

# Andrea Benedetto

## List of Publications by Year in descending order

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Version: 2024-02-01

48  
papers

1,521  
citations

304743

22  
h-index

414414

32  
g-index

51  
all docs

51  
docs citations

51  
times ranked

995  
citing authors

#	ARTICLE	IF	CITATIONS
1	An overview of ground-penetrating radar signal processing techniques for road inspections. Signal Processing, 2017, 132, 201-209.	3.7	206
2	Indirect diagnosis of pavement structural damages using surface GPR reflection techniques. Journal of Applied Geophysics, 2007, 62, 107-123.	2.1	113
3	Water content evaluation in unsaturated soil using GPR signal analysis in the frequency domain. Journal of Applied Geophysics, 2010, 71, 26-35.	2.1	98
4	A driving simulator study of driver performance on deceleration lanes. Accident Analysis and Prevention, 2012, 45, 195-203.	5.7	65
5	A pilot study on microwave heating for production and recycling of road pavement materials. Construction and Building Materials, 2013, 44, 351-359.	7.2	64
6	A three dimensional approach for tracking cracks in bridges using GPR. Journal of Applied Geophysics, 2013, 97, 37-44.	2.1	64
7	An integrated investigative approach in health monitoring of masonry arch bridges using GPR and InSAR technologies. NDT and E International, 2020, 115, 102288.	3.7	60
8	Novel perspectives in bridges inspection using GPR. Nondestructive Testing and Evaluation, 2012, 27, 239-251.	2.1	59
9	Clay content evaluation in soils through GPR signal processing. Journal of Applied Geophysics, 2013, 97, 69-80.	2.1	59
10	GPR applications for geotechnical stability of transportation infrastructures. Nondestructive Testing and Evaluation, 2012, 27, 253-262.	2.1	57
11	Remote Sensing of Soil Moisture Content by GPR Signal Processing in the Frequency Domain. IEEE Sensors Journal, 2011, 11, 2432-2441.	4.7	50
12	Transport Infrastructure Monitoring by InSAR and GPR Data Fusion. Surveys in Geophysics, 2020, 41, 371-394.	4.6	48
13	Reliability of signal processing technique for pavement damages detection and classification using ground penetrating radar. IEEE Sensors Journal, 2005, 5, 471-480.	4.7	47
14	Railway ballast condition assessment using ground-penetrating radar – An experimental, numerical simulation and modelling development. Construction and Building Materials, 2017, 140, 508-520.	7.2	41
15	Applications of Ground Penetrating Radar in civil engineering &#x2014; COST action TU1208. , 2013, , .		37
16	Testing Sentinel-1 SAR Interferometry Data for Airport Runway Monitoring: A Geostatistical Analysis. Sensors, 2021, 21, 5769.	3.8	37
17	An experimental-based model for the assessment of the mechanical properties of road pavements using ground-penetrating radar. Construction and Building Materials, 2018, 165, 966-974.	7.2	35
18	An investigation into the railway ballast dielectric properties using different GPR antennas and frequency systems. NDT and E International, 2018, 93, 131-140.	3.7	35

#	ARTICLE	IF	CITATIONS
19	Frequency dependent electric properties of homogeneous multi-phase lossy media in the ground-penetrating radar frequency range. <i>Journal of Applied Geophysics</i> , 2013, 97, 81-88.	2.1	31
20	A spectral analysis of ground-penetrating radar data for the assessment of the railway ballast geometric properties. <i>NDT and E International</i> , 2017, 90, 39-47.	3.7	31
21	Mapping the spatial variation of soil moisture at the large scale using GPR for pavement applications. <i>Near Surface Geophysics</i> , 2015, 13, 269-278.	1.2	29
22	GPR analysis of clayey soil behaviour in unsaturated conditions for pavement engineering and geoscience applications. <i>Near Surface Geophysics</i> , 2016, 14, 127-144.	1.2	27
23	GPR Applications Across Engineering and Geosciences Disciplines in Italy: A Review. <i>IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing</i> , 2016, 9, 2952-2965.	4.9	26
24	Soil moisture mapping using GPR for pavement applications. , 2013, , .		24
25	Elliptic model for prediction of deflections induced by a Light Falling Weight Deflectometer. <i>Journal of Terramechanics</i> , 2012, 49, 1-12.	3.1	22
26	An Enhanced Data Processing Framework for Mapping Tree Root Systems Using Ground Penetrating Radar. <i>Remote Sensing</i> , 2020, 12, 3417.	4.0	16
27	Health monitoring approach for transport infrastructure and bridges by satellite remote sensing Persistent Scatterers Interferometry (PSI). , 2020, , .		16
28	Investigating driver reaction time and speed during mobile phone conversations with a lead vehicle in front: A driving simulator comprehensive study. <i>Journal of Transportation Safety and Security</i> , 2018, 10, 5-24.	1.6	15
29	Bridge monitoring and assessment by high-resolution satellite remote sensing technologies. , 2020, , .		15
30	A Computer-Aided Model for the Simulation of Railway Ballast by Random Sequential Adsorption Process. <i>Computer-Aided Civil and Infrastructure Engineering</i> , 2018, 33, 243-257.	9.8	14
31	Novel Perspectives in the Monitoring of Transport Infrastructures by Sentinel-1 and Cosmo-SkyMed Multi-Temporal SAR Interferometry. , 2021, , .		12
32	Multi-Temporal SAR Interferometry for Structural Assessment of Bridges: The Rochester Bridge Case Study. , 2021, , .		11
33	Evaluation of geotechnical stability of road using GPR. , 2011, , .		10
34	Monitoring of bridges by MT-InSAR and unsupervised machine learning clustering techniques. , 2021, , .		7
35	Integration of Remote Sensing and Ground-Based Non-Destructive Methods in Transport Infrastructure Monitoring: Advances, Challenges and Perspectives. , 2021, , .		7
36	Integrated road pavement survey using GPR and LFWD. , 2010, , .		6

#	ARTICLE	IF	CITATIONS
37	Guest Editorial: Data Fusion, integration and advances of non-destructive testing methods in civil and environmental engineering. NDT and E International, 2020, 115, 102286.	3.7	6
38	Non-destructive technologies for sustainable assessment and monitoring of railway infrastructure: a focus on GPR and InSAR methods. Environmental Earth Sciences, 2021, 80, 1.	2.7	5
39	GPR Signal processing in frequency domain using Artificial Neural Network for water content prediction in unsaturated subgrade. , 2010, , .		4
40	Guest Editorial: Recent Advances in Non-destructive Testing Methods. Surveys in Geophysics, 2020, 41, 365-369.	4.6	4
41	Preface to the Special Issue on "Ground Penetrating Radar for nondestructive evaluation of pavements, bridges and subsurface infrastructures". Journal of Applied Geophysics, 2013, 97, 1-2.	2.1	3
42	A GPR Spectral-Based Processing Method for Minimisation of Concrete Sleepers Effects in Railway Ballast Investigations. , 2018, , .		2
43	Integrated Methodology for Design of Polluted Water Control System of Road Infrastructures for Environmental Protection. Journal of Transportation Engineering, 2003, 129, 84-92.	0.9	1
44	The ArchaeoTrack Project: Use of Ground-Penetrating Radar for Preventive Conservation of Buried Archaeology Towards the Development of a Virtual Museum. , 2018, , .		1
45	Road safety and simulation conferences: An interdisciplinary network for safer roads. Journal of Safety Research, 2014, 49, 3-4.	3.6	0
46	Foreword to the Special Issue on Civil and Environmental Engineering Applications of Ground Penetrating Radar. Near Surface Geophysics, 2016, 14, 103-104.	1.2	0
47	Structural detailing of buried Roman baths through GPR inspection. Archaeological Prospection, 2023, 30, 3-11.	2.2	0
48	Sensing Advancement and Health Monitoring of Transport Structures. Sensors, 2021, 21, 7621.	3.8	0