

Fariborz Haghighat

List of Publications by Year in descending order

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Version: 2024-02-01

204
papers

13,516
citations

18436

62
h-index

26548

107
g-index

207
all docs

207
docs citations

207
times ranked

11311
citing authors

#	ARTICLE	IF	CITATIONS
1	TiO ₂ photocatalyst for removal of volatile organic compounds in gas phase – A review. Chemical Engineering Journal, 2018, 334, 2408-2439.	6.6	704
2	Photocatalytic oxidation technology for indoor environment air purification: The state-of-the-art. Applied Catalysis B: Environmental, 2017, 203, 247-269.	10.8	573
3	Approaches to study Urban Heat Island – Abilities and limitations. Building and Environment, 2010, 45, 2192-2201.	3.0	533
4	Multiobjective optimization of building design using TRNSYS simulations, genetic algorithm, and Artificial Neural Network. Building and Environment, 2010, 45, 739-746.	3.0	530
5	A decision tree method for building energy demand modeling. Energy and Buildings, 2010, 42, 1637-1646.	3.1	470
6	A systematic procedure to study the influence of occupant behavior on building energy consumption. Energy and Buildings, 2011, 43, 1409-1417.	3.1	461
7	Removal of pharmaceuticals from water by homo/heterogenous Fenton-type processes – A review. Chemosphere, 2017, 174, 665-688.	4.2	445
8	Wastewater treatment in the pulp-and-paper industry: A review of treatment processes and the associated greenhouse gas emission. Journal of Environmental Management, 2015, 158, 146-157.	3.8	226
9	Thermal energy storage with phase change material – A state-of-the art review. Sustainable Cities and Society, 2014, 10, 87-100.	5.1	220
10	A review of the-state-of-the-art in data-driven approaches for building energy prediction. Energy and Buildings, 2020, 221, 110022.	3.1	212
11	A review on macro-encapsulated phase change material for building envelope applications. Building and Environment, 2018, 144, 281-294.	3.0	204
12	Photocatalytic air cleaners and materials technologies – Abilities and limitations. Building and Environment, 2015, 91, 191-203.	3.0	201
13	Fault detection and diagnosis of large-scale HVAC systems in buildings using data-driven methods: A comprehensive review. Energy and Buildings, 2020, 229, 110492.	3.1	195
14	Integration of storage and renewable energy into district heating systems: A review of modelling and optimization. Solar Energy, 2016, 136, 49-64.	2.9	180
15	Removal of pharmaceuticals and endocrine disrupting compounds from water by zinc oxide-based photocatalytic degradation: A review. Sustainable Cities and Society, 2016, 27, 407-418.	5.1	173
16	Material emission rates: Literature review, and the impact of indoor air temperature and relative humidity. Building and Environment, 1998, 33, 261-277.	3.0	148
17	Predictive control strategies based on weather forecast in buildings with energy storage system: A review of the state-of-the art. Energy and Buildings, 2017, 153, 485-500.	3.1	142
18	Wastewater Treatment and Reclamation: A Review of Pulp and Paper Industry Practices and Opportunities. BioResources, 2016, 11, 7953-8091.	0.5	141

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19	Optimization approaches in district heating and cooling thermal network. Energy and Buildings, 2017, 140, 121-130.	3.1	140
20	Photocatalytic degradation of sulfamethoxazole by hierarchical magnetic ZnO@g-C3N4: RSM optimization, kinetic study, reaction pathway and toxicity evaluation. Journal of Hazardous Materials, 2018, 359, 516-526.	6.5	131
21	Heat and cold storage using phase change materials in domestic refrigeration systems: The state-of-the-art review. Energy and Buildings, 2015, 106, 111-124.	3.1	127
22	Zonal Modeling for Simulating Indoor Environment of Buildings: Review, Recent Developments, and Applications. HVAC and R Research, 2007, 13, 887-905.	0.9	117
23	A novel methodology for knowledge discovery through mining associations between building operational data. Energy and Buildings, 2012, 47, 430-440.	3.1	117
24	Enhanced photocatalytic degradation of sulfamethoxazole by zinc oxide photocatalyst in the presence of fluoride ions: Optimization of parameters and toxicological evaluation. Water Research, 2018, 132, 241-251.	5.3	116
25	Investigation of the effect of geometric and operating parameters on thermal behavior of vertical shell-and-tube latent heat energy storage systems. Energy, 2017, 137, 69-82.	4.5	113
26	Heat transfer enhancement of phase change materials by fins under simultaneous charging and discharging. Energy Conversion and Management, 2017, 152, 136-156.	4.4	108
27	Magnetic fluorinated mesoporous g-C3N4 for photocatalytic degradation of amoxicillin: Transformation mechanism and toxicity assessment. Applied Catalysis B: Environmental, 2019, 242, 337-348.	10.8	108
28	Compressed air energy storage in integrated energy systems: A review. Renewable and Sustainable Energy Reviews, 2022, 167, 112701.	8.2	105
29	Hydrothermal/solvothermal synthesis and treatment of TiO2 for photocatalytic degradation of air pollutants: Preparation, characterization, properties, and performance. Chemosphere, 2019, 219, 804-825.	4.2	104
30	Modeling ventilated double skin facade: A zonal approach. Energy and Buildings, 2008, 40, 1567-1576.	3.1	102
31	Role of titanium dioxide (TiO2) structural design/morphology in photocatalytic air purification. Applied Catalysis B: Environmental, 2020, 269, 118735.	10.8	102
32	Optimization of ventilation system design and operation in office environment, Part I: Methodology. Building and Environment, 2009, 44, 651-656.	3.0	99
33	Occupancy-based HVAC control systems in buildings: A state-of-the-art review. Building and Environment, 2021, 197, 107810.	3.0	99
34	Integration of distributed energy storage into net-zero energy district systems: Optimum design and operation. Energy, 2018, 153, 575-591.	4.5	98
35	Occupant-density-detection based energy efficient ventilation system: Prevention of infection transmission. Energy and Buildings, 2021, 240, 110883.	3.1	96
36	Advances and challenges in building engineering and data mining applications for energy-efficient communities. Sustainable Cities and Society, 2016, 25, 33-38.	5.1	90

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37	Performance of ultraviolet photocatalytic oxidation for indoor air applications: Systematic experimental evaluation. <i>Journal of Hazardous Materials</i> , 2013, 261, 130-138.	6.5	89
38	A methodology for identifying and improving occupant behavior in residential buildings. <i>Energy</i> , 2011, 36, 6596-6608.	4.5	88
39	A software framework for model predictive control with GenOpt. <i>Energy and Buildings</i> , 2010, 42, 1084-1092.	3.1	86
40	Energy performance assessment of double-skin façade with thermal mass. <i>Energy and Buildings</i> , 2010, 42, 1499-1509.	3.1	83
41	Mitigating COVID-19 infection disease transmission in indoor environment using physical barriers. <i>Sustainable Cities and Society</i> , 2021, 74, 103175.	5.1	83
42	Integration of PCM in domestic hot water tanks: Optimization for shifting peak demand. <i>Energy and Buildings</i> , 2015, 106, 59-64.	3.1	82
43	Impact of phase change materials types and positioning on hot water tank thermal performance: Using measured water demand profile. <i>Applied Thermal Engineering</i> , 2014, 67, 460-468.	3.0	80
44	Adsorption performance of titanium dioxide (TiO ₂) coated air filters for volatile organic compounds. <i>Journal of Hazardous Materials</i> , 2012, 243, 340-349.	6.5	79
45	A comparative study on metal organic frameworks for indoor environment application: Adsorption evaluation. <i>Chemical Engineering Journal</i> , 2017, 313, 711-723.	6.6	79
46	Indoor thermal condition in urban heat island: Comparison of the artificial neural network and regression methods prediction. <i>Energy and Buildings</i> , 2014, 76, 597-604.	3.1	76
47	Experimental and numerical characterization of natural convection in a vertical shell-and-tube latent thermal energy storage system. <i>Sustainable Cities and Society</i> , 2017, 35, 13-24.	5.1	76
48	Evaluation of various activated carbons for air cleaning – Towards design of immune and sustainable buildings. <i>Atmospheric Environment</i> , 2008, 42, 8176-8184.	1.9	74
49	Photocatalytic degradation of VOCs on various commercial titanium dioxides: Impact of operating parameters on removal efficiency and by-products generation. <i>Building and Environment</i> , 2018, 138, 275-282.	3.0	73
50	Development of building energy saving advisory: A data mining approach. <i>Energy and Buildings</i> , 2018, 172, 139-151.	3.1	73
51	Modelling of volatile organic compounds emission from dry building materials. <i>Building and Environment</i> , 2002, 37, 1127-1138.	3.0	72
52	Modeling of volatile organic compounds degradation by photocatalytic oxidation reactor in indoor air: A review. <i>Building and Environment</i> , 2019, 154, 309-323.	3.0	72
53	Opportunities and challenges of PCM-to-air heat exchangers (PAHXs) for building free cooling applications – A comprehensive review. <i>Journal of Energy Storage</i> , 2019, 22, 157-175.	3.9	72
54	A Comprehensive Validation of Two Airflow Models - COMIS and CONTAM. <i>Indoor Air</i> , 1996, 6, 278-288.	2.0	71

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55	Airflow and heat transfer in double skin facades. <i>Energy and Buildings</i> , 2011, 43, 2760-2766.	3.1	71
56	Control strategies for integration of thermal energy storage into buildings: State-of-the-art review. <i>Energy and Buildings</i> , 2015, 106, 203-215.	3.1	71
57	Optimization of 4th generation distributed district heating system: Design and planning of combined heat and power. <i>Renewable Energy</i> , 2019, 130, 371-387.	4.3	70
58	Gas phase adsorption of volatile organic compounds onto titanium dioxide photocatalysts. <i>Chemical Engineering Journal</i> , 2018, 337, 60-73.	6.6	69
59	Computer modelling and experimental investigation of phase change hysteresis of PCMs: The state-of-the-art review. <i>Applied Energy</i> , 2020, 263, 114572.	5.1	69
60	Numerical investigation of a triplex tube heat exchanger with phase change material: Simultaneous charging and discharging. <i>Energy and Buildings</i> , 2017, 139, 426-438.	3.1	67
61	Plasma-based Indoor Air Cleaning Technologies: The State of the Art Review. <i>Clean - Soil, Air, Water</i> , 2014, 42, 1667-1680.	0.7	66
62	Designing building envelope with PCM wallboards: Design tool development. <i>Renewable and Sustainable Energy Reviews</i> , 2014, 31, 554-562.	8.2	66
63	Extracting knowledge from building-related data – A data mining framework. <i>Building Simulation</i> , 2013, 6, 207-222.	3.0	65
64	Photocatalytic oxidation air cleaner: Identification and quantification of by-products. <i>Building and Environment</i> , 2014, 72, 34-43.	3.0	65
65	Urban heat island, urban climate maps and urban development policies and action plans. <i>Environmental Technology and Innovation</i> , 2019, 14, 100341.	3.0	63
66	Modeling of phase change materials for applications in whole building simulation. <i>Renewable and Sustainable Energy Reviews</i> , 2012, 16, 5355-5362.	8.2	61
67	Development of Artificial Neural Network based heat convection algorithm for thermal simulation of large rectangular cross-sectional area Earth-to-Air Heat Exchangers. <i>Energy and Buildings</i> , 2010, 42, 435-440.	3.1	60
68	Impact of design parameters on the performance of non-thermal plasma air purification system. <i>Chemical Engineering Journal</i> , 2016, 302, 204-212.	6.6	60
69	Photocatalytic oxidation of volatile organic compounds for indoor environment applications: Three different scaled setups. <i>Chemical Engineering Journal</i> , 2019, 357, 533-546.	6.6	58
70	Surface fluorinated Ce-doped TiO ₂ nanostructure photocatalyst: A trap and remove strategy to enhance the VOC removal from indoor air environment. <i>Chemical Engineering Journal</i> , 2020, 401, 125932.	6.6	58
71	Development and improvement of occupant behavior models towards realistic building performance simulation: A review. <i>Sustainable Cities and Society</i> , 2019, 50, 101685.	5.1	57
72	Modeling and physical interpretation of photocatalytic oxidation efficiency in indoor air applications. <i>Building and Environment</i> , 2010, 45, 2689-2697.	3.0	56

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73	Experimental and numerical investigation on dodecane/expanded graphite shape-stabilized phase change material for cold energy storage. <i>Energy</i> , 2019, 189, 116175.	4.5	56
74	A Review of District Heating Systems: Modeling and Optimization. <i>Frontiers in Built Environment</i> , 2016, 2, .	1.2	55
75	Metal organic frameworks for gas-phase VOCs removal in a NTP-catalytic reactor. <i>Chemical Engineering Journal</i> , 2017, 320, 308-318.	6.6	55
76	Indoor thermal condition in urban heat Island “ Development of a predictive tool. <i>Building and Environment</i> , 2012, 57, 7-17.	3.0	52
77	Active ozone removal technologies for a safe indoor environment: A comprehensive review. <i>Building and Environment</i> , 2021, 187, 107370.	3.0	52
78	A novel approach to enhance outdoor air quality: Pedestrian ventilation system. <i>Building and Environment</i> , 2010, 45, 1582-1593.	3.0	51
79	Assessing long-term performance of centralized thermal energy storage system. <i>Applied Thermal Engineering</i> , 2014, 62, 313-321.	3.0	51
80	Abilities and limitations of thermal mass activation for thermal comfort, peak shifting and shaving: A review. <i>Building and Environment</i> , 2017, 118, 113-127.	3.0	51
81	Performance of Mechanical Filters and Respirators for Capturing Nanoparticles “Limitations and Future Direction. <i>Industrial Health</i> , 2010, 48, 296-304.	0.4	50
82	A procedure to quantify the impact of mitigation techniques on the urban ventilation. <i>Building and Environment</i> , 2012, 47, 410-420.	3.0	50
83	Contaminant source identification within a building: Toward design of immune buildings. <i>Building and Environment</i> , 2012, 51, 320-329.	3.0	50
84	Hierarchical magnetic petal-like Fe ₃ O ₄ -ZnO@g-C ₃ N ₄ for removal of sulfamethoxazole, suppression of photocorrosion, by-products identification and toxicity assessment. <i>Chemosphere</i> , 2018, 205, 463-474.	4.2	50
85	Experimental investigation of multiple tube heat transfer enhancement in a vertical cylindrical latent heat thermal energy storage system. <i>Renewable Energy</i> , 2019, 140, 234-244.	4.3	49
86	Integrated oxidation process and biological treatment for highly concentrated petrochemical effluents: A review. <i>Chemical Engineering and Processing: Process Intensification</i> , 2018, 125, 183-196.	1.8	48
87	Effect of surface fluorination of P25-TiO ₂ on adsorption of indoor environment volatile organic compounds. <i>Chemical Engineering Journal</i> , 2018, 346, 578-589.	6.6	47
88	Optimization of ventilation systems in office environment, Part II: Results and discussions. <i>Building and Environment</i> , 2009, 44, 657-665.	3.0	44
89	The contribution of dry indoor built environment on the spread of Coronavirus: Data from various Indian states. <i>Sustainable Cities and Society</i> , 2020, 62, 102371.	5.1	44
90	Impact of design parameters on the performance of ultraviolet photocatalytic oxidation air cleaner. <i>Building and Environment</i> , 2013, 66, 148-157.	3.0	43

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91	Numerical analysis of a thermally enhanced domestic hot water tank. <i>Applied Energy</i> , 2014, 129, 253-260.	5.1	43
92	Energy storage key performance indicators for building application. <i>Sustainable Cities and Society</i> , 2018, 40, 54-65.	5.1	43
93	Systematic approach to provide building occupants with feedback to reduce energy consumption. <i>Energy</i> , 2020, 194, 116813.	4.5	43
94	Recent developments in photocatalysis of industrial effluents Ö% A review and example of phenolic compounds degradation. <i>Chemosphere</i> , 2022, 296, 133688.	4.2	43
95	Indoor air quality and health in schools: A critical review for developing the roadmap for the future school environment. <i>Journal of Building Engineering</i> , 2022, 57, 104908.	1.6	43
96	Sonocatalytic removal of ampicillin by Zn(OH)F: Effect of operating parameters, toxicological evaluation and by-products identification. <i>Journal of Hazardous Materials</i> , 2019, 375, 86-95.	6.5	42
97	Assessing the performance of air cleaning devices â€“ A full-scale test method. <i>Building and Environment</i> , 2010, 45, 143-149.	3.0	40
98	Removal of SARS-CoV-2 using UV+Filter in built environment. <i>Sustainable Cities and Society</i> , 2021, 74, 103226.	5.1	39
99	Pollution removal effectiveness of the pedestrian ventilation system. <i>Journal of Wind Engineering and Industrial Aerodynamics</i> , 2011, 99, 46-58.	1.7	38
100	Phase change materials in hot water tank for shifting peak power demand. <i>Solar Energy</i> , 2014, 107, 628-635.	2.9	38
101	Carbon-doped TiO ₂ film to enhance visible and UV light photocatalytic degradation of indoor environment volatile organic compounds. <i>Journal of Environmental Chemical Engineering</i> , 2020, 8, 104162.	3.3	38
102	Urban neighborhood characteristics influence on a building indoor environment. <i>Sustainable Cities and Society</i> , 2015, 19, 403-413.	5.1	36
103	Influence of PCM thermal conductivity and HTF velocity during solidification of PCM through the free cooling concept â€“ A parametric study. <i>Journal of Energy Storage</i> , 2019, 21, 48-57.	3.9	36
104	Ultraviolet photocatalytic oxidation for indoor environment applications: Experimental validation of the model. <i>Building and Environment</i> , 2013, 62, 155-166.	3.0	35
105	Photocatalytic oxidation of MEK over hierarchical TiO ₂ catalysts: Effect of photocatalyst features and operating conditions. <i>Applied Catalysis B: Environmental</i> , 2019, 251, 1-16.	10.8	35
106	Development of a ranking procedure for energy performance evaluation of buildings based on occupant behavior. <i>Energy and Buildings</i> , 2019, 183, 659-671.	3.1	35
107	Modeling and validation of a photocatalytic oxidation reactor for indoor environment applications. <i>Chemical Engineering Science</i> , 2011, 66, 5945-5954.	1.9	33
108	Greenhouse gas emission by wastewater treatment plants of the pulp and paper industry â€“ Modeling and simulation. <i>International Journal of Greenhouse Gas Control</i> , 2013, 17, 462-472.	2.3	33

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109	Data driven occupancy information for energy simulation and energy use assessment in residential buildings. <i>Energy</i> , 2021, 218, 119539.	4.5	33
110	Effect of titanium dioxide properties and support material on photocatalytic oxidation of indoor air pollutants. <i>Building and Environment</i> , 2021, 189, 107518.	3.0	33
111	Anatase/brookite biphasic surface fluorinated Fe ³⁺ /TiO ₂ photocatalysts to enhance photocatalytic removal of VOCs under visible and UV light. <i>Journal of Cleaner Production</i> , 2021, 287, 125462.	4.6	33
112	Enhanced adsorption of anionic dyes by surface fluorination of zinc oxide: A straightforward method for numerical solving of the ideal adsorbed solution theory (IAST). <i>Chemical Engineering Journal</i> , 2017, 330, 407-418.	6.6	32
113	Performance of various commercial TiO ₂ in photocatalytic degradation of a mixture of indoor air pollutants: Effect of photocatalyst and operating parameters. <i>Science and Technology for the Built Environment</i> , 2019, 25, 600-614.	0.8	30
114	A novel model based on multi-grained cascade forests with wavelet denoising for indoor occupancy estimation. <i>Building and Environment</i> , 2020, 167, 106461.	3.0	30
115	Sensitivity analysis of design parameters for erythritol melting in a horizontal shell and multi-finned tube system: Numerical investigation. <i>Renewable Energy</i> , 2021, 163, 423-436.	4.3	30
116	Systematic data mining-based framework to discover potential energy waste patterns in residential buildings. <i>Energy and Buildings</i> , 2019, 199, 562-578.	3.1	29
117	Hybrid solar and heat-driven district cooling system: Optimal integration and control strategy. <i>Solar Energy</i> , 2019, 183, 260-275.	2.9	29
118	Modeling of gas-phase heterogeneous photocatalytic oxidation reactor in the presence of mass transfer limitation and axial dispersion. <i>Chemical Engineering Journal</i> , 2020, 386, 124013.	6.6	29
119	Occupancy-based HVAC control using deep learning algorithms for estimating online preconditioning time in residential buildings. <i>Energy and Buildings</i> , 2021, 252, 111377.	3.1	28
120	Impact of non-uniform urban surface temperature on pollution dispersion in urban areas. <i>Building Simulation</i> , 2011, 4, 227-244.	3.0	27
121	Simplified model to predict the thermal demand profile of districts. <i>Energy and Buildings</i> , 2017, 145, 213-225.	3.1	27
122	Natural convection characterization during melting of phase change materials: Development of a simplified front tracking method. <i>Solar Energy</i> , 2017, 158, 711-720.	2.9	27
123	Effect of surface fluorination of P25-TiO ₂ coated on nickel substrate for photocatalytic oxidation of methyl ethyl ketone in indoor environments. <i>Journal of Environmental Chemical Engineering</i> , 2019, 7, 103390.	3.3	27
124	Systematic variation of preparation time, temperature, and pressure in hydrothermal synthesis of macro-/mesoporous TiO ₂ for photocatalytic air treatment. <i>Journal of Photochemistry and Photobiology A: Chemistry</i> , 2019, 378, 156-170.	2.0	27
125	Building materials VOC emissions—a systematic parametric study. <i>Building and Environment</i> , 2003, 38, 995-1005.	3.0	25
126	Centralized latent heat thermal energy storage system: Model development and validation. <i>Energy and Buildings</i> , 2013, 65, 260-271.	3.1	25

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127	Expanding Heisler chart to characterize heat transfer phenomena in a building envelope integrated with phase change materials. <i>Energy and Buildings</i> , 2015, 106, 164-174.	3.1	25
128	Smart design and control of thermal energy storage in low-temperature heating and high-temperature cooling systems: A comprehensive review. <i>Renewable and Sustainable Energy Reviews</i> , 2022, 166, 112625.	8.2	25
129	Using physical-chemical properties of reactants to estimate the performance of photocatalytic oxidation air cleaners. <i>Building and Environment</i> , 2015, 85, 114-122.	3.0	24
130	Modeling of by-products from photocatalytic oxidation (PCO) indoor air purifiers: A case study of ethanol. <i>Building and Environment</i> , 2018, 144, 427-436.	3.0	24
131	Kinetic modeling of the photocatalytic degradation of methyl ethyl ketone in air for a continuous-flow reactor. <i>Chemical Engineering Journal</i> , 2021, 404, 126602.	6.6	24
132	Indoor airborne disinfection with electrostatic disinfectant (ESD): Numerical simulations of ESD performance and reduction of computing time. <i>Building and Environment</i> , 2021, 200, 107956.	3.0	24
133	Modeling the combined conduction-Air infiltration through diffusive building envelope. <i>Energy and Buildings</i> , 2007, 39, 1140-1150.	3.1	23
134	An Experimental Study for Examining the Effects of Environmental Conditions on Diffusion Coefficient of VOCs in Building Materials. <i>Clean - Soil, Air, Water</i> , 2009, 37, 436-443.	0.7	23
135	Modeling of gas-phase filter model for high- and low-challenge gas concentrations. <i>Building and Environment</i> , 2014, 80, 192-203.	3.0	23
136	Particle Loading Time and Humidity Effects on the Efficiency of an N95 Filtering Facepiece Respirator Model under Constant and Inhalation Cyclic Flows. <i>Annals of Occupational Hygiene</i> , 2015, 59, 629-40.	1.9	23
137	Simultaneous charging and discharging of phase change materials: Development of correlation for liquid fraction. <i>Solar Energy</i> , 2019, 188, 788-798.	2.9	23
138	Feasibility study on the year-round operation of PCM based free cooling systems in tropical climatic conditions. <i>Energy</i> , 2020, 192, 116695.	4.5	23
139	Performance of a self-learning predictive controller for peak shifting in a building integrated with energy storage. <i>Sustainable Cities and Society</i> , 2020, 60, 102285.	5.1	23
140	Impact of occupancy prediction models on building HVAC control system performance: Application of machine learning techniques. <i>Energy and Buildings</i> , 2022, 257, 111808.	3.1	23
141	Impact of two particle measurement techniques on the determination of N95 class respirator filtration performance against ultrafine particles. <i>Journal of Hazardous Materials</i> , 2012, 217-218, 51-57.	6.5	22
142	Evaluation of N95 Filtering Facepiece Respirator Efficiency with Cyclic and Constant Flows. <i>Journal of Occupational and Environmental Hygiene</i> , 2014, 11, 499-508.	0.4	22
143	Evaluation of nano-titanium dioxide (TiO ₂) catalysts for ultraviolet photocatalytic oxidation air cleaning devices. <i>Journal of Environmental Chemical Engineering</i> , 2015, 3, 1622-1629.	3.3	22
144	Embedded LES of thermal stratification effects on the airflow and concentration fields around an isolated high-rise building: Spectral and POD analyses. <i>Building and Environment</i> , 2021, 206, 108388.	3.0	22

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145	Predicting gas-phase air-cleaning system efficiency at low concentration using high concentration results: Development of a framework. <i>Building and Environment</i> , 2013, 68, 12-21.	3.0	21
146	Investigation of energy performance and operational schemes of a Tibet-focused PCM-integrated solar heating system employing a dynamic energy simulation model. <i>Energy</i> , 2019, 172, 141-154.	4.5	21
147	Performance analysis of an improved PCM-to-air heat exchanger for building envelope applications " An experimental study. <i>Solar Energy</i> , 2020, 199, 704-720.	2.9	20
148	Dynamics of SARS-CoV-2 spreading under the influence of environmental factors and strategies to tackle the pandemic: A systematic review. <i>Sustainable Cities and Society</i> , 2022, 81, 103840.	5.1	20
149	Application of dynamic models to estimate greenhouse gas emission by wastewater treatment plants of the pulp and paper industry. <i>Environmental Science and Pollution Research</i> , 2013, 20, 1858-1869.	2.7	19
150	A Learning Machine Approach for Predicting Thermal Comfort Indices. <i>International Journal of Ventilation</i> , 2005, 3, 363-376.	0.2	18
151	Airborne nanoparticles filtration performance of fibrous media: A review. <i>Science and Technology for the Built Environment</i> , 2018, 24, 648-672.	0.8	18
152	Kinetic and reaction mechanism of generated by-products in a photocatalytic oxidation reactor: Model development and validation. <i>Journal of Hazardous Materials</i> , 2021, 419, 126411.	6.5	18
153	Occupancy and occupant activity drivers of energy consumption in residential buildings. <i>Energy and Buildings</i> , 2021, 250, 111303.	3.1	18
154	Kinetic modeling and reaction mechanism of toluene and by-products in photocatalytic oxidation reactor. <i>Chemical Engineering Journal</i> , 2022, 427, 131536.	6.6	18
155	Impact of air distribution on indoor formaldehyde abatement with/without passive removal material: A CFD modeling. <i>Building and Environment</i> , 2022, 212, 108792.	3.0	18
156	Modeling of photocatalytic oxidation reactor for methyl ethyl ketone removal from indoor environment: Systematic model development and validation. <i>Chemical Engineering Journal</i> , 2021, 409, 128265.	6.6	17
157	Gas-phase filters breakthrough models at low concentration " Effect of relative humidity. <i>Building and Environment</i> , 2014, 75, 1-10.	3.0	16
158	Greenhouse Gas Emission and Energy Consumption in Wastewater Treatment Plants: Impact of Operating Parameters. <i>Clean - Soil, Air, Water</i> , 2014, 42, 207-220.	0.7	16
159	Impact of predictor variables on the performance of future occupancy prediction: Feature selection using genetic algorithms and machine learning. <i>Building and Environment</i> , 2022, 219, 109152.	3.0	16
160	A CFD Analysis of Ventilation Effectiveness in a Partitioned Room. <i>Indoor Air</i> , 1991, 1, 606-615.	2.0	14
161	Mechanochemical Synthesis of CPM: A Green Method. <i>Chemical Engineering and Technology</i> , 2017, 40, 88-93.	0.9	14
162	Control of electrically heated floor for building load management: A simplified self-learning predictive control approach. <i>Energy and Buildings</i> , 2018, 172, 442-458.	3.1	14

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163	Optimization of a hybrid community district heating system integrated with thermal energy storage system. <i>Journal of Energy Storage</i> , 2019, 23, 128-137.	3.9	14
164	A practical approach for preventing dispersion of infection disease in naturally ventilated room. <i>Journal of Building Engineering</i> , 2022, 48, 103921.	1.6	14
165	Filtration of nanoparticles applied in general ventilation. <i>Science and Technology for the Built Environment</i> , 2019, 25, 114-127.	0.8	13
166	A review of advances towards efficient reduced-order models (ROM) for predicting urban airflow and pollutant dispersion. <i>Building and Environment</i> , 2022, 216, 108966.	3.0	13
167	A review on an emerging solution to improve indoor air quality: Application of passive removal materials. <i>Building and Environment</i> , 2022, 219, 109228.	3.0	13
168	Evaluation of ultravioletâ€“photocatalytic oxidation of light alcohols at sub-parts per million concentrations. <i>Science and Technology for the Built Environment</i> , 2015, 21, 160-171.	0.8	12
169	Investigating the Effect of Control Strategy on the Shift of Energy Consumption in a Building Integrated with PCM Wallboard. <i>Energy Procedia</i> , 2015, 78, 2280-2285.	1.8	12
170	Thermal Energy Storage for Building Load Management: Application to Electrically Heated Floor. <i>Applied Sciences (Switzerland)</i> , 2016, 6, 194.	1.3	12
171	Enhancement in peak shifting and shaving potential of electrically heated floor residential buildings using heat extraction system. <i>Journal of Energy Storage</i> , 2018, 18, 435-446.	3.9	12
172	Development of PCM-to-air heat exchanger for integration in building envelopeâ€“modeling and validation. <i>Solar Energy</i> , 2019, 190, 367-385.	2.9	12
173	Parametric study to maximize the peak load shifting and thermal comfort in residential buildings located in cold climates. <i>Journal of Energy Storage</i> , 2020, 30, 101560.	3.9	12
174	Experimental evaluation of in-duct electronic air cleaning technologies for the removal of ketones. <i>Building and Environment</i> , 2021, 196, 107782.	3.0	11
175	Extracting energy-related knowledge from mining occupantsâ€™ behavioral data in residential buildings. <i>Journal of Building Engineering</i> , 2021, 39, 102319.	1.6	11
176	Season-Based Occupancy Prediction in Residential Buildings Using Machine Learning Models. <i>E-Prime</i> , 2021, 1, 100003.	2.1	11
177	Trade-off between accuracy and fairness of data-driven building and indoor environment models: A comparative study of pre-processing methods. <i>Energy</i> , 2022, 239, 122273.	4.5	11
178	Development and systematic validation of an adsorption filter model. <i>Building and Environment</i> , 2014, 73, 64-74.	3.0	10
179	Modelling of sorbent-based gas filters for indoor environment: A comprehensive review. <i>Building and Environment</i> , 2022, 208, 108579.	3.0	10
180	Emissions of Indoor Pollutants from Building Materialsâ€™ State of the Art Review. <i>Architectural Science Review</i> , 1993, 36, 13-22.	1.1	8

#	ARTICLE	IF	CITATIONS
181	A bridge pier scour model with non-uniform sediments. <i>Water Management</i> , 2014, 167, 499-511.	0.4	8
182	Evaluation of Gas-Phase Filter Performance for a Gas Mixture. <i>Clean - Soil, Air, Water</i> , 2015, 43, 469-478.	0.7	8
183	Competitive Adsorption Behaviour of Binary Mixtures on Titanium Dioxide. <i>Canadian Journal of Chemical Engineering</i> , 2015, 93, 1657-1666.	0.9	8
184	Deactivation and ultraviolet C-induced regeneration of photocatalytic oxidation air filters. <i>Science and Technology for the Built Environment</i> , 2016, 22, 576-585.	0.8	8
185	Integration of electrically activated concrete slab for peak shifting in a light-weight residential building—Determining key parameters. <i>Journal of Energy Storage</i> , 2019, 23, 329-343.	3.9	8
186	Kinetic modeling of binary mixture of butyraldehyde and acetone with generated by-products in photocatalytic oxidation reactor. <i>Chemical Engineering Journal</i> , 2022, 443, 136457.	6.6	8
187	Removal of indoor air ozone using carbon-based filters: Systematic development and validation of a predictive model. <i>Building and Environment</i> , 2022, 219, 109157.	3.0	8
188	Thermal Behaviour of the Diffusive Building Envelope: State-of-the-Art Review. <i>Advances in Building Energy Research</i> , 2007, 1, 213-226.	1.1	7
189	Melting and solidification performance in two horizontal shell-and-tube heat exchangers with different structures. <i>International Journal of Energy Research</i> , 2020, 44, 11288-11301.	2.2	7
190	Validation of a community district energy system model using field measured data. <i>Energy</i> , 2018, 144, 694-706.	4.5	6
191	Buried water-phase change material storage for load shifting: A parametric study. <i>Energy and Buildings</i> , 2020, 227, 110428.	3.1	6
192	The generalizability of pre-processing techniques on the accuracy and fairness of data-driven building models: A case study. <i>Energy and Buildings</i> , 2022, 268, 112204.	3.1	6
193	Data Analytics and Information Technologies for Smart Energy Storage Systems: A State-of-the-Art Review. <i>Sustainable Cities and Society</i> , 2022, 84, 104004.	5.1	6
194	Predicting Fibrous Filter's Efficiency by Two Methods: Artificial Neural Network (ANN) and Integration of Genetic Algorithm and Artificial Neural Network (GAINN). <i>Aerosol Science and Engineering</i> , 2018, 2, 197-205.	1.1	5
195	Development of advanced controllers to extend the peak shifting possibilities in the residential buildings. <i>Journal of Building Engineering</i> , 2021, 43, 103026.	1.6	4
196	Simple model and control strategy of earth-to-air heat exchangers. , 2009, , .		3
197	Performance of mechanical filters used in general ventilation against nanoparticles. <i>Science and Technology for the Built Environment</i> , 2020, 26, 1387-1396.	0.8	3
198	Understanding the influence of building characteristics on enhancing energy efficiency in residential buildings: A data mining based study. <i>Journal of Building Engineering</i> , 2021, 43, 103069.	1.6	3

#	ARTICLE	IF	CITATIONS
199	Vacuum cleaner as a source of abiotic and biological air pollution in buildings: a review. <i>Advances in Building Energy Research</i> , 0, , 1-12.	1.1	3
200	Procedure to measure the penetration of one mechanical filter for nanoparticles “ Validation by comparison. <i>Measurement: Journal of the International Measurement Confederation</i> , 2019, 147, 106840.	2.5	2
201	Analogy Between Thermal, Mechanical, and Electrical Energy Storage Systems. , 2022, , 315-328.		2
202	Thermal performance of PCM-to-air heat exchangers in hot desert climate. <i>Science and Technology for the Built Environment</i> , 2020, 26, 1371-1386.	0.8	1
203	Performance of surface fluorinated P25-TiO2 on the photocatalytic degradation of volatile organic compounds in indoor environment. <i>IOP Conference Series: Materials Science and Engineering</i> , 2019, 609, 042057.	0.3	0
204	Application of PCM-based Thermal Energy Storage System in Buildings: A State of the Art Review on the Mathematical Modeling Approaches and Experimental Investigations. <i>Journal of Thermal Science</i> , 0, , .	0.9	0