Debendra Baruah

List of Publications by Year
in descending order

59 papers	3,386 citations	201658 27 h-index	155644 55 g-index
59 all docs	59 docs citations	59 times ranked	4260 citing authors

#	Article	IF	Citations
1	Feasibility study of TEG-integrated biomass cook stove for electrical power generation specific to rural areas with inadequate electricity. Energy Sources, Part A: Recovery, Utilization and Environmental Effects, 2023, 45, 5714-5735.	2.3	10
2	Decision support system based planning of biomass gasification system for decentralised energy generation. Renewable Energy Focus, 2021, 38, 22-35.	4.5	3
3	Energy-carbon-water footprint of sugarcane bioenergy: A district-level life cycle assessment in the state of Maharashtra, India. Renewable and Sustainable Energy Reviews, 2021, 151, 111583.	16.4	20
4	Flexible luminescent non-lanthanide metalâ€“organic frameworks as small molecules sensors. Dalton Transactions, 2021, 50, 14513-14531.	3.3	22
5	Acetamide for latent heat storage: Thermal stability and metal corrosivity with varying thermal cycles. Renewable Energy, 2020, 145, 1932-1940.	8.9	12
6	Prospect and potential of biomass power to mitigate climate change: A case study in India. Journal of Cleaner Production, 2019, 220, 931-944.	9.3	60
7	Prospects of decentralized renewable energy to improve energy access: A resource-inventory-based analysis of South Africa. Renewable and Sustainable Energy Reviews, 2019, 103, 328-341.	16.4	22
8	Recycling of bioenergy byâ€products as crop nutrient: Application in different phases for improvement of soil and crop. Environmental Progress and Sustainable Energy, 2019, 38, 13099.	2.3	2
9	By-products of bioenergy systems (anaerobic digestion and gasification) as sources of plant nutrients: scope of processed application and effect on soil and crop. Journal of Material Cycles and Waste Management, 2019, 21, 556-572.	3.0	10
10	Bioelectricity from sugarcane bagasse co-generation in Indiaâ€'An assessment of resource potential, policies and market mobilization opportunities for the case of Uttar Pradesh. Journal of Cleaner Production, 2018, 182, 1012-1023.	9.3	26
11	Thermoelectric conversion of waste heat from IC engine-driven vehicles: A review of its application, issues, and solutions. International Journal of Energy Research, 2018, 42, 2595-2614.	4.5	27
12	Optimal Distributed Generator Sizing and Placement by Analytical Method and Fuzzy Expert System: a Case Study in Tezpur University, India. Technology and Economics of Smart Grids and Sustainable Energy, 2018, 3, 1.	2.6	15
13	Impact of time expenditure on household preferences for cooking fuels. Energy, 2018, 151, 309-316.	8.8	13
14	Recent Trends in the Pretreatment of Lignocellulosic Biomass for Value-Added Products. Frontiers in Energy Research, 2018, 6, .	2.3	622
15	Addressing Economic and Energy Poverty Through Locally Available Biomass Resources: Investigation of Issues Concerning India and South Africa. , 2018, , .		0
16	GIS mapping-based impact assessment of groundwater contamination by arsenic and other heavy metal contaminants in the Brahmaputra River valley: A water quality assessment study. Journal of Cleaner Production, 2018, 201, 1001-1011.	9.3	48
17	Effect of combined chemical and thermal pretreatments on biogas production from lignocellulosic biomasses. Industrial Crops and Products, 2018, 124, 735-746.	5.2	44
18	Artificial neural network based modeling of biomass gasification in fixed bed downdraft gasifiers. Biomass and Bioenergy, 2017, 98, 264-271.	5.7	115

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19	Investigation on by-products of bioenergy systems (anaerobic digestion and gasification) as potential crop nutrient using FTIR, XRD, SEM analysis and phyto-toxicity test. Journal of Environmental Management, 2017, 196, 201-216.	7.8	57
20	Emerging role of Geographical Information System (GIS), Life Cycle Assessment (LCA) and spatial LCA (GIS-LCA) in sustainable bioenergy planning. Bioresource Technology, 2017, 242, 218-226.	9.6	117
21	Solar air heater for residential space heating. Energy, Ecology and Environment, 2017, 2, 387-403.	3.9	25
22	Assessment of by-products of bioenergy systems (anaerobic digestion and gasification) as potential crop nutrient. Waste Management, 2017, 59, 102-117.	7.4	67
23	GIS based planning of a biomethanation power plant in Assam, India. Renewable and Sustainable Energy Reviews, 2016, 62, 596-608.	16.4	36
24	Biogas Production from Surplus Plant Biomass Feedstock: Some Highlights of Indo-UK R&D Initiative. Procedia Environmental Sciences, 2016, 35, 785-794.	1.4	16
25	Phosphorus recovery as struvite from farm, municipal and industrial waste: Feedstock suitability, methods and pre-treatments. Waste Management, 2016, 49, 437-454.	7.4	133
26	Phosphorus recovery as struvite: Recent concerns for use of seed, alternative Mg source, nitrogen conservation and fertilizer potential. Resources, Conservation and Recycling, 2016, 107, 142-156.	10.8	240
27	Steady state heat transfer modeling of solid fuel biomass stove: Part 1. Energy, 2016, 97, 283-295.	8.8	18
28	Distribution loss reduction in a University of North East India through load factor improvement. , 2015, , .		4
29	GIS mapping of rice straw residue for bioenergy purpose in a rural area of Assam, India. Biomass and Bioenergy, 2014, 71, 125-133.	5.7	21
30	Gasification of tea (Camellia sinensis (L.) O. Kuntze) shrubs for black tea manufacturing process heat generation in Assam, India. Biomass and Bioenergy, 2014, 66, 27-38.	5.7	19
31	Bioenergy potential from crop residue biomass in India. Renewable and Sustainable Energy Reviews, 2014, 32, 504-512.	16.4	400
32	Drying modelling and experimentation of Assam black tea (Camellia sinensis) with producer gas as a fuel. Applied Thermal Engineering, 2014, 63, 495-502.	6.0	31
33	Development of an Empirical Model for Assessment of Solar Air Heater Performance. Distributed Generation and Alternative Energy Journal, 2014, 29, 56-75.	0.8	1
34	Down Draft Gasification Modelling and Experimentation of Some Indigenous Biomass for Thermal Applications. Energy Procedia, 2014, 54, 21-34.	1.8	50
35	Modeling of biomass gasification: A review. Renewable and Sustainable Energy Reviews, 2014, 39, 806-815.	16.4	271
36	Possibility of biomass gasification in tea manufacturing industries in Assam, India. International Journal of Renewable Energy Technology, 2014, 5, 310.	0.3	4

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37	MICROWAVE DRYING CHARACTERISTICS OF ASSAM CTC TEA (CAMELLIA ASSAMICA). Journal of Food Processing and Preservation, 2013, 37, 366-370.	2.0	12
38	Production and characterization of biodiesel obtained from Sapindus mukorossi kernel oil. Energy, 2013, 60, 159-167.	8.8	49
39	Global trend in wind power with special focus on the top five wind power producing countries. Renewable and Sustainable Energy Reviews, 2013, 19, 348-359.	16.4	45
40	GIS based assessment of rice (Oryza sativa) straw biomass as an alternative fuel for tea (Camellia) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50	5.7	15
41	Performance of diesel engine using biodiesel obtained from mixed feedstocks. Renewable and Sustainable Energy Reviews, 2012, 16, 5479-5484.	16.4	20
42	Improving distribution efficiency of electrical network using geo-electrical options: a case study in a rural area of Assam (India). Energy Efficiency, 2012, 5, 519-530.	2.8	1
43	Investigation of oxidation stability of Terminalia belerica biodiesel and its blends with petrodiesel. Fuel Processing Technology, 2012, 98, 51-58.	7.2	34
44	Assessment of tree seed oil biodiesel: A comparative review based on biodiesel of a locally available tree seed. Renewable and Sustainable Energy Reviews, 2012, 16, 1616-1629.	16.4	37
45	Performance and energy analyses of a diesel engine fuelled with Koroch seed oil methyl ester and its diesel fuel blends. International Journal of Energy Technology and Policy, 2011, 7, 433.	0.2	2
46	MODELING DESORPTION ISOTHERMS AND THERMODYNAMIC PROPERTIES OF ASSAM CTC MANUFACTURED FROM TEA CULTIVAR T3E3. Journal of Food Processing and Preservation, 2011, 35, 729-738.	2.0	1
47	Rice straw residue biomass potential for decentralized electricity generation: A GIS based study in Lakhimpur district of Assam, India. Energy for Sustainable Development, 2011, 15, 214-222.	4.5	51
48	The use of Koroch seed oil methyl ester blends as fuel in a diesel engine. Applied Energy, 2011, 88, 2713-2725.	10.1	62
49	Crop residue biomass for decentralized electrical power generation in rural areas (part 1): Investigation of spatial availability. Renewable and Sustainable Energy Reviews, 2011, 15, 1885-1892.	16.4	87
50	Comparative Analysis of Performance and Combustion of Koroch Seed Oil and Jatropha Methyl Ester blends in a Diesel Engine. , 2011, , .		1
51	A cycle simulation model for predicting the performance of a diesel engine fuelled by diesel and biodiesel blends. Energy, 2010, 35, 1317-1323.	8.8	79
52	Assessment of hydropower potential using GIS and hydrological modeling technique in Kopili River basin in Assam (India). Applied Energy, 2010, 87, 298-309.	10.1	150
53	Investigation of terminalia (Terminalia belerica Robx.) seed oil as prospective biodiesel source for North-East India. Fuel Processing Technology, 2009, 90, 1435-1441.	7.2	43
54	Energy demand forecast for mechanized agriculture in rural India. Energy Policy, 2008, 36, 2628-2636.	8.8	44

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55	Forecasting Energy Demand for Mechanized Agriculture in Rural India. , 2007, , .		0
56	An investigation into the energy use in relation to yield of rice (Oryza sativa) in Assam, India. Agriculture, Ecosystems and Environment, 2007, 120, 185-191.	5.3	27
57	Energy Requirement Model for a Combine Harvester, Part I: Development of Component Models. Biosystems Engineering, 2005, 90, 9-25.	4.3	20
58	Energy Requirement Model for Combine Harvester, Part 2: Integration of Component Models. Biosystems Engineering, 2005, 90, 161-171.	4.3	13
59	Present status and future demand for energy for bullock-operated paddy-farms in Assam (India). Applied Energy, 2004, 79, 145-157.	10.1	12