

## Journal Articles:

- [1] **Malik P**, Chandel SS, Gupta R. Potential and performance assessment of solar photovoltaic systems across diverse climatic conditions: A comprehensive analysis. *Energy for Sustainable Development*. 2025 Dec 1;89:101851. (SCI, I.F. = 4.9)
- [2] **Malik P**, Chandel SS, Gupta R. A Comprehensive Review on Future Research Trends in Solar Cell Parameter Extraction Techniques. *Renewable Energy*. 2025 May 9:123427. (SCI, I.F. = 9)
- [3] **Malik P**, Awasthi M, Upadhyay S, Agrawal P, Raina G, Sharma S, Kumar M, Sinha S. Planning and optimization of sustainable grid integrated hybrid energy system in India. *Sustainable Energy Technologies and Assessments*. 2023 Mar 1;56:103115. (SCI, I.F. = 8)
- [4] **Malik P**, Awasthi M, Sinha S. A techno-economic investigation of grid integrated hybrid renewable energy systems. *Sustainable Energy Technologies and Assessments*. 2022 Jun 1;51:101976. (SCI, I.F. = 8)
- [5] **Malik P**, Chandel R, Chandel SS. A power prediction model and its validation for a roof top photovoltaic power plant considering module degradation. *Solar Energy*. 2021 Aug 1;224:184-94. (SCI, I.F. = 7.18)
- [6] **Malik P**, Awasthi M, Sinha S. Techno-economic and environmental analysis of biomass-based hybrid energy systems: A case study of a Western Himalayan state in India. *Sustainable Energy Technologies and Assessments*. 2021 Jun 1;45:101189. (SCI, I.F. = 8)
- [7] **Malik P**, Awasthi M, Sinha S. Biomass-based gaseous fuel for hybrid renewable energy systems: An overview and future research opportunities. *International Journal of Energy Research*. 2021 Mar 10;45(3):3464-94. (SCI, I.F. = 4.67)
- [8] **Malik P**, Chandel SS. A new integrated single-diode solar cell model for photovoltaic power prediction with experimental validation under real outdoor conditions. *International Journal of Energy Research*. 2021 Jan;45(1):759-71. (SCI, I.F. = 4.67)
- [9] **Malik P**, Chandel SS. Performance enhancement of multi-crystalline silicon photovoltaic modules using mirror reflectors under Western Himalayan climatic conditions. *Renewable Energy*. 2020 Jul 1;154:966-75. (SCI, I.F. = 9)
- [10] Sharma S, G Panwar, **Malik P**, Sinha S Spatial analysis of solar photovoltaic soiling and cleaning dynamics in India. *Energy for Sustainable Development*. 2026 Jun. (SCI, I.F. = 4.9)
- [11] Sharma S, **Malik P**, Sinha S. The Impact of Soiling on Temperature and Sustainable Solar PV Power Generation: A detailed Analysis. *Renewable Energy*. 2024 Nov 12:121864. (SCI, I.F. = 9)
- [12] Deb S, Sachan S, **Malik P**, Sinha S. Local energy systems development in India and United Kingdom: A comprehensive review of latest developments and way forward. *Wiley Interdisciplinary Reviews: Energy and Environment*. 2024 Jan;13(1):e496. (SCI, I.F. = 6.01)
- [13] Kumar M, **Malik P**, Chandel R, Chandel SS. Development of a novel solar PV module model for reliable power prediction under real outdoor conditions. *Renewable Energy*. 2023 Nov 1;217:119224. (SCI, I.F. = 9)
- [14] Sharma S, Sinha S, Raina G, **Malik P**, Katoch SS. Investigation and performance analysis of active solar still in colder Indian Himalayan region. *Groundwater for Sustainable Development*. 2022 Nov 1;19:100850. (SCI, I.F.=5.9)
- [15] Chandel R, Chandel SS, **Malik P**. Perspective of new distributed grid connected roof top solar photovoltaic power generation policy interventions in India. *Energy Policy*. 2022 Sep 1;168:113122. (SCI, I.F. = 9.3)

- [16] Raina G, Sinha S, Saini G, Sharma S, **Malik P**, Thakur NS. Assessment of photovoltaic power generation using fin augmented passive cooling technique for different climates. *Sustainable Energy Technologies and Assessments*. 2022 Aug 1;52:102095.  
(SCI, I.F. = 8)
- [17] Sinha S, Chandel SS, **Malik P**. Investigation of a building-integrated solar photovoltaic-wind-battery hybrid energy system: A case study. *International Journal of Energy Research*. 2021 Dec;45(15):21534-9. (SCI, I.F. = 4.67)
- [18] **Malik P**, Awasthi M, Sinha S. Techno-economic analysis of decentralized biomass energy system and CO<sub>2</sub> reduction in the Himalayan region. *International Journal of Energy and Environmental Engineering*. 2021 Jun;12:239-49.
- [19] Jain P, Raina G, Sinha S, **Malik P**, Mathur S. Agrovoltaics: Step towards sustainable energy-food combination. *Bioresource Technology Reports*. 2021 Sep 1;15:100766.
- [20] **Malik P**, Awasthi M, Sinha S. Study of grid integrated biomass-based hybrid renewable energy systems for Himalayan terrain. *International Journal of Sustainable Energy Planning and Management*. 2020 Jun 26;28:71-88.
- [21] **Malik P**, Awasthi M, Sinha S. Study on an existing PV/wind hybrid system using biomass gasifier for energy generation. *Pollution*. 2020 Apr 1;6(2):325-36.

#### International Conference Articles:

- [1] **Malik P**, Awasthi M, and Sinha, S. “Analysis of sensitive parameters influencing a SPV/WT/Biomass/Battery based hybrid system”, In 2019 8th International Conference on Power Systems (ICPS). IEEE. 20-22 Dec 2019
- [2] **Malik P**. Awasthi M. and Sinha S, “Energy generation enhancement of an existing PV/wind hybrid system using biomass gasifier” , International Conference on Materials, Manufacturing and Decision Making (MMDM –78), Beant College of Engineering and Technology(BCET), Gurdaspur, Punjab,India. 22 – 23 February 2019.
- [3] **Malik P**, Sinha S, Awasthi M, Aggarwal K. Hybrid operational approach for PV/DG microgrid without storage device. In 2021 IEEE 2nd International Conference on Smart Technologies for Power, Energy and Control (STPEC) 2021 Dec 19 (pp. 1-6). IEEE.
- [4] Sharma S, **Malik P**, Sinha S “Comparative Analysis of Soiling Loss Estimation in PV Systems Using Two Different Approaches” In 2025 IEEE 5th International Conference on Sustainable Energy and Future Electric Transportation (SEFET) 2025 Jul 9 (pp. 1-6). IEEE.
- [5] Deb S, Sachan S, Sinha S, **Malik P**. “Planning and operation of hybrid local energy system through Ant-Lion optimization”. In 2023 IEEE 3rd International Conference on Sustainable Energy and Future Electric Transportation (SEFET) 2023 Aug 9 (pp. 1-6). IEEE.
- [6] Deb S, Li D, Sinha S, **Malik P**, Raina G, Wang J. “Local energy system: A comprehensive review of modelling, tools and Pilot projects”. In 2023 International Conference on Power Electronics and Energy (ICPEE) 2023 Jan 3 (pp. 1-6). IEEE.
- [7] Vishwakarma A, Sinha S, and **Malik P**, “Sustainable farming: An application of Solar Greenhouse in Agriculture”, International Conference on Biotechnology for Resource Efficiency, Energy, Environment, Chemicals and Health (BREEECH 2021) 2021, Derhadun, India, 1-4 Dec 2021.
- [8] Vishwakarma A, Sinha S, and **Malik P**, “An experimental comparative study on Post-harvest loss reduction with solar dryer”, International Conference on Advancement in Materials, Manufacturing and Energy Engineering (ICAMME-2021), 2021, MANIT Bhopal, India, 18-20 February 2021.

## Book Chapters:

- [1] **Malik P**, Awasthi M. “Techno-economic and Environmental Evaluation of Producer Gas-Based IC Engine in a Hybrid Energy System”. In *Alternative Fuels and Advanced Combustion Techniques as Sustainable Solutions for Internal Combustion Engines 2021* May 16 (pp. 59-93). Singapore: Springer Singapore.
- [2] Sharma S, Raina G, **Malik P**, Sharma V, Sinha S. “Different Degradation Modes of PV Modules: An Overview”. *Advancements in Nanotechnology for Energy and Environment*. 2022 Sep 17:99-127.
- [3] Vishwakarma A, Sinha S, **Malik P**. “A study on post-harvest loss reduction with solar dryer”. In *Advancement in Materials, Manufacturing and Energy Engineering, Vol. II: Select Proceedings of ICAMME 2021* 2022 Jan 18 (pp. 351-360). Singapore: Springer Nature Singapore.
- [4] **Malik P**, Saraswat SK, Vanshpati R, Raina G, Sharma S, Kesharvani S, Bansal R, Tiwari AK. “Hydrogen-integrated renewable systems for power generation: an overview of technologies and applications”. *Sustainable Hydrogen Energy: Production, Storage & Transportation*. 2024 May 20;9:319.
- [5] S Kesharvani, S Sarathe, A Agrawal, G Dwivedi, **P Malik**. “Green hydrogen production using biomass”. *Sustainable Hydrogen Energy: Production, Storage & Transportation*. 2024 May 20;9:3.

## Edited Book

1. Editor of book on “Sustainable Hydrogen Energy: Production, Storage, & Transportation”, published by Walter de Gruyter GmbH, Germany (2023).