Yupeng Wu

List of Publications by Citations

90 papers	1,892 citations	24 h-index	41 g-index
93 ext. papers	2,567 ext. citations	6 avg, IF	5.71 L-index

#	Paper	IF	Citations
90	A review of the applications of phase change materials in cooling, heating and power generation in different temperature ranges. *Applied Energy*, **2018**, 220, 242-273	10.7	270
89	Experimental measurement and numerical simulation of horizontal-coupled slinky ground source heat exchangers. *Applied Thermal Engineering*, **2010**, 30, 2574-2583	5.8	120
88	Thermochromic smart window technologies for building application: A review. *Applied Energy*, **2019**, 255, 113522	10.7	105
87	Building information modelling based building energy modelling: A review. *Applied Energy*, **2019**, 238, 320-343	10.7	105
86	Smart windows□Dynamic control of building energy performance. *Energy and Buildings*, **2017**, 139, 535-546	7	74
85	A review of thermal absorbers and their integration methods for the combined solar photovoltaic/thermal (PV/T) modules. *Renewable and Sustainable Energy Reviews*, **2017**, 75, 839-854	16.2	69
84	Effect of air voids content on thermal properties of asphalt mixtures. *Construction and Building Materials*, **2016**, 115, 327-335	6.7	63
83	Integrated semi-transparent cadmium telluride photovoltaic glazing into windows: Energy and daylight performance for different architecture designs. *Applied Energy*, **2018**, 231, 972-984	10.7	48
82	Interactions between the physical soil environment and a horizontal ground coupled heat pump, for a domestic site in the UK. *Renewable Energy*, **2012**, 44, 141-153	8.1	47
81	A review of thermal and optical characterisation of complex window systems and their building performance prediction. *Applied Energy*, **2018**, 222, 729-747	10.7	45
80	A Review of Transparent Insulation Material (TIM) for building energy saving and daylight comfort. *Applied Energy*, **2018**, 226, 713-729	10.7	44
79	Experimental characterisation of a Fresnel lens photovoltaic concentrating system. *Solar Energy*, **2012**, 86, 430-440	6.8	43
78	Design and development of a reflective membrane for a novel Building Integrated Concentrating Photovoltaic (BICPV) Smart Window□system. *Applied Energy*, **2016**, 182, 331-339	10.7	43
77	Evaluation of the thermal and optical performance of thermochromic windows for office buildings in China. *Energy and Buildings*, **2018**, 176, 216-231	7	41
76	Smart solar concentrators for building integrated photovoltaic fa□des. *Solar Energy*, **2016**, 133, 111-118	6.8	37
75	Investigation on designed fins-enhanced phase change materials system for thermal management of a novel building integrated concentrating PV. *Applied Energy*, **2018**, 225, 696-709	10.7	36
74	Comprehensive evaluation of window-integrated semi-transparent PV for building daylight performance. *Renewable Energy*, **2020**, 145, 1399-1411	8.1	35

73	Developing an Innovative Method for Visual Perception Evaluation in a Physical-Based Virtual Environment. *Building and Environment*, **2019**, 162, 106278	6.5	30
72	A state-of-the-art review of the application of phase change materials (PCM) in Mobilized-Thermal Energy Storage (M-TES) for recovering low-temperature industrial waste heat (IWH) for distributed heat supply. *Renewable Energy*, **2021**, 168, 1040-1057	8.1	29
71	Analysis of the daylight performance of a glazing system with Parallel Slat Transparent Insulation Material (PS-TIM). *Energy and Buildings*, **2017**, 139, 616-633	7	28
70	Development of a comprehensive method to analyse glazing systems with Parallel Slat Transparent Insulation material (PS-TIM). *Applied Energy*, **2017**, 205, 951-963	10.7	27
69	Design and development of a Building Façade Integrated Asymmetric Compound Parabolic Photovoltaic concentrator (BFI-ACP-PV). *Applied Energy*, **2018**, 220, 325-336	10.7	26
68	Smart windows: Thermal modelling and evaluation. *Solar Energy*, **2014**, 103, 200-209	6.8	26
67	Vision-based detection and prediction of equipment heat gains in commercial office buildings using a deep learning method. *Applied Energy*, **2020**, 277, 115506	10.7	25
66	Transparent Wood Composites Fabricated by Impregnation of Epoxy Resin and W-Doped VO Nanoparticles for Application in Energy-Saving Windows. *ACS Applied Materials & Interfaces*, **2020**, 12, 34777-34783	9.5	23
65	Prediction of the thermal performance of horizontal-coupled ground-source heat exchangers. *International Journal of Low-Carbon Technologies*, **2011**, 6, 261-269	2.8	23
64	Analysis of the daylight performance of window integrated photovoltaics systems. *Renewable Energy*, **2020**, 145, 153-163	8.1	23
63	Experimental measurement and numerical simulation of the thermal performance of a double glazing system with an interstitial Venetian blind. *Building and Environment*, **2016**, 103, 111-122	6.5	22
62	Optical aspects and energy performance of switchable ethylene-tetrafluoroethylene (ETFE) foil cushions. *Applied Energy*, **2018**, 229, 335-351	10.7	21
61	Characteristic study of a novel compact Solar Thermal Facade (STF) with internally extruded pin-fin flow channel for building integration. *Applied Energy*, **2016**, 168, 48-64	10.7	19
60	Optimal design of photovoltaic shading systems for multi-story buildings. *Journal of Cleaner Production*, **2019**, 220, 1024-1038	10.3	18
59	Glazing systems with Parallel Slats Transparent Insulation Material (PS-TIM): Evaluation of building energy and daylight performance. *Energy and Buildings*, **2018**, 159, 213-227	7	18
58	Transmittance and Reflectance Studies of Thermotropic Material for a Novel Building Integrated Concentrating Photovoltaic (BICPV) Smart Window System. *Energies*, **2017**, 10, 1889	3.1	18
57	Thermal evaluation of a double glazing façade system with integrated Parallel Slat Transparent Insulation Material (PS-TIM). *Building and Environment*, **2016**, 105, 69-81	6.5	17
56	Scanning photocurrent microscopy of 3D printed light trapping structures in dye-sensitized solar cells. *Solar Energy Materials and Solar Cells*, **2018**, 180, 103-109	6.4	16

55	Analytical solutions of force convective heat transfer in plate heat exchangers partially filled with metal foams. *International Journal of Heat and Mass Transfer*, **2017**, 110, 476-481	4.9	15
54	Evaluating the impact of viewing location on view perception using a virtual environment. *Building and Environment*, **2020**, 180, 106932	6.5	15
53	An exploration of the combined effects of NIR and VIS spectrally selective thermochromic materials on building performance. *Energy and Buildings*, **2019**, 201, 149-162	7	14
52	Smart windows Transmittance tuned thermochromic coatings for dynamic control of building performance. *Energy and Buildings*, **2021**, 235, 110717	7	14
51	Toward a Sustainable Decentralized Water Supply: Review of Adsorption Desorption Desalination (ADD) and Current Technologies: Saudi Arabia (SA) as a Case Study. *Water (Switzerland)*, **2020**, 12, 1111	3	13
50	Design, development and characterisation of a Building Integrated Concentrating Photovoltaic (BICPV) smart window system. *Solar Energy*, **2021**, 220, 722-734	6.8	12
49	Crystallized TiO2 (A) VO2 (M/R) nanocomposite films with electrochromism hermochromism dual-response properties. *RSC Advances*, **2016**, 6, 32176-32182	3.7	11
48	Investigation of Mg-Y coated gasochromic smart windows for building applications. *Building Simulation*, **2019**, 12, 99-112	3.9	9
47	Development of experimental methods for quantifying the human response to chromatic glazing. *Building and Environment*, **2019**, 147, 199-210	6.5	9
46	Energy and daylight performance of a smart window: Window integrated with thermotropic parallel slat-transparent insulation material. *Applied Energy*, **2021**, 293, 116826	10.7	9
45	Energy-Saving Smart Windows with HPC/PAA Hybrid Hydrogels as Thermochromic Materials. *ACS Applied Energy Materials*, **2021**, 4, 9783-9791	6.1	9
44	Monte-Carlo optical model coupled with Inverse Adding-Doubling for Building Integrated Photovoltaic smart window design and characterisation. *Solar Energy Materials and Solar Cells*, **2021**, 223, 110972	6.4	8
43	Experimental Assessment of the Energy Performance of a Double-Skin Semi-Transparent PV Window in the Hot-Summer and Cold-Winter Zone of China. *Energies*, **2018**, 11, 1700	3.1	8
42	Integrated CdTe PV glazing into windows: energy and daylight performance for different window-to-wall ratio. *Energy Procedia*, **2019**, 158, 3014-3019	2.3	7
41	Thermal and Optical Analysis of a Passive Heat Recovery and Storage System for Greenhouse Skin. *Procedia Engineering*, **2016**, 155, 472-478		7
40	Study on the Energy Saving Potential for Semi-Transparent PV Window in Southwest China. *Energies*, **2018**, 11, 3239	3.1	7
39	Investigation of the Optical Performance of a Novel Planar Static PV Concentrator with Lambertian Rear Reflectors. *Buildings*, **2017**, 7, 88	3.2	6
38	The effect of thermochromic windows on visual performance and sustained attention. *Energy and Buildings*, **2021**, 236, 110778	7	6

37	Mechanical analysis of photovoltaic panels with various boundary condition. *Renewable Energy*, **2020**, 145, 242-260	8.1	6
36	Numerical investigation of a smart window system with thermotropic Parallel Slat Transparent Insulation Material for building energy conservation and daylight autonomy. *Building and Environment*, **2021**, 203, 108048	6.5	6
35	Design and optical characterisation of an efficient light trapping structure for dye-sensitized solar cell integrated windows. *Building Simulation*, **2019**, 12, 41-49	3.9	5
34	Design Strategy of a Compact Unglazed Solar Thermal Facade (STF) for Building Integration Based on BIM Concept. *Energy Procedia*, **2017**, 105, 1-6	2.3	5
33	Evaluation of the colour properties of CdTe PV windows. *Energy Procedia*, **2019**, 158, 3088-3093	2.3	4
32	Development of a multi-criteria decision making approach for sustainable seawater desalination technologies of medium and large-scale plants: a case study for Saudi Arabia□ vision 2030. *Energy Procedia*, **2019**, 158, 4274-4279	2.3	4
31	A fluid-structure interaction (FSI) and energy generation modelling for roof mounted renewable energy installations in buildings for extreme weather and typhoon resilience. *Renewable Energy*, **2020**, 160, 770-787	8.1	4
30	An experimental analysis of the optical, thermal and power to weight performance of plastic and glass optics with AR coatings for embedded CPV windows. *Solar Energy Materials and Solar Cells*, **2019**, 200, 110027	6.4	4
29	Experimental investigation of evacuated heat pipe solar collector efficiency using phase-change fluid. *International Journal of Low-Carbon Technologies*, **2017**, 12, 392-399	2.8	4
28	Development of cost-effective PCM-carbon foam composites for thermal energy storage. *Energy Reports*, **2022**, 8, 1696-1703	4.6	4
27	Virtual reality as a tool for evaluating user acceptance of view clarity through ETFE double-skin fa□des. *Energy and Buildings*, **2021**, 231, 110554	7	4
26	Dynamic environmental control mechanisms for pneumatic foil constructions. *E3S Web of Conferences*, **2017**, 22, 00048	0.5	3
25	The Early Design Stage of a Novel Solar Thermal Fa□de (STF) for Building Integration: Energy Performance Simulation and Socio-Economic Analysis. *Energy Procedia*, **2016**, 96, 55-66	2.3	3
24	Cooperative Performance of Potentially Developed Thermochromic Glazing under Different Climates. *Energy Procedia*, **2019**, 158, 3094-3100	2.3	2
23	Numerical investigations on the thermal performance of adaptive ETFE foil cushions. *Energy Procedia*, **2019**, 158, 3191-3195	2.3	2
22	A coupled deep learning-based internal heat gains detection and prediction method for energy-efficient office building operation. *Journal of Building Engineering*, **2021**, 103778	5.2	2
21	Conceptual Development of a Compact Unglazed Solar Thermal Facade (STF) for Building Integration. *Energy Procedia*, **2016**, 96, 42-54	2.3	2
20	Optimizing the Configuration of a Compact Thermal Facade Module for Solar Renovation Concept in Buildings. *Energy Procedia*, **2016**, 104, 9-14	2.3	2

19	Experimental characterisation of a smart glazing with tuneable transparency, light scattering ability and electricity generation function. *Applied Energy*, **2021**, 303, 117521	10.7	2
18	Assessment of the Effectiveness of Investment Strategy in Solar Photovoltaic (PV) Energy Sector: A Case Study. *Energy Procedia*, **2017**, 105, 2977-2982	2.3	1
17	Switching daylight: Performance prediction of climate adaptive ETFE foil fa□des. *Building and Environment*, **2022**, 209, 108650	6.5	1
16	Experimental Study of a Compact Unglazed Solar Thermal Facade (STF) for Energy-efficient Buildings. *Energy Procedia*, **2016**, 104, 3-8	2.3	1
15	Study on Lighting -Heating-Electricity Coupled Energy Saving Potential for STPV Window in Southwest China. *IOP Conference Series: Materials Science and Engineering*, **2019**, 556, 012008	0.4	1
14	BIM-based real time building energy simulation and optimization in early design stage. *IOP Conference Series: Materials Science and Engineering*, **2019**, 556, 012064	0.4	1
13	The impact of deep learning□based equipment usage detection on building energy demand estimation. *Building Services Engineering Research and Technology*, **2021**, 42, 545-557	2.3	1
12	Sustainability and structural resilience of building integrated photovoltaics subjected to typhoon strength winds. *Applied Energy*, **2021**, 301, 117437	10.7	1
11	Intelligent windows for electricity generation: A technologies review. *Building Simulation*,1	3.9	1
10	Comprehensive analysis of electrical-optical performance and application potential for 3D concentrating photovoltaic window. *Renewable Energy*, **2022**, 189, 369-382	8.1	1
9	Development of MgSO4/mesoporous silica composites for thermochemical energy storage: the role of porous structure on water adsorption. *Energy Reports*, **2022**, 8, 4913-4921	4.6	1
8	Deep learning and computer vision based occupancy CO2 level prediction for demand-controlled ventilation (DCV). *Journal of Building Engineering*, **2022**, 104715	5.2	1
7	Ternary composite phase change materials (PCMs) towards low phase separation and supercooling: eutectic behaviors and application. *Energy Reports*, **2022**, 8, 2646-2655	4.6	0
6	A novel Fluid-Structure Interaction modelling and optimisation of roofing designs of buildings for typhoon resilience. *IOP Conference Series: Materials Science and Engineering*, **2019**, 556, 012057	0.4	0
5	Numerical evaluation of an optically switchable photovoltaic glazing system for passive daylighting control and energy-efficient building design. *Building and Environment*, **2022**, 219, 109170	6.5	0
4	A fluid-structure interaction modelling of roof mounted renewable energy installations in low rise buildings for extreme weather and typhoon resilience. *IOP Conference Series: Earth and Environmental Science*, **2020**, 463, 012175	0.3	
3	Carbon Nanodots for Sensor Applications **2016**, 69-102		
2	The Assembly of Embedded Systems for Integrated Photovoltaic windows in Rural Buildings (E-IPB). *IOP Conference Series: Materials Science and Engineering*, **2019**, 556, 012040	0.4	

1	Numerical study of a thermal storage tank enclosed PCM capsules. *IOP Conference Series: Materials Science and Engineering*, **2019**, 556, 012013	0.4