## **Anil Kumar**

## List of Publications by Year in descending order

Source: https://exaly.com/author-pdf/3758400/publications.pdf

Version: 2024-02-01

111975 81434 5,474 142 41 67 citations h-index g-index papers 144 144 144 4153 citing authors docs citations times ranked all docs

#	Article	IF	CITATIONS
1	Drying kinetics and economic analysis of bitter gourd flakes drying inside hybrid greenhouse dryer. Environmental Science and Pollution Research, 2023, 30, 72026-72040.	2.7	15
2	Physico-Mechanical Properties and Taguchi Optimized Abrasive Wear of Alkali Treated and Fly Ash Reinforced Himalayan Agave Fiber Polyester Composite. Journal of Natural Fibers, 2022, 19, 9269-9282.	1.7	18
3	Concentrated solar power plants: A critical review of regional dynamics and operational parameters. Energy Research and Social Science, 2022, 83, 102331.	3.0	12
4	Exergy and energy analysis of sensible heat storage based double pass hybrid solar air heater. Sustainable Energy Technologies and Assessments, 2022, 49, 101714.	1.7	11
5	Effect of ventilated solar-geothermal drying on 3E (exergy, energy, and economic analysis), and quality attributes of tomato paste. Energy, 2022, 243, 122764.	4.5	27
6	Investigation of design configurations and effective parameters on productivity enhancement of vertical diffusion solar stills. International Journal of Environmental Science and Technology, 2022, 19, 6889-6924.	1.8	5
7	Review on fabrication methodologies and its impacts on performance of dye-sensitized solar cells. Environmental Science and Pollution Research, 2022, 29, 15233-15251.	2.7	22
8	A review of techniques for increasing the productivity of passive solar stills. Sustainable Energy Technologies and Assessments, 2022, 52, 102033.	1.7	15
9	Thermodynamic analysis of sensible heat storage based double pass hybrid solar air heater with and without reflector. Sadhana - Academy Proceedings in Engineering Sciences, 2022, 47, 1.	0.8	O
10	Evaluation of Physical, Mechanical, and Wear Properties of Jatropha Shell Powder Reinforced Epoxy Glass Fiber Composites. Journal of Natural Fibers, 2022, 19, 12195-12207.	1.7	10
11	Energy, environmental, economic, and color analysis of geo-exchange energy assisted-insulated north wall solar dryer for onion slices under relatively cloudy and rainy conditions. Solar Energy, 2022, 236, 1-16.	2.9	7
12	Methods to enhance the productivity of solar still: A review. Materials Today: Proceedings, 2022, , .	0.9	O
13	Performance analysis of single slope solar still under composite climate in India: Numerical simulation and thermal modeling approach. Materials Today: Proceedings, 2022, , .	0.9	O
14	Experimental investigations on latent heat storage based modified mixedâ€mode greenhouse groundnuts drying. Journal of Food Processing and Preservation, 2022, 46, .	0.9	12
15	Process optimization of conventional steam distillation system for peppermint oil extraction. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2022, 44, 3960-3980.	1.2	7
16	Financial feasibility of concentrated solar power with and without sensible heat storage in hot and dry Indian climate. Journal of Energy Storage, 2022, 52, 105002.	3.9	7
17	Comparison of groundnut drying in simple and modified natural convection greenhouse dryers: Thermal, environmental and kinetic analyses. Journal of Stored Products Research, 2022, 98, 101990.	1.2	15
18	Investigation of physicochemical properties of oil palm biomass for evaluating potential of biofuels production via pyrolysis processes. Biomass Conversion and Biorefinery, 2021, 11, 1987-2001.	2.9	30

#	Article	IF	CITATIONS
19	Thermal analysis of jet impingement on hemispherical protrusion on heated surface. Experimental Heat Transfer, 2021, 34, 662-677.	2.3	16
20	Fabrication and evaluation of physical and mechanical properties of jute and coconut coir reinforced polymer matrix composite. Materials Today: Proceedings, 2021, 38, 2572-2577.	0.9	24
21	Financial viability assessment of concentrated solar power technologies under Indian climatic conditions. Sustainable Energy Technologies and Assessments, 2021, 43, 100928.	1.7	11
22	Performance evaluation of mixed synthetic organic dye as sensitizer based dye sensitized solar cell. Optical Materials, 2021, 111, 110658.	1.7	9
23	Thermal performance and energy consumption analysis of retail buildings through daylighting: A numerical model with experimental validation. Materials Science for Energy Technologies, 2021, 4, 367-382.	1.0	2
24	Comparative Investigation of Yield and Quality of Bio-Oil and Biochar from Pyrolysis of Woody and Non-Woody Biomasses. Energies, 2021, 14, 1092.	1.6	27
25	Advancements in steam distillation system for oil extraction from peppermint leaves. Materials Today: Proceedings, 2021, 47, 5794-5799.	0.9	12
26	Physical and Mechanical Properties of Natural Leaf Fiber-Reinforced Epoxy Polyester Composites. Polymers, 2021, 13, 1369.	2.0	48
27	Experimental analysis and thermal performance of evacuated tube solar collector assisted solar dryer. Materials Today: Proceedings, 2021, 47, 5846-5851.	0.9	15
28	Thermal characteristics of sensible heat storage materials applicable for concentrated solar power systems. Materials Today: Proceedings, 2021, 47, 5812-5817.	0.9	10
29	Recent advancements of PCM based indirect type solar drying systems: A state of art. Materials Today: Proceedings, 2021, 47, 5852-5855.	0.9	14
30	CFD Modelling and Simulation of an Indirect Forced Convection Solar Dryer. IOP Conference Series: Earth and Environmental Science, 2021, 795, 012008.	0.2	6
31	Economic analysis and drying kinetics of a geothermalâ€assisted solar dryer for tomato paste drying. Journal of the Science of Food and Agriculture, 2021, 101, 6542-6551.	1.7	17
32	Cycle test stability and corrosion evaluation of phase change materials used in thermal energy storage systems. Journal of Energy Storage, 2021, 39, 102664.	3.9	30
33	Review on Spray-Assisted Solar Desalination: Concept, Performance and Modeling. Arabian Journal for Science and Engineering, 2021, 46, 11521.	1.7	3
34	Garlic dehydration inside heat exchanger-evacuated tube assisted drying system: Thermal performance, drying kinetic and color index. Journal of Stored Products Research, 2021, 93, 101852.	1.2	17
35	Enviro-economical feasibility of groundnut drying under greenhouse and indoor forced convection hot air dryers. Journal of Stored Products Research, 2021, 93, 101848.	1.2	21
36	A comprehensive overview on solar grapes drying: Modeling, energy, environmental and economic analysis. Sustainable Energy Technologies and Assessments, 2021, 47, 101513.	1.7	15

#	Article	IF	Citations
37	Thermodynamic analysis of Organic Rankine cycle driven by reversed absorber hybrid photovoltaic thermal compound parabolic concentrator system. Renewable Energy, 2020, 147, 2118-2127.	4.3	39
38	Exergo-environmental analysis of an indirect forced convection solar dryer for drying bitter gourd slices. Renewable Energy, 2020, 146, 2210-2223.	4.3	152
39	Development of indirect type solar dryer and experiments for estimation of drying parameters of apple and watermelon. Thermal Science and Engineering Progress, 2020, 16, 100477.	1.3	56
40	Development and characterization of ternary mixture series of medium―and long hain saturated fatty acids for energy applications. Energy Storage, 2020, 2, e112.	2.3	7
41	Daylight availability assessment and the application of energy simulation software – A literature review. Materials Science for Energy Technologies, 2020, 3, 679-689.	1.0	15
42	Experimental study of single slope solar still coupled with parabolic trough collector. Materials Science for Energy Technologies, 2020, 3, 700-708.	1.0	19
43	Solar cell technologies. , 2020, , 27-50.		7
44	A review on exergy analysis of solar parabolic collectors. Solar Energy, 2020, 197, 411-432.	2.9	56
45	Parboiled Paddy Drying with Different Dryers: Thermodynamic and Quality Properties, Mathematical Modeling Using ANNs Assessment. Foods, 2020, 9, 86.	1.9	16
46	Experimental and thermal performance investigations on sensible storage based solar air heater. Journal of Energy Storage, 2020, 31, 101620.	3.9	32
47	Performance and economic analysis of natural convection based rubber smoking room for rubber cooperatives in Thailand. Renewable Energy, 2019, 132, 233-242.	4.3	14
48	Review on biodiesel production by two-step catalytic conversion. Biocatalysis and Agricultural Biotechnology, 2019, 18, 101023.	1.5	51
49	Desalination and Solar Still: Boon to Earth. Green Energy and Technology, 2019, , 1-24.	0.4	4
50	Exergy Analysis of Active and Passive Solar Still. Green Energy and Technology, 2019, , 261-273.	0.4	2
51	Application of Software in Predicting Thermal Behaviours of Solar Stills. Green Energy and Technology, 2019, , 105-148.	0.4	0
52	Bamboo as a complementary crop to address climate change and livelihoods – Insights from India. Forest Policy and Economics, 2019, 102, 66-74.	1.5	34
53	Computational fluid dynamics simulation and energy analysis of domestic direct-type multi-shelf solar dryer. Journal of Thermal Analysis and Calorimetry, 2019, 136, 173-184.	2.0	19
54	Different Techniques for Separation of Brackish Water. Asian Journal of Chemistry, 2019, 31, 9-17.	0.1	1

#	Article	IF	Citations
55	Properties of functionally gradient composites reinforced with waste natural fillers. Acta Periodica Technologica, 2019, , 250-259.	0.5	26
56	Heat loss analysis of a parabolic type dish cooker. International Journal of Energy Technology, 2019, , 1.	0.3	0
57	Promising biomass materials for biofuels in India's context. Materials Letters, 2018, 220, 175-177.	1.3	11
58	Fabrication and characterization of mixed dye: Natural and synthetic organic dye. Optical Materials, 2018, 79, 296-301.	1.7	34
59	Thermo-environomical and drying kinetics of bitter gourd flakes drying under north wall insulated greenhouse dryer. Solar Energy, 2018, 162, 205-216.	2.9	78
60	Heat transfer analysis of PV integrated modified greenhouse dryer. Renewable Energy, 2018, 121, 53-65.	4.3	48
61	Thermal analysis of insulated north-wall greenhouse with solar collector under passive mode. International Journal of Sustainable Energy, 2018, 37, 325-339.	1.3	7
62	A review on technology and promotional initiatives for concentrated solar power in world. International Journal of Ambient Energy, 2018, 39, 297-316.	1.4	8
63	Heat transfer augmentation in solar thermal collectors using impinging air jets: A comprehensive review. Renewable and Sustainable Energy Reviews, 2018, 82, 3179-3190.	8.2	50
64	Recent developments in greenhouse solar drying: A review. Renewable and Sustainable Energy Reviews, 2018, 82, 3250-3262.	8.2	96
65	Thermal modeling and drying kinetics of gooseberry drying inside north wall insulated greenhouse dryer. Applied Thermal Engineering, 2018, 130, 587-597.	3.0	49
66	Investigation of thermal and hydrodynamic performance of impingement jets solar air passage with protrusion with combination arc obstacle on the heated plate. Experimental Heat Transfer, 2018, 31, 232-250.	2.3	33
67	Review on solar Stirling engine: Development and performance. Thermal Science and Engineering Progress, 2018, 8, 244-256.	1.3	78
68	Optimization of single arc protrusion ribs parameters in solar air heater with impinging air jets based upon PSI approach. Thermal Science and Engineering Progress, 2018, 7, 146-154.	1.3	38
69	Fundamentals and Performance Evaluation Parameters of Solar Dryer. Green Energy and Technology, 2018, , 37-50.	0.4	2
70	Drying Kinetics, Quality Assessment, and Economic Analysis of Bitter Gourd Flakes Drying Inside Forced Convection Greenhouse Dryer. Journal of Solar Energy Engineering, Transactions of the ASME, 2018, 140, .	1.1	21
71	Thermal modeling and drying kinetics of bitter gourd flakes drying in modified greenhouse dryer. Renewable Energy, 2018, 118, 799-813.	4.3	39
72	Experimental investigation on overall thermal performance of fluid-flow in a rectangular channel with discrete V-pattern baffle. Thermal Science, 2018, 22, 183-191.	0.5	25

#	Article	IF	Citations
73	Embodied energy analysis of the indirect solar drying unit. International Journal of Ambient Energy, 2017, 38, 280-285.	1.4	44
74	Optimizing discrete V obstacle parameters using a novel Entropy-VIKOR approach in a solar air flow channel. Renewable Energy, 2017, 106, 310-320.	4.3	43
75	Developing heat transfer and pressure loss in an air passage with multi discrete V-blockages. Experimental Thermal and Fluid Science, 2017, 84, 266-278.	1.5	25
76	Assessment of sensible heat storage and fuel utilization efficiency enhancement in rubber sheet drying. Journal of Energy Storage, 2017, 10, 67-74.	3.9	11
77	A review on progress of concentrated solar power in India. Renewable and Sustainable Energy Reviews, 2017, 79, 304-307.	8.2	60
78	Medium temperature application of concentrated solar thermal technology: Indian perspective. Renewable and Sustainable Energy Reviews, 2017, 76, 369-378.	8.2	43
79	Development of Phase Change Materials (PCMs) for Solar Drying Systems. Green Energy and Technology, 2017, , 619-633.	0.4	4
80	A novel two-step transesterification process catalyzed by homogeneous base catalyst in the first step and heterogeneous acid catalyst in the second step. Fuel Processing Technology, 2017, 168, 97-104.	3.7	25
81	Economic Analysis of Various Developed Solar Dryers. Green Energy and Technology, 2017, , 495-513.	0.4	3
82	Energy Analysis of the Direct and Indirect Solar Drying System. Green Energy and Technology, 2017, , 529-542.	0.4	3
83	Development and Performance Study of Solar Air Heater for Solar Drying Applications. Green Energy and Technology, 2017, , 579-601.	0.4	11
84	Effect of multiple arc protrusion ribs on heat transfer and fluid flow of a circular-jet impingement solar air passage. Chemical Engineering and Processing: Process Intensification, 2017, 120, 114-133.	1.8	20
85	Techno-economic assessment of forced-convection rubber smoking room for rubber cooperatives. Energy, 2017, 137, 152-159.	4.5	7
86	Conjugate heat and mass transfer modeling of a new rubber smoking room and experimental validation. Applied Thermal Engineering, 2017, 112, 761-770.	3.0	15
87	Heat transfer analysis of north wall insulated greenhouse dryer under natural convection mode. Energy, 2017, 118, 1264-1274.	4.5	46
88	A review on thermal models for greenhouse dryers. Renewable and Sustainable Energy Reviews, 2017, 75, 548-558.	8.2	45
89	Natural dyes for dye sensitized solar cell: A review. Renewable and Sustainable Energy Reviews, 2017, 69, 705-718.	8.2	307
90	A Novel Chemical Method for Determining Ester Content in Biodiesel. Energy Procedia, 2017, 138, 536-543.	1.8	28

#	Article	IF	Citations
91	Evaluation of Biodiesel Production Process by the Determining of the Total Glycerol Content in Biodiesel. Energy Procedia, 2017, 138, 544-551.	1.8	7
92	Experimental Investigation on Modified Solar Still Using Nanoparticles and Water Sprinkler Attachment. Frontiers in Materials, 2017, 4, .	1.2	41
93	Parametric study and shrinkage modelling of natural rubber sheet drying using COMSOL multiphysics. IOP Conference Series: Materials Science and Engineering, 2017, 243, 012012.	0.3	2
94	Fundamental Concepts of Drying. Green Energy and Technology, 2017, , 3-38.	0.4	9
95	Exergy Analysis of Solar Dryers. Green Energy and Technology, 2017, , 239-262.	0.4	4
96	Thin layer drying characteristics of curry leaves (Murraya koenigii) in an indirect solar dryer. Thermal Science, 2017, 21, 359-367.	0.5	20
97	Applications of Soft Computing in Solar Drying Systems. Green Energy and Technology, 2017, , 419-438.	0.4	2
98	Advancement in Greenhouse Drying System. Green Energy and Technology, 2017, , 177-196.	0.4	3
99	Experimental investigation of effect of flow attack angle on thermohydraulic performance of air flow in a rectangular channel with discrete V-pattern baffle on the heated plate. Advances in Mechanical Engineering, 2016, 8, 168781401664105.	0.8	26
100	Review on various modelling techniques for the solar dryers. Renewable and Sustainable Energy Reviews, 2016, 62, 396-417.	8.2	74
101	Mathematical modeling and performance investigation of mixed-mode and indirect solar dryers for natural rubber sheet drying. Energy for Sustainable Development, 2016, 34, 44-53.	2.0	62
102	Performance of modified greenhouse dryer with thermal energy storage. Energy Reports, 2016, 2, 155-162.	2.5	81
103	Chapter 4 Review on Performance Affected Parameters for Dye Sensitized Solar Cell., 2016,, 93-112.		0
104	Review on Indian Solar Drying Status. Current Sustainable/Renewable Energy Reports, 2016, 3, 113-120.	1.2	23
105	Mathematical modeling and performance analysis of thin layer drying of bitter gourd in sensible storage based indirect solar dryer. Innovative Food Science and Emerging Technologies, 2016, 36, 59-67.	2.7	144
106	Performance analysis of greenhouse dryer by using insulated north-wall under natural convection mode. Energy Reports, 2016, 2, 107-116.	2.5	61
107	Thermal energy storage based solar drying systems: A review. Innovative Food Science and Emerging Technologies, 2016, 34, 86-99.	2.7	142
108	Experimental investigation on the comparison of fenugreek drying in an indirect solar dryer and under open sun. Heat and Mass Transfer, 2016, 52, 1963-1972.	1.2	21

#	Article	IF	CITATIONS
109	Computational fluid dynamic analysis of innovative design of solar-biomass hybrid dryer: An experimental validation. Renewable Energy, 2016, 92, 185-191.	4.3	56
110	PREDICTION OF THE RATE OF MOISTURE EVAPORATION FROM JAGGERY IN GREENHOUSE DRYING USING THE FUZZY LOGIC. Heat Transfer Research, 2015, 46, 923-935.	0.9	15
111	A Comprehensive Overview of Renewable Energy Status in India. , 2015, , 91-105.		6
112	A review on biomass energy resources, potential, conversion and policy in India. Renewable and Sustainable Energy Reviews, 2015, 45, 530-539.	8.2	372
113	Applications of software in solar drying systems: A review. Renewable and Sustainable Energy Reviews, 2015, 51, 1326-1337.	8.2	74
114	Solar stills system design: A review. Renewable and Sustainable Energy Reviews, 2015, 51, 153-181.	8.2	156
115	Heating potential evaluation of earth–air heat exchanger system for winter season. Journal of Building Physics, 2015, 39, 242-260.	1.2	14
116	Annual Performance of a Modified Greenhouse Dryer Under Passive Mode In No-Load Conditions. International Journal of Green Energy, 2015, 12, 1091-1099.	2.1	32
117	Solar Photovoltaic Technology and Its Sustainability. Green Energy and Technology, 2015, , 3-25.	0.4	5
118	Historical and recent development of photovoltaic thermal (PVT) technologies. Renewable and Sustainable Energy Reviews, 2015, 42, 1428-1436.	8.2	151
119	Energy metrics of earth–air heat exchanger system for hot and dry climatic conditions of India. Energy and Buildings, 2015, 86, 214-221.	3.1	61
120	Study on Calculation Models of Earth-Air Heat Exchanger Systems. Journal of Energy, 2014, 2014, 1-15.	1.4	30
121	Environomical Analysis and Mathematical Modelling for Tomato Flakes Drying in a Modified Greenhouse Dryer under Active Mode. International Journal of Food Engineering, 2014, 10, 669-681.	0.7	75
122	Application of artificial neural network for the prediction of jaggery mass during drying inside the natural convection greenhouse dryer. International Journal of Ambient Energy, 2014, 35, 186-192.	1.4	30
123	Thermal performance evaluation of modified active greenhouse dryer. Journal of Building Physics, 2014, 37, 395-402.	1.2	18
124	Solar greenhouse drying: A review. Renewable and Sustainable Energy Reviews, 2014, 29, 905-910.	8.2	138
125	ANFIS modelling of a natural convection greenhouse drying system for jaggery: an experimental validation. International Journal of Sustainable Energy, 2014, 33, 316-335.	1.3	50
126	Performance evaluation of greenhouse dryer with opaque north wall. Heat and Mass Transfer, 2014, 50, 493-500.	1.2	28

#	Article	IF	CITATIONS
127	A review of thermohydraulic performance of artificially roughened solar air heaters. Renewable and Sustainable Energy Reviews, 2014, 37, 100-122.	8.2	78
128	DESIGN, DEVELOPMENT, AND TESTING OF A MODIFIED GREENHOUSE DRYER UNDER CONDITIONS OF NATURAL CONVECTION. Heat Transfer Research, 2014, 45, 433-451.	0.9	19
129	Experimental and analytical studies of earth–air heat exchanger (EAHE) systems in India: A review. Renewable and Sustainable Energy Reviews, 2013, 19, 238-246.	8.2	151
130	Historical Review and Recent Trends in Solar Drying Systems. International Journal of Green Energy, 2013, 10, 690-738.	2.1	131
131	Calculation of total solar fraction for different orientation of greenhouse using 3D-shadow analysis in Auto-CAD. Energy and Buildings, 2012, 47, 27-34.	3.1	71
132	Wind energy status in India: A short review. Renewable and Sustainable Energy Reviews, 2012, 16, 1157-1164.	8.2	76
133	Experimental investigation on heat transfer and fluid flow characteristics of air flow in a rectangular duct with Multi v-shaped rib with gap roughness on the heated plate. Solar Energy, 2012, 86, 1733-1749.	2.9	152
134	Effect of mass on convective mass transfer coefficient during open sun and greenhouse drying of onion flakes. Journal of Food Engineering, 2007, 79, 1337-1350.	2.7	91
135	Thermal modeling of a natural convection greenhouse drying system for jaggery: An experimental validation. Solar Energy, 2006, 80, 1135-1144.	2.9	84
136	Effect of shape and size on convective mass transfer coefficient during greenhouse drying (GHD) of Jaggery. Journal of Food Engineering, 2006, 73, 121-134.	2.7	43
137	Thermal Modeling and Parametric Study of a Forced Convection Greenhouse Drying System for Jaggery: An Experimental Validation. International Journal of Agricultural Research, 2006, 1, 265-279.	0.0	33
138	Role of Greenhouse Technology in Agricultural Engineering. International Journal of Agricultural Research, 2006, 1, 364-372.	0.0	33
139	Using renewable energy technologies for domestic cooking in India: a methodology for potential estimation. Renewable Energy, 2002, 26, 235-246.	4.3	47
140	EXPERIMENTAL INVESTIGATION ON THERMAL BEHAVIOR OF HYBRID SINGLE SLOPE SOLAR STILL. Journal of Thermal Engineering, 0, , 677-689.	0.8	2
141	Solar photovoltaic (PV)â€driven active crop drying system for plantain ( MUSA SPP ): Design, development, and performance evaluation. Journal of Food Process Engineering, 0, , e13892.	1.5	0
142	Drying kinetics, performance, and quality assessment for banana slices using heat pump–assisted drying system ( HPADS ). Journal of Food Process Engineering, 0, , .	1.5	4