

# Anthony J Peyton

## List of Publications by Year in descending order

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202  
papers

3,986  
citations

109321

35  
h-index

161849

54  
g-index

203  
all docs

203  
docs citations

203  
times ranked

1675  
citing authors

#	ARTICLE	IF	CITATIONS
1	An overview of electromagnetic inductance tomography: description of three different systems. <i>Measurement Science and Technology</i> , 1996, 7, 261-271.	2.6	172
2	Thickness measurement of non-magnetic plates using multi-frequency eddy current sensors. <i>NDT and E International</i> , 2007, 40, 43-48.	3.7	145
3	Chemical engineering applications of electrical process tomography. <i>Sensors and Actuators B: Chemical</i> , 2003, 92, 17-24.	7.8	127
4	Hardware and software design for an electromagnetic induction tomography (EMT) system for high contrast metal process applications. <i>Measurement Science and Technology</i> , 2006, 17, 111-118.	2.6	101
5	Simultaneous Measurement of Distance and Thickness of a Thin Metal Plate With an Electromagnetic Sensor Using a Simplified Model. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2004, 53, 1335-1338.	4.7	87
6	A planar EMT system for the detection of faults on thin metallic plates. <i>Measurement Science and Technology</i> , 2006, 17, 2130-2135.	2.6	87
7	Noncontact Characterization of Carbon-Fiber-Reinforced Plastics Using Multifrequency Eddy Current Sensors. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2009, 58, 738-743.	4.7	73
8	Reducing the Lift-Off Effect on Permeability Measurement for Magnetic Plates From Multifrequency Induction Data. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2018, 67, 167-174.	4.7	73
9	Determination of the Magnetic Permeability, Electrical Conductivity, and Thickness of Ferrite Metallic Plates Using a Multifrequency Electromagnetic Sensing System. <i>IEEE Transactions on Industrial Informatics</i> , 2019, 15, 4111-4119.	11.3	73
10	A Novel Compensation Algorithm for Thickness Measurement Immune to Lift-Off Variations Using Eddy Current Method. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2016, 65, 2773-2779.	4.7	72
11	Thickness measurement of metallic plates with finite planar dimension using eddy current method. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2020, , 1-1.	4.7	69
12	A three-dimensional inverse finite-element method applied to experimental eddy-current imaging data. <i>IEEE Transactions on Magnetics</i> , 2006, 42, 1560-1567.	2.1	65
13	Dynamic imaging in electrical capacitance tomography and electromagnetic induction tomography using a Kalman filter. <i>Measurement Science and Technology</i> , 2007, 18, 3287-3294.	2.6	64
14	Simultaneous Noncontact Measurement of Water Level and Conductivity. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2008, 57, 2665-2669.	4.7	63
15	Time efficient auto-focussing algorithms for ultrasonic inspection of dual-layered media using Full Matrix Capture. <i>NDT and E International</i> , 2012, 47, 43-50.	3.7	63
16	Combined Electromagnetic Tomography for Determining Two-phase Flow Characteristics in the Submerged Entry Nozzle and in the Mold of a Continuous Casting Model. <i>Metallurgical and Materials Transactions B: Process Metallurgy and Materials Processing Science</i> , 2011, 42, 1201-1210.	2.1	59
17	Conductivity Lift-off Invariance and measurement of permeability for ferrite metallic plates. <i>NDT and E International</i> , 2018, 95, 36-44.	3.7	59
18	Imaging the continuous conductivity profile within layered metal structures using inductance spectroscopy. <i>IEEE Sensors Journal</i> , 2005, 5, 161-166.	4.7	57

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19	Eddy current measurements of electrical conductivity and magnetic permeability of porous metals. NDT and E International, 2006, 39, 562-568.	3.7	57
20	Analysis of the Liftoff Effect of Phase Spectra for Eddy Current Sensors. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 2775-2781.	4.7	57
21	Thickness Measurement of Metallic Plates With an Electromagnetic Sensor Using Phase Signature Analysis. IEEE Transactions on Instrumentation and Measurement, 2008, 57, 1803-1807.	4.7	54
22	A multi-frequency impedance analysing instrument for eddy current testing. Measurement Science and Technology, 2006, 17, 393-402.	2.6	53
23	Electromagnetic techniques for imaging the cross-section distribution of molten steel flow in the continuous casting nozzle. IEEE Sensors Journal, 2005, 5, 224-232.	4.7	52
24	Three-dimensional object location and inversion of the magnetic polarizability tensor at a single frequency using a walk-through metal detector. Measurement Science and Technology, 2013, 24, 045102.	2.6	50
25	Exploring the relationship between ferrite fraction and morphology and the electromagnetic properties of steel. Journal of Materials Science, 2007, 42, 6854-6861.	3.7	46
26	Measurement of permeability and ferrite/austenite phase fraction using a multi-frequency electromagnetic sensor. NDT and E International, 2009, 42, 64-68.	3.7	46
27	Measurement of Permeability for Ferrous Metallic Plates Using a Novel Lift-Off Compensation Technique on Phase Signature. IEEE Sensors Journal, 2019, 19, 7440-7446.	4.7	46
28	Acceleration of Frequency Sweeping in Eddy-Current Computation. IEEE Transactions on Magnetics, 2017, 53, 1-8.	2.1	45
29	Electromagnetic inspection of a two-phase flow of GalSn and argon. Flow Measurement and Instrumentation, 2011, 22, 10-16.	2.0	42
30	Sensitivity Formulation Including Velocity Effects for Electromagnetic Induction Systems. IEEE Transactions on Magnetics, 2010, 46, 1172-1176.	2.1	41
31	Non-contact multi-frequency magnetic induction spectroscopy system for industrial-scale bio-impedance measurement. Measurement Science and Technology, 2015, 26, 035102.	2.6	41
32	Image Reconstruction for High-Contrast Conductivity Imaging in Mutual Induction Tomography for Industrial Applications. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 2024-2032.	4.7	40
33	Imaging molten steel flow profiles. Measurement Science and Technology, 2001, 12, 1132-1138.	2.6	39
34	Classification of Nonferrous Metals Using Magnetic Induction Spectroscopy. IEEE Transactions on Industrial Informatics, 2018, 14, 3477-3485.	11.3	39
35	Eddy Current Measurement of the Electrical Conductivity and Porosity of Metal Foams. IEEE Transactions on Instrumentation and Measurement, 2006, 55, 570-576.	4.7	37
36	Calculation of the forward problem for absolute image reconstruction in MIT. Physiological Measurement, 2008, 29, S455-S464.	2.1	37

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37	The Development of a Multifrequency Electromagnetic Instrument for Monitoring the Phase Transformation of Hot Strip Steel. IEEE Transactions on Instrumentation and Measurement, 2007, 56, 879-886.	4.7	36
38	A Model for the Forward Problem in Magnetic Induction Tomography Using Boundary Integral Equations. IEEE Transactions on Magnetics, 2008, 44, 2262-2267.	2.1	36
39	Simulation of ultrasonic and EMAT arrays using FEM and FDTD. Ultrasonics, 2016, 66, 154-165.	3.9	36
40	Magnetic Polarizability Tensor Spectroscopy for Low Metal Anti-Personnel Mine Surrogates. IEEE Sensors Journal, 2016, 16, 3775-3783.	4.7	36
41	Thickness measurement of non-magnetic steel plates using a novel planar triple-coil sensor. NDT and E International, 2019, 107, 102148.	3.7	36
42	Evaporation of Sessile Drops: Application of the Quartz Crystal Microbalance. Langmuir, 2000, 16, 4024-4033.	3.5	34
43	Measurement of the electrical conductivity of open-celled aluminium foam using non-contact eddy current techniques. NDT and E International, 2005, 38, 359-367.	3.7	34
44	Development of multiple frequency electromagnetic induction systems for steel flow visualization. Measurement Science and Technology, 2008, 19, 094008.	2.6	34
45	Use of electromagnetic induction tomography for monitoring liquid metal/gas flow regimes on a model of an industrial steel caster. Measurement Science and Technology, 2011, 22, 015501.	2.6	33
46	A Method to Solve the Forward Problem in Magnetic Induction Tomography Based on the Weakly Coupled Field Approximation. IEEE Transactions on Biomedical Engineering, 2010, 57, 914-921.	4.2	32
47	Measurement of Ferromagnetic Slabs Permeability Based on a Novel Planar Triple-Coil Sensor. IEEE Sensors Journal, 2020, 20, 2904-2910.	4.7	31
48	Measurement of the magnetic properties of P9 and T22 steel taken from service in power station. Journal of Magnetism and Magnetic Materials, 2014, 360, 52-58.	2.3	30
49	Evaluating the Permeability Distribution of a Layered Conductor by Inductance Spectroscopy. IEEE Transactions on Magnetics, 2006, 42, 3645-3651.	2.1	27
50	On the Low-Frequency Electromagnetic Responses of In-Line Metal Detectors to Metal Contaminants. IEEE Transactions on Instrumentation and Measurement, 2014, 63, 3181-3189.	4.7	26
51	Quantification of the phase fraction in steel using an electromagnetic sensor. NDT and E International, 2014, 67, 31-35.	3.7	26
52	KNN classification of metallic targets using the magnetic polarizability tensor. Measurement Science and Technology, 2014, 25, 055105.	2.6	25
53	A Novel Perturbed Matrix Inversion Based Method for the Acceleration of Finite Element Analysis in Crack-Scanning Eddy Current NDT. IEEE Access, 2020, 8, 12438-12444.	4.2	24
54	Characterization of Decarburization of Steels Using a Multifrequency Electromagnetic Sensor: Experiment and Modeling. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2009, 40, 745-756.	2.2	23

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55	Liquid metal experiments with swirling flow submerged entry nozzle. <i>Ironmaking and Steelmaking</i> , 2012, 39, 1-9.	2.1	23
56	An Equivalent-Effect Phenomenon in Eddy Current Non-Destructive Testing of Thin Structures. <i>IEEE Access</i> , 2019, 7, 70296-70307.	4.2	23
57	Theoretical and numerical approaches to the forward problem and sensitivity calculation of a novel contactless inductive flow tomography (CIFT). <i>Measurement Science and Technology</i> , 2009, 20, 105503.	2.6	22
58	Imaging x70 weld cross-section using electromagnetic testing. <i>NDT and E International</i> , 2018, 98, 155-160.	3.7	21
59	Combining Electromagnetic Spectroscopy and Ground-Penetrating Radar for the Detection of Anti-Personnel Landmines. <i>Sensors</i> , 2019, 19, 3390.	3.8	21
60	Using electromagnetic methods to monitor the transformation of steel samples. <i>Transactions of the Institute of Measurement and Control</i> , 2001, 23, 21-29.	1.7	20
61	Feasibility study of NIR diffuse optical tomography on agricultural produce. <i>Postharvest Biology and Technology</i> , 2008, 48, 223-230.	6.0	20
62	A Very-Low-Frequency Electromagnetic Inductive Sensor System for Workpiece Recognition Using the Magnetic Polarizability Tensor. <i>IEEE Sensors Journal</i> , 2017, 17, 2703-2712.	4.7	20
63	Lift-off invariant inductance of steels in multi-frequency eddy-current testing. <i>NDT and E International</i> , 2021, 121, 102458.	3.7	19
64	Electromagnetic Imaging Using Mutual Inductance Tomography: Potential for process applications. <i>Particle and Particle Systems Characterization</i> , 1995, 12, 68-74.	2.3	18
65	Measurement and modeling of the electromagnetic response to phase transformation in steels. <i>Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science</i> , 2004, 35, 965-972.	2.2	18
66	Determination of the magnetic polarizability tensor and three dimensional object location for multiple objects using a walk-through metal detector. <i>Measurement Science and Technology</i> , 2014, 25, 055107.	2.6	18
67	Modelling the electromagnetic response of two-phase steel microstructures. <i>NDT and E International</i> , 2010, 43, 305-315.	3.7	17
68	Measurement of the Radius of Metallic Plates Based on a Novel Finite Region Eigenfunction Expansion (FREE) Method. <i>IEEE Sensors Journal</i> , 2020, 20, 15099-15106.	4.7	17
69	Towards metal detection and identification for humanitarian demining using magnetic polarizability tensor spectroscopy. <i>Measurement Science and Technology</i> , 2015, 26, 115501.	2.6	16
70	On the magnetic polarizability tensor of US coinage. <i>Measurement Science and Technology</i> , 2018, 29, 035501.	2.6	16
71	A high-frequency phase feature for the measurement of magnetic permeability using eddy current sensor. <i>NDT and E International</i> , 2021, 123, 102519.	3.7	16
72	Contactless Inductive Bubble Detection in a Liquid Metal Flow. <i>Sensors</i> , 2016, 16, 63.	3.8	15

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73	Magnetic characterisation of grain size and precipitate distribution by major and minor BH loop measurements. <i>Journal of Magnetism and Magnetic Materials</i> , 2019, 481, 55-67.	2.3	15
74	Electromagnetic evaluation of the microstructure of Grade 91 tubes/pipes. <i>International Journal of Pressure Vessels and Piping</i> , 2015, 132-133, 65-71.	2.6	14
75	ABSOLUTE IMAGING OF LOW CONDUCTIVITY MATERIAL DISTRIBUTIONS USING NONLINEAR RECONSTRUCTION METHODS IN MAGNETIC INDUCTION TOMOGRAPHY. <i>Progress in Electromagnetics Research</i> , 2016, 155, 1-18.	4.4	14
76	Shunt bootstrapping technique to improve bandwidth of transimpedance amplifiers. <i>Electronics Letters</i> , 1999, 35, 369.	1.0	13
77	Modelling and experimental study of an electromagnetic sensor with an H-shaped ferrite core used for monitoring the hot transformation of steel in an industrial environment. <i>NDT and E International</i> , 2011, 44, 547-552.	3.7	13
78	Evaluating the conductivity distribution in isotropic polycrystalline graphite using spectroscopic eddy current technique for monitoring weight loss in advanced gas cooled reactors. <i>NDT and E International</i> , 2012, 51, 150-159.	3.7	13
79	Differential permeability behaviour of P9 and T22 power station Steels. <i>Journal of Magnetism and Magnetic Materials</i> , 2014, 352, 81-90.	2.3	13
80	Determining the Electromagnetic Polarizability Tensors of Metal Objects During In-Line Scanning. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2016, 65, 1172-1181.	4.7	13
81	Magnetic characterisation of microstructural feature distribution in P9 and T22 steels by major and minor BH loop measurements. <i>Journal of Magnetism and Magnetic Materials</i> , 2016, 401, 579-592.	2.3	13
82	Methods of Controlling Lift-Off in Conductivity Invariance Phenomenon for Eddy Current Testing. <i>IEEE Access</i> , 2020, 8, 122413-122421.	4.2	13
83	Conductivity Profiling of Graphite Moderator Bricks From Multifrequency Eddy Current Measurements. <i>IEEE Sensors Journal</i> , 2020, 20, 4840-4849.	4.7	13
84	Thickness measurement of circular metallic film using single-frequency eddy current sensor. <i>NDT and E International</i> , 2021, 119, 102420.	3.7	13
85	A novel design of window function modulated meander-line-coils EMATs for unidirectional Rayleigh waves generation and sidelobes suppression. <i>NDT and E International</i> , 2021, 123, 102501.	3.7	13
86	Determination of the moment of inertia of limb segments by a simple method. <i>Journal of Biomechanics</i> , 1986, 19, 405-410.	2.1	12
87	Monitoring microstructure changes in rod online by using induction spectroscopy. <i>Ironmaking and Steelmaking</i> , 2010, 37, 135-139.	2.1	12
88	Thickness Measurement of Metallic Film Based on a High-Frequency Feature of Triple-Coil Electromagnetic Eddy Current Sensor. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2021, 70, 1-8.	4.7	12
89	Non-contact characterization of hybrid aluminium/carbon-fibre-reinforced plastic sheets using multi-frequency eddy-current sensors. <i>Measurement Science and Technology</i> , 2010, 21, 105708.	2.6	11
90	A Three-Dimensional Positioning Algorithm for Networked Wireless Sensors. <i>IEEE Transactions on Instrumentation and Measurement</i> , 2011, 60, 1423-1432.	4.7	11

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91	Measurement of electromagnetic properties of power station steels. NDT and E International, 2012, 51, 135-141.	3.7	11
92	Visualization of the Flow in a Mold of Continuous Casting by Contactless Inductive Flow Tomography and Mutual Inductance Tomography. Steel Research International, 2014, 85, 1266-1273.	1.8	11
93	Three-Dimensional Electromagnetic Mixing Models for Dual-Phase Steel Microstructures. Applied Sciences (Switzerland), 2018, 8, 529.	2.5	11
94	Simultaneous Measurements of Wire Diameter and Conductivity Using a Combined Inductive and Capacitive Sensor. IEEE Sensors Journal, 2020, 20, 11617-11624.	4.7	11
95	Liftoff Tolerant Pancake Eddy-Current Sensor for the Thickness and Spacing Measurement of Nonmagnetic Plates. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	11
96	A Positioning Algorithm for Wireless Sensors in Rich Multipath Environments. IEEE Microwave and Wireless Components Letters, 2008, 18, 644-646.	3.2	10
97	Performance of a FPGA-based Direct Digitising Signal Measurement module for MIT. Journal of Physics: Conference Series, 2010, 224, 012017.	0.4	10
98	Feature detection and monitoring of eddy current imaging data by means of wavelet based singularity analysis. NDT and E International, 2010, 43, 687-694.	3.7	10
99	Evaluation of rail decarburisation depth using a H-shaped electromagnetic sensor. NDT and E International, 2012, 46, 63-69.	3.7	10
100	Improving reliability for classification of metallic objects using a WTMD portal. Measurement Science and Technology, 2015, 26, 105103.	2.6	10
101	Modeling and experimental study of a multi-frequency electromagnetic sensor system for rail decarburisation measurement. NDT and E International, 2017, 86, 1-6.	3.7	10
102	Measuring Lift-Off Distance and Electromagnetic Property of Metal Using Dual-Frequency Linearity Feature. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	10
103	Measuring the Magnetic Polarizability Tensor Using an Axial Multi-Coil Geometry. IEEE Sensors Journal, 2021, 21, 19322-19333.	4.7	10
104	Impedance spectroscopy for remote analysis of steel microstructures. Ironmaking and Steelmaking, 2005, 32, 381-384.	2.1	9
105	Application of a single step temporal imaging of magnetic induction tomography for metal flow visualisation. Insight: Non-Destructive Testing and Condition Monitoring, 2008, 50, 25-29.	0.6	9
106	High-resolution imaging of dielectric profiles by using a time-domain ultra wideband radar sensor. Measurement: Journal of the International Measurement Confederation, 2011, 44, 859-870.	5.0	9
107	Scaled Experimental Verification of Single-Well Induction Conductivity Measurement Through Nonmagnetic Casing. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 1199-1206.	4.7	9
108	Custom edgeâ€element FEM solver and its application to eddyâ€current simulation of realistic 2Mâ€element human brain phantom. Bioelectromagnetics, 2018, 39, 604-616.	1.6	9



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109	Study of asymmetric gradiometer sensor configurations for eddy current based non-destructive testing in an industrial environment. NDT and E International, 2018, 100, 1-10.	3.7	9
110	Investigating the Performance of Bi-Static GPR Antennas for Near-Surface Object Detection. Sensors, 2019, 19, 170.	3.8	9
111	Circuit for Monitoring the Median Frequency of the Spectrum of the Surface EMG Signal. IEEE Transactions on Biomedical Engineering, 1987, BME-34, 391-394.	4.2	8
112	Electromagnetic visualisation of steel flow in continuous casting nozzles. Ironmaking and Steelmaking, 2006, 33, 357-361.	2.1	8
113	Simultaneous Non-contact Measurement of Water Level and Conductivity. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2006, , .	0.0	8
114	Sample-interpolation timing: an optimized technique for the digital measurement of time of flight for $\beta^3$ rays and neutrons at relatively low sampling rates. Measurement Science and Technology, 2009, 20, 015104.	2.6	8
115	Overview of non-destructive evaluation of steel microstructures using multifrequency electromagnetic sensors. Ironmaking and Steelmaking, 2011, 38, 510-517.	2.1	8
116	Spectroscopic identification of anti-personnel mine surrogates from planar sensor measurements. , 2016, , .		8
117	Classification of metallic targets using a single frequency component of the magnetic polarisability tensor. Journal of Physics: Conference Series, 2013, 450, 012038.	0.4	7
118	Development and deployment of online multifrequency electromagnetic system to monitor steel hot transformation on runout table of hot strip mill. Ironmaking and Steelmaking, 2014, 41, 685-693.	2.1	7
119	Measurement system for determining the magnetic polarizability tensor of small metal targets. , 2015, , .		7
120	Measurements of Thickness for Metallic Plates With Co-Axial Holes Using a Novel Analytical Method With the Modified Integration Range. IEEE Access, 2020, 8, 198301-198306.	4.2	7
121	Depth Evaluation for Metal Surface Defects by Eddy Current Testing Using Deep Residual Convolutional Neural Networks. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-13.	4.7	7
122	Antenna Design Considerations for Ground Penetrating Radar Landmine Detection. IEEE Transactions on Antennas and Propagation, 2022, 70, 4273-4286.	5.1	7
123	Imaging the transformation of hot strip steel using magnetic techniques. Journal of Electronic Imaging, 2001, 10, 669.	0.9	6
124	Non-Contact Characterisation of Carbon-Fibre-Reinforced Plastics (CFRP) Using Multi-frequency Eddy Current Sensors. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2007, , .	0.0	6
125	Non-contact measurement of water surface level from phase values of inductive measurements. , 2012, , .		6
126	Magnetic Evaluation of Microstructure Changes in 9Cr-1Mo and 2.25Cr-1Mo Steels Using Electromagnetic Sensors. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2013, 44, 5897-5909.	2.2	6



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127	Design of electromagnetic sensor arrays optimised for inversion of the magnetic polarisability tensor. , 2015, , .		6
128	GPR combined with a positioning system to detect anti-personnel landmines. , 2015, , .		6
129	Determination of Surface Crack Orientation Based on Thin-Skin Regime Using Triple-Coil Driveâ€“Pickup Eddy-Current Sensor. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	6
130	A Review of Passive and Active Ultra-Wideband Baluns for Use in Ground Penetrating Radar. Remote Sensing, 2021, 13, 1899.	4.0	6
131	High temperature magnetic characterisation of structural steels using Epstein frame. Measurement Science and Technology, 2021, 32, 125601.	2.6	6
132	The application of parametric 3D finite element modelling techniques to evaluate the performance of a magnetic sensor system. Sensors and Actuators A: Physical, 2001, 93, 109-116.	4.1	5
133	Unique broad-spectrum neutron sensing instrument. Review of Scientific Instruments, 2001, 72, 2043-2047.	1.3	5
134	Computation of 3-D Sensitivity Coefficients in Magnetic Induction Tomography Using Boundary Integral Equations and Radial Basis Functions. IEEE Transactions on Magnetics, 2008, 44, 2268-2276.	2.1	5
135	Assessing the feasibility of detecting a hemorrhagic type stroke using a 16 channel magnetic induction system. Journal of Physics: Conference Series, 2010, 224, 012047.	0.4	5
136	Non-contact characterisation of conductivity gradient in isotropic polycrystalline graphite using inductance spectroscopy measurements. Insight: Non-Destructive Testing and Condition Monitoring, 2011, 53, 90-95.	0.6	5
137	Detection of creep degradation during pressure vessel testing using electromagnetic sensor technology. Materials at High Temperatures, 2017, 34, 448-457.	1.0	5
138	A Class D Power Amplifier for Multifrequency Eddy Current Testing Based on Multisimultaneous-Frequency Selective Harmonic Elimination Pulsewidth Modulation. IEEE Transactions on Industrial Electronics, 2020, 67, 8799-8807.	7.9	5
139	Detection of Metallic Objects in Mineralized Soil Using Magnetic Induction Spectroscopy. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 27-36.	6.3	5
140	A comparison of non-linear optimisation algorithms for recovering the conductivity depth profile of an electrically conductive block using eddy current inspection. NDT and E International, 2022, 125, 102571.	3.7	5
141	Evaluation of the effects of the screen based on an analytical solution of a simplified MIT system. Journal of Physics: Conference Series, 2010, 224, 012154.	0.4	4
142	Measurement of decarburisation of steel rods with an electromagnetic sensor using an analytical model. NDT and E International, 2010, 43, 667-670.	3.7	4
143	Subsurface cracks in AGR graphite bricks. NDT and E International, 2014, 66, 72-81.	3.7	4
144	Rapid non-contact relative permittivity measurement of fruits and vegetables using magnetic induction spectroscopy. , 2015, , .		4

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145	Evaluation of the thin-skin approximation boundary element method for electromagnetic induction scattering problems. , 2016, , .		4
146	Sparse electromagnetic tomography based on matching pursuit algorithms. , 2016, , .		4
147	Electromagnetic tensor spectroscopy for sorting of shredded metallic scrap. , 2017, , .		4
148	Measuring Coaxial Hole Size of Finite-Size Metallic Disk Based on a Dual-Constraint Integration Feature Using Multifrequency Eddy Current Testing. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-7.	4.7	4
149	Inversion of Distance and Magnetic Permeability Based on Material-Independent and Liftoff Insensitive Algorithms Using Eddy Current Sensor. IEEE Transactions on Instrumentation and Measurement, 2021, 70, 1-9.	4.7	4
150	Analysis of Tilt Effect on Notch Depth Profiling Using Thin-Skin Regime of Driver-Pickup Eddy-Current Sensor. Sensors, 2021, 21, 5536.	3.8	4
151	A Novel Acceleration Method for Crack Computation Using Finite Element Analysis in Eddy Current Testing. IEEE Transactions on Instrumentation and Measurement, 2022, 71, 1-9.	4.7	4
152	Development of sensor arrays for electromagnetic inductive tomography: compensation of large background signal values. Transactions of the Institute of Measurement and Control, 1998, 20, 195-202.	1.7	3
153	Measurement and modeling of the electromagnetic response to phase transformation in steels. Metallurgical and Materials Transactions A: Physical Metallurgy and Materials Science, 2004, 35, 965-972.	2.2	3
154	Time-domain reconstruction using sensitivity coefficients for limited view ultrawide band tomography. Review of Scientific Instruments, 2007, 78, 084703.	1.3	3
155	Thickness Measurement of Metallic Plates with an Electromagnetic Sensor Using hase Signature Analysis. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2007, , .	0.0	3
156	Prediction of interlamellar pearlite spacing of tyre bead wires after patenting using electromagnetic techniques. Insight: Non-Destructive Testing and Condition Monitoring, 2013, 55, 132-135.	0.6	3
157	Magnetic sensing for microstructural assessment of power station steels: Magnetic Barkhausen noise and minor loop measurements. Journal of Physics: Conference Series, 2013, 450, 012041.	0.4	3
158	Prediction of the asymptotical magnetic polarization tensors for cylindrical samples using the boundary element method. , 2015, , .		3
159	Determination of material and geometric properties of metallic objects using the magnetic polarisability tensor. , 2015, , .		3
160	A Comparison of Solid and Loaded Bowtie Antennas in GPR for the Detection of Buried Landmines. , 2018, , .		3
161	Design and construction of a bespoke system for the detection of buried, iron-rich meteorites in Antarctica. Antarctic Science, 2020, 32, 58-69.	0.9	3
162	Threat Identification in Humanitarian Demining Using Machine Learning and Spectroscopic Metal Detection. Lecture Notes in Computer Science, 2019, , 542-549.	1.3	3

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163	A feasibility study on the delectability of Edema using Magnetic Induction Tomography using an Analytical Model. IFMBE Proceedings, 2009, , 736-739.	0.3	3
164	Measurement of GMPT Coefficients for Improved Object Characterisation in Metal Detection. IEEE Sensors Journal, 2022, 22, 2430-2446.	4.7	3
165	Modelling of the effect of microstructural variation on inductive sensor measurements of phase transformation in steel. Journal of Physics: Conference Series, 2005, 15, 131-136.	0.4	2
166	Determining the Step-change Conductivity Profile within Layered Metal Structures Using Inductance Spectroscopy. Conference Record - IEEE Instrumentation and Measurement Technology Conference, 2006, , .	0.0	2
167	Non-contact characterisation of Carbon Fibre Reinforced Plastics in hybrid aluminium / CFRP sheets using multi-frequency eddy current sensors. , 2009, , .		2
168	Improvement of signal to noise ratio and frame capture rate in magnetic inductance tomography (MIT) by exploiting transient process analysis. , 2009, , .		2
169	Improvement of signal-to-noise ratio and image stability in magnetic inductance tomography by exploiting transient response analysis. IET Image Processing, 2011, 5, 508.	2.5	2
170	Measurement of electromagnetic properties of power station steels. , 2012, , .		2
171	The 3-D Positioning of Wireless Sensors in Dispersive Propagation Media. IEEE Transactions on Instrumentation and Measurement, 2013, 62, 2338-2352.	4.7	2
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