Svend H Svendsen

List of Publications by Year
in descending order

93 papers	4,797 citations	136740 32 h-index	98622 67 g-index
95 all docs	95 docs citations	95 times ranked	3103 citing authors

#	Article	IF	Citations
1	4th Generation District Heating (4GDH). Energy, 2014, 68, 1-11.	4.5	1,548
2	The status of 4th generation district heating: Research and results. Energy, 2018, 164, 147-159.	4.5	395
3	Quantifying the potential of automated dynamic solar shading in office buildings through integrated simulations of energy and daylight. Solar Energy, 2011, 85, 757-768.	2.9	201
4	Energy and exergy analysis of low temperature district heating network. Energy, 2012, 45, 237-246.	4.5	132
5	Renewable-based low-temperature district heating for existing buildings in various stages of refurbishment. Energy, 2013, 62, 311-319.	4.5	129
6	Impact of faÃ§ade window design on energy, daylighting and thermal comfort in nearly zero-energy houses. Energy and Buildings, 2015, 102, 149-156.	3.1	117
7	Method and simulation program informed decisions in the early stages of building design. Energy and Buildings, 2010, 42, 1113-1119.	3.1	103
8	Low Temperature District Heating for Future Energy Systems. Energy Procedia, 2017, 116, 26-38.	1.8	92
9	Business models for full service energy renovation of single-family houses in Nordic countries. Applied Energy, 2013, 112, 1558-1565.	5.1	66
10	Simple tool to evaluate the impact of daylight on building energy consumption. Solar Energy, 2008, 82, 787-798.	2.9	64
11	Modelling floor heating systems using a validated two-dimensional ground-coupled numerical model. Building and Environment, 2005, 40, 153-163.	3.0	63
12	Energy, economy and exergy evaluations of the solutions for supplying domestic hot water from low-temperature district heating in Denmark. Energy Conversion and Management, 2016, 122, 142-152.	4.4	61
13	Replacing critical radiators to increase the potential to use low-temperature district heating â€" A case study of 4 Danish single-family houses from the 1930s. Energy, 2016, 110, 75-84.	4.5	56
14	Internal insulation applied in heritage multi-storey buildings with wooden beams embedded in solid masonry brick faÃ§ades. Building and Environment, 2016, 99, 59-72.	3.0	56
15	Space heating with ultra-low-temperature district heating â€" a case study of four single-family houses from the 1980s. Energy Procedia, 2017, 116, 226-235.	1.8	54
16	Evaluations of different domestic hot water preparing methods with ultra-low-temperature district heating. Energy, 2016, 109, 248-259.	4.5	53
17	Method to investigate and plan the application of low temperature district heating to existing hydraulic radiator systems in existing buildings. Energy, 2016, 113, 413-421.	4.5	52
18	Solar collector with monolithic silica aerogel. Journal of Non-Crystalline Solids, 1992, 145, 240-243.	1.5	50

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19	Initiatives for the energy renovation of single-family houses in Denmark evaluated on the basis of barriers and motivators. Energy and Buildings, 2018, 167, 347-358.	3.1	49
20	Ultra-low temperature district heating system with central heat pump and local boosters for low-heat-density area: Analyses on a real case in Denmark. Energy, 2018, 159, 243-251.	4.5	46
21	Method for component-based economical optimisation for use in design of new low-energy buildings. Renewable Energy, 2012, 38, 173-180.	4.3	45
22	Decentralized substations for low-temperature district heating with no Legionella risk, and low return temperatures. Energy, 2016, 110, 65-74.	4.5	45
23	Experimental study of perforated suspended ceilings as diffuse ventilation air inlets. Energy and Buildings, 2013, 56, 160-168.	3.1	42
24	District Heating Network Design and Configuration Optimization with Genetic Algorithm. Journal of Sustainable Development of Energy, Water and Environment Systems, 2013, 1, 291-303.	0.9	42
25	Theoretical overview of heating power and necessary heating supply temperatures in typical Danish single-family houses from the 1900s. Energy and Buildings, 2016, 126, 375-383.	3.1	42
26	Numerical modelling and experimental measurements for a low-temperature district heating substation for instantaneous preparation of DHW with respect to service pipes. Energy, 2012, 41, 392-400.	4.5	41
27	Investigation of interior post-insulated masonry walls with wooden beam ends. Journal of Building Physics, 2013, 36, 265-293.	1.2	39
28	The effect of a rotary heat exchanger in room-based ventilation on indoor humidity in existing apartments in temperate climates. Energy and Buildings, 2016, 116, 349-361.	3.1	38
29	Low-temperature operation of heating systems to enable 4th generation district heating: A review. Energy, 2022, 248, 123529.	4.5	37
30	Method for reducing excess heat supply experienced in typical Chinese district heating systems by achieving hydraulic balance and improving indoor air temperature control at the building level. Energy, 2016, 107, 431-442.	4.5	36
31	The effect of dynamic solar shading on energy, daylighting and thermal comfort in a nearly zero-energy loft room in Rome and Copenhagen. Energy and Buildings, 2017, 135, 302-311.	3.1	36
32	Costs and benefits of preparing existing Danish buildings for low-temperature district heating. Energy, 2019, 176, 718-727.	4.5	36
33	Development of a slim window frame made of glass fibre reinforced polyester. Energy and Buildings, 2010, 42, 1918-1925.	3.1	34
34	A comparative study on substation types and network layouts in connection with low-energy district heating systems. Energy Conversion and Management, 2012, 64, 551-561.	4.4	33
35	Development of a plastic rotary heat exchanger for room-based ventilation in existing apartments. Energy and Buildings, 2015, 107, 1-10.	3.1	33
36	Method for simulating predictive control of building systems operation in the early stages of building design. Applied Energy, 2011, 88, 4597-4606.	5.1	32

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37	Experience from a practical test of low-temperature district heating for space heating in five Danish single-family houses from the 1930s. Energy, 2018, 159, 569-578.	4.5	32
38	Study of thermal performance of capillary micro tubes integrated into the building sandwich element made of high performance concrete. Applied Thermal Engineering, 2013, 52, 576-584.	3.0	31
39	An hourly based performance comparison of an integrated micro-structural perforated shading screen with standard shading systems. Energy and Buildings, 2012, 50, 166-176.	3.1	26
40	Method for a component-based economic optimisation in design of whole building renovation versus demolishing and rebuilding. Energy Policy, 2014, 65, 305-314.	4.2	26
41	Achieving low return temperature for domestic hot water preparation by ultra-low-temperature district heating. Energy Procedia, 2017, 116, 426-437.	1.8	26
42	Comparison between ASHRAE and ISO thermal transmittance calculation methods. Energy and Buildings, 2007, 39, 374-384.	3.1	25
43	Experimental analysis of energy performance f a ventilated window for heat recovery under controlled conditions. Energy and Buildings, 2011, 43, 3200-3207.	3.1	25
44	Analytical and experimental analysis of a low-pressure heat exchanger suitable for passive ventilation. Energy and Buildings, 2011, 43, 275-284.	3.1	25
45	Improving thermal performance of an existing UK district heat network: A case for temperature optimization. Energy and Buildings, 2018, 158, 1576-1585.	3.1	25
46	Full scale measurements and CFD investigations of a wall radiant cooling system integrated in thin concrete walls. Energy and Buildings, 2017, 139, 242-253.	3.1	24
47	Improved Control of Radiator Heating Systems with Thermostatic Radiator Valves without Pre-Setting Function. Energies, 2019, 12, 3215.	1.6	24
48	WinSim: A simple simulation program for evaluating the influence of windows on heating demand and risk of overheating. Solar Energy, 1998, 63, 251-258.	2.9	23
49	Changes in heat load profile of typical Danish multi-storey buildings when energy-renovated and supplied with low-temperature district heating. International Journal of Sustainable Energy, 2015, 34, 232-247.	1.3	23
50	Dynamic behavior of radiant cooling system based on capillary tubes in walls made of high performance concrete. Energy and Buildings, 2015, 108, 92-100.	3.1	22
51	Alternative solutions for inhibiting Legionella in domestic hot water systems based on low-temperature district heating. Building Services Engineering Research and Technology, 2016, 37, 468-478.	0.9	22
52	Evaluation of the renovation of a Danish single-family house based on measurements. Energy and Buildings, 2017, 150, 189-199.	3.1	22
53	Case study of low-temperature heating in an existing single-family houseâ€"A test of methods for simulation of heating system temperatures. Energy and Buildings, 2016, 126, 535-544.	3.1	21
54	Energy labelling of glazings and windows in Denmark: calculated and measured values. Solar Energy, 2002, 73, 23-31.	2.9	19

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55	Energy-efficient and cost-effective in-house substations bypass for improving thermal and DHW (domestic hot water) comfort in bathrooms in low-energy buildings supplied by low-temperature district heating. Energy, 2014, 67, 256-267.	4.5	19
56	Quasi-steady-state model of a counter-flow air-to-air heat-exchanger with phase change. Applied Energy, 2008, 85, 312-325.	5.1	18
57	Roadmap for improving roof and faÃ§ade windows in nearly zero-energy houses in Europe. Energy and Buildings, 2016, 116, 602-613.	3.1	17
58	Improving the district heating operation by innovative layout and control strategy of the hot water storage tank. Energy and Buildings, 2020, 224, 110273.	3.1	17
59	Effects of boosting the supply temperature on pipe dimensions of low-energy district heating networks: A case study in Gladsaxe, Denmark. Energy and Buildings, 2015, 88, 324-334.	3.1	16
60	Modeling Transient Heat Transfer in Small-Size Twin Pipes for End-User Connections to Low-Energy District Heating Networks. Heat Transfer Engineering, 2013, 34, 372-384.	1.2	15
61	Method for achieving hydraulic balance in typical Chinese building heating systems by managing differential pressure and flow. Building Simulation, 2017, 10, 51-63.	3.0	15
62	Experimental Investigation of the Effect of Natural Convection on Heat Transfer in Mineral Wool. Journal of Thermal Envelope and Building Science, 2002, 26, 153-164.	0.5	14
63	Collaboration Opportunities in Advanced Housing Renovation. Energy Procedia, 2012, 30, 1380-1389.	1.8	14
64	Multi-mode control method for the existing domestic hot water storage tanks with district heating supply. Energy, 2020, 191, 116517.	4.5	14
65	Illuminance Level in the Urban Fabric and in the Room. Indoor and Built Environment, 2011, 20, 456-463.	1.5	13
66	Modern insulation requirements change the rules of architectural design in low-energy homes. Renewable Energy, 2014, 72, 301-310.	4.3	13
67	Technical, economic and environmental investigation of using districtÂheating to prepare domestic hot water in Chinese multi-storeyÂbuildings. Energy, 2016, 116, 281-292.	4.5	13
68	Using a One-Stop-Shop Concept to Guide Decisions When Single-Family Houses Are Renovated. Journal of Architectural Engineering, 2017, 23, .	0.8	13
69	Overview of Solutions for the Low-Temperature Operation of Domestic Hot-Water Systems with a Circulation Loop. Energies, 2021, 14, 3350.	1.6	12
70	Strategy for low-temperature operation of radiator systems using data from existing digital heat cost allocators. Energy, 2021, 231, 120928.	4.5	12
71	Are typical radiators over-dimensioned? An analysis of radiator dimensions in 1645 Danish houses. Energy and Buildings, 2018, 178, 206-215.	3.1	11
72	Modelling and multi-scenario analysis for electric heat tracing system combined with low temperature district heating for domestic hot water supply. Building Simulation, 2016, 9, 141-151.	3.0	10

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73	Energy and cost savings with continuous low temperature heating versus intermittent heating of an office building with district heating. Energy, 2022, 252, 124071.	4.5	10
74	Performance of a daylight-redirecting glass-shading system. Energy and Buildings, 2013, 64, 309-316.	3.1	9
75	Test and evaluation of a method to identify heating system malfunctions by using information from electronic heat cost allocators. Energy and Buildings, 2019, 184, 152-162.	3.1	9
76	Double Loop Network for Combined Heating and Cooling in Low Heat Density Areas. Energies, 2020, 13, 6091.	1.6	9
77	New Low-Temperature Central Heating System Integrated with Industrial Exhausted Heat Using Distributed Electric Compression Heat Pumps for Higher Energy Efficiency. Energies, 2020, 13, 6582.	1.6	9
78	What does a well-functioning heating system look like? Investigation of ten Danish buildings that utilize district heating efficiently. Energy, 2021, 227, 120250.	4.5	9
79	Solar collector design with respect to moisture problems. Solar Energy, 2003, 75, 269-276.	2.9	8
80	Optimization of China's Centralized Domestic Hot Water System by Applying Danish Elements. Energy Procedia, 2014, 61, 2833-2840.	1.8	6
81	Feasibility of a booster for DHW circulation in apartment buildings. Energy Reports, 2021, 7, 311-318.	2.5	5
82	A Static Pressure Reset Control System with a New Type of Flow Damper for Use in Low Pressure Ventilation Systems. International Journal of Ventilation, 2012, 11, 235-246.	0.2	4
83	The Exergetic, Environmental and Economic Effect of the Hydrostatic Design Static Pressure Level on the Pipe Dimensions of Low-Energy District Heating Networks. Challenges, 2013, 4, 1-16.	0.9	4
84	Low return temperature from domestic hot-water system based on instantaneous heat exchanger with chemical-based disinfection solution. Energy, 2021, 215, 119211.	4.5	4
85	Development and Test of a Novel Electronic Radiator Thermostat with a Return Temperature Limiting Function. Energies, 2022, 15, 367.	1.6	4
86	Implementation of a strategy for low-temperature operation of radiator systems using data from existing digital heat cost allocators. Energy, 2022, 251, 123844.	4.5	4
87	Technical Comparison of Domestic Hot Water System Which Used in China and Denmark. Energy Procedia, 2014, 61, 2509-2513.	1.8	3
88	Determining the Optimal Capacities of Renewable-Energy-Based Energy Conversion Systems for Meeting the Demands of Low-Energy District Heating, Electricity, and District Cooling: Case Studies in Copenhagen and Toronto. , 2015, , 777-830.		3
89	The cost efficiency of improved roof windows in two well-lit nearly zero-energy houses in Copenhagen. Energy and Buildings, 2017, 140, 399-417.	3.1	2
90	Thermal Performance of Capillary Micro Tubes Integrated into the Sandwich Element Made of Concrete. Advanced Materials Research, 0, 649, 133-136.	0.3	0

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91	Regional Energy Planning Tool for Renewable Integrated Low-Energy District Heating Systems: Environmental Assessment. , 2013, , 859-878.		0
92	A novel concept for energy-efficient floor heating systems with minimal hot water return temperatures. Journal of Physics: Conference Series, 2021, 2069, 012106.	0.3	0
93	On the influence of decommissioning an area thermal substation in a district heating system on heat consumption and costs in buildings â€“ Long term field research. Sustainable Energy Technologies and Assessments, 2022, 50, 101870.	1.7	0