

# Rocco Pierri

## List of Publications by Year in descending order

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75  
papers

1,147  
citations

361045

20  
h-index

454577

30  
g-index

76  
all docs

76  
docs citations

76  
times ranked

309  
citing authors

#	ARTICLE	IF	CITATIONS
1	A Kirchhoff-Based Shape Reconstruction Algorithm for the Multimono-static Configuration: The Realistic Case of Buried Pipes. IEEE Transactions on Geoscience and Remote Sensing, 2008, 46, 3031-3038.	2.7	86
2	On the information content of the radiated fields in the near zone over bounded domains. Inverse Problems, 1998, 14, 321-337.	1.0	79
3	Information content of Born scattered fields: results in the circular cylindrical case. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1998, 15, 1909.	0.8	72
4	On the local minima in phase reconstruction algorithms. Radio Science, 1996, 31, 1887-1899.	0.8	55
5	In-depth resolution for a strip source in the Fresnel zone. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2001, 18, 352.	0.8	49
6	Sampling approach for singular system computation of a radiation operator. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, 353.	0.8	39
7	Application of Inverse Source Reconstruction to Conformal Antennas Synthesis. IEEE Transactions on Antennas and Propagation, 2018, 66, 1436-1445.	3.1	37
8	Role of support information and zero locations in phase retrieval by a quadratic approach. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1999, 16, 1845.	0.8	36
9	Inverse scattering under the distorted Born approximation for cylindrical geometries. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1999, 16, 1779.	0.8	35
10	Role of diversity on the singular values of linear scattering operators: the case of strip objects. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2013, 30, 2266.	0.8	30
11	RF breast cancer detection employing a noncharacterized vivaldi antenna and a MUSIC-inspired algorithm. International Journal of RF and Microwave Computer-Aided Engineering, 2013, 23, 598-609.	0.8	29
12	Resolution limits in inverse source problem for strip currents not in Fresnel zone. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, 826.	0.8	27
13	Performance of Phase Retrieval via Phaselift and Quadratic Inversion in Circular Scanning Case. IEEE Transactions on Antennas and Propagation, 2019, 67, 7528-7537.	3.1	25
14	INVERSE SOURCE OF CIRCUMFERENCE GEOMETRIES: SVD INVESTIGATION BASED ON FOURIER ANALYSIS. Progress in Electromagnetics Research M, 2018, 76, 217-230.	0.5	24
15	Number of degrees of freedom of the radiated field over multiple bounded domains. Optics Letters, 2007, 32, 3113.	1.7	23
16	On the Singular Spectrum of the Radiation Operator for Multiple and Extended Observation Domains. International Journal of Antennas and Propagation, 2013, 2013, 1-10.	0.7	23
17	Inverse source in the near field: the case of a strip current. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2018, 35, 755.	0.8	23
18	INFORMATION CONTENT IN INVERSE SOURCE WITH SYMMETRY AND SUPPORT PRIORS. Progress in Electromagnetics Research C, 2018, 80, 39-54.	0.6	22

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19	Inverse source in the presence of a reflecting plane for the strip case. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 2814.	0.8	20
20	Depth resolution in strip current reconstructions in near non-reactive zone. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2019, 36, 975.	0.8	20
21	TWI EXPERIMENTAL RESULTS BY A LINEAR INVERSE SCATTERING APPROACH. Progress in Electromagnetics Research, 2009, 91, 259-272.	1.6	19
22	Inverse scattering in the presence of a reflecting plane. Journal of Optics (United Kingdom), 2016, 18, 025603.	1.0	19
23	Localizing Thin Metallic Cylinders by a 2.5-D Linear Distributional Approach: Experimental Results. IEEE Transactions on Antennas and Propagation, 2008, 56, 2630-2637.	3.1	18
24	Inverse Source on Conformal Conic Geometries. IEEE Transactions on Antennas and Propagation, 2021, 69, 1596-1609.	3.1	18
25	In-depth resolution from multifrequency Born fields scattered by a dielectric strip in the Fresnel zone. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2002, 19, 1234.	0.8	16
26	Near-Field <i>Transverse</i> Resolution in Planar Source Reconstructions. IEEE Transactions on Antennas and Propagation, 2021, 69, 4836-4845.	3.1	16
27	Near-Field Warping Sampling Scheme for Broad-Side Antenna Characterization. Electronics (Switzerland), 2020, 9, 1047.	1.8	15
28	On Data Increasing in Phase Retrieval via Quadratic Inversion: Flattening Manifold and Local Minima. IEEE Transactions on Antennas and Propagation, 2020, 68, 8104-8113.	3.1	15
29	Resolution in two-dimensional tomographic reconstructions in the Fresnel zone from Born scattered fields. Journal of Optics, 2004, 6, 529-536.	1.5	14
30	Reconstruction of complex signals from intensities of Fourier-transform pairs. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1996, 13, 1546.	0.8	13
31	TRANSVERSE RESOLUTION IN MICROWAVE IMAGING FOR STRIP OBJECTS BURIED IN A HALF-SPACE MEDIUM. Progress in Electromagnetics Research M, 2020, 88, 145-157.	0.5	13
32	Localization of a planar perfect-electric-conducting interface embedded in a half-space. Journal of Optics, 2006, 8, 10-16.	1.5	12
33	Spatial Sampling in Monostatic Radar Imaging. IEEE Geoscience and Remote Sensing Letters, 2022, 19, 1-5.	1.4	12
34	Radiation of a Circular Arc Source in a Limited Angle for Nonuniform Conformal Arrays. IEEE Transactions on Antennas and Propagation, 2021, 69, 4955-4966.	3.1	12
35	Valid angle criterion and radiation pattern estimation via singular value decomposition for planar scanning. IET Microwaves, Antennas and Propagation, 2019, 13, 2342-2348.	0.7	12
36	Radiation Properties of Conformal Antennas: The Elliptical Source. Electronics (Switzerland), 2019, 8, 531.	1.8	11

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37	NDF of Scattered Fields for Strip Geometries. Electronics (Switzerland), 2021, 10, 202.	1.8	11
38	Sensor Arrangement in Monostatic Subsurface Radar Imaging. IEEE Open Journal of Antennas and Propagation, 2021, 2, 3-13.	2.5	10
39	Synthesis of Angle Arrays by the NDF of the Radiation Integral. IEEE Transactions on Antennas and Propagation, 2021, 69, 2092-2102.	3.1	10
40	NDF and PSF Analysis in Inverse Source and Scattering Problems for Circumference Geometries. Electronics (Switzerland), 2021, 10, 2157.	1.8	10
41	Multistatic "multiview resolution from Born fields for strips in Fresnel zone. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2004, 21, 1402.	0.8	9
42	Localization of Interfaces Embedded in a Half-Space by a Linear Inverse Scattering Algorithm. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 3661-3671.	2.7	9
43	PSF Analysis of the Inverse Source and Scattering Problems for Strip Geometries. Electronics (Switzerland), 2021, 10, 754.	1.8	9
44	Sensor Arrangement in Through-the Wall Radar Imaging. IEEE Open Journal of Antennas and Propagation, 2022, 3, 333-341.	2.5	9
45	Asymptotic Study of the Radiation Operator for the Strip Current in Near Zone. Electronics (Switzerland), 2020, 9, 911.	1.8	8
46	Linear tomographic inversion of stepped-frequency GPR data: experimental results on two test-sites. AEU - International Journal of Electronics and Communications, 2005, 59, 329-336.	1.7	7
47	Scattered Far-Field Sampling in Multi-Static Multi-Frequency Configuration. Sensors, 2021, 21, 4724.	2.1	7
48	Performance of the Linear Model Scattering of 2D Full Object with Limited Data. Sensors, 2022, 22, 3868.	2.1	7
49	NDF of the Near-Zone Field on a Line Perpendicular to the Source. IEEE Access, 2021, 9, 91649-91660.	2.6	6
50	Resolution of Born Scattering in Curve Geometries: Aspect-Limited Observations and Excitations. Electronics (Switzerland), 2021, 10, 3089.	1.8	6
51	On the Sampling of the Fresnel Field Intensity over a Full Angular Sector. Electronics (Switzerland), 2021, 10, 832.	1.8	5
52	The Dimension of Phaseless Near-Field Data by Asymptotic Investigation of the Lifting Operator. Electronics (Switzerland), 2021, 10, 1658.	1.8	5
53	A novel phase retrieval technique based on propagation diversity via a dielectric slab. Optics Express, 2008, 16, 7418.	1.7	4
54	On the Number of Independent Equations in Phase Retrieval Problem: Numerical Results in Circular Case., 2018, , .		4

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55	An SVD Approach for Estimating the Dimension of Phaseless Data on Multiple Arcs in Fresnel Zone. Electronics (Switzerland), 2021, 10, 606.	1.8	3
56	A PSF Approach to Far Field Discretization for Conformal Sources. IEEE Access, 2022, 10, 23394-23407.	2.6	3
57	Dimension and Sampling of the Near-Field and Its Intensity Over Curves. IEEE Open Journal of Antennas and Propagation, 2022, 3, 412-424.	2.5	3
58	Optimal choice of measurement points in near field: numerical results. , 2018, , .		2
59	Comparison of Some Geometries in the Inverse Source Problem. , 2019, , .		2
60	Fourier Analysis for the Reconstruction of Radiating Sources on Conic Curves. , 2019, , .		2
61	Experimental Validation of a Microwave Imaging Method for Shallow Buried Target Detection by Under-Sampled Data and a Non-Cooperative Source. Sensors, 2021, 21, 5148.	2.1	2
62	On the singular spectrum of the radiation operator in near reactive zone. , 2017, , .		1
63	NDF and PSF Numeric Results of Elliptical Sources. , 2019, , .		1
64	Element positioning effect on the performance of conformal arrays: synthesis and diagnostics. , 2020, , .		1
65	Optimal Field Sampling of Arc Sources via Asymptotic Study of the Radiation Operator. Electronics (Switzerland), 2022, 11, 270.	1.8	1
66	Imaging of a rotationally symmetric dielectric cylinder by a quadratic approach: errata. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1998, 15, 549.	0.8	0
67	Inverse scattering under the distorted Born approximation for cylindrical geometries: errata. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1999, 16, 2310.	0.8	0
68	Inverse Scattering and Microwave Tomography in Safety, Security, and Health. International Journal of Antennas and Propagation, 2013, 2013, 1-2.	0.7	0
69	Enhancing TSVD-distributional method by passive PEC grid. , 2014, , .		0
70	Half-space impact in multi-monostatic linear inverse scattering: numerical results. , 2019, , .		0
71	Numeric Simulations on the Choice of Curve Parameters for ED and SVD Analysis of Radiating Sources. , 2019, , .		0
72	Microwave imaging via a migration algorithm and effective spatial sampling. , 2021, , .		0

#	ARTICLE	IF	CITATIONS
73	Sampling approach for the discretization of scattering operator in inhomogeneous medium. , 2021, , .		0
74	An efficient sampling scheme in phaseless near-field techniques. , 2021, , .		0
75	Non-uniform near field sampling for conformal 3D sources. , 2021, , .		0