Structural Health Monitoring</i> , <b>2019</b> , 18, 1889-1902	4.4	17
173	Study on effect of laser-induced ablation for Lamb waves in a thin plate. <i>Ultrasonics</i> , <b>2019</b> , 91, 121-128	3.5	8
172	Continuous-wave line laser thermography for monitoring of rotating wind turbine blades. <i>Structural Health Monitoring</i> , <b>2019</b> , 18, 1010-1021	4.4	11
171	Development of a tunable low-frequency vibration energy harvester and its application to a self-contained wireless fatigue crack detection sensor. <i>Structural Health Monitoring</i> , <b>2019</b> , 18, 920-933	4.4	6
170	Development of a 3-DOF Structural Displacement Sensor Based on a Two-Stage Kalman Filter. <i>Conference Proceedings of the Society for Experimental Mechanics</i> , <b>2019</b> , 139-141	0.3	1
169	A scalable cloud-based cyberinfrastructure platform for bridge monitoring. <i>Structure and Infrastructure Engineering</i> , <b>2019</b> , 15, 82-102	2.9	16
168	Continuous fatigue crack length estimation for aluminum 6061-T6 plates with a notch. <i>Mechanical Systems and Signal Processing</i> , <b>2019</b> , 120, 356-364	7.8	9
167	Noncontact Nonlinear Ultrasonic Wave Modulation for Fatigue Crack and Delamination Detection <b>2019</b> , 661-697		0

166	Fundamentals of Nonlinear Acoustical Techniques and Sideband Peak Count <b>2019</b> , 1-88		5
165	Automatic As-Built BIM Creation of Precast Concrete Bridge Deck Panels Using Laser Scan Data. <i>Journal of Computing in Civil Engineering</i> , <b>2018</b> , 32, 04018011	5	39
164	Data-driven fatigue crack quantification and prognosis using nonlinear ultrasonic modulation. <i>Mechanical Systems and Signal Processing</i> , <b>2018</b> , 109, 185-195	7.8	25
163	Second harmonic generation at fatigue cracks by low-frequency Lamb waves: Experimental and numerical studies. <i>Mechanical Systems and Signal Processing</i> , <b>2018</b> , 99, 760-773	7.8	68
162	Structural displacement estimation through multi-rate fusion of accelerometer and RTK-GPS displacement and velocity measurements. <i>Measurement: Journal of the International Measurement Confederation</i> , <b>2018</b> , 130, 223-235	4.6	23
161	Fatigue crack detection using dual laser induced nonlinear ultrasonic modulation. <i>Optics and Lasers in Engineering</i> , <b>2018</b> , 110, 420-430	4.6	25
160	Nonlinear ultrasonic modulation based failure warning for aluminum plates subject to fatigue loading. <i>International Journal of Fatigue</i> , <b>2018</b> , 114, 130-137	5	19
159	An Overview of Non-Destructive Testing Methods for Integrated Circuit Packaging Inspection. <i>Sensors</i> , <b>2018</b> , 18,	3.8	32
158	Development of a High Accuracy and High Sampling Rate Displacement Sensor for Civil Engineering Structures Monitoring. <i>Lecture Notes in Civil Engineering</i> , <b>2018</b> , 62-70	0.3	
157	Optimal placement of precast bridge deck slabs with respect to precast girders using 3D laser scanning. <i>Automation in Construction</i> , <b>2018</b> , 86, 81-98	9.6	15
156	Delamination localization in wind turbine blades based on adaptive time-of-flight analysis of noncontact laser ultrasonic signals. <i>Nondestructive Testing and Evaluation</i> , <b>2017</b> , 32, 1-20	2	26
155	Automatic measurement and warning of tension force reduction in a PT tendon using eddy current sensing. <i>NDT and E International</i> , <b>2017</b> , 87, 93-99	4.1	10
154	Reconstruction of laser ultrasonic wavefield images from reduced sparse measurements using compressed sensing aided super-resolution <b>2017</b> ,		3
153	Accelerated noncontact laser ultrasonic scanning for damage detection using combined binary search and compressed sensing. <i>Mechanical Systems and Signal Processing</i> , <b>2017</b> , 92, 315-333	7.8	20
152	Nonlinear spectral correlation for fatigue crack detection under noisy environments. <i>Journal of Sound and Vibration</i> , <b>2017</b> , 400, 305-316	3.9	7
151	Continuous Line Laser Thermography for Damage Imaging of Rotating Wind Turbine Blades. <i>Procedia Engineering</i> , <b>2017</b> , 188, 225-232		19
150	An information modeling framework for bridge monitoring. <i>Advances in Engineering Software</i> , <b>2017</b> , 114, 11-31	3.6	46
149	Accelerated damage visualization using binary search with fixed pitch-catch distance laser ultrasonic scanning. <i>Smart Materials and Structures</i> , <b>2017</b> , 26, 075005	3.4	2

148	Automated Estimation of Reinforced Precast Concrete Rebar Positions Using Colored Laser Scan Data. <i>Computer-Aided Civil and Infrastructure Engineering</i> , <b>2017</b> , 32, 787-802	8.4	59
147	Damage detection using sideband peak count in spectral correlation domain. <i>Journal of Sound and Vibration</i> , <b>2017</b> , 411, 20-33	3.9	7
146	Development of nonlinear spectral correlation between ultrasonic modulation components. <i>NDT and E International</i> , <b>2017</b> , 91, 120-128	4.1	4
145	Novel multi-coil resonator design for wireless power transfer through reinforced concrete structure with rebar array <b>2017</b> ,		3
144	Flexible highly-effective energy harvester via crystallographic and computational control of nanointerfacial morphotropic piezoelectric thin film. <i>Nano Research</i> , <b>2017</b> , 10, 437-455	10	74
143	Dynamic displacement estimation by fusing LDV and LiDAR measurements via smoothing based Kalman filtering. <i>Mechanical Systems and Signal Processing</i> , <b>2017</b> , 82, 339-355	7.8	31
142	Autonomous mobile lock-in thermography system for detecting and quantifying voids in liquefied natural gas cargo tank second barrier. <i>Structural Health Monitoring</i> , <b>2017</b> , 16, 276-290	4.4	2
141	Development of a "tick-and-detect" wireless sensor node for fatigue crack detection. <i>Structural Health Monitoring</i> , <b>2017</b> , 16, 153-163	4.4	19
140	Necessary Conditions for Nonlinear Ultrasonic Modulation Generation Given a Localized Fatigue Crack in a Plate-Like Structure. <i>Materials</i> , <b>2017</b> , 10,	3.5	9
139	A Reference-Free and Non-Contact Method for Detecting and Imaging Damage in Adhesive-Bonded Structures Using Air-Coupled Ultrasonic Transducers. <i>Materials</i> , <b>2017</b> , 10,	3.5	18
138	Development of a High Precision Displacement Measurement System by Fusing a Low Cost RTK-GPS Sensor and a Force Feedback Accelerometer for Infrastructure Monitoring. <i>Sensors</i> , <b>2017</b> , 17,	3.8	10
137	A distributed cloud-based cyberinfrastructure framework for integrated bridge monitoring <b>2017</b> ,		1
136	Multi-spot laser lock-in thermography for real-time imaging of cracks in semiconductor chips during a manufacturing process. <i>Journal of Materials Processing Technology</i> , <b>2016</b> , 229, 94-101	5.3	12
135	Development of a mixed pixel filter for improved dimension estimation using AMCW laser scanner. <i>ISPRS Journal of Photogrammetry and Remote Sensing</i> , <b>2016</b> , 119, 246-258	11.8	14
134	A reference-free micro defect visualization using pulse laser scanning thermography and image processing. <i>Measurement Science and Technology</i> , <b>2016</b> , 27, 085601	2	8
133	Development and full-scale dynamic test of a combined system of heterogeneous laser sensors for structural displacement measurement. <i>Smart Materials and Structures</i> , <b>2016</b> , 25, 065015	3.4	5
132	Wireless power and data transfer system for smart bridge sensors <b>2016</b> ,		3
131	Automated quality assessment of precast concrete elements with geometry irregularities using terrestrial laser scanning. <i>Automation in Construction</i> , <b>2016</b> , 68, 170-182	9.6	71

130	Operation of battery-less and wireless sensor using magnetic resonance based wireless power transfer through concrete. <i>Smart Structures and Systems</i> , <b>2016</b> , 17, 631-646		3
129	Dynamic displacement estimation by fusing biased high-sampling rate acceleration and low-sampling rate displacement measurements using two-stage Kalman estimator. <i>Smart Structures and Systems</i> , <b>2016</b> , 17, 647-667		15
128	A NoSQL data management infrastructure for bridge monitoring. <i>Smart Structures and Systems</i> , <b>2016</b> , 17, 669-690		25
127	Surface flatness and distortion inspection of precast concrete elements using laser scanning technology. <i>Smart Structures and Systems</i> , <b>2016</b> , 18, 601-623		22
126	Non-contact laser ultrasonics for SHM in aerospace structures <b>2016</b> , 325-352		2
125	Baseline-free fatigue crack detection based on spectral correlation and nonlinear wave modulation. <i>Smart Materials and Structures</i> , <b>2016</b> , 25, 125034	3.4	13
124	Numerical simulation of damage detection using laser-generated ultrasound. <i>Ultrasonics</i> , <b>2016</b> , 69, 248-255		40
123	A cloud-based information repository for bridge monitoring applications <b>2016</b> ,		4
122	Development and field application of a nonlinear ultrasonic modulation technique for fatigue crack detection without reference data from an intact condition. <i>Smart Materials and Structures</i> , <b>2016</b> , 25, 095055	3.4	20
121	Automated dimensional quality assurance of full-scale precast concrete elements using laser scanning and BIM. <i>Automation in Construction</i> , <b>2016</b> , 72, 102-114	9.6	105
120	Automated detection and quantification of hidden voids in triplex bonding layers using active lock-in thermography. <i>NDT and E International</i> , <b>2015</b> , 74, 94-105	4.1	13
119	Line laser lock-in thermography for instantaneous imaging of cracks in semiconductor chips. <i>Optics and Lasers in Engineering</i> , <b>2015</b> , 73, 128-136	4.6	25
118	Locating fatigue damage using temporal signal features of nonlinear Lamb waves. <i>Mechanical Systems and Signal Processing</i> , <b>2015</b> , 60-61, 182-197	7.8	75
117	Noncontact fatigue crack visualization using nonlinear ultrasonic modulation. <i>NDT and E International</i> , <b>2015</b> , 73, 8-14	4.1	39
116	Dual-mode wireless power transfer module for smartphone application <b>2015</b> ,		10
115	Visualization of non-propagating Lamb wave modes for fatigue crack evaluation. <i>Journal of Applied Physics</i> , <b>2015</b> , 117, 114904	2.5	12
114	Fatigue crack localization using noncontact laser ultrasonics and state space attractors. <i>Journal of the Acoustical Society of America</i> , <b>2015</b> , 138, 890-8	2.2	9
113	A framework for dimensional and surface quality assessment of precast concrete elements using BIM and 3D laser scanning. <i>Automation in Construction</i> , <b>2015</b> , 49, 225-238	9.6	118

112	Localization and Quantification of Concrete Spalling Defects Using Terrestrial Laser Scanning. <i>Journal of Computing in Civil Engineering</i> , <b>2015</b> , 29, 04014086	5	62
111	Fatigue crack detection using structural nonlinearity reflected on linear ultrasonic features. <i>Journal of Applied Physics</i> , <b>2015</b> , 118, 244902	2.5	14
110	Baseline-free damage visualization using noncontact laser nonlinear ultrasonics and state space geometrical changes. <i>Smart Materials and Structures</i> , <b>2015</b> , 24, 065036	3.4	24
109	A data management infrastructure for bridge monitoring <b>2015</b> ,		6
108	Special Section Guest Editorial: Structural Health Monitoring: Use of Guided Waves and/or Nonlinear Acoustic Techniques. <i>Optical Engineering</i> , <b>2015</b> , 55, 011001	1.1	2
107	Detection of fatigue crack on a rotating steel shaft using air-coupled nonlinear ultrasonic modulation <b>2015</b> ,		1
106	A Fatigue Crack Detection Methodology. <i>KAIST Research Series</i> , <b>2015</b> , 233-253		1
105	Laser based impedance measurement for pipe corrosion and bolt-loosening detection. <i>Smart Structures and Systems</i> , <b>2015</b> , 15, 41-55		2
104	Laser lock-in thermography for detection of surface-breaking fatigue cracks on uncoated steel structures. <i>NDT and E International</i> , <b>2014</b> , 65, 54-63	4.1	54
103	Application of Local Reference-Free Damage Detection Techniques to In Situ Bridges. <i>Journal of Structural Engineering</i> , <b>2014</b> , 140, 04013069	3	17
102	Wireless ultrasonic wavefield imaging via laser for hidden damage detection inside a steel box girder bridge. <i>Smart Materials and Structures</i> , <b>2014</b> , 23, 095019	3.4	9
101	Nonlinear ultrasonic wave modulation for online fatigue crack detection. <i>Journal of Sound and Vibration</i> , <b>2014</b> , 333, 1473-1484	3.9	121
100	Automated dimensional quality assessment of precast concrete panels using terrestrial laser scanning. <i>Automation in Construction</i> , <b>2014</b> , 45, 163-177	9.6	58
99	Visualization of hidden delamination and debonding in composites through noncontact laser ultrasonic scanning. <i>Composites Science and Technology</i> , <b>2014</b> , 100, 10-18	8.6	135
98	Non-contact visualization of nonlinear ultrasonic modulation for reference-free fatigue crack detection <b>2014</b> ,		2
97	Full-Scale Application of a Dimensional Quality Assessment Technique to Precast Concrete Panels using Terrestrial Laser Scanning <b>2014</b> ,		2
96	Monitoring of pipelines in nuclear power plants by measuring laser-based mechanical impedance. <i>Smart Materials and Structures</i> , <b>2014</b> , 23, 065008	3.4	14
95	Pipe Defect Visualization and Quantification Using Longitudinal Ultrasonic Modes. <i>International Journal of Structural Stability and Dynamics</i> , <b>2014</b> , 14, 1440008	1.9	6



94	Sensing solutions for assessing and monitoring of nuclear power plants (NPPs) <b>2014</b> , 605-637		2
93	Damage detection technique by measuring laser-based mechanical impedance <b>2014</b> ,		2
92	Binding conditions for nonlinear ultrasonic generation unifying wave propagation and vibration. <i>Applied Physics Letters</i> , <b>2014</b> , 104, 214103	3-4	18
91	Mechanical impedance measurement and damage detection using noncontact laser ultrasound. <i>Optics Letters</i> , <b>2014</b> , 39, 3130-3	3	2
90	High efficient rectenna using a harmonic rejection low pass filter for RF based wireless power transmission <b>2014</b> ,		8
89	Subspace model identification of guided wave propagation in metallic plates. <i>Smart Materials and Structures</i> , <b>2014</b> , 23, 035006	3-4	4
88	Crack detection technique for operating wind turbine blades using Vibro-Acoustic Modulation. <i>Structural Health Monitoring</i> , <b>2014</b> , 13, 660-670	4-4	21
87	Noncontact detection of fatigue cracks by laser nonlinear wave modulation spectroscopy (LNWMS). <i>NDT and E International</i> , <b>2014</b> , 66, 106-116	4-1	55
86	Piezoelectric transducers for assessing and monitoring civil infrastructures <b>2014</b> , 86-120		8
85	Introduction to sensing for structural performance assessment and health monitoring <b>2014</b> , 1-22		6
84	Autonomous dynamic displacement estimation from data fusion of acceleration and intermittent displacement measurements. <i>Mechanical Systems and Signal Processing</i> , <b>2014</b> , 42, 194-205	7-8	54
83	Reference-free fatigue crack detection using nonlinear ultrasonic modulation under various temperature and loading conditions. <i>Mechanical Systems and Signal Processing</i> , <b>2014</b> , 45, 468-478	7-8	56
82	Fatigue Crack Localization Using Laser Nonlinear Wave Modulation Spectroscopy (LNWMS). <i>Journal of the Korean Society for Nondestructive Testing</i> , <b>2014</b> , 34, 419-427	0	12
81	Reference-free damage detection, localization, and quantification in composites. <i>Journal of the Acoustical Society of America</i> , <b>2013</b> , 133, 3838-45	2-2	9
80	Development of a fiber-guided laser ultrasonic system resilient to high temperature and gamma radiation for nuclear power plant pipe monitoring. <i>Measurement Science and Technology</i> , <b>2013</b> , 24, 085003		8
79	Reference-free delamination detection using Lamb waves. <i>Structural Control and Health Monitoring</i> , <b>2013</b> , 21, n/a-n/a	4-5	8
78	Electromechanical impedance measurement from large structures using a dual piezoelectric transducer. <i>Journal of Sound and Vibration</i> , <b>2013</b> , 332, 6580-6595	3-9	31
77	Data-driven physical parameter estimation for lumped mass structures from a single point actuation test. <i>Journal of Sound and Vibration</i> , <b>2013</b> , 332, 4390-4402	3-9	11



76	Complete noncontact laser ultrasonic imaging for automated crack visualization in a plate. <i>Smart Materials and Structures</i> , <b>2013</b> , 22, 025022	3-4	105
75	Active Dimensional Quality Assessment of Precast Concrete Using 3D Laser Scanning <b>2013</b> ,		2
74	Noncontact laser ultrasonic crack detection for plates with additional structural complexities. <i>Structural Health Monitoring</i> , <b>2013</b> , 12, 522-538	4-4	20
73	Laser Lock-In Thermography for Fatigue Crack Detection. <i>Key Engineering Materials</i> , <b>2013</b> , 558, 76-83	0-4	3
72	In situ measurement of structural mass, stiffness, and damping using a reaction force actuator and a laser Doppler vibrometer. <i>Smart Materials and Structures</i> , <b>2013</b> , 22, 085004	3-4	11
71	Laser ultrasonic imaging and damage detection for a rotating structure. <i>Structural Health Monitoring</i> , <b>2013</b> , 12, 494-506	4-4	28
70	Laser lock-in thermography for fatigue crack detection in an uncoated metallic structure <b>2013</b> ,		1
69	Integrated impedance and guided wave based damage detection. <i>Mechanical Systems and Signal Processing</i> , <b>2012</b> , 28, 50-62	7-8	66
68	Instantaneous delamination detection in a composite plate using a dual piezoelectric transducer network. <i>Composite Structures</i> , <b>2012</b> , 94, 3490-3499	5-3	46
67	Airplane hot spot monitoring using integrated impedance and guided wave measurements. <i>Structural Control and Health Monitoring</i> , <b>2012</b> , 19, 592-604	4-5	22
66	Laser ultrasonic imaging of a rotating blade <b>2012</b> ,		1
65	Laser based structural health monitoring for civil, mechanical, and aerospace systems <b>2012</b> ,		5
64	Impact localization in complex structures using laser-based time reversal. <i>Structural Health Monitoring</i> , <b>2012</b> , 11, 577-588	4-4	67
63	An optical fiber guided ultrasonic excitation and sensing system for online monitoring of nuclear power plants <b>2012</b> ,		2
62	Isolation of crack-induced standing wave energy from laser scanned ultrasonic image <b>2012</b> ,		1
61	Experimental study on identifying cracks of increasing size using ultrasonic excitation. <i>Structural Health Monitoring</i> , <b>2012</b> , 11, 95-108	4-4	7
60	Baseline-free pipeline monitoring using optical fiber-guided laser ultrasonics. <i>Structural Health Monitoring</i> , <b>2012</b> , 11, 684-695	4-4	21
59	Wireless guided wave and impedance measurement using laser and piezoelectric transducers. <i>Smart Materials and Structures</i> , <b>2012</b> , 21, 035029	3-4	18

58	Damage detection for pipeline structures using optic-based active sensing. <i>Smart Structures and Systems</i> , <b>2012</b> , 9, 461-472		8
57	Remote guided wave imaging using wireless PZT excitation and laser vibrometer scanning for local bridge monitoring. <i>Bridge Maintenance, Safety and Management</i> , <b>2012</b> , 731-736		0
56	Piezoelectric Transducer Diagnostics via Linear Reciprocity for Guided Wave Structural Health Monitoring. <i>AIAA Journal</i> , <b>2011</b> , 49, 621-629	2.1	8
55	Pipeline monitoring using an integrated MFC/FBG system <b>2011</b> ,		3
54	Investigating mode-converted Lamb wave signals induced by a notch on a beam in the frequency domain <b>2011</b> ,		2
53	Delamination detection in a composite plate using a dual piezoelectric transducer network <b>2011</b> ,		3
52	Impact localization in an aircraft fuselage using laser based time reversal <b>2011</b> ,		1
51	Impedance based damage detection under varying temperature and loading conditions. <i>NDT and E International</i> , <b>2011</b> , 44, 740-750	4.1	72
50	Reference-free impedance-based crack detection in plates. <i>Journal of Sound and Vibration</i> , <b>2011</b> , 330, 5949-5962	3.9	18
49	Temperature Independent Damage Detection in Plates Using Redundant Signal Measurements. <i>Journal of Nondestructive Evaluation</i> , <b>2011</b> , 30, 106-116	2.1	8
48	Reference-free crack detection under varying temperature. <i>KSCE Journal of Civil Engineering</i> , <b>2011</b> , 15, 1395-1404	1.9	12
47	Investigating electro-mechanical signals from collocated piezoelectric wafers for the reference-free damage diagnosis of a plate. <i>Smart Materials and Structures</i> , <b>2011</b> , 20, 065001	3.4	10
46	Delamination detection in composites through guided wave field image processing. <i>Composites Science and Technology</i> , <b>2011</b> , 71, 1250-1256	8.6	133
45	Design of copper/carbon-coated fiber Bragg grating acoustic sensor net for integrated health monitoring of nuclear power plant. <i>Nuclear Engineering and Design</i> , <b>2011</b> , 241, 1889-1898	1.8	4
44	Lamb wave mode decomposition using concentric ring and circular piezoelectric transducers. <i>Wave Motion</i> , <b>2011</b> , 48, 358-370	1.8	43
43	Automated detection of delamination and disbond from wavefield images obtained using a scanning laser vibrometer. <i>Smart Materials and Structures</i> , <b>2011</b> , 20, 045017	3.4	117
42	Integrated impedance and guided wave based damage detection under temperature variation <b>2011</b> ,		5
41	Finite Element Model Updating of a PSC Box Girder Bridge Using Ambient Vibration Test. <i>Advanced Materials Research</i> , <b>2010</b> , 168-170, 2263-2270	0.5	2

40	IN SITU DETECTION OF SURFACE-MOUNTED PZT TRANSDUCER DEFECTS USING LINEAR RECIPROCITY <b>2010</b> ,		3
39	Lamb wave tuning curve calibration for surface-bonded piezoelectric transducers. <i>Smart Materials and Structures</i> , <b>2010</b> , 19, 015007	3-4	54
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32	Reference-free crack detection using transfer impedances. <i>Journal of Sound and Vibration</i> , <b>2010</b> , 329, 2337-2348	3-9	29
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18	Reference-Free NDT Technique for Debonding Detection in CFRP-Strengthened RC Structures. <i>Journal of Structural Engineering</i> , <b>2007</b> , 133, 1080-1091	3	33
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