

Hoon Sohn

List of Publications by Year in descending order

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222
papers

8,786
citations

53794

45
h-index

51608

86
g-index

231
all docs

231
docs citations

231
times ranked

4470
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 1 | Real-time structural displacement estimation by fusing asynchronous acceleration and computer vision measurements. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2022, 37, 688-703. | 9.8 | 41 |
| 2 | 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> , 2022, 148, 106778. | 3.8 | 12 |
| 3 | Detection and localization of fatigue crack using nonlinear ultrasonic three-wave mixing technique. <i>International Journal of Fatigue</i> , 2022, 155, 106582. | 5.7 | 18 |
| 4 | Ultrafast nonlinear ultrasonic measurement using femtosecond laser and modified lock-in detection. <i>Optics and Lasers in Engineering</i> , 2022, 150, 106844. | 3.8 | 6 |
| 5 | Cubic nonlinearity parameter measurement and material degradation detection using nonlinear ultrasonic three-wave mixing. <i>Ultrasonics</i> , 2022, 121, 106670. | 3.9 | 12 |
| 6 | Innovative Technologies for Structural Health Monitoring of SFTs: Combination of InfraRed Thermography with Mixed Reality. <i>Lecture Notes in Civil Engineering</i> , 2022, , 922-928. | 0.4 | 1 |
| 7 | Real-time porosity reduction during metal directed energy deposition using a pulse laser. <i>Journal of Materials Science and Technology</i> , 2022, 116, 214-223. | 10.7 | 13 |
| 8 | Online melt pool depth estimation in laser metal deposition using a coaxial thermography system. <i>Journal of Laser Applications</i> , 2022, 34, . | 1.7 | 3 |
| 9 | Fatigue crack prognosis of lifting-lug by nonlinear ultrasonic modulation. , 2022, , . | | 0 |
| 10 | Automated visualization of steel structure coating thickness using line laser scanning thermography. <i>Automation in Construction</i> , 2022, 139, 104267. | 9.8 | 4 |
| 11 | 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> , 2022, 140, 104338. | 9.8 | 31 |
| 12 | Ultrasonic Lamb wave mixing based fatigue crack detection using a deep learning model and higher-order spectral analysis. <i>International Journal of Fatigue</i> , 2022, 163, 107028. | 5.7 | 12 |
| 13 | Noncontact cable tension force estimation using an integrated vision and inertial measurement system. <i>Measurement: Journal of the International Measurement Confederation</i> , 2022, 199, 111532. | 5.0 | 14 |
| 14 | Evaluation of material degradation using phased array ultrasonic technique with full matrix capture. <i>Engineering Failure Analysis</i> , 2021, 120, 105118. | 4.0 | 14 |
| 15 | Steel bridge corrosion inspection with combined vision and thermographic images. <i>Structural Health Monitoring</i> , 2021, 20, 3424-3435. | 7.5 | 15 |
| 16 | Bridge displacement estimation by fusing accelerometer and strain gauge measurements. <i>Structural Control and Health Monitoring</i> , 2021, 28, e2733. | 4.0 | 34 |
| 17 | Mechanical properties estimation of additively manufactured metal components using femtosecond laser ultrasonics and laser polishing. <i>International Journal of Machine Tools and Manufacture</i> , 2021, 166, 103745. | 13.4 | 40 |
| 18 | Porosity inspection in directed energy deposition additive manufacturing based on transient thermorefectance measurement. <i>NDT and E International</i> , 2021, 122, 102491. | 3.7 | 15 |

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|----|---|-----|-----------|
| 19 | Estimation of Silicon Wafer Coating Thickness Using Ultrasound Generated by Femtosecond Laser. Journal of Nondestructive Evaluation, Diagnostics and Prognostics of Engineering Systems, 2021, 4, . | 0.9 | 2 |
| 20 | Laser-Based Structural Health Monitoring. , 2021, , 1-14. | | 0 |
| 21 | Online Stress Monitoring Technique Based on Lamb-wave Measurements and a Convolutional Neural Network Under Static and Dynamic Loadings. Experimental Mechanics, 2020, 60, 171-179. | 2.0 | 18 |
| 22 | Multifunctional Smart Ball Sensor for Wireless Structural Health Monitoring in a Fire Situation. Sensors, 2020, 20, 4328. | 3.8 | 0 |
| 23 | Dynamic Displacement Estimation for Long-Span Bridges Using Acceleration and Heuristically Enhanced Displacement Measurements of Real-Time Kinematic Global Navigation System. Sensors, 2020, 20, 5092. | 3.8 | 7 |
| 24 | Laser active thermography for debonding detection in FRP retrofitted concrete structures. NDT and E International, 2020, 114, 102285. | 3.7 | 13 |
| 25 | Accelerated cable-stayed bridge construction using terrestrial laser scanning. Automation in Construction, 2020, 117, 103269. | 9.8 | 23 |
| 26 | Silicon wafer crack detection using nonlinear ultrasonic modulation induced by high repetition rate pulse laser. Optics and Lasers in Engineering, 2020, 129, 106074. | 3.8 | 20 |
| 27 | Remote Inspection of Internal Delamination in Wind Turbine Blades using Continuous Line Laser Scanning Thermography. International Journal of Precision Engineering and Manufacturing - Green Technology, 2020, 7, 699-712. | 4.9 | 27 |
| 28 | Study on effect of laser-induced ablation for Lamb waves in a thin plate. Ultrasonics, 2019, 91, 121-128. | 3.9 | 17 |
| 29 | Continuous-wave line laser thermography for monitoring of rotating wind turbine blades. Structural Health Monitoring, 2019, 18, 1010-1021. | 7.5 | 22 |
| 30 | Development of a tunable low-frequency vibration energy harvester and its application to a self-contained wireless fatigue crack detection sensor. Structural Health Monitoring, 2019, 18, 920-933. | 7.5 | 11 |
| 31 | A Real-Time, Non-Contact Method for In-Line Inspection of Oil and Gas Pipelines Using Optical Sensor Array. Sensors, 2019, 19, 3615. | 3.8 | 21 |
| 32 | Development of high-accuracy edge line estimation algorithms using terrestrial laser scanning. Automation in Construction, 2019, 101, 59-71. | 9.8 | 15 |
| 33 | Fatigue crack detection in rotating steel shafts using noncontact ultrasonic modulation measurements. Engineering Structures, 2019, 196, 109293. | 5.3 | 21 |
| 34 | Micro-crack detection with nonlinear wave modulation technique and its application to loaded cracks. NDT and E International, 2019, 107, 102132. | 3.7 | 20 |
| 35 | A mirror-aided laser scanning system for geometric quality inspection of side surfaces of precast concrete elements. Measurement: Journal of the International Measurement Confederation, 2019, 141, 420-428. | 5.0 | 31 |
| 36 | Monitoring and instantaneous evaluation of fatigue crack using integrated passive and active laser thermography. Optics and Lasers in Engineering, 2019, 119, 9-17. | 3.8 | 18 |

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|----|--|-----|-----------|
| 37 | Online fatigue crack prognosis using nonlinear ultrasonic modulation. Structural Health Monitoring, 2019, 18, 1889-1902. | 7.5 | 26 |
| 38 | A scalable cloud-based cyberinfrastructure platform for bridge monitoring. Structure and Infrastructure Engineering, 2019, 15, 82-102. | 3.7 | 22 |
| 39 | Continuous fatigue crack length estimation for aluminum 6061-T6 plates with a notch. Mechanical Systems and Signal Processing, 2019, 120, 356-364. | 8.0 | 14 |
| 40 | Noncontact Nonlinear Ultrasonic Wave Modulation for Fatigue Crack and Delamination Detection. , 2019, , 661-697. | | 1 |
| 41 | Fundamentals of Nonlinear Acoustical Techniques and Sideband Peak Count. , 2019, , 1-88. | | 14 |
| 42 | Development of a 3-DOF Structural Displacement Sensor Based on a Two-Stage Kalman Filter. Conference Proceedings of the Society for Experimental Mechanics, 2019, , 139-141. | 0.5 | 1 |
| 43 | Online prognosis of fatigue crack at welded joints using nonlinear ultrasonic modulation. , 2019, , . | | 1 |
| 44 | Automatic As-Built BIM Creation of Precast Concrete Bridge Deck Panels Using Laser Scan Data. Journal of Computing in Civil Engineering, 2018, 32, . | 4.7 | 55 |
| 45 | Data-driven fatigue crack quantification and prognosis using nonlinear ultrasonic modulation. Mechanical Systems and Signal Processing, 2018, 109, 185-195. | 8.0 | 47 |
| 46 | Second harmonic generation at fatigue cracks by low-frequency Lamb waves: Experimental and numerical studies. Mechanical Systems and Signal Processing, 2018, 99, 760-773. | 8.0 | 112 |
| 47 | Development of a High Accuracy and High Sampling Rate Displacement Sensor for Civil Engineering Structures Monitoring. Lecture Notes in Civil Engineering, 2018, , 62-70. | 0.4 | 0 |
| 48 | Optimal placement of precast bridge deck slabs with respect to precast girders using 3D laser scanning. Automation in Construction, 2018, 86, 81-98. | 9.8 | 30 |
| 49 | Post-tensioning tendon force loss detection using low power pulsed eddy current measurement. AIP Conference Proceedings, 2018, , . | 0.4 | 1 |
| 50 | Accelerated defect visualization of microelectronic systems using binary search with fixed pitch-catch distance laser ultrasonic scanning. AIP Conference Proceedings, 2018, , . | 0.4 | 0 |
| 51 | Structural displacement estimation through multi-rate fusion of accelerometer and RTK-GPS displacement and velocity measurements. Measurement: Journal of the International Measurement Confederation, 2018, 130, 223-235. | 5.0 | 45 |
| 52 | Fatigue crack detection using dual laser induced nonlinear ultrasonic modulation. Optics and Lasers in Engineering, 2018, 110, 420-430. | 3.8 | 44 |
| 53 | Nonlinear ultrasonic modulation based failure warning for aluminum plates subject to fatigue loading. International Journal of Fatigue, 2018, 114, 130-137. | 5.7 | 36 |
| 54 | An Overview of Non-Destructive Testing Methods for Integrated Circuit Packaging Inspection. Sensors, 2018, 18, 1981. | 3.8 | 77 |

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|----|---|------|-----------|
| 55 | Online fatigue crack quantification and prognosis using nonlinear ultrasonic modulation and artificial neural network. , 2018, , . | | 0 |
| 56 | A study on the detection of compressed micro-crack by nonlinear wave modulation technique. , 2018, , . | | 0 |
| 57 | Delamination localization in wind turbine blades based on adaptive time-of-flight analysis of noncontact laser ultrasonic signals. NDT and E International, 2017, 32, 1-20. | 2.1 | 38 |
| 58 | Automatic measurement and warning of tension force reduction in a PT tendon using eddy current sensing. NDT and E International, 2017, 87, 93-99. | 3.7 | 19 |
| 59 | Reconstruction of laser ultrasonic wavefield images from reduced sparse measurements using compressed sensing aided super-resolution. AIP Conference Proceedings, 2017, , . | 0.4 | 4 |
| 60 | Accelerated noncontact laser ultrasonic scanning for damage detection using combined binary search and compressed sensing. Mechanical Systems and Signal Processing, 2017, 92, 315-333. | 8.0 | 32 |
| 61 | Fatigue crack detection by nonlinear spectral correlation with a wideband input. Proceedings of SPIE, 2017, , . | 0.8 | 0 |
| 62 | Nonlinear spectral correlation for fatigue crack detection under noisy environments. Journal of Sound and Vibration, 2017, 400, 305-316. | 3.9 | 15 |
| 63 | Accelerated damage visualization using binary search with fixed distance laser ultrasonic scanning. , 2017, , . | | 0 |
| 64 | Continuous Line Laser Thermography for Damage Imaging of Rotating Wind Turbine Blades. Procedia Engineering, 2017, 188, 225-232. | 1.2 | 30 |
| 65 | An information modeling framework for bridge monitoring. Advances in Engineering Software, 2017, 114, 11-31. | 3.8 | 72 |
| 66 | Accelerated damage visualization using binary search with fixed pitch-catch distance laser ultrasonic scanning. Smart Materials and Structures, 2017, 26, 075005. | 3.5 | 6 |
| 67 | Automated Estimation of Reinforced Precast Concrete Rebar Positions Using Colored Laser Scan Data. Computer-Aided Civil and Infrastructure Engineering, 2017, 32, 787-802. | 9.8 | 93 |
| 68 | Damage detection using sideband peak count in spectral correlation domain. Journal of Sound and Vibration, 2017, 411, 20-33. | 3.9 | 15 |
| 69 | Development of nonlinear spectral correlation between ultrasonic modulation components. NDT and E International, 2017, 91, 120-128. | 3.7 | 7 |
| 70 | Novel multi-coil resonator design for wireless power transfer through reinforced concrete structure with rebar array. , 2017, , . | | 5 |
| 71 | Flexible highly-effective energy harvester via crystallographic and computational control of nanointerfacial morphotropic piezoelectric thin film. Nano Research, 2017, 10, 437-455. | 10.4 | 86 |
| 72 | Dynamic displacement estimation by fusing LDV and LiDAR measurements via smoothing based Kalman filtering. Mechanical Systems and Signal Processing, 2017, 82, 339-355. | 8.0 | 47 |

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|----|---|------|-----------|
| 73 | Autonomous mobile lock-in thermography system for detecting and quantifying voids in liquefied natural gas cargo tank second barrier. Structural Health Monitoring, 2017, 16, 276-290. | 7.5 | 3 |
| 74 | Development of a "stick-and-detect" wireless sensor node for fatigue crack detection. Structural Health Monitoring, 2017, 16, 153-163. | 7.5 | 24 |
| 75 | Necessary Conditions for Nonlinear Ultrasonic Modulation Generation Given a Localized Fatigue Crack in a Plate-Like Structure. Materials, 2017, 10, 248. | 2.9 | 14 |
| 76 | A Reference-Free and Non-Contact Method for Detecting and Imaging Damage in Adhesive-Bonded Structures Using Air-Coupled Ultrasonic Transducers. Materials, 2017, 10, 1402. | 2.9 | 21 |
| 77 | Development of a High Precision Displacement Measurement System by Fusing a Low Cost RTK-GPS Sensor and a Force Feedback Accelerometer for Infrastructure Monitoring. Sensors, 2017, 17, 2745. | 3.8 | 19 |
| 78 | A distributed cloud-based cyberinfrastructure framework for integrated bridge monitoring. , 2017, , . | | 1 |
| 79 | Non-contact laser ultrasonics for SHM in aerospace structures. , 2016, , 325-352. | | 4 |
| 80 | Baseline-free fatigue crack detection based on spectral correlation and nonlinear wave modulation. Smart Materials and Structures, 2016, 25, 125034. | 3.5 | 21 |
| 81 | Damage visualization using synchronized noncontact laser ultrasonic scanning. , 2016, , . | | 0 |
| 82 | Numerical simulation of damage detection using laser-generated ultrasound. Ultrasonics, 2016, 69, 248-258. | 3.9 | 54 |
| 83 | A cloud-based information repository for bridge monitoring applications. , 2016, , . | | 4 |
| 84 | Development and field application of a nonlinear ultrasonic modulation technique for fatigue crack detection without reference data from an intact condition. Smart Materials and Structures, 2016, 25, 095055. | 3.5 | 30 |
| 85 | Automated dimensional quality assurance of full-scale precast concrete elements using laser scanning and BIM. Automation in Construction, 2016, 72, 102-114. | 9.8 | 166 |
| 86 | Development of a mixed pixel filter for improved dimension estimation using AMCW laser scanner. ISPRS Journal of Photogrammetry and Remote Sensing, 2016, 119, 246-258. | 11.1 | 19 |
| 87 | A reference-free micro defect visualization using pulse laser scanning thermography and image processing. Measurement Science and Technology, 2016, 27, 085601. | 2.6 | 12 |
| 88 | Development and full-scale dynamic test of a combined system of heterogeneous laser sensors for structural displacement measurement. Smart Materials and Structures, 2016, 25, 065015. | 3.5 | 9 |
| 89 | Wireless power and data transfer system for smart bridge sensors. , 2016, , . | | 4 |
| 90 | Automated quality assessment of precast concrete elements with geometry irregularities using terrestrial laser scanning. Automation in Construction, 2016, 68, 170-182. | 9.8 | 109 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 91 | 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> , 2016, 229, 94-101. | 6.3 | 18 |
| 92 | Operation of battery-less and wireless sensor using magnetic resonance based wireless power transfer through concrete. <i>Smart Structures and Systems</i> , 2016, 17, 631-646. | 1.9 | 4 |
| 93 | 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> , 2016, 17, 647-667. | 1.9 | 26 |
| 94 | A NoSQL data management infrastructure for bridge monitoring. <i>Smart Structures and Systems</i> , 2016, 17, 669-690. | 1.9 | 38 |
| 95 | Surface flatness and distortion inspection of precast concrete elements using laser scanning technology. <i>Smart Structures and Systems</i> , 2016, 18, 601-623. | 1.9 | 40 |
| 96 | Fatigue crack detection based on change of linear ultrasonic features caused by structural nonlinearity. <i>AIP Conference Proceedings</i> , 2015, , . | 0.4 | 0 |
| 97 | Fatigue crack detection using structural nonlinearity reflected on linear ultrasonic features. <i>Journal of Applied Physics</i> , 2015, 118, . | 2.5 | 18 |
| 98 | Baseline-free damage visualization using noncontact laser nonlinear ultrasonics and state space geometrical changes. <i>Smart Materials and Structures</i> , 2015, 24, 065036. | 3.5 | 35 |
| 99 | Fatigue crack visualization using noncontact laser ultrasonics and state space geometrical changes. , 2015, , . | | 0 |
| 100 | A data management infrastructure for bridge monitoring. , 2015, , . | | 8 |
| 101 | Special Section Guest Editorial: Structural Health Monitoring: Use of Guided Waves and/or Nonlinear Acoustic Techniques. <i>Optical Engineering</i> , 2015, 55, 011001. | 1.0 | 4 |
| 102 | Detection of fatigue crack on a rotating steel shaft using air-coupled nonlinear ultrasonic modulation. , 2015, , . | | 1 |
| 103 | Automated detection and quantification of hidden voids in triplex bonding layers using active lock-in thermography. <i>NDT and E International</i> , 2015, 74, 94-105. | 3.7 | 16 |
| 104 | Line laser lock-in thermography for instantaneous imaging of cracks in semiconductor chips. <i>Optics and Lasers in Engineering</i> , 2015, 73, 128-136. | 3.8 | 33 |
| 105 | Locating fatigue damage using temporal signal features of nonlinear Lamb waves. <i>Mechanical Systems and Signal Processing</i> , 2015, 60-61, 182-197. | 8.0 | 93 |
| 106 | Noncontact fatigue crack visualization using nonlinear ultrasonic modulation. <i>NDT and E International</i> , 2015, 73, 8-14. | 3.7 | 48 |
| 107 | Dual-mode wireless power transfer module for smartphone application. , 2015, , . | | 18 |
| 108 | Visualization of non-propagating Lamb wave modes for fatigue crack evaluation. <i>Journal of Applied Physics</i> , 2015, 117, . | 2.5 | 12 |

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| 109 | Fatigue crack localization using noncontact laser ultrasonics and state space attractors. Journal of the Acoustical Society of America, 2015, 138, 890-898. | 1.1 | 13 |
| 110 | A framework for dimensional and surface quality assessment of precast concrete elements using BIM and 3D laser scanning. Automation in Construction, 2015, 49, 225-238. | 9.8 | 175 |
| 111 | Localization and Quantification of Concrete Spalling Defects Using Terrestrial Laser Scanning. Journal of Computing in Civil Engineering, 2015, 29, . | 4.7 | 85 |
| 112 | A Fatigue Crack Detection Methodology. KAIST Research Series, 2015, , 233-253. | 1.5 | 3 |
| 113 | Laser based impedance measurement for pipe corrosion and bolt-loosening detection. Smart Structures and Systems, 2015, 15, 41-55. | 1.9 | 2 |
| 114 | Laser-Based Structural Health Monitoring. , 2015, , 1273-1286. | | 1 |
| 115 | Monitoring of pipelines in nuclear power plants by measuring laser-based mechanical impedance. Smart Materials and Structures, 2014, 23, 065008. | 3.5 | 18 |
| 116 | Pipe Defect Visualization and Quantification Using Longitudinal Ultrasonic Modes. International Journal of Structural Stability and Dynamics, 2014, 14, 1440008. | 2.4 | 9 |
| 117 | Sensing solutions for assessing and monitoring of nuclear power plants (NPPs). , 2014, , 605-637. | | 4 |
| 118 | Damage detection technique by measuring laser-based mechanical impedance. AIP Conference Proceedings, 2014, , . | 0.4 | 3 |
| 119 | Binding conditions for nonlinear ultrasonic generation unifying wave propagation and vibration. Applied Physics Letters, 2014, 104, . | 3.3 | 28 |
| 120 | Mechanical impedance measurement and damage detection using noncontact laser ultrasound. Optics Letters, 2014, 39, 3130. | 3.3 | 2 |
| 121 | Development of a wireless nonlinear wave modulation spectroscopy (NWMS) sensor node for fatigue crack detection. Proceedings of SPIE, 2014, , . | 0.8 | 1 |
| 122 | High efficient rectenna using a harmonic rejection low pass filter for RF based wireless power transmission. , 2014, , . | | 11 |
| 123 | Subspace model identification of guided wave propagation in metallic plates. Smart Materials and Structures, 2014, 23, 035006. | 3.5 | 4 |
| 124 | Crack detection technique for operating wind turbine blades using Vibro-Acoustic Modulation. Structural Health Monitoring, 2014, 13, 660-670. | 7.5 | 31 |
| 125 | Noncontact detection of fatigue cracks by laser nonlinear wave modulation spectroscopy (LNWMS). NDT and E International, 2014, 66, 106-116. | 3.7 | 87 |
| 126 | Piezoelectric transducers for assessing and monitoring civil infrastructures. , 2014, , 86-120. | | 17 |

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|-----|--|-----|-----------|
| 127 | Introduction to sensing for structural performance assessment and health monitoring. , 2014, , 1-22. | | 10 |
| 128 | Autonomous dynamic displacement estimation from data fusion of acceleration and intermittent displacement measurements. Mechanical Systems and Signal Processing, 2014, 42, 194-205. | 8.0 | 78 |
| 129 | Reference-free fatigue crack detection using nonlinear ultrasonic modulation under various temperature and loading conditions. Mechanical Systems and Signal Processing, 2014, 45, 468-478. | 8.0 | 74 |
| 130 | Laser lock-in thermography for detection of surface-breaking fatigue cracks on uncoated steel structures. NDT and E International, 2014, 65, 54-63. | 3.7 | 73 |
| 131 | Application of Local Reference-Free Damage Detection Techniques to In Situ Bridges. Journal of Structural Engineering, 2014, 140, . | 3.4 | 18 |
| 132 | Wireless ultrasonic wavefield imaging via laser for hidden damage detection inside a steel box girder bridge. Smart Materials and Structures, 2014, 23, 095019. | 3.5 | 11 |
| 133 | Nonlinear ultrasonic wave modulation for online fatigue crack detection. Journal of Sound and Vibration, 2014, 333, 1473-1484. | 3.9 | 169 |
| 134 | Automated dimensional quality assessment of precast concrete panels using terrestrial laser scanning. Automation in Construction, 2014, 45, 163-177. | 9.8 | 97 |
| 135 | Visualization of hidden delamination and debonding in composites through noncontact laser ultrasonic scanning. Composites Science and Technology, 2014, 100, 10-18. | 7.8 | 171 |
| 136 | Non-contact visualization of nonlinear ultrasonic modulation for reference-free fatigue crack detection. Proceedings of SPIE, 2014, , . | 0.8 | 2 |
| 137 | Full-Scale Application of a Dimensional Quality Assessment Technique to Precast Concrete Panels using Terrestrial Laser Scanning. , 2014, , . | | 4 |
| 138 | Fatigue Crack Localization Using Laser Nonlinear Wave Modulation Spectroscopy (LNWMS). Journal of the Korean Society for Nondestructive Testing, 2014, 34, 419-427. | 0.2 | 16 |
| 139 | Reference-free damage detection, localization, and quantification in composites. Journal of the Acoustical Society of America, 2013, 133, 3838-3845. | 1.1 | 9 |
| 140 | Development of a fiber-guided laser ultrasonic system resilient to high temperature and gamma radiation for nuclear power plant pipe monitoring. Measurement Science and Technology, 2013, 24, 085003. | 2.6 | 11 |
| 141 | Reference-free delamination detection using Lamb waves. Structural Control and Health Monitoring, 2013, 21, n/a-n/a. | 4.0 | 11 |
| 142 | Electromechanical impedance measurement from large structures using a dual piezoelectric transducer. Journal of Sound and Vibration, 2013, 332, 6580-6595. | 3.9 | 39 |
| 143 | Data-driven physical parameter estimation for lumped mass structures from a single point actuation test. Journal of Sound and Vibration, 2013, 332, 4390-4402. | 3.9 | 15 |
| 144 | Complete noncontact laser ultrasonic imaging for automated crack visualization in a plate. Smart Materials and Structures, 2013, 22, 025022. | 3.5 | 139 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|-----|-----------|
| 145 | Active Dimensional Quality Assessment of Precast Concrete Using 3D Laser Scanning. , 2013, , . | | 4 |
| 146 | Crack detection on wind turbine blades in an operating environment using vibro-acoustic modulation technique. , 2013, , . | | 2 |
| 147 | Noncontact laser ultrasonic crack detection for plates with additional structural complexities. Structural Health Monitoring, 2013, 12, 522-538. | 7.5 | 25 |
| 148 | Laser Lock-In Thermography for Fatigue Crack Detection. Key Engineering Materials, 2013, 558, 76-83. | 0.4 | 4 |
| 149 | In situ measurement of structural mass, stiffness, and damping using a reaction force actuator and a laser Doppler vibrometer. Smart Materials and Structures, 2013, 22, 085004. | 3.5 | 15 |
| 150 | Laser ultrasonic imaging and damage detection for a rotating structure. Structural Health Monitoring, 2013, 12, 494-506. | 7.5 | 43 |
| 151 | Fatigue crack detection using guided waves nonlinear modulation. Proceedings of SPIE, 2013, , . | 0.8 | 0 |
| 152 | Special Issue on Noncontact Measurement Technology for Structural Health Monitoring. Structural Health Monitoring, 2013, 12, 395-396. | 7.5 | 0 |
| 153 | Laser lock-in thermography for fatigue crack detection in an uncoated metallic structure. , 2013, , . | | 1 |
| 154 | Laser ultrasonic imaging of a rotating blade. Proceedings of SPIE, 2012, , . | 0.8 | 1 |
| 155 | Laser based structural health monitoring for civil, mechanical, and aerospace systems. , 2012, , . | | 6 |
| 156 | Impact localization in complex structures using laser-based time reversal. Structural Health Monitoring, 2012, 11, 577-588. | 7.5 | 77 |
| 157 | An optical fiber guided ultrasonic excitation and sensing system for online monitoring of nuclear power plants. , 2012, , . | | 2 |
| 158 | Isolation of crack-induced standing wave energy from laser scanned ultrasonic image. AIP Conference Proceedings, 2012, , . | 0.4 | 1 |
| 159 | Experimental study on identifying cracks of increasing size using ultrasonic excitation. Structural Health Monitoring, 2012, 11, 95-108. | 7.5 | 9 |
| 160 | Baseline-free pipeline monitoring using optical fiber-guided laser ultrasonics. Structural Health Monitoring, 2012, 11, 684-695. | 7.5 | 22 |
| 161 | Wireless guided wave and impedance measurement using laser and piezoelectric transducers. Smart Materials and Structures, 2012, 21, 035029. | 3.5 | 20 |
| 162 | Special issue on a structural health monitoring project for a composite unmanned aerial vehicle wing. Structural Control and Health Monitoring, 2012, 19, 565-566. | 4.0 | 0 |

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|-----|---|-----|-----------|
| 163 | Instantaneous delamination detection in a composite plate using a dual piezoelectric transducer network. <i>Composite Structures</i> , 2012, 94, 3490-3499. | 5.8 | 53 |
| 164 | Airplane hot spot monitoring using integrated impedance and guided wave measurements. <i>Structural Control and Health Monitoring</i> , 2012, 19, 592-604. | 4.0 | 25 |
| 165 | Integrated impedance and guided wave based damage detection. <i>Mechanical Systems and Signal Processing</i> , 2012, 28, 50-62. | 8.0 | 81 |
| 166 | Damage detection for pipeline structures using optic-based active sensing. <i>Smart Structures and Systems</i> , 2012, 9, 461-472. | 1.9 | 10 |
| 167 | Remote guided wave imaging using wireless PZT excitation and laser vibrometer scanning for local bridge monitoring. <i>Bridge Maintenance, Safety and Management</i> , 2012, , 731-736. | 0.1 | 1 |
| 168 | Investigating electro-mechanical signals from collocated piezoelectric wafers for the reference-free damage diagnosis of a plate. <i>Smart Materials and Structures</i> , 2011, 20, 065001. | 3.5 | 10 |
| 169 | Piezoelectric Transducer Diagnostics via Linear Reciprocity for Guided Wave Structural Health Monitoring. <i>AIAA Journal</i> , 2011, 49, 621-629. | 2.6 | 9 |
| 170 | Pipeline monitoring using an integrated MFC/FBG system. <i>Proceedings of SPIE</i> , 2011, , . | 0.8 | 4 |
| 171 | Investigating mode-converted Lamb wave signals induced by a notch on a beam in the frequency domain. <i>Proceedings of SPIE</i> , 2011, , . | 0.8 | 2 |
| 172 | Development of a non-contact PZT excitation and sensing technology via laser. , 2011, , . | | 0 |
| 173 | Delamination detection in a composite plate using a dual piezoelectric transducer network. <i>Proceedings of SPIE</i> , 2011, , . | 0.8 | 3 |
| 174 | Impact localization in an aircraft fuselage using laser based time reversal. <i>Proceedings of SPIE</i> , 2011, , . | 0.8 | 2 |
| 175 | Impedance based damage detection under varying temperature and loading conditions. <i>NDT and E International</i> , 2011, 44, 740-750. | 3.7 | 87 |
| 176 | Reference-free impedance-based crack detection in plates. <i>Journal of Sound and Vibration</i> , 2011, 330, 5949-5962. | 3.9 | 18 |
| 177 | Temperature Independent Damage Detection in Plates Using Redundant Signal Measurements. <i>Journal of Nondestructive Evaluation</i> , 2011, 30, 106-116. | 2.4 | 9 |
| 178 | Reference-free crack detection under varying temperature. <i>KSCE Journal of Civil Engineering</i> , 2011, 15, 1395-1404. | 1.9 | 13 |
| 179 | Delamination detection in composites through guided wave field image processing. <i>Composites Science and Technology</i> , 2011, 71, 1250-1256. | 7.8 | 156 |
| 180 | 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> , 2011, 241, 1889-1898. | 1.7 | 8 |

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|-----|---|-----|-----------|
| 181 | Lamb wave mode decomposition using concentric ring and circular piezoelectric transducers. Wave Motion, 2011, 48, 358-370. | 2.0 | 53 |
| 182 | Automated detection of delamination and disbond from wavefield images obtained using a scanning laser vibrometer. Smart Materials and Structures, 2011, 20, 045017. | 3.5 | 147 |
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