Michal Kummert

List of Publications by Citations

36 papers	1,591 citations	15 h-index	38 g-index
38 ext. papers	1,780 ext. citations	4.1 avg, IF	4.88 L-index

#	Paper	IF	Citations
36	Contrasting the capabilities of building energy performance simulation programs. *Building and Environment*, **2008**, 43, 661-673	6.5	906
35	Designing net-zero energy buildings for the future climate, not for the past. *Building and Environment*, **2012**, 55, 150-158	6.5	139
34	A neural network controller for hydronic heating systems of solar buildings. *Neural Networks*, **2004**, 17, 427-40	9.1	66
33	A novel approach to compare building-integrated photovoltaics/thermal air collectors to side-by-side PV modules and solar thermal collectors. *Solar Energy*, **2014**, 100, 50-65	6.8	52
32	Optimal heating control in a passive solar commercial building. *Solar Energy*, **2001**, 69, 103-116	6.8	48
31	Cost-benefit analysis of integrating BIPV-T air systems into energy-efficient homes. *Solar Energy*, **2016**, 136, 385-400	6.8	43
30	Analysis of short-term solar radiation data. *Solar Energy*, **2005**, 79, 495-504	6.8	40
29	Development and numerical validation of a new model for walls with phase change materials implemented in TRNSYS. *Journal of Building Performance Simulation*, **2017**, 10, 422-437	2.8	24
28	Thermal Behavior Mapping of a Phase Change Material Between the Heating and Cooling Enthalpy-temperature Curves. *Energy Procedia*, **2015**, 78, 225-230	2.3	23
27	Sub-hourly simulation of residential ground coupled heat pump systems. *Building Services Engineering Research and Technology*, **2008**, 29, 27-44	2.3	23
26	Financial optimization and design of hybrid ground-coupled heat pump systems. *Applied Thermal Engineering*, **2016**, 93, 72-82	5.8	22
25	Experimental assessment of a phase change material storage tank. *Applied Thermal Engineering*, **2016**, 99, 880-891	5.8	20
24	Demonstration of the new ESP-r and TRNSYS co-simulator for modelling solar buildings. *Energy Procedia*, **2012**, 30, 505-514	2.3	20
23	Influence of experimental conditions on measured thermal properties used to model phase change materials. *Building Simulation*, **2015**, 8, 637-650	3.9	18
22	Optimized control strategies for solar district heating systems. *Journal of Building Performance Simulation*, **2015**, 8, 79-96	2.8	17
21	Assessment of T-History Method Variants to Obtain Enthalpy□Temperature Curves for Phase Change Materials With Significant Subcooling. *Journal of Thermal Science and Engineering Applications*, **2015**, 7,	1.9	15
20	Comparing vertical ground heat exchanger models. *Journal of Building Performance Simulation*, **2012**, 5, 369-383	2.8	15

19	Balancing demand and supply: Linking neighborhood-level building load calculations with detailed district energy network analysis models. *Energy*, **2018**, 150, 913-925	7.9	14
18	Towards standardising market-independent indicators for quantifying energy flexibility in buildings. *Energy and Buildings*, **2020**, 220, 110027	7	13
17	Co-simulation between ESP-r and TRNSYS. *Journal of Building Performance Simulation*, **2014**, 7, 133-151	2.8	12
16	Inter-model comparison of embedded-tube radiant floor models in BPS tools. *Journal of Building Performance Simulation*, **2016**, 9, 190-209	2.8	8
15	A comparison of the UK Standard Assessment Procedure and detailed simulation of solar energy systems for dwellings. *Journal of Building Performance Simulation*, **2011**, 4, 75-90	2.8	8
14	Experimental Study to Characterize the Performance of Combined Photovoltaic/Thermal Air Collectors. *Journal of Solar Energy Engineering, Transactions of the ASME*, **2012**, 134,	2.3	8
13	Modeling horizontal storage tanks with encapsulated phase change materials for building performance simulation. *Science and Technology for the Built Environment*, **2018**, 24, 327-342	1.8	4
12	Collection and Storage of Solar Gains Incident on the Floor in a House During the Heating Season. *Energy Procedia*, **2015**, 78, 2274-2279	2.3	4
11	Analysis of a combined photovoltaic□geothermal gas-fired absorption heat pump system in a Canadian climate. *Journal of Building Performance Simulation*, **2008**, 1, 245-256	2.8	4
10	A comparison between geothermal absorption and compression heat pumps for space conditioning. *International Journal of Environmental Studies*, **2007**, 64, 467-487	1.8	4
9	Comparing Control Strategies Using Experimental and Simulation Results: Methodology and Application to Heating Control of Passive Solar Buildings. *HVAC and R Research*, **2006**, 12, 715-737		4
8	Evaluating the impact of thermostat control strategies on the energy flexibility of residential buildings for space heating. *Building Simulation*, **2021**, 14, 1439-1452	3.9	4
7	Building-scale experimental validation of a new model for walls with phase change materials. *Science and Technology for the Built Environment*, **2017**, 23, 1049-1062	1.8	3
6	Above-floor tube-and-plate radiant floor model development and validation. *Journal of Building Performance Simulation*, **2018**, 11, 449-469	2.8	3
5	Discriminant analysis classification of residential electricity smart meter data. *Energy and Buildings*, **2022**, 258, 111823	7	2
4	Effects of controls and floor construction of radiant floor heating systems for residential application with high variability of solar gains. *Science and Technology for the Built Environment*, **2020**, 26, 524-540	1.8	2
3	Modeling of a portable electric spa: Model development, experimental validation and application to winter demand response. *Applied Thermal Engineering*, **2017**, 111, 183-192	5.8	1
2	Development of a stochastic virtual smart meter data set for a residential building stock □ methodology and sample data. *Journal of Building Performance Simulation*, **2020**, 13, 583-605	2.8	1

1 An archetype-based energy modelling approach for a remote, subarctic community. *Journal of Building Performance Simulation*, **2021**, 14, 666-687 2.8