

Leung Tsang

List of Publications by Year in descending order

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264
papers

9,600
citations

87888

38
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51608

86
g-index

272
all docs

272
docs citations

272
times ranked

4867
citing authors

#	ARTICLE	IF	CITATIONS
1	The Soil Moisture Active Passive (SMAP) Mission. Proceedings of the IEEE, 2010, 98, 704-716.	21.3	2,546
2	Emission of rough surfaces calculated by the integral equation method with comparison to three-dimensional moment method simulations. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 90-101.	6.3	515
3	A prototype AMSR-E global snow area and snow depth algorithm. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 230-242.	6.3	429
4	Dense media radiative transfer theory based on quasicrystalline approximation with applications to passive microwave remote sensing of snow. Radio Science, 2000, 35, 731-749.	1.6	195
5	Backscattering enhancement of random discrete scatterers. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1984, 1, 836.	1.5	176
6	Modeling Active Microwave Remote Sensing of Snow Using Dense Media Radiative Transfer (DMRT) Theory With Multiple-Scattering Effects. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 990-1004.	6.3	158
7	Monte-Carlo simulations of large-scale problems of random rough surface scattering and applications to grazing incidence with the BMIA/canonical grid method. IEEE Transactions on Antennas and Propagation, 1995, 43, 851-859.	5.1	121
8	A parameterized surface reflectivity model and estimation of bare-surface soil moisture with L-band radiometer. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 2674-2686.	6.3	113
9	Backscattering enhancement of electromagnetic waves from two-dimensional perfectly conducting random rough surfaces based on Monte Carlo simulations. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1995, 12, 2491.	1.5	112
10	Backscattering enhancement of electromagnetic waves from two-dimensional perfectly conducting random rough surfaces: a comparison of Monte Carlo simulations with experimental data. IEEE Transactions on Antennas and Propagation, 1996, 44, 748.	5.1	111
11	Models of L-Band Radar Backscattering Coefficients Over Global Terrain for Soil Moisture Retrieval. IEEE Transactions on Geoscience and Remote Sensing, 2014, 52, 1381-1396.	6.3	110
12	Monte Carlo simulations of the extinction rate of dense media with randomly distributed dielectric spheres based on solution of Maxwell's equations. Optics Letters, 1992, 17, 314.	3.3	102
13	Numerical simulations and backscattering enhancement of electromagnetic waves from two-dimensional dielectric random rough surfaces with the sparse-matrix canonical grid method. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1997, 14, 1515.	1.5	98
14	A numerical study of the composite surface model for ocean backscattering. IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 72-83.	6.3	95
15	Backscattering enhancement of a two-dimensional random rough surface (three-dimensional) Tj ETQq1 1 0.784314 rgBT /Overlock 10 T Image Science, and Vision, 1994, 11, 711.	1.5	93
16	Backscattering Coefficients, Coherent Reflectivities, and Emissivities of Randomly Rough Soil Surfaces at L-Band for SMAP Applications Based on Numerical Solutions of Maxwell Equations in Three-Dimensional Simulations. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 2557-2568.	6.3	91
17	Theory of backscattering enhancement of random discrete isotropic scatterers based on the summation of all ladder and cyclical terms. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1985, 2, 1331.	1.5	85
18	Soil Moisture Retrieval Using Time-Series Radar Observations Over Bare Surfaces. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 1853-1863.	6.3	85

#	ARTICLE	IF	CITATIONS
19	Electromagnetic Scattering by Bicontinuous Random Microstructures With Discrete Permittivities. IEEE Transactions on Geoscience and Remote Sensing, 2010, 48, 3139-3151.	6.3	81
20	Analysis of a large number of vias and differential signaling in multilayered structures. IEEE Transactions on Microwave Theory and Techniques, 2003, 51, 818-829.	4.6	80
21	Modeling of multiple scattering among vias in planar waveguides using Foldy-Lax equations. Microwave and Optical Technology Letters, 2001, 31, 201-208.	1.4	75
22	Backscattering enhancement and clustering effects of randomly distributed dielectric cylinders overlying a dielectric half space based on Monte-Carlo simulations. IEEE Transactions on Antennas and Propagation, 1995, 43, 488-499.	5.1	69
23	Surface Soil Moisture Retrieval Using the L-Band Synthetic Aperture Radar Onboard the Soil Moisture Activeâ€“Passive Satellite and Evaluation at Core Validation Sites. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 1897-1914.	6.3	64
24	Electromagnetic Computation in Scattering of Electromagnetic Waves by Random Rough Surface and Dense Media in Microwave Remote Sensing of Land Surfaces. Proceedings of the IEEE, 2013, 101, 255-279.	21.3	62
25	Electromagnetic Scattering of Randomly Rough Soil Surfaces Based on Numerical Solutions of Maxwell Equations in Three-Dimensional Simulations Using a Hybrid UV/PBTG/SMCG Method. IEEE Transactions on Geoscience and Remote Sensing, 2012, 50, 4025-4035.	6.3	61
26	Coupling of vias in electronic packaging and printed circuit board structures with finite ground plane. IEEE Transactions on Advanced Packaging, 2003, 26, 375-384.	1.6	57
27	Modeling Both Active and Passive Microwave Remote Sensing of Snow Using Dense Media Radiative Transfer (DMRT) Theory With Multiple Scattering and Backscattering Enhancement. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 4418-4430.	4.9	53
28	Radiometric Approach for Estimating Relative Changes in Intraglacier Average Temperature. IEEE Transactions on Geoscience and Remote Sensing, 2015, 53, 134-143.	6.3	53
29	A numerical study of ocean polarimetric thermal emission. IEEE Transactions on Geoscience and Remote Sensing, 1999, 37, 8-20.	6.3	52
30	Random Rough Surface Effects on Wave Propagation in Interconnects. IEEE Transactions on Advanced Packaging, 2010, 33, 839-856.	1.6	52
31	Radiative Wave Equations for Vector Electromagnetic Propagation in Dense Nontenuous Media. Journal of Electromagnetic Waves and Applications, 1987, 1, 59-72.	1.6	51
32	Backscattering enhancement of random discrete scatters of moderate sizes. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 1988, 5, 228.	1.5	48
33	Multiple scattering of waves by dense random distributions of sticky particles for applications in microwave scattering by terrestrial snow. Radio Science, 2007, 42, .	1.6	46
34	Microwave emission and scattering of foam based on monte carlo simulations of dense media. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 782-790.	6.3	45
35	Characterization of Errors in a Coupled Snow Hydrologyâ€“Microwave Emission Model. Journal of Hydrometeorology, 2008, 9, 149-164.	1.9	45
36	Dense Media Radiative Transfer Applied to SnowScat and SnowSAR. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2014, 7, 3811-3825.	4.9	44

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37	Physical Models of Layered Polar Firn Brightness Temperatures From 0.5 to 2 GHz. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2015, 8, 3681-3691.	4.9	44
38	Propagation and Scattering by a Layer of Randomly Distributed Dielectric Cylinders Using Monte Carlo Simulations of 3D Maxwell Equations With Applications in Microwave Interactions With Vegetation. IEEE Access, 2017, 5, 11985-12003.	4.2	43
39	Off-Chip Rough-Metal-Surface Propagation Loss Modeling and Correlation with Measurements. , 2007, , .		42
40	500-2000-MHz Brightness Temperature Spectra of the Northwestern Greenland Ice Sheet. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 1485-1496.	6.3	42
41	Microwave emission from density-stratified Antarctic firn at 6 cm wavelength. Journal of Glaciology, 1996, 42, 63-76.	2.2	39
42	Emissivity simulations in passive microwave remote sensing with 3-D numerical solutions of Maxwell equations. IEEE Transactions on Geoscience and Remote Sensing, 2004, 42, 1739-1748.	6.3	39
43	Electromagnetic Models of Co/Cross Polarization of Bicontinuous/DMRT in Radar Remote Sensing of Terrestrial Snow at X- and Ku-band for CoReH ₂ O and SCLP Applications. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2012, 5, 1024-1032.	4.9	39
44	Modeling Multiple Vias With Arbitrary Shape of Antipads and Pads in High Speed Interconnect Circuits. IEEE Microwave and Wireless Components Letters, 2009, 19, 12-14.	3.2	38
45	Parallel implementation of the sparse-matrix/canonical grid method for the analysis of two-dimensional random rough surfaces (three-dimensional scattering problem) on a Beowulf system. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 1600-1608.	6.3	37
46	Frequency dependence of scattering and extinction of dense media based on three-dimensional simulations of Maxwell's equations with applications to snow. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 1844-1852.	6.3	36
47	Modeling Effects of Random Rough Interface on Power Absorption Between Dielectric and Conductive Medium in 3-D Problem. IEEE Transactions on Microwave Theory and Techniques, 2007, 55, 511-517.	4.6	36
48	Signal Integrity Analysis of Package and Printed Circuit Board With Multiple Vias in Substrate of Layered Dielectrics. IEEE Transactions on Advanced Packaging, 2010, 33, 510-516.	1.6	36
49	A method of moments model for VHF propagation. IEEE Transactions on Antennas and Propagation, 1997, 45, 115-125.	5.1	35
50	Wave Propagation in a Randomly Rough Parallel-Plate Waveguide. IEEE Transactions on Microwave Theory and Techniques, 2009, 57, 1216-1223.	4.6	35
51	Modeling of Vias Sharing the Same Antipad in Planar Waveguide With Boundary Integral Equation and Group T-Matrix Method. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2013, 3, 315-327.	2.5	35
52	Multilevel expansion of the sparse-matrix canonical grid method for two-dimensional random rough surfaces. IEEE Transactions on Antennas and Propagation, 2001, 49, 1579-1589.	5.1	34
53	Multiple Scattering Effects With Cyclical Correction in Active Remote Sensing of Vegetated Surface Using Vector Radiative Transfer Theory. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 1414-1429.	4.9	34
54	Application of physics-based two-grid method and sparse matrix canonical grid method for numerical simulations of emissivities of soils with rough surfaces at microwave frequencies. IEEE Transactions on Geoscience and Remote Sensing, 2000, 38, 1635-1643.	6.3	32

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55	Estimation of Roughness-Induced Power Absorption From Measured Surface Profile Data. IEEE Microwave and Wireless Components Letters, 2007, 17, 486-488.	3.2	32
56	Bistatic scattering and emissivities of random rough dielectric lossy surfaces with the physics-based two-grid method in conjunction with the sparse-matrix canonical grid method. IEEE Transactions on Antennas and Propagation, 2000, 48, 1-11.	5.1	30
57	Passive microwave remote sensing of snow constrained by hydrological simulations. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 1744-1756.	6.3	30
58	Forward and Inverse Radar Modeling of Terrestrial Snow Using SnowSAR Data. IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 7122-7132.	6.3	30
59	Microwave emission from density-stratified Antarctic firn at 6 cm wavelength. Journal of Glaciology, 1996, 42, 63-76.	2.2	29
60	Detection of a buried object under a single random rough surface with angular correlation function in EM wave scattering. Microwave and Optical Technology Letters, 1996, 11, 300-304.	1.4	29
61	Application of angular correlation function of clutter scattering and correlation imaging in target detection. IEEE Transactions on Geoscience and Remote Sensing, 1998, 36, 1485-1493.	6.3	29
62	BROADBAND GREEN'S FUNCTION WITH LOW WAVENUMBER EXTRACTION FOR ARBITRARY SHAPED WAVEGUIDE AND APPLICATIONS TO MODELING OF VIAS IN FINITE POWER/GROUND PLANE. Progress in Electromagnetics Research, 2015, 152, 105-125.	4.4	29
63	Soil moisture retrieval from time series multi-angular radar data using a dry down constraint. Remote Sensing of Environment, 2019, 231, 111237.	11.0	29
64	Multiple Scattering Among Vias in Planar Waveguides Using Preconditioned SMCG Method. IEEE Transactions on Microwave Theory and Techniques, 2004, 52, 20-28.	4.6	27
65	Bistatic Scattering and Emissivities of Lossy Dielectric Surfaces With Exponential Correlation Functions. IEEE Transactions on Geoscience and Remote Sensing, 2007, 45, 62-72.	6.3	27
66	Third and fourth Stokes parameters in polarimetric passive microwave remote sensing of rough surfaces over layered media. Microwave and Optical Technology Letters, 2008, 50, 3063-3069.	1.4	27
67	Calculations of band diagrams and low frequency dispersion relations of 2D periodic dielectric scatterers using broadband Green's function with low wavenumber extraction (BBGFL). Optics Express, 2016, 24, 945.	3.4	27
68	Fast Computation of Layered Medium Green's Functions of Multilayers and Lossy Media Using Fast All-Modes Method and Numerical Modified Steepest Descent Path Method. IEEE Transactions on Microwave Theory and Techniques, 2008, 56, 1446-1454.	4.6	26
69	Full-Wave Solver for Microstrip Trace and Through-Hole Via in Layered Media. IEEE Transactions on Advanced Packaging, 2008, 31, 292-302.	1.6	26
70	Coherent Model of L-Band Radar Scattering by Soybean Plants: Model Development, Evaluation, and Retrieval. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2016, 9, 272-284.	4.9	26
71	Scattering of electromagnetic waves from 3D multilayer random rough surfaces based on the second-order small perturbation method: energy conservation, reflectivity, and emissivity. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2017, 34, 395.	1.5	26
72	Depolarized Backscattering of Rough Surface by AIEM Model. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 4740-4752.	4.9	26

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73	Multiple scattering among vias in lossy planar waveguides using SMCG method. IEEE Transactions on Advanced Packaging, 2002, 25, 181-188.	1.6	24
74	Fast and Broadband Modeling Method for Multiple Vias With Irregular Antipad in Arbitrarily Shaped Power/Ground Planes in 3-D IC and Packaging Based on Generalized Foldy's Lax Equations. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2014, 4, 685-696.	2.5	24
75	Microwave Scattering and Medium Characterization for Terrestrial Snow With QCA's Mie and Bicontinuous Models: Comparison Studies. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 3637-3648.	6.3	24
76	Sea Surface Radar Scattering at L-Band Based on Numerical Solution of Maxwell's Equations in 3-D (NMM3D). IEEE Transactions on Geoscience and Remote Sensing, 2018, 56, 3137-3147.	6.3	24
77	Electromagnetic Fields of Hertzian Dipoles in Layered Media of Moderate Thickness Including the Effects of All Modes. IEEE Antennas and Wireless Propagation Letters, 2007, 6, 316-319.	4.0	23
78	Electromagnetic modeling of massively coupled through silicon vias for 3D interconnects. Microwave and Optical Technology Letters, 2011, 53, 1204-1206.	1.4	23
79	Active and Passive Vegetated Surface Models With Rough Surface Boundary Conditions From NMM3D. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2013, 6, 1698-1709.	4.9	23
80	Surface electric fields and impedance matrix elements of stratified media. IEEE Transactions on Antennas and Propagation, 2000, 48, 1533-1543.	5.1	22
81	Wave scattering with the UV multilevel partitioning method: 1. Two-dimensional problem of perfect electric conductor surface scattering. Radio Science, 2004, 39, n/a-n/a.	1.6	22
82	BROADBAND CALCULATIONS OF BAND DIAGRAMS IN PERIODIC STRUCTURES USING THE BROADBAND GREEN'S FUNCTION WITH LOW WAVENUMBER EXTRACTION (BBGFL). Progress in Electromagnetics Research, 2015, 153, 57-68.	4.4	22
83	Propagation of Waves in Randomly Distributed Cylinders Using Three-Dimensional Vector Cylindrical Wave Expansions in Foldy's Lax Equations. IEEE Journal on Multiscale and Multiphysics Computational Techniques, 2019, 4, 214-226.	2.2	22
84	Collective scattering effects of trees generated by stochastic lindenmayer systems. Microwave and Optical Technology Letters, 1996, 11, 107-111.	1.4	21
85	On the Analysis of Statistical Distributions of UWB Signal Scattering by Random Rough Surfaces Based on Monte Carlo Simulations of Maxwell Equations. IEEE Transactions on Antennas and Propagation, 2004, 52, 3200-3206.	5.1	21
86	Copolarized and Cross-Polarized Backscattering From Random Rough Soil Surfaces From L-Band to Ku-Band Using Numerical Solutions of Maxwell's Equations With Near-Field Precondition. IEEE Transactions on Geoscience and Remote Sensing, 2016, 54, 651-662.	6.3	21
87	Wave Propagation in Vegetation Field Using a Hybrid Method. IEEE Transactions on Antennas and Propagation, 2021, 69, 6752-6761.	5.1	21
88	Scattering by rough surface using a hybrid technique combining the multilevel UV method with the sparse matrix canonical grid method. Radio Science, 2005, 40, n/a-n/a.	1.6	20
89	Active Remote Sensing of Snow Using NMM3D/DMRT and Comparison With CLPX II Airborne Data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2010, 3, 689-697.	4.9	20
90	Microwave Signatures of Snow Cover Using Numerical Maxwell Equations Based on Discrete Dipole Approximation in Bicontinuous Media and Half-Space Dyadic Green's Function. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 4686-4702.	4.9	20

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91	Rough Surface and Volume Scattering of Soil Surfaces, Ocean Surfaces, Snow, and Vegetation Based on Numerical Maxwell Model of 3-D Simulations. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2017, 10, 4703-4720.	4.9	19
92	Fast Electromagnetic Analysis of Emissions From Printed Circuit Board Using Broadband Green's Function Method. IEEE Transactions on Electromagnetic Compatibility, 2016, 58, 1642-1652.	2.2	18
93	Numerical solution of scattering of waves by lossy dielectric surfaces using a physics-based two-grid method. Microwave and Optical Technology Letters, 1997, 16, 356-364.	1.4	17
94	Greenland Ice Sheet Subsurface Temperature Estimation Using Ultrawideband Microwave Radiometry. IEEE Transactions on Geoscience and Remote Sensing, 2022, 60, 1-12.	6.3	17
95	Microwave Radiometry at Frequencies From 500 to 1400 MHz: An Emerging Technology for Earth Observations. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 2021, 14, 4894-4914.	4.9	16
96	Remote Sensing of Sea Ice Thickness and Salinity With 0.5-2 GHz Microwave Radiometry. IEEE Transactions on Geoscience and Remote Sensing, 2019, 57, 8672-8684.	6.3	15
97	Green's functions, including scatterers, for photonic crystals and metamaterials. Journal of the Optical Society of America B: Optical Physics, 2017, 34, 1450.	2.1	14
98	3-D Electromagnetic Scattering From Multilayer Dielectric Media With 2-D Random Rough Interfaces Using \mathbf{H} -Matrix Approach. IEEE Transactions on Antennas and Propagation, 2019, 67, 495-503.	5.1	14
99	Accurate Calculations of Emissivities of Polar Ocean Surfaces Between 0.5 and 2 GHz Using an NIBC/Nystrom/SMCG Method. IEEE Transactions on Geoscience and Remote Sensing, 2020, 58, 2732-2744.	6.3	14
100	The angular correlation function of wave scattering by a buried object embedded in random discrete scatterers under a random rough surface. Microwave and Optical Technology Letters, 1997, 14, 144-151.	1.4	13
101	Mapping the spatial distribution and time evolution of snow water equivalent with passive microwave measurements. IEEE Transactions on Geoscience and Remote Sensing, 2003, 41, 612-621.	6.3	13
102	Uniaxial Effective Permittivity of Anisotropic Bicontinuous Random Media Using NMM3D. IEEE Geoscience and Remote Sensing Letters, 2016, 13, 1168-1172.	3.1	13
103	Application of a banded matrix iterative approach to monte carlo simulations of scattering of waves by a random rough surface: TM case. Microwave and Optical Technology Letters, 1993, 6, 148-151.	1.4	12
104	Studies on accuracy of numerical simulations of emission from rough ocean-like surfaces. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 1757-1763.	6.3	12
105	Transmission and scattering on interconnects with via structures. Microwave and Optical Technology Letters, 2005, 46, 446-452.	1.4	12
106	Fast all modes (FAM) method combined with NMSP for evaluating spatial domain layered medium Green's functions of moderate thickness. Microwave and Optical Technology Letters, 2007, 49, 3112-3118.	1.4	12
107	Scattering of electromagnetic waves by vegetation based on the wave approach and the stochastic lindenmayer system. Microwave and Optical Technology Letters, 1995, 8, 30-33.	1.4	11
108	Polarimetric passive microwave remote sensing of wind vectors with foam-covered rough ocean surfaces. Radio Science, 2003, 38, n/a-n/a.	1.6	11

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109	Wave Propagation in Parallel Plate Metallic Waveguide With Finite Conductivity and Three Dimensional Roughness. IEEE Transactions on Antennas and Propagation, 2012, 60, 5867-5880.	5.1	11
110	The Ultra-wideband Software-Defined Radiometer (UWBRAD) for ice sheet internal temperature sensing: Results from recent observations. , 2016, , .		11
111	Effect of Particle Shape, Density, and Inhomogeneity on the Microwave Optical Properties of Graupel and Hailstones. IEEE Transactions on Geoscience and Remote Sensing, 2017, 55, 6366-6378.	6.3	11
112	Modeling of Scattering in Arbitrary-Shape Waveguide Using Broadband Green's Function With Higher Order Low Wavenumber Extractions. IEEE Transactions on Electromagnetic Compatibility, 2018, 60, 16-25.	2.2	11
113	Microwave radiometric technique to retrieve vapor, liquid and ice. II. Joint studies of radiometer and radar in winter clouds. IEEE Transactions on Geoscience and Remote Sensing, 1997, 35, 237-247.	6.3	10
114	Anomalous properties of the band-edge states in large two-dimensional photonic quasicrystals. Physical Review B, 2007, 76, .	3.2	10
115	SCATTERING AND TRANSMISSION OF WAVES IN MULTIPLE RANDOM ROUGH SURFACES: ENERGY CONSERVATION STUDIES WITH THE SECOND ORDER SMALL PERTURBATION METHOD. Progress in Electromagnetics Research, 2016, 157, 1-20.	4.4	10
116	Scattering of waves by a half-space of periodic scatterers using broadband Green's function. Optics Letters, 2017, 42, 4667.	3.3	10
117	ELECTROMAGNETIC SCATTERING AND EMISSION BY OCEAN SURFACES BASED ON NEIGHBORHOOD IMPEDANCE BOUNDARY CONDITION (NIBC) WITH DENSE GRID: ACCURATE EMISSIVITY AND SENSITIVITY TO SALINITY. Progress in Electromagnetics Research B, 2018, 81, 141-162.	1.0	10
118	A PHYSICAL PATCH MODEL FOR GNSS-R LAND APPLICATIONS. Progress in Electromagnetics Research, 2019, 165, 93-105.	4.4	10
119	Multifrequency Full-Wave Simulations of Vegetation Using a Hybrid Method. IEEE Transactions on Microwave Theory and Techniques, 2022, 70, 275-285.	4.6	10
120	Monte Carlo simulations of scattering and emission from lossy dielectric random rough surfaces using the wavelet transform method. IEEE Transactions on Geoscience and Remote Sensing, 1999, 37, 2295-2304.	6.3	9
121	Wavelet-based simulations of electromagnetic scattering from large-scale two-dimensional perfectly conducting random rough surfaces. IEEE Transactions on Geoscience and Remote Sensing, 2001, 39, 718-725.	6.3	9
122	MODELLING AND VALIDATION OF COMBINED ACTIVE AND PASSIVE MICROWAVE REMOTE SENSING OF AGRICULTURAL VEGETATION AT L-BAND. Progress in Electromagnetics Research B, 2017, 78, 91-124.	1.0	9
123	Electromagnetic Scattering and Emission From Large Rough Surfaces With Multiple Elevations Using the MLS-D-SMCG Method. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 5393-5406.	6.3	9
124	Solution of the fundamental problem of transient acoustic propagation in a borehole with the hybrid method. Journal of the Acoustical Society of America, 1985, 77, 2024-2032.	1.1	8
125	Angular correlation function of wave scattering by a random rough surface and discrete scatterers and its application in the detection of a buried object. Waves in Random and Complex Media, 1997, 7, 467-478.	1.5	8
126	Electric fields of spatial Green's functions of microstrip structures and applications to the calculations of impedance matrix elements. Microwave and Optical Technology Letters, 1999, 20, 90-97.	1.4	8

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127	Frequency dependence of scattering by dense media of small particles based on Monte Carlo simulation of Maxwell equations. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 153-161.	6.3	8
128	Microwave emission from snowpacks: modeling the effects of volume scattering, surface scattering and layering. , 2008, , .		8
129	Snow Water Equivalent Retrieval Using Active and Passive Microwave Observations. Water Resources Research, 2021, 57, e2020WR027563.	4.2	8
130	Polarimetric Passive And Active Remote Sensing: Theoretical Modeling Of Random Discrete Scatterers And Rough Surfaces. , 0, , .		7
131	Microwave emission of rough ocean surfaces with full spatial spectrum based on the multilevel expansion method. IEEE Transactions on Geoscience and Remote Sensing, 2002, 40, 574-582.	6.3	7
132	Time domain Green's functions for lossy and dispersive multilayered media. IEEE Microwave and Wireless Components Letters, 2003, 13, 399-401.	3.2	7
133	A Partially Coherent Approach for Modeling Polar Ice Sheet 0.5â€“2-GHz Thermal Emission. IEEE Transactions on Geoscience and Remote Sensing, 2021, 59, 8062-8072.	6.3	7
134	Planeâ€“wave diffraction by a dielectricâ€“coated corrugated surface. Journal of Applied Physics, 1985, 58, 646-650.	2.5	6
135	Numerical studies of the detection of targets embedded in clutter by using angular correlation function and angular correlation imaging. Microwave and Optical Technology Letters, 1998, 17, 82-86.	1.4	6
136	Bistatic phase function and fast solution of scattering by 2D random distributed scatterers. Microwave and Optical Technology Letters, 2003, 38, 313-317.	1.4	6
137	Modeling multi-layer effects in passive microwave remote sensing of dry snow using Dense Media Radiative Transfer Theory (DMRT) based on quasicrystalline approximation. , 2007, , .		6
138	Random Rough Surface Effects in Waveguides Using Mode Matching Technique and the Method of Moments. IEEE Transactions on Components, Packaging and Manufacturing Technology, 2012, 2, 140-148.	2.5	6
139	Surface electric fields and spatial derivatives of Green's function of layered media based on half-space extraction. Microwave and Optical Technology Letters, 2000, 24, 247-253.	1.4	5
140	Wave scattering from lossy dielectric random rough surfaces using the physics-based two-grid method in conjunction with the multilevel fast multipole method. Radio Science, 2001, 36, 571-583.	1.6	5
141	Propagation over terrain and urban environment using the multilevel UV method and a hybrid UV/SDFMM method. IEEE Antennas and Wireless Propagation Letters, 2004, 3, 336-339.	4.0	5
142	Conical electromagnetic waves diffraction from sastrugi type surfaces of layered snow dunes on Greenland ice sheets in passive microwave remote sensing. , 2011, , .		5
143	Simulation and measurement correlation of random rough surface effects in interconnects. , 2012, , .		5
144	The Ultra-Wideband Software Defined Microwave Radiometer (UWBRAD) for Ice sheet subsurface temperature sensing: Calibration and campaign results. , 2017, , .		5

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145	MULTIPLE SCATTERING OF WAVES BY COMPLEX OBJECTS USING HYBRID METHOD OF T-MATRIX AND FOLDY-LAX EQUATIONS USING VECTOR SPHERICAL WAVES AND VECTOR SPHEROIDAL WAVES. Progress in Electromagnetics Research, 2020, 168, 87-111.	4.4	5
146	Transient acoustic waves in a fluid-filled borehole with a horizontal bed boundary separating two solid formations. Journal of the Acoustical Society of America, 1987, 81, 844-853.	1.1	4
147	Inversion of Parameters for Semiarid Regions by a Neural Network. , 0, , .		4
148	Electromagnetic wave scattering from real-life rough-surface profiles and profiles based on an averaged spectrum. Microwave and Optical Technology Letters, 1996, 12, 258-262.	1.4	4
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150	Soil Moisture Retrieval Using full Wave Simulations of 3-D Maxwell Equations for Compensating Vegetation Effects. , 2018, , .		4
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