Sumit Roy

List of Publications by Year in Descending Order

26 papers	631 citations	13 h-index	25 g-index
32 ext. papers	750 ext. citations	6 avg, IF	4.44 L-index

#	Paper	IF	Citations
26	The techno-economics potential of hydrogen interconnectors for electrical energy transmission and storage. *Journal of Cleaner Production*, **2022**, 335, 130045	10.3	2
25	The performance and efficiency of novel oxy-hydrogen-argon gas power cycles for zero emission power generation. *Energy Conversion and Management*, **2021**, 244, 114510	10.6	0
24	Development and validation of an artificial intelligence platform for characterization of the exergy-emission-stability profiles of the PPCI-RCCI regimes in a diesel-methanol operation under varying injection phasing strategies: A Gene Expression Programming approach. *Fuel*, **2021**, 299, 120864	7.1	6
23	A combined heat and green hydrogen (CHH) generator integrated with a heat network. *Energy Conversion and Management*, **2021**, 246, 114686	10.6	0
22	Evaluation of performance characteristics of a novel hydrogen-fuelled free-piston engine generator. *International Journal of Hydrogen Energy*, **2020**,	6.7	7
21	Effective utilisation of waste cooking oil in a single-cylinder diesel engine using alumina nanoparticles. *Sustainable Energy and Fuels*, **2020**, 4, 571-581	5.8	9
20	Realization of a Novel Free-Piston Engine Generator for Hybrid-Electric Vehicle Applications. *Energy & Fuels*, **2020**, 34, 12926-12939	4.1	6
19	Development of an artificial neural network based virtual sensing platform for the simultaneous prediction of emission-performance-stability parameters of a diesel engine operating in dual fuel mode with port injected methanol. *Energy Conversion and Management*, **2019**, 184, 488-509	10.6	34
18	Performance Emission Characterization of a LPG-Diesel Dual Fuel Operation: A Gene Expression Programming Approach. *Advances in Intelligent Systems and Computing*, **2019**, 405-414	0.4	4
17	Performance Analysis of a Flexi-Fuel Turbine-Combined Free-Piston Engine Generator. *Energies*, **2019**, 12, 2657	3.1	2
16	Isolation of the parametric effects of pre-blended fuel on low load gasoline compression ignition (GCI). *Fuel*, **2019**, 237, 522-535	7.1	20
15	Characterization of performance-emission indices of a diesel engine using ANFIS operating in dual-fuel mode with LPG. *Heat and Mass Transfer*, **2018**, 54, 2725-2742	2.2	7
14	Multi-objective optimization of the performance-emission trade-off characteristics of a CRDI coupled CNG diesel dual-fuel operation: A GEP meta-model assisted MOGA endeavour. *Fuel*, **2018**, 211, 891-897	7.1	11
13	ANN meta-model assisted MOPSO application in an EPA-Tier 4 constrained emission-performance trade-off calibration problem of a hydrogen-diesel-EGR dual fuel operation. *Fuel*, **2017**, 208, 746-778	7.1	7
12	Application of artificial intelligence (AI) in characterization of the performance-emission profile of a single cylinder CI engine operating with hydrogen in dual fuel mode: An ANN approach with fuzzy-logic based topology optimization. *International Journal of Hydrogen Energy*, **2016**, 41, 14330-14350	6.7	31
11	An experimental investigation on the potential of hydrogen-biohol synergy in the performance-emission trade-off paradigm of a diesel engine. *International Journal of Hydrogen Energy*, **2016**, 41, 3712-3739	6.7	13
10	An experimental based ANN approach in mapping performance-emission characteristics of a diesel engine operating in dual-fuel mode with LPG. *Journal of Natural Gas Science and Engineering*, **2016**, 28, 15-30	4.6	41

9	Hydrogen-EGR synergy as a promising pathway to meet the PM–NOx–BSFC trade-off contingencies of the diesel engine: A comprehensive review. *International Journal of Hydrogen Energy*, **2015**, 40, 12824-12847	6.7	50
8	Adaptive-neuro fuzzy inference system (ANFIS) based prediction of performance and emission parameters of a CRDI assisted diesel engine under CNG dual-fuel operation. *Journal of Natural Gas Science and Engineering*, **2015**, 27, 274-283	4.6	17
7	Development and validation of a GEP model to predict the performance and exhaust emission parameters of a CRDI assisted single cylinder diesel engine coupled with EGR. *Applied Energy*, **2015**, 140, 52-64	10.7	37
6	Performance and exhaust emissions prediction of a CRDI assisted single cylinder diesel engine coupled with EGR using artificial neural network. *Applied Energy*, **2014**, 119, 330-340	10.7	143
5	Application of Grey–Taguchi based multi-objective optimization strategy to calibrate the PM–NHC–BSFC trade-off characteristics of a CRDI assisted CNG dual-fuel engine. *Journal of Natural Gas Science and Engineering*, **2014**, 21, 524-531	4.6	46
4	Development of an ANN based system identification tool to estimate the performance-emission characteristics of a CRDI assisted CNG dual fuel diesel engine. *Journal of Natural Gas Science and Engineering*, **2014**, 21, 147-158	4.6	61
3	A TMI based CNG dual-fuel approach to address the soot–NOx–BSFC trade-off characteristics of a CRDI assisted diesel engine – an EPA perspective. *Journal of Natural Gas Science and Engineering*, **2014**, 20, 221-240	4.6	20
2	ANN metamodel assisted Particle Swarm Optimization of the performance-emission trade-off characteristics of a single cylinder CRDI engine under CNG dual-fuel operation. *Journal of Natural Gas Science and Engineering*, **2014**, 21, 1156-1162	4.6	21
1	A comparative study of GEP and an ANN strategy to model engine performance and emission characteristics of a CRDI assisted single cylinder diesel engine under CNG dual-fuel operation. *Journal of Natural Gas Science and Engineering*, **2014**, 21, 814-828	4.6	32