Ingve Simonsen

List of Publications by Citations

49 papers	838 citations	15 h-index	28 g-index
55 ext. papers	954 ext. citations	2.7 avg, IF	4.1 L-index

#	Paper	IF	Citations
49	Transient dynamics increasing network vulnerability to cascading failures. *Physical Review Letters*, **2008**, 100, 218701	7.4	169
48	Modularity and extreme edges of the internet. *Physical Review Letters*, **2003**, 90, 148701	7.4	147
47	Optics of surface disordered systems. *European Physical Journal: Special Topics*, **2010**, 181, 1-103	2.3	44
46	Diffusion on complex networks: a way to probe their large-scale topological structures. *Physica A: Statistical Mechanics and Its Applications*, **2004**, 336, 163-173	3.3	42
45	Rayleigh and Wood anomalies in the diffraction of light from a perfectly conducting reflection grating. *Journal of Optics (United Kingdom)*, **2016**, 18, 024004	1.7	39
44	Diffusion and networks: A powerful combination!. *Physica A: Statistical Mechanics and Its Applications*, **2005**, 357, 317-330	3.3	29
43	Wave scattering from self-affine surfaces. *Physical Review E*, **2000**, 61, 5914-7	2.4	28
42	Scattering of electromagnetic waves from two-dimensional randomly rough penetrable surfaces. *Physical Review Letters*, **2010**, 104, 223904	7.4	24
41	Scattering of electromagnetic waves from two-dimensional randomly rough perfectly conducting surfaces: The full angular intensity distribution. *Physical Review A*, **2010**, 81,	2.6	22
40	Numerical simulation of electromagnetic wave scattering from planar dielectric films deposited on rough perfectly conducting substrates. *Optics Communications*, **1999**, 162, 99-111	2	21
39	Calculation of the Mueller matrix for scattering of light from two-dimensional rough surfaces. *Physical Review A*, **2012**, 86,	2.6	19
38	Light scattering from anisotropic, randomly rough, perfectly conducting surfaces. *Computer Physics Communications*, **2011**, 182, 1904-1908	4.2	19
37	Dispersion of polarization coupling, localized and collective plasmon modes in a metallic photonic crystal mapped by Mueller Matrix Ellipsometry. *Optics Express*, **2015**, 23, 22800-15	3.3	18
36	Electromagnetic wave scattering from conducting self-affine surfaces: an analytic and numerical study. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2001**, 18, 1101-11	1.8	18
35	Design of one-dimensional random surfaces with specified scattering properties. *Applied Physics Letters*, **2002**, 81, 798-800	3.4	16
34	Effects of City-Size Heterogeneity on Epidemic Spreading in a Metapopulation: A Reaction-Diffusion Approach. *Journal of Statistical Physics*, **2013**, 151, 367-382	1.5	14
33	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, 1126-34	1.8	12

32	Satellite peaks in the scattering of light from the two-dimensional randomly rough surface of a dielectric film on a planar metal surface. *Optics Express*, **2012**, 20, 11336-50	3.3	12
31	Random surfaces that suppress single scattering. *Optics Letters*, **1999**, 24, 1257-9	3	12
30	Fear and its implications for stock markets. *European Physical Journal B*, **2007**, 57, 153-158	1.2	11
29	Numerical simulations of scattering of light from two-dimensional rough surfaces using the reduced Rayleigh equation. *Frontiers in Physics*, **2013**, 1,	3.9	10
28	Light scattering from an amplifying medium bounded by a randomly rough surface: A numerical study. *Physical Review B*, **2001**, 64,	3.3	10
27	Interfacial Susceptibilities in Nanoplasmonics via Inversion of Fresnel Coefficients. *Plasmonics*, **2014**, 9, 261-272	2.4	9
26	Numerical studies of the scattering of light from a two-dimensional randomly rough interface between two dielectric media. *Physical Review A*, **2016**, 93,	2.6	8
25	Experimental and numerical studies of the scattering of light from a two-dimensional randomly rough interface in the presence of total internal reflection: optical Yoneda peaks. *Optics Express*, **2016**, 24, 25995-26005	3.3	8
24	Design of one-dimensional Lambertian diffusers of light. *Waves in Random and Complex Media*, **2001**, 11, 529-533		7
23	Selective enhancement of Sell□yi rings induced by the cross-correlation between the interfaces of a two-dimensional randomly rough dielectric film. *Annals of Physics*, **2018**, 389, 352-382	2.5	6
22	Numerical studies of the transmission of light through a two-dimensional randomly rough interface. *Physical Review A*, **2017**, 95,	2.6	6
21	The scattering of light from two-dimensional randomly rough surfaces **2011**,		6
20	Enhanced back and forward scattering in the reflection of light from weakly rough random metal surfaces. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 2075-2083	1.3	5
19	The angular intensity correlation functions C (1) and C (10) for the scattering of light from randomly rough dielectric and metal surfaces. *Waves in Random and Complex Media*, **2002**, 12, 307-319		5
18	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	0.7	5
17	Leaky surface electromagnetic waves on a high-index dielectric grating. *Optics Letters*, **2016**, 41, 2229-323		5
16	Coherent effects in the scattering of light from two-dimensional rough metal surfaces. *Journal of the Optical Society of America A: Optics and Image Science, and Vision*, **2013**, 30, 1136-45	1.8	4
15	Fast algorithm for generating long self-affine profiles. *Physical Review E*, **2002**, 65, 037701	2.4	4

14	Characterization of rough self-affine surfaces by electromagnetic wave scattering. *Journal of Optics* , **2002**, 4, S168-S174		4
13	Neutral-helium-atom diffraction from a micron-scale periodic structure: Photonic-crystal-membrane characterization. *Physical Review A*, **2017**, 95,	2.6	3
12	Nanometer-Resolution Mask Lithography with Matter Waves: Near-Field Binary Holography. *Physical Review Applied*, **2019**, 11,	4.3	3
11	Time-scale effects on the gain-loss asymmetry in stock indices. *Physical Review E*, **2016**, 94, 022311	2.4	3
10	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,	2.6	2
9	Optimal Design of Grid-Based Binary Holograms for Matter-Wave Lithography. *Physical Review Applied*, **2017**, 8,	4.3	2
8	Physics of polarized light scattering from weakly rough dielectric surfaces: Yoneda and Brewster scattering phenomena. *Physical Review A*, **2019**, 99,	2.6	2
7	Single scattering of polarized light by correlated surface and volume disorder. *Physical Review A*, **2020**, 101,	2.6	1
6	Validity of the Rayleigh hypothesis for two-dimensional randomly rough metal surfaces. *Journal of Physics: Conference Series*, **2013**, 454, 012033	0.3	1
5	Spectrally dependent locations of hot-spots in nanoparticle clusters. *Physica Status Solidi (B): Basic Research*, **2010**, 247, 2084-2088	1.3	1
4	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	1.8	0
3	Features in the diffraction of a scalar plane wave from doubly-periodic Dirichlet and Neumann surfaces. *Low Temperature Physics*, **2018**, 44, 733-743	0.7	
2	Perfect depolarization in single scattering of light from uncorrelated surface and volume disorder. *Optics Letters*, **2020**, 45, 6354-6357	3	
1	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	