Alexei A Maradudin

List of Publications by Year
in descending order

71 papers	1,164 citations	471509 17 h-index	395702 33 g-index
72 all docs	72 docs citations	72 times ranked	496 citing authors

#	Article	IF	Citations
1	Localization effects in the scattering of light from a randomly rough grating. Physical Review B, 1985, 31, 4866-4871.	3.2	239
2	Properties of Surface Polaritons in Layered Structures. Physical Review Letters, 1973, 31, 372-375.	7.8	102
3	Localization effects in the elastic scattering of light from a randomly rough surface. Journal of the Optical Society of America B: Optical Physics, 1987, 4, 910.	2.1	87
4	Rayleigh and Wood anomalies in the diffraction of light from a perfectly conducting reflection grating. Journal of Optics (United Kingdom), 2016, 18, 024004.	2.2	61
5	Scattering of electromagnetic waves from a bounded medium with a random surface. Physical Review B, 1994, 50, 15353-15368.	3.2	47
6	Surface-plasmon polariton scattering from a finite array of nanogroovesâˆ•ridges: Efficient mirrors. Applied Physics Letters, 2005, 86, 251106.	3.3	46
7	Perturbation theory results for the diffuse scattering of light from two-dimensional randomly rough metal surfaces. Waves in Random and Complex Media, 1996, 6, 251-267.	1.5	31
8	Scattering of electromagnetic waves from two-dimensional randomly rough perfectly conducting surfaces: The full angular intensity distribution. Physical Review A, 2010, 81, .	2.5	30
9	Scattering of Electromagnetic Waves from Two-Dimensional Randomly Rough Penetrable Surfaces. Physical Review Letters, 2010, 104, 223904.	7.8	29
10	Calculation of the Mueller matrix for scattering of light from two-dimensional rough surfaces. Physical Review A, 2012, 86, .	2.5	28
11	Theory of surface-polariton resonances and field enhancements in light scattering from bigratings. Journal of the Optical Society of America, 1983, 73, 1240.	1.2	27
12	Transmission of electromagnetic waves through thin metal films with randomly rough surfaces. Physical Review B, 1995, 51, 17100-17115.	3.2	27
13	Speckle correlations in the light scattered from a weakly rough one-dimensional random metal surface. Optics Letters, 1997, 22, 946.	3.3	23
14	Light scattering from anisotropic, randomly rough, perfectly conducting surfaces. Computer Physics Communications, 2011, 182, 1904-1908.	7.5	23
15	Title is missing!. Waves in Random and Complex Media, 1997, 7, 479-520.	1.5	18
16	Asymmetric transmission of surface plasmon polaritons. Physical Review A, 2012, 86, .	2.5	17
17	Effects of optical polarization on hybridization of radiative and evanescent field modes. Physical Review B, 2017, 96, .	3.2	17
18	Determination of surface profile statistics from electromagnetic scattering data. Optics Letters, 1997, 22, 58.	3.3	16

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19	Design of one-dimensional band-limited uniform diffusers of light. Applied Physics Letters, 1998, 73, 1943-1945.	3.3	14
20	Multiple scattering of light from randomly rough surfaces. Progress in Optics, 2004, 46, 117-241.	0.6	14
21	Light Scattering from Randomly Rough Surfaces. Science Progress, 2007, 90, 161-221.	1.9	14
22	Numerical solutions of the Rayleigh equations for the scattering of light from a two-dimensional randomly rough perfectly conducting surface. Journal of the Optical Society of America A: Optics and Image Science, and Vision, 2014, 31, 1126.	1.5	14
23	Design of two-dimensional random surfaces with specified scattering properties. Optics Letters, 2004, 29, 2917.	3.3	13
24	Interaction of two optical beams at a symmetric random surface. Applied Optics, 1992, 31, 5878.	2.1	12
25	Two-dimensional random surfaces that act as circular diffusers. Optics Letters, 2003, 28, 72.	3.3	12
26	X-ray scattering from a randomly rough surface. Waves in Random and Complex Media, 1997, 7, 395-434.	1.5	11
27	<title>Design and synthesis of random uniform diffusers</title>. , 1998, , .		11
28	Asymmetric transmission of surface plasmon polaritons on planar gratings. Physical Review A, 2015, 92, .	2.5	11
29	Numerical studies of the scattering of light from a two-dimensional randomly rough interface between two dielectric media. Physical Review A, 2016, 93, .	2.5	11
30	Effects of roughness on the retroreflection from dielectric layers. Waves in Random and Complex Media, 2002, 12, 279-292.	1.5	11
31	Light scattering from an amplifying medium bounded by a randomly rough surface: A numerical study. Physical Review B, 2001, 64, .	3.2	10
32	Optical spectrum and electromagnetic-field distribution at double-groove metallic surface gratings. Journal of Applied Physics, 2009, 106, 053705.	2.5	10
33	Introduction: Plasmonics and its Building Blocks. Handbook of Surface Science, 2014, , 1-36.	0.3	10
34	Acoustic surface shape resonances of circularly symmetric defects on solid surfaces. Applied Physics Letters, 1995, 67, 3090-3092.	3.3	8
35	Design of one-dimensional Lambertian diffusers of light. Waves in Random and Complex Media, 2001, 11, 529-533.	1.5	8
36	Scattering of surface-plasmon polaritons by a localized dielectric surface defect studied using an effective boundary condition. Physical Review A, 2011, 84, .	2.5	8

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37	Rayleigh and Wood anomalies in the diffraction of acoustic waves from the periodically corrugated surface of an elastic medium. Low Temperature Physics, 2016, 42, 354-360.	0.6	8
38	Numerical studies of the transmission of light through a two-dimensional randomly rough interface. Physical Review A, 2017, 95, .	2.5	8
39	The design of two-dimensional random surfaces with specified scattering properties. Journal of Optics, 2005, 7, S141-S151.	1.5	6
40	Synthetic spectra from rough surface scattering. Waves in Random and Complex Media, 2006, 16, 531-544.	2.7	6
41	The scattering of light from two-dimensional randomly rough surfaces. , 2011, , .		6
42	Reconstruction of the surface-height autocorrelation function of a randomly rough dielectric surface from incoherent light scattering. Physical Review A, 2013, 88, .	2.5	6
43	Leaky surface electromagnetic waves on a high-index dielectric grating. Optics Letters, 2016, 41, 2229.	3.3	6
44	The design and fabrication of one-dimensional random surfaces with specified scattering properties. Physics of the Solid State, 1999, 41, 835-841.	0.6	5
45	The angular intensity correlation functionsC(1)andC(10)for the scattering of light from randomly rough dielectric and metal surfaces. Waves in Random and Complex Media, 2002, 12, 307-319.	1.5	5
46	Determination of the normalized-surface-height autocorrelation function of a two-dimensional randomly rough dielectric surface by the inversion of light-scattering data. Physical Review A, 2016, 93, .	2.5	5
47	Speckle correlations in the light scattered from weakly rough random metal surfaces. Waves in Random and Complex Media, 1997, 7, 479-520.	1.5	4
48	Waves on Corrugated Surfaces: K-Gaps and Enhanced Backscattering. , 1991, , 315-324.		4
49	Geometrical optics of dispersive media with turning points. Waves in Random and Complex Media, 2008, 18, 541-549.	2.7	3
50	Pseudo-Nondiffracting Beams from Rough Surface Scattering. , 2005, , .		3
51	Reply to Comment on â€˜X-ray scattering from a randomly rough surfaceâ€™. Waves in Random and Complex Media, 1999, 9, 461-462.	1.5	2
52	Computer simulation studies of the speckle correlations of light scattered from a random array of scatterers:â€ƒScalar wave approximation. Physical Review B, 2001, 64, .	3.2	2
53	Effects of the mixture of one-and three-dimensional inhomogeneities on the wave spectrum of superlattices. JETP Letters, 2003, 77, 285-290.	1.4	2
54	Transformation of surface plasmon polaritons by surface structures. Physica B: Condensed Matter, 2010, 405, 2972-2977.	2.7	2

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55	A Thin Phase Screen Model for Surface Plasmon Polaritons. Plasmonics, 2019, 14, 1071-1079.	3.4	2
56	Multiple-Scattering Phenomena in the Scattering of Light from Randomly Rough Surfaces. Physica Status Solidi A, 1999, 175, 241-252.	1.7	1
57	The angular intensity correlation function C 0 for the scattering of light from a one-dimensional randomly rough surface. The Philosophical Magazine: Physics of Condensed Matter B, Statistical Mechanics, Electronic, Optical and Magnetic Properties, 2001, 81, 1289-1302.	0.6	1
58	Waves in a superlattice with anisotropic inhomogeneities. JETP Letters, 2003, 78, 592-596.	1.4	1
59	Amplification in one-dimensional random active medium near the lasing threshold. Optical and Quantum Electronics, 2004, 36, 175-188.	3.3	1
60	Dynamic and static control of the optical phase of guided p-polarized light for near-field focusing at large angles of incidence. Journal of Applied Physics, 2013, 114, .	2.5	1
61	A surface plasmon polariton analogue of a Wannier-Stark ladder. , 2014, , .		1
62	Scattering of an Obliquely Incident Surface Plasmon Polariton from Sub-Micron Metal Grooves and Ridges. Plasmonics, 2015, 10, 1173-1183.	3.4	1
63	The scattering of a scalar beam from isotropic and anisotropic two-dimensional randomly rough Dirichlet or Neumann surfaces: The full angular intensity distributions. Wave Motion, 2018, 82, 30-50.	2.0	1
64	MULTIPLE SCATTERING EFFECTS IN THE SECOND HARMONIC GENERATION OF LIGHT REFLECTION FROM RANDOMLY ROUGH METAL SURFACE. , 2005, , 245-297.		1
65	Kinetic Instability of Semiconductor Alloy Growth. Materials Research Society Symposia Proceedings, 1999, 583, 291.	0.1	0
66	Design of Matched Absorbing Layers for Surface Plasmon-Polaritons. Advances in OptoElectronics, 2012, 2012, 1-7.	0.6	0
67	A one-dimensional randomly rough interface that produces a specified angular distribution of the intensity of the light transmitted through it. , 2017, , .		0
68	The excitation and detection of a leaky surface electromagnetic wave on a high-index dielectric grating in a prism-coupler geometry. Low Temperature Physics, 2017, 43, 162-167.	0.6	0
69	Control of the coherence of light transmitted through a one-dimensional randomly rough interface that acts as a Schell-model source. , 2017, , .		0
70	Replacement of Ensemble Averaging by the Use of a Broadband Source in Scattering of Light from a One-Dimensional Randomly Rough Interface between Two Dielectric Media. International Journal of Antennas and Propagation, 2018, 2018, 1-7.	1.2	0
71	Features in the diffraction of a scalar plane wave from doubly-periodic Dirichlet and Neumann surfaces. Low Temperature Physics, 2018, 44, 733-743.	0.6	0