Paul D Cobden

List of Publications by Year
in descending order

21 papers	863 citations	516561 16 h-index	713332 21 g-index
21 all docs	21 docs citations	21 times ranked	609 citing authors

#	Article	IF	Citations
1	The Crucial Role of the K⁺â€“Aluminium Oxide Interaction in K⁺â€Promoted Aluminaâ€•and Hydrotalciteâ€Based Materials for CO₂ Sorption at High Temperatures. ChemSusChem, 2008, 1, 643-650.	3.6	136
2	Isotherm model for high-temperature, high-pressure adsorption of and on K-promoted hydrotalcite. Chemical Engineering Journal, 2014, 248, 406-414.	6.6	78
3	High-temperature pressure swing adsorption cycle design for sorption-enhanced waterâ€“gas shift. Chemical Engineering Science, 2015, 122, 219-231.	1.9	75
4	Testing of hydrotalcite-based sorbents for CO2 and H2S capture for use in sorption enhanced water gas shift. International Journal of Greenhouse Gas Control, 2011, 5, 505-511.	2.3	73
5	On the influence of steam on the CO2 chemisorption capacity of a hydrotalcite-based adsorbent for SEWGS applications. Chemical Engineering Journal, 2017, 314, 554-569.	6.6	56
6	Chemisorption working capacity and kinetics of CO 2 and H 2 O of hydrotalcite-based adsorbents for sorption-enhanced water-gas-shift applications. Chemical Engineering Journal, 2016, 293, 9-23.	6.6	54
7	High CO₂ Storage Capacity in Alkaliâ€Promoted Hydrotalciteâ€Based Material: In Situ Detection of Reversible Formation of Magnesium Carbonate. Chemistry - A European Journal, 2010, 16, 12694-12700.	1.7	51
8	SEWGS Technology is Now Ready for Scale-up!. Energy Procedia, 2013, 37, 2265-2273.	1.8	51
9	Improved sorbent for the sorption-enhanced water-gas shift process. Energy Procedia, 2011, 4, 1090-1095.	1.8	49
10	Techno-economic assessment of SEWGS technology when applied to integrated steel-plant for CO2 emission mitigation. International Journal of Greenhouse Gas Control, 2020, 94, 102935.	2.3	42
11	CAESAR: Development of a SEWGS model for IGCC. Energy Procedia, 2011, 4, 1147-1154.	1.8	29
12	Modeling Study of the Sorption-Enhanced Reaction Process for CO₂ Capture. II. Application to Steam-Methane Reforming. Industrial & Engineering Chemistry Research, 2009, 48, 6975-6982.	1.8	28
13	Sorption-Enhanced Waterâ€“Gas Shift. Advances in Chemical Engineering, 2017, , 1-96.	0.5	23
14	SEWGS process cycle optimization. Energy Procedia, 2011, 4, 1155-1161.	1.8	22
15	Cost Effective CO2 Reduction in the Iron & Steel Industry by Means of the SEWGS Technology: STEPWISE Project. Energy Procedia, 2017, 114, 6256-6265.	1.8	22
16	Qualification of the ALKASORB sorbent for the sorption-enhanced water-gas shift process. Energy Procedia, 2013, 37, 180-189.	1.8	21
17	Correlation between structural rearrangement of hydrotalcite-type materials and CO2 sorption processes under pre-combustion decarbonisation conditions. Energy Procedia, 2011, 4, 1162-1167.	1.8	16
18	STEPWISE Project: Sorption-Enhanced Water-Gas Shift Technology to Reduce Carbon Footprint in the Iron and Steel Industry. Johnson Matthey Technology Review, 2018, 62, 395-402.	0.5	13

#	Article	IF	Citations
19	Life Cycle Assessment of SEWGS Technology Applied to Integrated Steel Plants. Sustainability, 2019, 11, 1825.	1.6	11
20	A new application of the commercial high temperature water gas shift catalyst for reduction of CO2 emissions in the iron and steel industry: Lab-scale catalyst evaluation. International Journal of Hydrogen Energy, 2021, 46, 39023-39035.	3.8	9
21	Steam and Pressure Management for the Conversion of Steelworks Arising Gases to H2 with CO2 Capture by Stepwise Technology. Separations, 2022, 9, 20.	1.1	4