

List of Publications as on 31/01/2025

S. No.	Authors	Title of paper	Journal	Volume/ year/ DOI	Page	Indexed in
1	Dhibar NC, <u>Reddy B.R.</u> , Patel M.	Investigation of kinetics, reaction mechanisms, thermodynamics, and synergetic effects in co-pyrolysis of wood sawdust and linear low-density polyethylene using the thermogravimetric approach	Environmental science and pollution research	(2024) 10.1007/s11356-024-34886-3	1-23	SCI
2	<u>Reddy B.R.</u> , Sarkar S, Vinu R.	Microwave-assisted rapid pyrolysis of woodblock without adding susceptor and detailed product analysis	Biomass Conversion and Biorefinery	14 (2024) 10.1007/s13399-023-03820-x	1194 1–50.	SCIE
3	V.S. Dadi, S. Veluru, H.K. Tanneru, <u>R.R. Busigari</u> , R. Potnuri, A. Kulkarni, G. Mishra, T. Basak	Recent advancements of CFD and heat transfer studies in pyrolysis: A review	Journal of Analytical and Applied Pyrolysis	175 (2023) https://doi.org/10.1016/j.jaap.2023.106163	1061 63	SCI 04/09/ 2023
4	L. Wu, Y. Guan, C. Li, L. Shi, S. Yang, <u>B. R. Reddy</u> , G. Ye, Q. Zhang, R.K. Liew, J. Zhou, R. Vinu, S.S. Lam	Free-radical behaviors of co-pyrolysis of low-rank coal and different solid hydrogen-rich donors: A critical review	Chemical Engineering Journal	474 (2023) https://doi.org/10.1016/j.cej.2023.145900	1459 00	SCI 04/09/ 2023

5	V. Sridevi, D.V. Surya, B.R. Reddy , M. Shah, R. Gautam, T.H. Kumar, H. Puppala, K.S. Pritam, T. Basak	Challenges and opportunities in the production of sustainable hydrogen from lignocellulosic biomass using microwave-assisted pyrolysis: A review	International Journal of Hydrogen Energy	2023 https://doi.org/10.1016/j.ijhydene.2023.06.186 .	NA	SCI 16/06/2023
6	K. Kachhadiya, D. Patel, G.J. Vijaybhai, P. Raghuvanshi, D.V. Surya, S. Dharaskar, G.P. Kumar, B.R. Reddy , N. Remya, T.H. Kumar, T. Basak	Conversion of waste polystyrene into valuable aromatic hydrocarbons via microwave-assisted pyrolysis	Environmental Science & Pollution Research	2023 https://doi.org/10.1007/s11356-023-28294-2 .	NA	SCI 26/06/2023
7	D. Govindarajan, K. Sivagami, I.M. Nambi, B.N. Ravikumar, M. Kumar, S. Chakraborty, B.R. Reddy	Thermo-Chemical conversion of polyolefin-based facemask using bench-scale pyrolysis system	Energy Sources, Part A Recover. Util. Environ. Eff.	45 (2023). https://doi.org/10.1080/15567036.2023.2172099	542–556	SCI 26/06/2023
8	B.R. Reddy , S. Sarkar, R. Vinu	Microwave-assisted rapid pyrolysis of woodblock without adding susceptor and detailed product analysis	Biomass conversion and Biorefinery	2023 https://doi.org/10.1007/s13399-023-03820-x .	NA	SCI 16/01/2023
9	D. V. Suriapparao, B.R. Reddy , C. Sankar, L. Rao	Prosopis juliflora valorization via microwave-assisted pyrolysis: Optimization of reaction parameters	Journal of Analytical and	169 (2023) https://doi.org/10.1016/j.jaap.2022.105811	105811	SCI, 25/11/2022

		using machine learning analysis	Applied Pyrolysis			
10	B. R. Reddy , A. Malhotra, S. Najmi, M.B. Fales, K. Coasey, M. Mackay, D.G. Vlachos	Microwave assisted heating of plastic waste: Effect of plastic/susceptor (SiC) contacting patterns	Chemical Engineering and Processing-Process Intensification	182 (2022) https://doi.org/10.1016/j.cep.2022.109202	190202	SCIE, 30/10/2022
11	D.V. Suriapparao, T.H. Kumar, B.R. Reddy	A review on the role of susceptors in the recovery of valuable renewable carbon products from microwave-assisted pyrolysis of lignocellulosic and algal biomasses: Prospects and challenges	Environmental Research	215 (2022) https://doi.org/10.1016/j.envres.2022.114378	114378	SCI, 15/09/2022
12	B.R. Reddy , V. Sridevi, T.H. Kumar, C.S. Rao, V.C.S. Palla, D. V. Suriapparao, G.S. Undi,	Synthesis of renewable carbon biorefinery products from susceptor enhanced microwave-assisted pyrolysis of agro-residual waste: A review	Process Safety and Environmental Protection	164 (2022) https://doi.org/10.1016/j.psep.2022.06.027	354-372	SCI, 13/06/2022
13	L. Wu, J. Liu, B.R. Reddy , J. Zhou	Preparation of coal-based carbon nanotubes using catalytical pyrolysis: A brief review	Fuel Processing Technology	229 (2022) https://doi.org/10.1016/j.fuproc.2022.107171	107171	SCI, 10/01/2022
14	L. Wu, H. Wu, B. R. Reddy , J. Zhou, R. Vinu	A low-cost and multifunctional bluecoke-based absorbent for high-efficiency microwave pyrolysis of coal	Fuel	313 (2022) https://doi.org/10.1016/j.fuel.2021.122657	122657	SCI, 17/11/2021

15	D. V. Suriapparao, T. H. Kumar, <u>B.R. Reddy</u> , A. Yerrayya, B.A. Srinivas, P. Sivakumar, S.R. Prakash, C.S. Rao, V. Sridevi, J. Desinghu	Role of ZSM5 catalyst and char susceptor on the synthesis of chemicals and hydrocarbons from microwave-assisted in-situ catalytic co-pyrolysis of algae and plastic wastes	Renewable Energy	181 (2022) https://doi.org/10.1016/j.renene.2021.09.084	990 - 999	SCI, 29/09/2021
16	<u>B.R. Reddy</u> , R. Vinu	Evidence of interactions in microwave-assisted co-pyrolysis of different varieties of coals	Journal of the Energy Institute	95 (2021) https://doi.org/10.1016/j.joei.2020.11.006	18-29	SCI, 10/11/2020
17	<u>B.R. Reddy</u> , I. Ashok, R. Vinu	Preparation of carbon nanostructures from medium and high ash Indian coals via microwave-assisted pyrolysis	Advanced Powder Technology	31 (2020) https://doi.org/10.1016/j.appt.2019.12.017	1229 - 1240	SCI, 16/12/2019
18	R. Gautam, S. Shyam, <u>B.R. Reddy</u> , K. Govindaraju, R. Vinu	Microwave-assisted pyrolysis and analytical fast pyrolysis of macroalgae: Product analysis and effect of heating mechanism	Sustainable Energy & Fuels	3 (2019) https://doi.org/10.1016/j.jaap.2019.05.003	3009 - 3020	SCIE, 26/05/2019
19	<u>B.R. Reddy</u> , B. Shrivani, B. Das, P.S. Dash, R. Vinu	Microwave-assisted and analytical pyrolysis of coking and non-coking coals: Comparison of tar and char compositions	Journal of Analytical and Applied Pyrolysis	142 (2019) https://doi.org/10.1039/C9SE00162J	1046 - 14	SCI, 06/05/2019
20	<u>B.R. Reddy</u> , R. Vinu,	Microwave-assisted co-pyrolysis of high ash Indian coal and rice husk : Product characterization and evidence of interactions	Fuel Processing Technology	178 (2018) https://doi.org/10.1016/j.fuproc.2018.04.018	41-52	SCI, 17/04/2018

21	B. Debalina, <u>B.R. Reddy</u> , R. Vinu	Production of carbon nanostructures in biochar, bio-oil and gases from bagasse via microwave assisted pyrolysis using Fe and Co as susceptors	Journal of Analytical and Applied Pyrolysis	124 (2017) https://doi.org/10.1016/j.jaap.2017.01.018	310-318	SCI, 17/01/2017
22	<u>B.R. Reddy</u> , R. Vinu	Microwave assisted pyrolysis of Indian and Indonesian coals and product characterization	Fuel Processing Technology	154 (2016) https://doi.org/10.1016/j.fuproc.2016.08.016	96-103	SCI, 10/08/2016