

# Kristen M Donnell

## List of Publications by Year in descending order

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45  
papers

518  
citations

840776

11  
h-index

794594

19  
g-index

45  
all docs

45  
docs citations

45  
times ranked

482  
citing authors

| #  | ARTICLE  | IF   | CITATIONS |
|----|--|------|-----------|
| 1  | Active Microwave Thermography for Defect Detection of CFRP-Strengthened Cement-Based Materials. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 2612-2620.                     | 4.7  | 60        |
| 2  | Characterization of Corroded Reinforced Steel Bars by Active Microwave Thermography. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 2583-2585.                                | 4.7  | 34        |
| 3  | Application of Active Microwave Thermography to delamination detection. , 2014, , .  |      | 33        |
| 4  | Evaluation of steel fiber distribution in cement-based mortars using active microwave thermography. Materials and Structures/Materiaux Et Constructions, 2016, 49, 5051-5065.                  | 3.1  | 33        |
| 5  | Active Microwave Thermography for Nondestructive Evaluation of Surface Cracks in Metal Structures. IEEE Transactions on Instrumentation and Measurement, 2019, 68, 576-585.                    | 4.7  | 28        |
| 6  | Effect of Sample Preparation on Microwave Material Characterization by Loaded Waveguide Technique. IEEE Transactions on Instrumentation and Measurement, 2016, 65, 1669-1677.                  | 4.7  | 27        |
| 7  | Detecting alkali-silica reaction: A multi-physics approach. Cement and Concrete Composites, 2016, 73, 123-135.   | 10.7 | 27        |
| 8  | Microwave Imaging From Sparse Measurements for Near-Field Synthetic Aperture Radar. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 2680-2692.                                 | 4.7  | 27        |
| 9  | On the Crack Characteristic Signal From an Open-Ended Coaxial Probe. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 1877-1879.  | 4.7  | 25        |
| 10 | Detection of CFRP-concrete interfacial debonding using active microwave thermography. Composite Structures, 2021, 260, 113261.   | 5.8  | 20        |
| 11 | Application of frequency selective surfaces for inspection of layered structures. , 2015, , .  |      | 17        |
| 12 | Application of active microwave thermography to inspection of carbon fiber reinforced composites. , 2014, , .  |      | 15        |
| 13 | Active Microwave Thermography to Detect and Locate Water Ingress. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 9774-9783.   | 4.7  | 14        |
| 14 | Novel FSS-based sensor for concurrent temperature and strain sensing. , 2017, , .  |      | 13        |
| 15 | Empirical Multiphase Dielectric Mixing Model for Cement-Based Materials Containing Alkali-Silica Reaction Gel. IEEE Transactions on Instrumentation and Measurement, 2017, 66, 2428-2436.      | 4.7  | 12        |
| 16 | An Aperture Efficiency Approach for Optimization of FSS-Based Sensor Resolution. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 7837-7845.                                    | 4.7  | 12        |
| 17 | Detection of Corrosion in Reinforcing Steel Bars Using Microwave Dual-Loaded Differential Modulated Scatterer Technique. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 1-16. | 4.7  | 11        |
| 18 | Performance Metrics for Frequency Selective Surface-Based Sensors. , 2017, 1, 1-4.   |      | 11        |

| #  | ARTICLE   | IF  | CITATIONS |
|----|---|-----|-----------|
| 19 | Embedded FSS sensing for structural health monitoring of bridge columns. , 2016, , .  |     | 10        |
| 20 | A chirped pulse Fourier transform microwave spectrometer with multi-antenna detection. Journal of Molecular Spectroscopy, 2021, 376, 111396.  | 1.2 | 9         |
| 21 | Health Monitoring of RAM-Coated Structures by Active Microwave Thermography. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-11.  | 4.7 | 8         |
| 22 | Application of Electrically Invisible Antennas to the Modulated Scatterer Technique. IEEE Transactions on Instrumentation and Measurement, 2015, 64, 3526-3535.                             | 4.7 | 7         |
| 23 | Nondestructive assessment of microwave absorbing structures via active microwave thermography. , 2018, , .  |     | 7         |
| 24 | Application of Embedded Dual-Loaded Modulated Scatterer Technique (MST) to Multilayer Structures. IEEE Transactions on Instrumentation and Measurement, 2012, 61, 2799-2806.                | 4.7 | 6         |
| 25 | Microwave characterization of 3D printed conductive composite materials. , 2018, , .  |     | 6         |
| 26 | Microwave sensing of sand production from petroleum wells. , 2015, , .  |     | 5         |
| 27 | Active frequency selective surface for strain sensing. , 2017, , .  |     | 5         |
| 28 | Application of electrically invisible antennas to the Modulated Scatterer Technique. , 2013, , .  |     | 4         |
| 29 | Effect of illumination pattern on FSS-based sensor resolution. , 2018, , .  |     | 4         |
| 30 | Image Distortion Characterization due to Equivalent Monostatic Approximation in Near-Field Bistatic SAR Imaging. IEEE Transactions on Instrumentation and Measurement, 2020, 69, 4898-4907. | 4.7 | 4         |
| 31 | Active Microwave Thermographic Measurement of In-Plane Thermal Diffusivity. , 2020, , .   |     | 4         |
| 32 | Theoretical and experimental foundation of dual-loaded dipole scatterer as an embedded sensor. , 2010, , .  |     | 3         |
| 33 | Microwave characterization of fly ash geopolymerization. , 2016, , .  |     | 3         |
| 34 | Microwave materials characterization of geopolymer precursor powders. , 2018, , .   |     | 3         |
| 35 | Application of the dual-loaded Modulated Scatterer Technique to multilayered material evaluation. , 2011, , .   |     | 2         |
| 36 | Design of a new bi-state active frequency selective surface. , 2016, , .  |     | 2         |

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|----|---|-----|-----------|
| 37 | Wideband Multi-Loop FSS Absorber Design Based on Q- factor Approach. , 2018, , .  |     | 2         |
| 38 | A Comprehensive Bi-Static Amplitude Compensated Range Migration Algorithm (AC-RMA). IEEE Transactions on Image Processing, 2021, 30, 7038-7049.   | 9.8 | 2         |
| 39 | Synthetic beamforming for localized FSS-based sensing. , 2018, , .  |     | 1         |
| 40 | Microwave Materials Characterization of Biodegradable Glass. , 2020, , .  |     | 1         |
| 41 | Adjustable Resolution for Localized FSS-Based Sensing by Synthetic Beamforming. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.  | 4.7 | 1         |
| 42 | In Memoriam Frank Reyes. IEEE Instrumentation and Measurement Magazine, 2015, 18, 63-67.  | 1.6 | 0         |
| 43 | Mutual coupling reduction in orthogonally fed aperture-coupled patch antennas via an integrated metasurface. , 2017, , .  |     | 0         |
| 44 | Improved grounded coplanar waveguide-to-multilayer substrate integrated waveguide transition for efficient feeding of an antipodal Vivaldi antenna for imaging applications. Microwave and Optical Technology Letters, 2021, 63, 1712-1718. | 1.4 | 0         |
| 45 | Pulsed-Active Microwave Thermography. , 2022, , .   |     | 0         |