BjÃ¸rn Petter Jelle

List of Publications by Year
in descending order

77 papers	6,727 citations	101384 36 h-index	79541 73 g-index
77 all docs	77 docs citations	77 times ranked	5554 citing authors

#	Article	IF	Citations
1	3D-printed polyamide structures coated with TiO2 nanoparticles, towards a 360-degree rotating photocatalytic reactor. Materials Letters, 2022, 307, 131044.	1.3	9
2	A framework for classification of snow- and icephobicity. Journal of Adhesion Science and Technology, 2021, 35, 1087-1098.	1.4	4
3	Influence of shell materials on the optical performance of VO2 coreâ€“shell nanoparticleâ€“based thermochromic films. Materials Today Nano, 2021, 13, 100102.	2.3	4
4	Operating Hardware Impact on the Heat Transfer Properties of Windows. Energies, 2021, 14, 1145.	1.6	0
5	Utilization of size-tunable hollow silica nanospheres for building thermal insulation applications. Journal of Building Engineering, 2020, 31, 101336.	1.6	8
6	Durability-enhanced vanadium dioxide thermochromic film for smart windows. Materials Today Physics, 2020, 13, 100205.	2.9	38
7	Preparation of low density organosilica monoliths containing hollow silica nanospheres as thermal insulation materials. Materials Letters, 2019, 250, 151-154.	1.3	12
8	Investigations of 6-pane glazing: Properties and possibilities. Energy and Buildings, 2019, 190, 61-68.	3.1	44
9	Phase Change Materials for Application in Energy-Efficient Buildings. , 2017, , 57-118.		32
10	Norwegian Pitched Roof Defects. Buildings, 2016, 6, 24.	1.4	27
11	Building Integrated Photovoltaics: A Concise Description of the Current State of the Art and Possible Research Pathways. Energies, 2016, 9, 21.	1.6	70
12	Building Integration of Aerogel Glazings. Procedia Engineering, 2016, 145, 723-728.	1.2	20
13	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.	3.1	25
14	Calcined clays as binder for thermal insulating and structural aerogel incorporated mortar. Cement and Concrete Composites, 2016, 72, 213-221.	4.6	42
15	Avoiding Snow and Ice Formation on Exterior Solar Cell Surfaces â€“ A Review of Research Pathways and Opportunities. Procedia Engineering, 2016, 145, 699-706.	1.2	26
16	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.	3.2	57
17	Accelerated aging of treated aluminum for use as a cool colored material for facades. Energy and Buildings, 2016, 112, 184-197.	3.1	15
18	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.	1.4	35

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19	Aerogel granulate glazing facades and their application potential from an energy saving perspective. Applied Energy, 2015, 142, 179-191.	5.1	78
20	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.	3.1	419
21	Experimental investigations of aerogel-incorporated ultra-high performance concrete. Construction and Building Materials, 2015, 77, 307-316.	3.2	122
22	Aerogel granule aging driven by moisture and solar radiation. Energy and Buildings, 2015, 103, 238-248.	3.1	49
23	Low-emissivity materials for building applications: A state-of-the-art review and future research perspectives. Energy and Buildings, 2015, 96, 329-356.	3.1	183
24	Development of Nano Insulation Materials for Building Constructions. , 2015, , 429-434.		4
25	Effect of facade components on energy efficiency in office buildings. Applied Energy, 2015, 158, 422-432.	5.1	73
26	Impact of convection on thermal performance of aerogel granulate glazing systems. Energy and Buildings, 2015, 88, 165-173.	3.1	45
27	Sealant aging and its correlation with facade reflectance. Construction and Building Materials, 2014, 69, 390-402.	3.2	11
28	Lightweight and thermally insulating aerogel glass materials. Applied Physics A: Materials Science and Processing, 2014, 117, 799-808.	1.1	19
29	Reaction to fire and water vapour resistance performance of treated wood specimens containing TiO₂ and clay nanoparticles. Fire and Materials, 2014, 38, 717-724.	0.9	6
30	Robustness classification of materials, assemblies and buildings. Journal of Building Physics, 2014, 37, 213-245.	1.2	21
31	Vacuum insulation panel products: A state-of-the-art review and future research pathways. Applied Energy, 2014, 116, 355-375.	5.1	187
32	Aerogel-incorporated concrete: An experimental study. Construction and Building Materials, 2014, 52, 130-136.	3.2	179
33	Fatigue resistance of double sealant composed of polyisobutylene sealant adjacent to silicone sealant. Construction and Building Materials, 2014, 66, 467-475.	3.2	9
34	Nano Insulation Materials: Synthesis and Life Cycle Assessment. Procedia CIRP, 2014, 15, 490-495.	1.0	36
35	Insulating glazing units with silica aerogel granules: The impact of particle size. Applied Energy, 2014, 128, 27-34.	5.1	110
36	Monodisperse Hollow Silica Nanospheres for Nano Insulation Materials: Synthesis, Characterization, and Life Cycle Assessment. ACS Applied Materials & Interfaces, 2013, 5, 761-767.	4.0	137

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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.	1.9	31
38	The challenge of removing snow downfall on photovoltaic solar cell roofs in order to maximize solar energy efficiencyâ€”Research opportunities for the future. Energy and Buildings, 2013, 67, 334-351.	3.1	83
39	Antireflection properties of monodisperse hollow silica nanospheres. Applied Physics A: Materials Science and Processing, 2013, 110, 65-70.	1.1	25
40	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.	3.1	81
41	Large-scale experimental wind-driven rain exposure investigations of building integrated photovoltaics. Solar Energy, 2013, 90, 179-187.	2.9	19
42	Effects of TiO2 and clay nanoparticles loading on weathering performance of coated wood. Progress in Organic Coatings, 2013, 76, 1425-1429.	1.9	21
43	Windows in the buildings of tomorrow: Energy losers or energy gainers?. Energy and Buildings, 2013, 61, 185-192.	3.1	154
44	Thermal Conductivity of TiO₂ Nanotubes. Journal of Physical Chemistry C, 2013, 117, 1401-1408.	1.5	36
45	Color changes of wood and wood-based materials due to natural and artificial weathering. Wood Material Science and Engineering, 2013, 8, 13-25.	1.1	23
46	Visible-Light-Driven Photochromism of Hexagonal Sodium Tungsten Bronze Nanorods. Journal of Physical Chemistry C, 2013, 117, 13753-13761.	1.5	65
47	Paraotwayite-type Î±-Ni(OH)₂ Nanowires: Structural, Optical, and Electrochemical Properties. Journal of Physical Chemistry C, 2013, 117, 17294-17302.	1.5	69
48	Durability, reaction to fire properties, and environmental impact of treated and untreated wooden claddings. Wood Material Science and Engineering, 2013, 8, 175-187.	1.1	5
49	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.	1.2	7
50	Vacuum insulation panels in wood frame wall constructions with different stud profiles. Journal of Building Physics, 2012, 36, 212-226.	1.2	13
51	Accelerated climate aging of building materials and their characterization by Fourier transform infrared radiation analysis. Journal of Building Physics, 2012, 36, 99-112.	1.2	26
52	Impregnated wooden claddings and the influence of nanoparticles on the weathering performance. Wood Material Science and Engineering, 2012, 7, 186-195.	1.1	10
53	State-of-the-art Building Integrated Photovoltaics. Energy Procedia, 2012, 20, 68-77.	1.8	85
54	The Path to the Building Integrated Photovoltaics of Tomorrow. Energy Procedia, 2012, 20, 78-87.	1.8	62

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55	Development of a model for radon concentration in indoor air. Science of the Total Environment, 2012, 416, 343-350.	3.9	46
56	Coated wooden claddings and the influence of nanoparticles on the weathering performance. Progress in Organic Coatings, 2012, 75, 72-78.	1.9	33
57	Implementation of radon barriers, model development and calculation of radon concentration in indoor air. Journal of Building Physics, 2011, 34, 195-222.	1.2	19
58	Key elements of and material performance targets for highly insulating window frames. Energy and Buildings, 2011, 43, 2583-2594.	3.1	83
59	Traditional, state-of-the-art and future thermal building insulation materials and solutions â€“ Properties, requirements and possibilities. Energy and Buildings, 2011, 43, 2549-2563.	3.1	864
60	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.	3.2	37
61	Aerogel insulation for building applications: A state-of-the-art review. Energy and Buildings, 2011, 43, 761-769.	3.1	859
62	Aging effects on thermal properties and service life of vacuum insulation panels. Journal of Building Physics, 2011, 35, 128-167.	1.2	83
63	Improving thermal insulation of timber frame walls by retrofitting with vacuum insulation panels â€“ experimental and theoretical investigations. Journal of Building Physics, 2011, 35, 168-188.	1.2	32
64	Hot box investigations and theoretical assessments of miscellaneous vacuum insulation panel configurations in building envelopes. Journal of Building Physics, 2011, 34, 297-324.	1.2	27
65	Vacuum insulation panels for building applications: A review and beyond. Energy and Buildings, 2010, 42, 147-172.	3.1	319
66	Phase change materials for building applications: A state-of-the-art review. Energy and Buildings, 2010, 42, 1361-1368.	3.1	763
67	Gas-filled panels for building applications: A state-of-the-art review. Energy and Buildings, 2010, 42, 1969-1975.	3.1	60
68	The path to the high performance thermal building insulation materials and solutions of tomorrow. Journal of Building Physics, 2010, 34, 99-123.	1.2	164
69	Developing Low-conductance Window Frames: Capabilities and Limitations of Current Window Heat Transfer Design Tools â€" State-of-the-Art Review. Journal of Building Physics, 2008, 32, 131-153.	1.2	32
70	Correlation between light absorption and electric charge in solid state electrochromic windows. Journal of Applied Electrochemistry, 1999, 29, 1103-1110.	1.5	25
71	UV-VIS-NIR Transmission Spectra of an Electrochromic Window based on Polyaniline, Prussian Blue, Tungsten Oxide and a Solid Polymer Electrolyte. , 1994, , 377-380.		0
72	Transmission spectra of an electrochromic window consisting of polyaniline, prussian blue and tungsten oxide. Electrochimica Acta, 1993, 38, 1497-1500.	2.6	60

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73	Reduction factor for polyaniline films on ito from cyclic voltammetry and visible absorption spectra. Electrochimica Acta, 1993, 38, 1643-1647.	2.6	27
74	Transmission Spectra of an Electrochromic Window Based on Polyaniline, Prussian Blue and Tungsten Oxide. Journal of the Electrochemical Society, 1993, 140, 3560-3564.	1.3	104
75	Dynamic light modulation in an electrochromic window consisting of polyaniline, tungsten oxide and a solid polymer electrolyte. Synthetic Metals, 1993, 54, 315-320.	2.1	42
76	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.	1.7	26
77	Transmission spectra of an electrochromic window based on polyaniline, tungsten oxide and a solid polymer electrolyte. Electrochimica Acta, 1992, 37, 1377-1380.	2.6	51