Narayan Lal Panwar

List of Publications by Year
in descending order

120	6,402	168829	78623
papers	citations	31 h-index	77 g-index

126	126	126	8684
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Role of renewable energy sources in environmental protection: A review. Renewable and Sustainable Energy Reviews, 2011, 15, 1513-1524.	8.2	2,614
2	Emergence of energy storage technologies as the solution for reliable operation of smart power systems: A review. Renewable and Sustainable Energy Reviews, 2013, 25, 135-165.	8.2	310
3	Recent advancement in biogas enrichment and its applications. Renewable and Sustainable Energy Reviews, 2017, 73, 892-903.	8.2	259
4	Thermo chemical conversion of biomass â€“ Eco friendly energy routes. Renewable and Sustainable Energy Reviews, 2012, 16, 1801-1816.	8.2	217
5	Alternative fuels for transportation vehicles: A technical review. Renewable and Sustainable Energy Reviews, 2013, 25, 404-419.	8.2	172
6	Biodiesel resources and production technologies â€“ A review. Renewable and Sustainable Energy Reviews, 2012, 16, 3680-3689.	8.2	162
7	Review on solar air heating system with and without thermal energy storage system. Renewable and Sustainable Energy Reviews, 2012, 16, 2289-2303.	8.2	160
8	Performance evaluation of a diesel engine fueled with methyl ester of castor seed oil. Applied Thermal Engineering, 2010, 30, 245-249.	3.0	158
9	Comprehensive review on production and utilization of biochar. SN Applied Sciences, 2019, 1, 1.	1.5	123
10	State of the art of solar cooking: An overview. Renewable and Sustainable Energy Reviews, 2012, 16, 3776-3785.	8.2	112
11	Solar greenhouse an option for renewable and sustainable farming. Renewable and Sustainable Energy Reviews, 2011, 15, 3934-3945.	8.2	102
12	Influence of activation conditions on the physicochemical properties of activated biochar: a review. Biomass Conversion and Biorefinery, 2022, 12, 925-947.	2.9	93
13	Experimental studies on hemi cylindrical walk-in type solar tunnel dryer for grape drying. Applied Energy, 2010, 87, 2764-2767.	5.1	90
14	Improved biomass cookstoves for sustainable development: A review. Renewable and Sustainable Energy Reviews, 2017, 73, 672-687.	8.2	90
15	Solar cooker realizations in actual use: An overview. Renewable and Sustainable Energy Reviews, 2014, 37, 288-306.	8.2	88
16	Bio Diesel from Castor Oil â€“ A Green Energy Option. Low Carbon Economy, 2011, 02, 1-6.	0.7	73
17	Experimental investigation of drying of garlic clove in solar dryer using phase change material as energy storage. Journal of Thermal Analysis and Calorimetry, 2014, 118, 533-539.	2.0	68
18	Energy and exergy analysis of passive solar distillation systems. International Journal of Low-Carbon Technologies, 2016, 11, 211-221.	1.2	68

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19	Thermodynamic performance evaluation of solar and other thermal power generation systems: A review. Renewable and Sustainable Energy Reviews, 2015, 50, 567-582.	8.2	64
20	Design and performance evaluation of a 5kW producer gas stove. Biomass and Bioenergy, 2008, 32, 1349-1352.	2.9	63
21	A review on energy and exergy analysis of solar dying systems. Renewable and Sustainable Energy Reviews, 2012, 16, 2812-2819.	8.2	56
22	A comprehensive review of different types of solar photovoltaic cells and their applications. International Journal of Ambient Energy, 2021, 42, 1200-1217.	1.4	56
23	Exergetic analysis of a vapour compression refrigeration system with R134a, R143a, R152a, R404A, R407C, R410A, R502 and R507A. Clean Technologies and Environmental Policy, 2012, 14, 47-53.	2.1	50
24	Comprehensive review on pyrolytic oil production, upgrading and its utilization. Journal of Material Cycles and Waste Management, 2020, 22, 1712-1722.	1.6	48
25	Biomass gasification for climate change mitigation and policy framework in India: A review. Bioresource Technology Reports, 2022, 17, 100892.	1.5	42
26	Design and performance evaluation of energy efficient biomass gasifier based cookstove on multi fuels. Mitigation and Adaptation Strategies for Global Change, 2009, 14, 627-633.	1.0	41
27	Mitigation of greenhouse gases by adoption of improved biomass cookstoves. Mitigation and Adaptation Strategies for Global Change, 2009, 14, 569-578.	1.0	40
28	Strategic overview of management of future solar photovoltaic panel waste generation in the Indian context. Waste Management and Research, 2022, 40, 504-518.	2.2	39
29	An Approach to Analyse Energy and Exergy Analysis of Thermal Power Plants: A Review. Smart Grid and Renewable Energy, 2010, 01, 143-152.	0.7	37
30	Optimum exergy efficiency of single-effect ideal passive solar stills. Energy Efficiency, 2013, 6, 595-606.	1.3	35
31	An overview of recent development in bio-oil upgrading and separation techniques. Environmental Engineering Research, 2021, 26, 200382-0.	1.5	34
32	Review on power generation scenario of India. Renewable and Sustainable Energy Reviews, 2013, 18, 43-48.	8.2	32
33	Experimental investigation of energy and exergy efficiencies of domestic size parabolic dish solar cooker. Journal of Renewable and Sustainable Energy, 2012, 4, .	0.8	31
34	Performance Evaluation of Developed Domestic Cook Stove with Jatropha Shell. Waste and Biomass Valorization, 2010, 1, 309-314.	1.8	29
35	A comprehensive review on optimization of anaerobic digestion technologies for lignocellulosic biomass available in India. Biomass and Bioenergy, 2022, 161, 106479.	2.9	28
36	Techno-economic evaluation of masonry type animal feed solar cooker in rural areas of an Indian state Rajasthan. Energy Policy, 2013, 52, 583-586.	4.2	26

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37	CO2 mitigation potential from biodiesel of castor seed oil in Indian context. Clean Technologies and Environmental Policy, 2010, 12, 579-582.	2.1	25
38	Kinetic analysis and thermal degradation study on wheat straw and its biochar from vacuum pyrolysis under non-isothermal condition. Biomass Conversion and Biorefinery, 2023, 13, 7547-7559.	2.9	25
39	Design and development of energy efficient solar tunnel dryer for industrial drying. Clean Technologies and Environmental Policy, 2011, 13, 125-132.	2.1	24
40	Design and performance evaluation of biogas stove for community cooking application. International Journal of Sustainable Energy, 2010, 29, 116-123.	1.3	23
41	Experimental investigation on energy and exergy analysis of coriander (Coriadrum sativum L.) leaves drying in natural convection solar dryer. Applied Solar Energy (English Translation of Geliotekhnika), 2014, 50, 133-137.	0.2	22
42	Experimental investigation of open core downdraft biomass gasifier for food processing industry. Mitigation and Adaptation Strategies for Global Change, 2009, 14, 547-556.	1.0	21
43	Performance evaluation of producer gas burner for industrial application. Biomass and Bioenergy, 2011, 35, 1373-1377.	2.9	20
44	Kinetic study on pyrolysis of mustard stalk using thermogravimetric analysis. Bioresource Technology Reports, 2022, 17, 100942.	1.5	20
45	Experimental investigation on biochar from groundnut shell in a continuous production system. Biomass Conversion and Biorefinery, 2022, 12, 1093-1103.	2.9	19
46	A Comprehensive Review on the Performance of Structural Lightweight Aggregate Concrete for Sustainable Construction. Construction Materials, 2021, 1, 39-62.	0.5	19
47	Catalysts and their role in biomass gasification and tar abetment: a review. Biomass Conversion and Biorefinery, 0, , 1.	2.9	19
48	Experimental investigation of energy and exergy efficiency of masonry-type solar cooker for animal feed. International Journal of Sustainable Energy, 2010, 29, 178-184.	1.3	18
49	Effects of thermal conductivity and geometry of materials on the temperature variation in packed bed solar air heater. Journal of Thermal Analysis and Calorimetry, 2013, 111, 839-847.	2.0	17
50	Cost-benefit and systems analysis of passively ventilated solar greenhouses for food production in arid and semi-arid regions. Environment Systems and Decisions, 2014, 34, 160-167.	1.9	17
51	Pyrolysis and kinetic behaviour of black gram straw using thermogravimetric analysis. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2023, 45, 2371-2384.	1.2	16
52	Experimental investigation and thermal modelling of box and parabolic type solar cookers for temperature mapping. Journal of Thermal Analysis and Calorimetry, 2019, 136, 1347-1364.	2.0	16
53	Experimental investigation on the production of bio-oil from wheat straw. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 0, , 1-16.	1.2	14
54	The emission characteristics of a compression ignition engine operating on castor oil methyl ester. International Journal of Global Warming, 2009, 1, 368.	0.2	13

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55	Thermodynamic evaluation of heat recovery through a Canopus heat exchanger for vapor compression refrigeration (VCR) system. Journal of Thermal Analysis and Calorimetry, 2012, 110, 1493-1499.	2.0	13
56	Development of domestic biogas stove. Biomass Conversion and Biorefinery, 2011, 1, 99-103.	2.9	12
57	State of the art on solar drying technology: a review. International Journal of Renewable Energy Technology, 2012, 3, 107.	0.2	12
58	Thermal modeling, energy and exergy analysis of animal feed solar cooker. Journal of Renewable and Sustainable Energy, 2013, 5, 043105.	0.8	12
59	Performance Evaluation of Improved Carbonized Cashew Nut Shell Based Cookstove. Waste and Biomass Valorization, 2016, 7, 1221-1225.	1.8	12
60	Solar map of India under clear sky conditions. International Journal of Sustainable Energy, 2019, 38, 415-446.	1.3	12
61	Thermogravimetric studies on co-pyrolysis of raw/torrefied biomass and coal blends. Waste Management and Research, 2020, 38, 1259-1268.	2.2	12
62	Influences of biochar in biomethanation and CO2 mitigation potential. Biomass Conversion and Biorefinery, 0, , 1.	2.9	12
63	Potential of surplus biomass gasifier based power generation: A case study of an Indian state Rajasthan. Mitigation and Adaptation Strategies for Global Change, 2009, 14, 711-720.	1.0	11
64	Performance evaluation of exhaust air recirculation system of mixed mode solar dryer for drying of onion flakes. International Journal of Renewable Energy Technology, 2009, 1, 29.	0.2	11
65	Sustainable development with renewable energy resources: a review. World Review of Science, Technology and Sustainable Development, 2013, 10, 163.	0.3	11
66	The Fungal Pre-Treatment of Maize Cob Heart and Water Hyacinth for Enhanced Biomethanation. International Journal of Green Energy, 2014, 11, 40-49.	2.1	11
67	Influence of granite waste on mechanical and durability properties of fly ash-based geopolymer concrete. Environment, Development and Sustainability, 2021, 23, 17810-17834.	2.7	11
68	Outline of solar energy in India: advancements, policies, barriers, socio-economic aspects and impacts of COVID on solar industries. International Journal of Ambient Energy, 2022, 43, 7630-7642.	1.4	11
69	Energetic and exergetic analysis of three different solar cookers. Journal of Renewable and Sustainable Energy, 2013, 5, 023102.	0.8	9
70	Dust impact on concentrated solar power: A review. Environmental Engineering Research, 2022, 27, 210345-0.	1.5	9
71	Energetic and exergetic performance evaluation of improved biomass cookstoves. International Journal of Exergy, 2014, 14, 430.	0.2	8
72	Environment friendly biomass gasifier cookstove for community cooking. Environmental Technology (United Kingdom), 2015, 36, 2308-2311.	1.2	8

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73	Design and development of solar energy powered maize milling machine. International Journal of Ambient Energy, 2022, 43, 1671-1676.	1.4	8
74	Thermal degradation of coconut husk waste biomass under non-isothermal condition. Biomass Conversion and Biorefinery, 2023, 13, 7613-7622.	2.9	8
75	Energy and exergy analyses of solar ponds in the Indian climatic conditions. International Journal of Exergy, 2014, 15, 121.	0.2	7
76	Energetic and exergetic evaluation of solar box cooker in Algerian climatic conditions. International Journal of Exergy, 2015, 16, 337.	0.2	7
77	Current status, opportunities and challenges in anaerobic digestion in Indian context: An overview. Bioresource Technology Reports, 2021, 16, 100830.	1.5	7
78	Experimental investigation of producer gas burner for thermal application. International Journal of Sustainable Energy, 2011, 30, 376-384.	1.3	6
79	Experimental studies on hemi cylindrical walk-in type solar tunnel dryer for grape drying. Applied Solar Energy (English Translation of Geliotekhnika), 2009, 45, 269-273.	0.2	5
80	Performance of open core down draft gasifier with densified agro residue fuel. International Journal of Sustainable Energy, 2011, 30, 302-310.	1.3	5
81	Improved Biogas Stove with Scrubbing Unit for Household Use. Waste and Biomass Valorization, 2011, 2, 397-402.	1.8	5
82	Thermal modeling and experimental validation of solar tunnel dryer: a clean energy option for drying surgical cotton. International Journal of Low-Carbon Technologies, 0, , ctt053.	1.2	5
83	Generation of solar irradiation maps for various applications under Algerian clear-sky conditions. International Journal of Ambient Energy, 2018, 39, 243-256.	1.4	5
84	RECEIVER TEMPERATURE MAPS OF PARABOLIC COLLECTOR USED FOR SOLAR FOOD COOKING APPLICATION IN ALGERIA. Journal of Thermal Engineering, 0, , 1656-1667.	0.8	5
85	A comparative study on morphology, composition, kinetics, thermal behaviour and thermodynamic parameters of Prosopis Juliflora and its biochar derived from vacuum pyrolysis. Bioresource Technology Reports, 2022, 18, 101053.	1.5	5
86	Experimental investigation of an applicator of liquid slurry, from biogas production, for crop production. Environmental Technology (United Kingdom), 2011, 32, 873-878.	1.2	4
87	Performance evaluation of solar tunnel dryer for grape drying. International Journal of Renewable Energy Technology, 2012, 3, 1.	0.2	4
88	Energetic and exergetic analysis of walk-in type solar tunnel dryer for Kasuri Methi (Fenugreek) leaves drying. International Journal of Exergy, 2014, 14, 519.	0.2	4
89	Thermal Modelling and Experimental Validation of a Walk-in Type Solar Tunnel Dryer for Drying Fenugreek Leaves (Methi) in Indian Climate. Environmental Modeling and Assessment, 2015, 20, 211-223.	1.2	4
90	Experimental Investigation of Eco Friendly Biomass Fired Water Heating System. Waste and Biomass Valorization, 2016, 7, 1491-1494.	1.8	4

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91	Experimental investigation on biomass fired dryer for drying of agricultural products. International Journal of Ambient Energy, 2021, 42, 1765-1768.	1.4	4
92	Experimental Investigation on Farmer-Friendly Hybrid Dryer for Indoor Drying of Mushroom. Springer Proceedings in Energy, 2020, , 81-92.	0.2	4
93	Biogas in India: Potential and Integration into Present Energy Systems. International Journal of Current Microbiology and Applied Sciences, 2018, 7, 2175-2186.	0.0	4
94	A Comparative Study of Thumba Seed Bio Diesel. Journal of Environmental Protection, 2011, 02, 454-459.	0.3	4
95	Waste heat recovery from improved cookstove through thermoelectric generator. International Journal of Ambient Energy, 2022, 43, 466-470.	1.4	3
96	Experimental investigation on non-oxidative biomass torrefaction system. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2020, , 1-12.	1.2	3
97	Design and Development of Solar-biogas Hybrid Dryer for Onion Drying. International Journal of Environment and Climate Change, 0, , 65-73.	0.0	3
98	Experimental Analysis of Solar Photovoltaic System under Partial Shading. International Journal of Current Microbiology and Applied Sciences, 2020, 9, 1623-1630.	0.0	3
99	Thermal performance and heat storage behaviour of three pots improved cookstove. Energy Nexus, 2022, 6, 100074.	3.3	3
100	Evaluation of traditional half orange type charcoal kiln for carbonisation: a case study. World Review of Science, Technology and Sustainable Development, 2011, 8, 196.	0.3	2
101	Experimental study of drying techniques in retention of nutrients in aonla. International Journal of Postharvest Technology and Innovation, 2015, 5, 81.	0.1	2
102	Energetic and Exergetic Assessment of 50 W Solar PV System. Applied Solar Energy (English) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 302	0.2	2
103	Experimental investigation on energy-efficient twin-mode biomass improved cookstove. SN Applied Sciences, 2019, 1, 1.	1.5	2
104	Experimental investigation on the production of bio-oil from maize straw at a pilot scale. Environmental Engineering Research, 2022, 27, 200592-0.	1.5	2
105	Influences of a novel cylindrical solar dryer on farmerâ€™s income and its impact on environment. Environmental Science and Pollution Research, 2022, 29, 78887-78900.	2.7	2
106	Thermal performance of a focusing type collector for paraffin wax melting. Journal of Renewable and Sustainable Energy, 2012, 4, 023114.	0.8	1
107	Design improvement and experimental study on shell and tube condenser for bio-oil recovery from fast pyrolysis of wheat straw biomass. SN Applied Sciences, 2021, 3, 1.	1.5	1
108	Generating Temperature Maps of a Solar Receiver for a Domestic Parabolic Concentrator for Cooking Purposes Under Algerian Environment. Green Energy and Technology, 2018, , 231-257.	0.4	0

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109	Development of biomass-based hydrothermal liquefaction system for essential oil extraction. International Journal of Ambient Energy, 2022, 43, 952-957.	1.4	0
110	Bio-oil production from agricultural crop residues - a review. International Journal of Environment and Sustainable Development, 2021, 20, 301.	0.2	0
111	Bio-oil production from agricultural crop residues - a review. International Journal of Environment and Sustainable Development, 2021, 20, 301.	0.2	0
112	Energetic and exergetic analysis of solar photovoltaicthermoelectric generator hybrid system. International Journal of Agricultural Sciences, 2021, 17, 256-261.	0.0	0
113	Energy auditing of chemical industry and scope for renewable energy. Engineering and Technology in India, 2014, 5, 80-86.	0.0	0
114	Energetic and Exergetic Evaluation of Biomass Fired Water Heating System. Trends in Renewable Energy, 2017, , .	0.1	0
115	Experimental Investigation on Energy Recovery System for Continuous Biochar Production System. International Journal of Environment and Climate Change, 0, , 300-310.	0.0	0
116	Analysis of biochar from carbonisation of wheat straw using continuous auger reactor. International Journal of Environment and Sustainable Development, 2022, 21, 218.	0.2	0
117	Development of an analytical model for cost-based optimization of KVIC biogas plant dimensions. Bioresource Technology Reports, 2021, 16, 100879.	1.5	0
118	Health Problems Associated with Existing Indoor Air Quality in Tribal Household Kitchens. International Journal of Current Microbiology and Applied Sciences, 2020, 9, 809-816.	0.0	0
119	Electrical Analysis of Solar Photovoltaic-Thermoelectric Generator Hybrid System. International Journal of Current Microbiology and Applied Sciences, 2020, 9, 2925-2932.	0.0	0
120	Environmental assessment, microstructural behaviour, stressâ€“strain characteristics, and effect of exposure to extreme temperature on sustainable concrete made with dolomite mining residues. Environmental Science and Pollution Research, 2022, , 1.	2.7	0