Ronnen Levinson

List of Publications by Year
in descending order

57 papers	3,879 citations	147566 31 h-index	143772 57 g-index
58 all docs	58 docs citations	58 times ranked	2614 citing authors

#	Article	IF	Citations
1	Solar spectral optical properties of pigmentsâ€"Part II: survey of common colorants. Solar Energy Materials and Solar Cells, 2005, 89, 351-389.	3.0	314
2	Solar spectral optical properties of pigmentsâ€"Part I: model for deriving scattering and absorption coefficients from transmittance and reflectance measurements. Solar Energy Materials and Solar Cells, 2005, 89, 319-349.	3.0	278
3	Methods of creating solar-reflective nonwhite surfaces and their application to residential roofing materials. Solar Energy Materials and Solar Cells, 2007, 91, 304-314.	3.0	257
4	Temperature-adaptive radiative coating for all-season household thermal regulation. Science, 2021, 374, 1504-1509.	6.0	251
5	Weathering of roofing materials â€" An overview. Construction and Building Materials, 2008, 22, 423-433.	3.2	209
6	Measuring solar reflectanceâ€"Part I: Defining a metric that accurately predicts solar heat gain. Solar Energy, 2010, 84, 1717-1744.	2.9	191
7	Potential benefits of cool roofs on commercial buildings: conserving energy, saving money, and reducing emission of greenhouse gases and air pollutants. Energy Efficiency, 2010, 3, 53-109.	1.3	184
8	Radiative forcing and temperature response to changes in urban albedos and associated CO ₂ offsets. Environmental Research Letters, 2010, 5, 014005.	2.2	151
9	A novel technique for the production of cool colored concrete tile and asphalt shingle roofing products. Solar Energy Materials and Solar Cells, 2010, 94, 946-954.	3.0	129
10	Monitoring the energy-use effects of cool roofs on California commercial buildings. Energy and Buildings, 2005, 37, 1007-1016.	3.1	126
11	Evolution of Cool-Roof Standards in the US. Advances in Building Energy Research, 2008, 2, 1-32.	1.1	104
12	Inclusion of cool roofs in nonresidential Title 24 prescriptive requirements. Energy Policy, 2005, 33, 151-170.	4.2	100
13	Effects of composition and exposure on the solar reflectance of portland cement concrete. Cement and Concrete Research, 2002, 32, 1679-1698.	4.6	98
14	Solar access of residential rooftops in four California cities. Solar Energy, 2009, 83, 2120-2135.	2.9	93
15	Measuring solar reflectanceâ€"Part II: Review of practical methods. Solar Energy, 2010, 84, 1745-1759.	2.9	84
16	Soiling of building envelope surfaces and its effect on solar reflectanceâ€"Part I: Analysis of roofing product databases. Solar Energy Materials and Solar Cells, 2011, 95, 3385-3399.	3.0	84
17	Resilient cooling of buildings to protect against heat waves and power outages: Key concepts and definition. Energy and Buildings, 2021, 239, 110869.	3.1	83
18	Soiling of building envelope surfaces and its effect on solar reflectance â€" Part II: Development of an accelerated aging method for roofing materials. Solar Energy Materials and Solar Cells, 2014, 122, 271-281.	3.0	76

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19	Cool roofs in China: Policy review, building simulations, and proof-of-concept experiments. Energy Policy, 2014, 74, 190-214.	4.2	68
20	Resilient cooling strategies â€“ A critical review and qualitative assessment. Energy and Buildings, 2021, 251, 111312.	3.1	68
21	Electricity production and cooling energy savings from installation of a building-integrated photovoltaic roof on an office building. Energy and Buildings, 2013, 56, 210-220.	3.1	61
22	Procedure for measuring the solar reflectance of flat or curved roofing assemblies. Solar Energy, 2008, 82, 648-655.	2.9	55
23	Potential benefits of solar reflective car shells: Cooler cabins, fuel savings and emission reductions. Applied Energy, 2011, 88, 4343-4357.	5.1	54
24	Using remote sensing to quantify albedo of roofs in seven California cities, Part 1: Methods. Solar Energy, 2015, 115, 777-790.	2.9	47
25	Potential benefits of cool walls on residential and commercial buildings across California and the United States: Conserving energy, saving money, and reducing emission of greenhouse gases and air pollutants. Energy and Buildings, 2019, 199, 588-607.	3.1	46
26	Keeping California cool: Recent cool community developments. Energy and Buildings, 2016, 114, 20-26.	3.1	45
27	Thermal performance and energy savings of white and sedum-tray garden roof: A case study in a Chongqing office building. Energy and Buildings, 2017, 156, 343-359.	3.1	45
28	Methods and instrumentation to measure the effective solar reflectance of fluorescent cool surfaces. Energy and Buildings, 2017, 152, 752-765.	3.1	39
29	Measured temperature reductions and energy savings from a cool tile roof on a central California home. Energy and Buildings, 2014, 80, 57-71.	3.1	37
30	Optimization of cool roof and night ventilation in office buildings: AÂcase study in Xiamen, China. Renewable Energy, 2020, 147, 2279-2294.	4.3	35
31	Cool Roofs in Guangzhou, China: Outdoor Air Temperature Reductions during Heat Waves and Typical Summer Conditions. Environmental Science & Technology, 2015, 49, 14672-14679.	4.6	34
32	Systematic Comparison of the Influence of Cool Wall versus Cool Roof Adoption on Urban Climate in the Los Angeles Basin. Environmental Science & Technology, 2018, 52, 11188-11197.	4.6	31
33	Effects of natural soiling and weathering on cool roof energy savings for dormitory buildings in Chinese cities with hot summers. Solar Energy Materials and Solar Cells, 2019, 200, 110016.	3.0	26
34	Passive cooling designs to improve heat resilience of homes in underserved and vulnerable communities. Energy and Buildings, 2021, 252, 111383.	3.1	26
35	Modeling the climate impacts of deploying solar reflective cool pavements in California cities. Journal of Geophysical Research D: Atmospheres, 2017, 122, 6798-6817.	1.2	25
36	Investigating the Urban Air Quality Effects of Cool Walls and Cool Roofs in Southern California. Environmental Science & Technology, 2019, 53, 7532-7542.	4.6	25

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37	Duct systems in large commercial buildings: physical characterization, air leakage, and heat conduction gains. Energy and Buildings, 2000, 32, 109-119.	3.1	24
38	Design, characterization, and fabrication of solar-retroreflective cool-wall materials. Solar Energy Materials and Solar Cells, 2020, 206, 110117.	3.0	24
39	Reflectometer measurement of roofing aggregate albedo. Solar Energy, 2014, 100, 159-171.	2.9	22
40	Using remote sensing to quantify albedo of roofs in seven California cities, Part 2: Results and application to climate modeling. Solar Energy, 2015, 115, 791-805.	2.9	21
41	Self-cleaning and de-pollution efficacies of photocatalytic architectural membranes. Applied Catalysis B: Environmental, 2021, 281, 119260.	10.8	21
42	Comparison of software models for energy savings from cool roofs. Energy and Buildings, 2016, 114, 130-135.	3.1	20
43	Air-Temperature Response to Neighborhood-Scale Variations in Albedo and Canopy Cover in the Real World: Fine-Resolution Meteorological Modeling and Mobile Temperature Observations in the Los Angeles Climate Archipelago. Climate, 2018, 6, 53.	1.2	17
44	Three-year weathering tests on asphalt shingles: Solar reflectance. Solar Energy Materials and Solar Cells, 2012, 99, 277-281.	3.0	16
45	Life cycle assessment of white roof and sedum-tray garden roof for office buildings in China. Sustainable Cities and Society, 2019, 46, 101390.	5.1	15
46	Observational Evidence of Neighborhood Scale Reductions in Air Temperature Associated with Increases in Roof Albedo. Climate, 2018, 6, 98.	1.2	14
47	A simple tool for estimating city-wide annual electrical energy savings from cooler surfaces. Urban Climate, 2015, 14, 315-325.	2.4	13
48	Potential benefits and optimization of cool-coated office buildings: A case study in Chongqing, China. Energy, 2021, 226, 120373.	4.5	13
49	Influence of street setbacks on solar reflection and air cooling by reflective streets in urban canyons. Solar Energy, 2017, 144, 144-157.	2.9	12
50	Conceptualising a resilient cooling system: A socio-technical approach. City and Environment Interactions, 2021, 11, 100065.	1.8	12
51	Using solar availability factors to adjust cool-wall energy savings for shading and reflection by neighboring buildings. Solar Energy, 2019, 180, 717-734.	2.9	10
52	Preparatory meteorological modeling and theoretical analysis for a neighborhood-scale cool roof demonstration. Urban Climate, 2018, 24, 616-632.	2.4	9
53	Experimental comparison of pyranometer, reflectometer, and spectrophotometer methods for the measurement of roofing product albedo. Solar Energy, 2020, 206, 826-847.	2.9	9
54	Analysis of the effect of vegetation on albedo in residential areas: case studies in suburban Sacramento and Los Angeles, CA. GIScience and Remote Sensing, 2013, 50, 64-77.	2.4	7

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55	Effects of airflow infiltration on the thermal performance of internally insulated ducts. Energy and Buildings, 2000, 32, 345-354.	3.1	6
56	Modeling potential air temperature reductions yielded by cool roofs and urban irrigation in the Kansas City Metropolitan Area. Urban Climate, 2021, 37, 100833.	2.4	6
57	Targeting buildings for energy-saving cool-wall retrofits: a case study at the University of California, Davis. Energy and Buildings, 2021, 249, 111014.	3.1	5