

# Vahid M Nik

## List of Publications by Year in descending order

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Version: 2024-02-01

52  
papers

2,576  
citations

159525

30  
h-index

223716

46  
g-index

53  
all docs

53  
docs citations

53  
times ranked

1819  
citing authors

#	ARTICLE	IF	CITATIONS
1	High-resolution impact assessment of climate change on building energy performance considering extreme weather events and microclimate – Investigating variations in indoor thermal comfort and degree-days. <i>Sustainable Cities and Society</i> , 2022, 78, 103634.	5.1	39
2	Climate Change and Renewable Energy Generation in Europe – Long-Term Impact Assessment on Solar and Wind Energy Using High-Resolution Future Climate Data and Considering Climate Uncertainties. <i>Energies</i> , 2022, 15, 302.	1.6	29
3	Combining computational fluid dynamics and neural networks to characterize microclimate extremes: Learning the complex interactions between meso-climate and urban morphology. <i>Science of the Total Environment</i> , 2022, 829, 154223.	3.9	16
4	Towards climate resilient urban energy systems: a review. <i>National Science Review</i> , 2021, 8, nwaal34.	4.6	45
5	Using collective intelligence to enhance demand flexibility and climate resilience in urban areas. <i>Applied Energy</i> , 2021, 281, 116106.	5.1	27
6	Towards realization of an Energy Internet: Designing distributed energy systems using game-theoretic approach. <i>Applied Energy</i> , 2021, 283, 116349.	5.1	27
7	Climate resilient interconnected infrastructure: Co-optimization of energy systems and urban morphology. <i>Applied Energy</i> , 2021, 285, 116430.	5.1	60
8	Climate change and energy performance of European residential building stocks – A comprehensive impact assessment using climate big data from the coordinated regional climate downscaling experiment. <i>Applied Energy</i> , 2021, 298, 117246.	5.1	57
9	Assessing the climate change adaptation over four European cities. <i>Journal of Physics: Conference Series</i> , 2021, 2069, 012069.	0.3	0
10	Empowering energy flexibility and climate resilience using collective intelligence based demand side management (CI-DSM). <i>Journal of Physics: Conference Series</i> , 2021, 2069, 012149.	0.3	1
11	Interactions between extreme climate and urban morphology: Investigating the evolution of extreme wind speeds from mesoscale to microscale. <i>Urban Climate</i> , 2020, 31, 100544.	2.4	38
12	The Importance of Developing Climate-Resilient Pathways for Energy Transition and Climate Change Adaptation. <i>One Earth</i> , 2020, 3, 423-424.	3.6	7
13	Impact assessment of climate change on the energy performance of the building stocks in four European cities. <i>E3S Web of Conferences</i> , 2020, 172, 02008.	0.2	2
14	Quantifying the impacts of climate change and extreme climate events on energy systems. <i>Nature Energy</i> , 2020, 5, 150-159.	19.8	309
15	Introducing reinforcement learning to the energy system design process. <i>Applied Energy</i> , 2020, 262, 114580.	5.1	48
16	Optimization of building form and its fenestration in response to microclimate conditions of an urban area. <i>E3S Web of Conferences</i> , 2020, 172, 19002.	0.2	3
17	Future Climate Resilience Through Informed Decision Making in Retrofitting Projects. <i>Lecture Notes in Computer Science</i> , 2020, , 352-364.	1.0	1
18	Redefining energy system flexibility for distributed energy system design. <i>Applied Energy</i> , 2019, 253, 113572.	5.1	68

#	ARTICLE	IF	CITATIONS
19	Towards climate robust buildings: An innovative method for designing buildings with robust energy performance under climate change. <i>Energy and Buildings</i> , 2019, 202, 109378.	3.1	34
20	Impacts of extreme climate conditions due to climate change on the energy system design and operation. <i>Energy Procedia</i> , 2019, 159, 358-363.	1.8	8
21	Impacts of Microclimate Conditions on the Energy Performance of Buildings in Urban Areas. <i>Buildings</i> , 2019, 9, 189.	1.4	43
22	A review of assessment methods for the urban environment and its energy sustainability to guarantee climate adaptation of future cities. <i>Renewable and Sustainable Energy Reviews</i> , 2019, 112, 733-746.	8.2	128
23	A novel design-based optimization framework for enhancing the energy efficiency of high-rise office buildings in urban areas. <i>Sustainable Cities and Society</i> , 2019, 49, 101597.	5.1	45
24	Economic feasibility of building retrofitting mitigation potentials: Climate change uncertainties for Swedish cities. <i>Applied Energy</i> , 2019, 242, 1022-1035.	5.1	38
25	Machine learning methods to assist energy system optimization. <i>Applied Energy</i> , 2019, 243, 191-205.	5.1	59
26	Impacts of future weather data typology on building energy performance – Investigating long-term patterns of climate change and extreme weather conditions. <i>Applied Energy</i> , 2019, 238, 696-720.	5.1	184
27	Linking Neighborhoods into Sustainable Energy Systems. <i>Energy, Environment, and Sustainability</i> , 2019, , 93-110.	0.6	1
28	Assessing the Potential of Energy Retrofitting and Renewables in the Campus of Lund University. <i>Springer Proceedings in Energy</i> , 2019, , 519-529.	0.2	0
29	Integrating Renewable Energy Technologies into Distributed Energy Systems Maintaining System Flexibility. , 2018, , .		6
30	Simulations of Moisture Gradients in Wood Subjected to Changes in Relative Humidity and Temperature Due to Climate Change. <i>Geosciences (Switzerland)</i> , 2018, 8, 378.	1.0	27
31	Impacts of urban morphology on reducing cooling load and increasing ventilation potential in hot-arid climate. <i>Applied Energy</i> , 2018, 231, 714-746.	5.1	112
32	A New Framework to Evaluate Urban Design Using Urban Microclimatic Modeling in Future Climatic Conditions. <i>Sustainability</i> , 2018, 10, 1134.	1.6	41
33	Passive design optimization of newly-built residential buildings in Shanghai for improving indoor thermal comfort while reducing building energy demand. <i>Energy and Buildings</i> , 2018, 169, 484-506.	3.1	197
34	Electrical hubs: An effective way to integrate non-dispatchable renewable energy sources with minimum impact to the grid. <i>Applied Energy</i> , 2017, 190, 232-248.	5.1	110
35	Using Typical and Extreme Weather Files for Impact Assessment of Climate Change on Buildings. <i>Energy Procedia</i> , 2017, 132, 616-621.	1.8	13
36	Optimum design of distributed energy hubs using hybrid surrogate models (HSM). <i>Energy Procedia</i> , 2017, 122, 187-192.	1.8	3

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37	Investigating the importance of future climate typology on estimating the energy performance of buildings in the EPFL campus. Energy Procedia, 2017, 122, 1087-1092.	1.8	12
38	Application of typical and extreme weather data sets in the hygrothermal simulation of building components for future climate – A case study for a wooden frame wall. Energy and Buildings, 2017, 154, 30-45.	3.1	50
39	An integrated approach to design site specific distributed electrical hubs combining optimization, multi-criterion assessment and decision making. Energy, 2017, 134, 103-120.	4.5	56
40	Making energy simulation easier for future climate – Synthesizing typical and extreme weather data sets out of regional climate models (RCMs). Applied Energy, 2016, 177, 204-226.	5.1	123
41	Sensitivity of the dispatch strategy in designing grid integrated hybrid energy systems. , 2016, , .		2
42	Effective and robust energy retrofitting measures for future climatic conditions – Reduced heating demand of Swedish households. Energy and Buildings, 2016, 121, 176-187.	3.1	60
43	Optimum design and control of grid integrated electrical hubs considering lifecycle cost and emission. , 2016, , .		12
44	Design Optimization of Electrical Hubs Using Hybrid Evolutionary Algorithm. , 2016, , .		2
45	Assessing the Efficiency and Robustness of the Retrofitted Building Envelope Against Climate change. Energy Procedia, 2015, 78, 955-960.	1.8	17
46	Straw bale: A Waste from Agriculture, a New Construction Material for Sustainable Buildings. Energy Procedia, 2015, 78, 297-302.	1.8	31
47	Climate responsive strategies of traditional dwellings located in an ancient village in hot summer and cold winter region of China. Building and Environment, 2015, 86, 151-165.	3.0	83
48	A statistical method for assessing retrofitting measures of buildings and ranking their robustness against climate change. Energy and Buildings, 2015, 88, 262-275.	3.1	41
49	Future moisture loads for building facades in Sweden: Climate change and wind-driven rain. Building and Environment, 2015, 93, 362-375.	3.0	54
50	Impact study of the climate change on the energy performance of the building stock in Stockholm considering four climate uncertainties. Building and Environment, 2013, 60, 291-304.	3.0	116
51	Statistical methods for assessing and analysing the building performance in respect to the future climate. Building and Environment, 2012, 53, 107-118.	3.0	33
52	Assessment of hygrothermal performance and mould growth risk in ventilated attics in respect to possible climate changes in Sweden. Building and Environment, 2012, 55, 96-109.	3.0	58