Andreas Eschenbacher

List of Publications by Year
in descending order

29 papers	730 citations	516561 16 h-index	552653 26 g-index
29 all docs	29 docs citations	29 times ranked	324 citing authors

#	Article	IF	Citations
1	Opportunities and challenges for the application of post-consumer plastic waste pyrolysis oils as steam cracker feedstocks: To decontaminate or not to decontaminate?. Waste Management, 2022, 138, 83-115.	3.7	98
2	A comprehensive experimental investigation of plastic waste pyrolysis oil quality and its dependence on the plastic waste composition. Fuel Processing Technology, 2022, 227, 107090.	3.7	78
3	Maximizing light olefins and aromatics as high value base chemicals via single step catalytic conversion of plastic waste. Chemical Engineering Journal, 2022, 428, 132087.	6.6	40
4	Impact of ZSM-5 Deactivation on Bio-Oil Quality during Upgrading of Straw Derived Pyrolysis Vapors. Energy & Fuels, 2019, 33, 397-412.	2.5	38
5	Enhancing bio-oil quality and energy recovery by atmospheric hydrodeoxygenation of wheat straw pyrolysis vapors using Pt and Mo-based catalysts. Sustainable Energy and Fuels, 2020, 4, 1991-2008.	2.5	35
6	Highly selective conversion of mixed polyolefins to valuable base chemicals using phosphorus-modified and steam-treated mesoporous HZSM-5 zeolite with minimal carbon footprint. Applied Catalysis B: Environmental, 2022, 309, 121251.	10.8	33
7	Deoxygenation of wheat straw fast pyrolysis vapors over Na-Al2O3 catalyst for production of bio-oil with low acidity. Chemical Engineering Journal, 2020, 394, 124878.	6.6	31
8	Catalytic deoxygenation of vapors obtained from ablative fast pyrolysis of wheat straw using mesoporous HZSM-5. Fuel Processing Technology, 2019, 194, 106119.	3.7	30
9	Deoxygenation of Wheat Straw Fast Pyrolysis Vapors using HZSM-5, Al₂O₃, HZSM-5/Al₂O₃ Extrudates, and Desilicated HZSM-5/Al₂O₃ Extrudates. Energy & Fuels, 2019, 33, 6405-6420.	2.5	26
10	Co-processing of wood and wheat straw derived pyrolysis oils with FCC feedâ€”Product distribution and effect of deoxygenation. Fuel, 2020, 260, 116312.	3.4	25
11	Pyrolysis of end-of-life polystyrene in a pilot-scale reactor: Maximizing styrene production. Waste Management, 2022, 139, 85-95.	3.7	25
12	Decomposition of carbon/phenolic composites for aerospace heatshields: Detailed speciation of phenolic resin pyrolysis products. Aerospace Science and Technology, 2021, 119, 107079.	2.5	23
13	Boron-Modified Mesoporous ZSM-5 for the Conversion of Pyrolysis Vapors from LDPE and Mixed Polyolefins: Maximizing the C₂â€“C₄ Olefin Yield with Minimal Carbon Footprint. ACS Sustainable Chemistry and Engineering, 2021, 9, 14618-14630.	3.2	23
14	Maximizing olefin production via steam cracking of distilled pyrolysis oils from difficult-to-recycle municipal plastic waste and marine litter. Science of the Total Environment, 2022, 838, 156092.	3.9	23
15	Performance of mesoporous HZSM-5 and Silicalite-1 coated mesoporous HZSM-5 catalysts for deoxygenation of straw fast pyrolysis vapors. Journal of Analytical and Applied Pyrolysis, 2020, 145, 104712.	2.6	19
16	Fluid catalytic co-processing of bio-oils with petroleum intermediates: Comparison of vapour phase low pressure hydrotreating and catalytic cracking as pretreatment. Fuel, 2021, 302, 121198.	3.4	19
17	Performance-screening of metal-impregnated industrial HZSM-5/Î³-Al2O3 extrudates for deoxygenation and hydrodeoxygenation of fast pyrolysis vapors. Journal of Analytical and Applied Pyrolysis, 2020, 150, 104892.	2.6	18
18	A detailed experimental and kinetic modeling study on pyrolysis and oxidation of oxymethylene ether-2 (OME-2). Combustion and Flame, 2022, 238, 111914.	2.8	18

#	Article	IF	Citations
19	A Review of Recent Research on Catalytic Biomass Pyrolysis and Low-Pressure Hydropyrolysis. Energy & Fuels, 2021, 35, 18333-18369.	2.5	17
20	Study of the degradation of epoxy resins used in spacecraft components by thermogravimetry and fast pyrolysis. Journal of Analytical and Applied Pyrolysis, 2022, 161, 105397.	2.6	17
21	Fast pyrolysis of polyurethanes and polyisocyanurate with and without flame retardant: Compounds of interest for chemical recycling. Journal of Analytical and Applied Pyrolysis, 2021, 160, 105374.	2.6	15
22	Micro-pyrolyzer screening of hydrodeoxygenation catalysts for efficient conversion of straw-derived pyrolysis vapors. Journal of Analytical and Applied Pyrolysis, 2020, 150, 104868.	2.6	13
23	Thermochemical recycling of end-of-life and virgin HDPE: A pilot-scale study. Journal of Analytical and Applied Pyrolysis, 2022, 166, 105614.	2.6	12
24	Insights into the scalability of catalytic upgrading of biomass pyrolysis vapors using micro and bench-scale reactors. Sustainable Energy and Fuels, 2020, 4, 3780-3796.	2.5	11
25	Detailed characterization of sulfur compounds in fast pyrolysis bio-oils using GC Ã— GC-SCD and GCâ€"MS. Journal of Analytical and Applied Pyrolysis, 2021, 159, 105288.	2.6	10
26	Catalytic upgrading of tars generated in a 100ÂkWth low temperature circulating fluidized bed gasifier for production of liquid bio-fuels in a polygeneration scheme. Energy Conversion and Management, 2020, 207, 112538.	4.4	9
27	Counteracting Rapid Catalyst Deactivation by Concomitant Temperature Increase during Catalytic Upgrading of Biomass Pyrolysis Vapors Using Solid Acid Catalysts. Catalysts, 2020, 10, 748.	1.6	8
28	Catalytic conversion of acetol over HZSM-5 catalysts â€" influence of Si/Al ratio and introduction of mesoporosity. Catalysis Today, 2021, 365, 301-309.	2.2	8
29	Primary Thermal Decomposition Pathways of Hydroxycinnamaldehydes. Energy & Fuels, 2021, 35, 12216-12226.	2.5	8