Andreas Eschenbacher

List of Publications by Year in Descending Order

28 papers	259 citations	9 h-index	15 g-index
29 ext. papers	469 ext. citations	7.3 avg, IF	3.7 L-index

#	Paper	IF	Citations
28	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	6	1
27	A comprehensive experimental investigation of plastic waste pyrolysis oil quality and its dependence on the plastic waste composition. *Fuel Processing Technology*, **2022**, 227, 107090	7.2	13
26	A detailed experimental and kinetic modeling study on pyrolysis and oxidation of oxymethylene ether-2 (OME-2). *Combustion and Flame*, **2022**, 238, 111914	5.3	2
25	Maximizing light olefins and aromatics as high value base chemicals via single step catalytic conversion of plastic waste. *Chemical Engineering Journal*, **2022**, 428, 132087	14.7	9
24	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	21.8	1
23	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	10.2	2
22	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	6	2
21	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*, **2021**, 138, 83-115	8.6	11
20	Pyrolysis of end-of-life polystyrene in a pilot-scale reactor: Maximizing styrene production.. *Waste Management*, **2021**, 139, 85-95	8.6	5
19	Boron-Modified Mesoporous ZSM-5 for the Conversion of Pyrolysis Vapors from LDPE and Mixed Polyolefins: Maximizing the C2–C4 Olefin Yield with Minimal Carbon Footprint. *ACS Sustainable Chemistry and Engineering*, **2021**, 9, 14618-14630	8.3	4
18	Primary Thermal Decomposition Pathways of Hydroxycinnamaldehydes. *Energy & Fuels*, **2021**, 35, 12216-12226	4.1	3
17	Catalytic conversion of acetol over HZSM-5 catalysts – influence of Si/Al ratio and introduction of mesoporosity. *Catalysis Today*, **2021**, 365, 301-309	5.3	4
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	7.1	6
15	Detailed characterization of sulfur compounds in fast pyrolysis bio-oils using GC×GC-SCD and GC–MS. *Journal of Analytical and Applied Pyrolysis*, **2021**, 159, 105288	6	2
14	Decomposition of carbon/phenolic composites for aerospace heatshields: Detailed speciation of phenolic resin pyrolysis products. *Aerospace Science and Technology*, **2021**, 119, 107079	4.9	8
13	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	5.8	7
12	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	5.8	30

List of Publications

11	Catalytic upgrading of tars generated in a 100 kWth low temperature circulating fluidized bed gasifier for production of liquid bio-fuels in a polygeneration scheme. *Energy Conversion and Management*, **2020**, 207, 112538	10.6	7
10	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	14.7	21
9	Co-processing of wood and wheat straw derived pyrolysis oils with FCC feed: Product distribution and effect of deoxygenation. *Fuel*, **2020**, 260, 116312	7.1	11
8	Micro-pyrolyzer screening of hydrodeoxygenation catalysts for efficient conversion of straw-derived pyrolysis vapors. *Journal of Analytical and Applied Pyrolysis*, **2020**, 150, 104868	6	6
7	Performance-screening of metal-impregnated industrial HZSM-5/Al2O3 extrudates for deoxygenation and hydrodeoxygenation of fast pyrolysis vapors. *Journal of Analytical and Applied Pyrolysis*, **2020**, 150, 104892	6	7
6	Counteracting Rapid Catalyst Deactivation by Concomitant Temperature Increase during Catalytic Upgrading of Biomass Pyrolysis Vapors Using Solid Acid Catalysts. *Catalysts*, **2020**, 10, 748	4	5
5	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	6	12
4	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	4.1	22
3	Catalytic deoxygenation of vapors obtained from ablative fast pyrolysis of wheat straw using mesoporous HZSM-5. *Fuel Processing Technology*, **2019**, 194, 106119	7.2	24
2	Impact of ZSM-5 Deactivation on Bio-Oil Quality during Upgrading of Straw Derived Pyrolysis Vapors. *Energy & Fuels*, **2019**, 33, 397-412	4.1	31
1	A Review of Recent Research on Catalytic Biomass Pyrolysis and Low-Pressure Hydropyrolysis. *Energy & Fuels*,	4.1	3