Bjrn Petter Jelle

List of Publications by Citations

77 papers	5,313 citations	34 h-index	72 g-index
77 ext. papers	5,952 ext. citations	5.2 avg, IF	6.44 L-index

#	Paper	IF	Citations
77	Aerogel insulation for building applications: A state-of-the-art review. *Energy and Buildings*, **2011**, 43, 761-769	7	681
76	Traditional, state-of-the-art and future thermal building insulation materials and solutions Properties, requirements and possibilities. *Energy and Buildings*, **2011**, 43, 2549-2563	7	671
75	Phase change materials for building applications: A state-of-the-art review. *Energy and Buildings*, **2010**, 42, 1361-1368	7	612
74	Phase change materials and products for building applications: A state-of-the-art review and future research opportunities. *Energy and Buildings*, **2015**, 94, 150-176	7	316
73	Vacuum insulation panels for building applications: A review and beyond. *Energy and Buildings*, **2010**, 42, 147-172	7	269
72	Vacuum insulation panel products: A state-of-the-art review and future research pathways. *Applied Energy*, **2014**, 116, 355-375	10.7	155
71	The path to the high performance thermal building insulation materials and solutions of tomorrow. *Journal of Building Physics*, **2010**, 34, 99-123	2.6	135
70	Aerogel-incorporated concrete: An experimental study. *Construction and Building Materials*, **2014**, 52, 130-136	6.7	128
69	Monodisperse hollow silica nanospheres for nano insulation materials: synthesis, characterization, and life cycle assessment. *ACS Applied Materials & Interfaces*, **2013**, 5, 761-7	9.5	121
68	Windows in the buildings of tomorrow: Energy losers or energy gainers?. *Energy and Buildings*, **2013**, 61, 185-192	7	117
67	Low-emissivity materials for building applications: A state-of-the-art review and future research perspectives. *Energy and Buildings*, **2015**, 96, 329-356	7	108
66	Insulating glazing units with silica aerogel granules: The impact of particle size. *Applied Energy*, **2014**, 128, 27-34	10.7	96
65	Experimental investigations of aerogel-incorporated ultra-high performance concrete. *Construction and Building Materials*, **2015**, 77, 307-316	6.7	95
64	Transmission Spectra of an Electrochromic Window Based on Polyaniline, Prussian Blue and Tungsten Oxide. *Journal of the Electrochemical Society*, **1993**, 140, 3560-3564	3.9	91
63	State-of-the-art Building Integrated Photovoltaics. *Energy Procedia*, **2012**, 20, 68-77	2.3	69
62	Key elements of and material performance targets for highly insulating window frames. *Energy and Buildings*, **2011**, 43, 2583-2594	7	67
61	Aging effects on thermal properties and service life of vacuum insulation panels. *Journal of Building Physics*, **2011**, 35, 128-167	2.6	66

60	The challenge of removing snow downfall on photovoltaic solar cell roofs in order to maximize solar energy efficiency: Research opportunities for the future. *Energy and Buildings*, **2013**, 67, 334-351	7	65
59	Window spacers and edge seals in insulating glass units: A state-of-the-art review and future perspectives. *Energy and Buildings*, **2013**, 58, 263-280	7	64
58	Aerogel granulate glazing facades and their application potential from an energy saving perspective. *Applied Energy*, **2015**, 142, 179-191	10.7	60
57	Visible-Light-Driven Photochromism of Hexagonal Sodium Tungsten Bronze Nanorods. *Journal of Physical Chemistry C*, **2013**, 117, 13753-13761	3.8	55
56	Effect of facade components on energy efficiency in office buildings. *Applied Energy*, **2015**, 158, 422-432	10.7	54
55	The Path to the Building Integrated Photovoltaics of Tomorrow. *Energy Procedia*, **2012**, 20, 78-87	2.3	53
54	Paraotwayite-type β-Ni(OH)2 Nanowires: Structural, Optical, and Electrochemical Properties. *Journal of Physical Chemistry C*, **2013**, 117, 17294-17302	3.8	52
53	Building Integrated Photovoltaics: A Concise Description of the Current State of the Art and Possible Research Pathways. *Energies*, **2016**, 9, 21	3.1	52
52	Gas-filled panels for building applications: A state-of-the-art review. *Energy and Buildings*, **2010**, 42, 1969-1975	7	51
51	Transmission spectra of an electrochromic window consisting of polyaniline, prussian blue and tungsten oxide. *Electrochimica Acta*, **1993**, 38, 1497-1500	6.7	49
50	Development of a model for radon concentration in indoor air. *Science of the Total Environment*, **2012**, 416, 343-50	10.2	41
49	Impact of convection on thermal performance of aerogel granulate glazing systems. *Energy and Buildings*, **2015**, 88, 165-173	7	40
48	Effect of storage and curing conditions at elevated temperatures on aerogel-incorporated mortar samples based on UHPC recipe. *Construction and Building Materials*, **2016**, 106, 640-649	6.7	39
47	Transmission spectra of an electrochromic window based on polyaniline, tungsten oxide and a solid polymer electrolyte. *Electrochimica Acta*, **1992**, 37, 1377-1380	6.7	39
46	Aerogel granule aging driven by moisture and solar radiation. *Energy and Buildings*, **2015**, 103, 238-248	7	38
45	Dynamic light modulation in an electrochromic window consisting of polyaniline, tungsten oxide and a solid polymer electrolyte. *Synthetic Metals*, **1993**, 54, 315-320	3.6	36
44	Comparison of accelerated climate ageing methods of polymer building materials by attenuated total reflectance Fourier transform infrared radiation spectroscopy. *Construction and Building Materials*, **2011**, 25, 2122-2132	6.7	35
43	Calcined clays as binder for thermal insulating and structural aerogel incorporated mortar. *Cement and Concrete Composites*, **2016**, 72, 213-221	8.6	29

42	Improving thermal insulation of timber frame walls by retrofitting with vacuum insulation panels – experimental and theoretical investigations. *Journal of Building Physics*, **2011**, 35, 168-188	2.6	29
41	Nano Insulation Materials: Synthesis and Life Cycle Assessment. *Procedia CIRP*, **2014**, 15, 490-495	1.8	28
40	Coated wooden claddings and the influence of nanoparticles on the weathering performance. *Progress in Organic Coatings*, **2012**, 75, 72-78	4.8	28
39	Thermal Conductivity of TiO2Nanotubes. *Journal of Physical Chemistry C*, **2013**, 117, 1401-1408	3.8	28
38	Developing Low-conductance Window Frames: Capabilities and Limitations of Current Window Heat Transfer Design Tools – State-of-the-Art Review. *Journal of Building Physics*, **2008**, 32, 131-153	2.6	28
37	Weathering performance of spruce coated with water based acrylic paint modified with TiO2 and clay nanoparticles. *Progress in Organic Coatings*, **2013**, 76, 1543-1548	4.8	26
36	Accelerated climate aging of building materials and their characterization by Fourier transform infrared radiation analysis. *Journal of Building Physics*, **2012**, 36, 99-112	2.6	26
35	Application of ATR-FTIR Spectroscopy to Compare the Cell Materials of Wood Decay Fungi with Wood Mould Fungi. *International Journal of Spectroscopy*, **2015**, 2015, 1-7		25
34	Hot box investigations and theoretical assessments of miscellaneous vacuum insulation panel configurations in building envelopes. *Journal of Building Physics*, **2011**, 34, 297-324	2.6	25
33	Investigations of 6-pane glazing: Properties and possibilities. *Energy and Buildings*, **2019**, 190, 61-68	7	24
32	Transmission through an electrochromic window based on polyaniline, tungsten oxide and a solid polymer electrolyte. *Materials Science and Engineering B: Solid-State Materials for Advanced Technology*, **1992**, 13, 239-241	3.1	24
31	Reduction factor for polyaniline films on ito from cyclic voltammetry and visible absorption spectra. *Electrochimica Acta*, **1993**, 38, 1643-1647	6.7	24
30	Correlation between light absorption and electric charge in solid state electrochromic windows. *Journal of Applied Electrochemistry*, **1999**, 29, 1103-1110	2.6	23
29	Phase Change Materials for Application in Energy-Efficient Buildings **2017**, 57-118		21
28	Robustness classification of materials, assemblies and buildings. *Journal of Building Physics*, **2014**, 37, 213-245	2.6	21
27	Norwegian Pitched Roof Defects. *Buildings*, **2016**, 6, 24	3.2	20
26	Durability-enhanced vanadium dioxide thermochromic film for smart windows. *Materials Today Physics*, **2020**, 13, 100205	8	20
25	Antireflection properties of monodisperse hollow silica nanospheres. *Applied Physics A: Materials Science and Processing*, **2013**, 110, 65-70	2.6	19

24	Effects of TiO2 and clay nanoparticles loading on weathering performance of coated wood. *Progress in Organic Coatings*, **2013**, 76, 1425-1429	4.8	19
23	Color changes of wood and wood-based materials due to natural and artificial weathering. *Wood Material Science and Engineering*, **2013**, 8, 13-25	1.9	19
22	Accelerated ageing and durability of double-glazed sealed insulating window panes and impact on heating demand in buildings. *Energy and Buildings*, **2016**, 116, 395-402	7	19
21	Avoiding Snow and Ice Formation on Exterior Solar Cell Surfaces □A Review of Research Pathways and Opportunities. *Procedia Engineering*, **2016**, 145, 699-706		17
20	Large-scale experimental wind-driven rain exposure investigations of building integrated photovoltaics. *Solar Energy*, **2013**, 90, 179-187	6.8	17
19	Implementation of radon barriers, model development and calculation of radon concentration in indoor air. *Journal of Building Physics*, **2011**, 34, 195-222	2.6	17
18	Lightweight and thermally insulating aerogel glass materials. *Applied Physics A: Materials Science and Processing*, **2014**, 117, 799-808	2.6	16
17	Building Integration of Aerogel Glazings. *Procedia Engineering*, **2016**, 145, 723-728		15
16	Accelerated aging of treated aluminum for use as a cool colored material for facades. *Energy and Buildings*, **2016**, 112, 184-197	7	13
15	Vacuum insulation panels in wood frame wall constructions with different stud profiles. *Journal of Building Physics*, **2012**, 36, 212-226	2.6	13
14	Sealant aging and its correlation with facade reflectance. *Construction and Building Materials*, **2014**, 69, 390-402	6.7	10
13	Impregnated wooden claddings and the influence of nanoparticles on the weathering performance. *Wood Material Science and Engineering*, **2012**, 7, 186-195	1.9	10
12	Utilization of size-tunable hollow silica nanospheres for building thermal insulation applications. *Journal of Building Engineering*, **2020**, 31, 101336	5.2	8
11	Preparation of low density organosilica monoliths containing hollow silica nanospheres as thermal insulation materials. *Materials Letters*, **2019**, 250, 151-154	3.3	6
10	Reaction to fire and water vapour resistance performance of treated wood specimens containing TiO2 and clay nanoparticles. *Fire and Materials*, **2014**, 38, 717-724	1.8	5
9	Measurement of the convective moisture transfer coefficient from porous building material surfaces applying a wind tunnel method. *Journal of Building Physics*, **2013**, 37, 103-121	2.6	5
8	Development of Nano Insulation Materials for Building Constructions **2015**, 429-434		4
7	Fatigue resistance of double sealant composed of polyisobutylene sealant adjacent to silicone sealant. *Construction and Building Materials*, **2014**, 66, 467-475	6.7	4

6	Durability, reaction to fire properties, and environmental impact of treated and untreated wooden claddings. *Wood Material Science and Engineering*, **2013**, 8, 175-187	1.9	3
5	Influence of shell materials on the optical performance of VO2 core–shell nanoparticle-based thermochromic films. *Materials Today Nano*, **2021**, 13, 100102	9.7	3
4	3D-printed polyamide structures coated with TiO2 nanoparticles, towards a 360-degree rotating photocatalytic reactor. *Materials Letters*, **2022**, 307, 131044	3.3	1
3	A framework for classification of snow- and icephobicity. *Journal of Adhesion Science and Technology*, **2021**, 35, 1087-1098	2	1
2	UV-VIS-NIR Transmission Spectra of an Electrochromic Window based on Polyaniline, Prussian Blue, Tungsten Oxide and a Solid Polymer Electrolyte **1994**, 377-380		
1	Operating Hardware Impact on the Heat Transfer Properties of Windows. *Energies*, **2021**, 14, 1145	3.1	