M Mercedes Maroto-Valer

List of Publications by Year
in descending order

209	11,543	38742 50	32842 100
papers	citations	h-index	g-index

214	214	214	11495
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Investigation of carbon dioxide photoreduction process in a laboratory-scale photoreactor by computational fluid dynamic and reaction kinetic modeling. Frontiers of Chemical Science and Engineering, 2022, 16, 1149-1163.	4.4	6
2	Coreâ€“shell TiO_{2â^'x}-Cu_yO microspheres for photogeneration of cyclic carbonates under simulated sunlight. Nanoscale, 2022, 14, 6349-6356.	5.6	1
3	Investigation of CO₂ Photoreduction in an Annular Fluidized Bed Photoreactor by MP-PIC Simulation. Industrial & Engineering Chemistry Research, 2022, 61, 3123-3136.	3.7	5
4	The Impact of Wettability on Dynamic Fluid Connectivity and Flow Transport Kinetics in Porous Media. Water Resources Research, 2022, 58, .	4.2	12
5	Production of CH4 and CO on CuxO and NixOy coatings through CO2 photoreduction. Journal of Environmental Chemical Engineering, 2022, 10, 108199.	6.7	9
6	Acetate intercalated Mgâ€“Al layered double hydroxides (LDHs) through modified amide hydrolysis: a new route to synthesize novel mixed metal oxides (MMOs) for CO₂capture. Dalton Transactions, 2021, 50, 7474-7483.	3.3	11
7	Layered Double Hydroxides-Based Mixed Metal Oxides: Development of Novel Structured Sorbents for CO₂Capture Applications. ACS Applied Materials & Interfaces, 2021, 13, 11805-11813.	8.0	20
8	CO2 capture by novel hierarchical activated ordered micro-mesoporous carbons derived from low value coal tar products. Microporous and Mesoporous Materials, 2021, 318, 110986.	4.4	19
9	Photocatalytic reduction of CO2 over Bi2WO6 in a continuous-flow differential photoreactor: Investigation of operational parameters. Journal of Environmental Chemical Engineering, 2021, 9, 105097.	6.7	18
10	Simulation of CO2 photoreduction in a twin reactor by multiphysics models. Chemical Engineering Research and Design, 2021, 171, 125-138.	5.6	8
11	Comparative study of CO2 photoreduction using different conformations of CuO photocatalyst: Powder, coating on mesh and thin film. Journal of CO2 Utilization, 2021, 50, 101588.	6.8	18
12	A stakeholdersâ€™ participatory approach to multi-criteria assessment of sustainable aviation fuels production pathways. International Journal of Production Economics, 2021, 238, 108156.	8.9	16
13	An Investigation into CO2â€“Brineâ€“Cementâ€“Reservoir Rock Interactions for Wellbore Integrity in CO2 Geological Storage. Energies, 2021, 14, 5033.	3.1	12
14	Understanding the role of wettability distribution on pore-filling and displacement patterns in a homogeneous structure via quasi 3D pore-scale modelling. Scientific Reports, 2021, 11, 17847.	3.3	12
15	Particle carbonation kinetics models and activation methods under mild environment: The case of calcium silicate. Chemical Engineering Journal, 2021, 423, 130157.	12.7	20
16	Hierarchical hyper-branched titania nanorods with tuneable selectivity for CO₂ photoreduction. RSC Advances, 2021, 11, 32022-32029.	3.6	0
17	Manufacturing of Microfluidic Devices with Interchangeable Commercial Fiber Optic Sensors. Sensors, 2021, 21, 7493.	3.8	1
18	CO2â€“CO capture and kinetic analyses of sodium cobaltate under various partial pressures. Adsorption, 2020, 26, 781-792.	3.0	2

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19	Carbon stabilised saponite supported transition metal-alloy catalysts for chemical CO2 utilisation via reverse water-gas shift reaction. Applied Catalysis B: Environmental, 2020, 261, 118241.	20.2	56
20	Investigation of process parameters assessment via design of experiments for CO2 photoreduction in two photoreactors. Journal of CO2 Utilization, 2020, 36, 25-32.	6.8	13
21	The effect of the layer-interlayer chemistry of LDHs on developing high temperature carbon capture materials. Dalton Transactions, 2020, 49, 923-931.	3.3	12
22	Theoretical Efficiency Limits of Photoelectrochemical CO₂ Reduction: A Routeâ€Ðependent Thermodynamic Analysis. ChemPhysChem, 2020, 21, 232-239.	2.1	4
23	Review of Microfluidic Devices and Imaging Techniques for Fluid Flow Study in Porous Geomaterials. Sensors, 2020, 20, 4030.	3.8	33
24	Alkali modified P25 with enhanced CO₂ adsorption for CO₂ photoreduction. RSC Advances, 2020, 10, 27989-27994.	3.6	13
25	Synthesis of TiO2â˜x/W18O49 hollow double-shell and coreâ€“shell microspheres for CO2 photoreduction under visible light. Chemical Communications, 2020, 56, 12150-12153.	4.1	17
26	Layered Double Hydroxide (LDH)â€Ðerived Mixed Metal Oxides (MMOs): A Systematic Crystalâ€Chemical Approach to Investigating the Chemical Composition and its Effect on High Temperature CO₂ capture.. ChemistrySelect, 2020, 5, 5587-5594.	1.5	10
27	Investigation of an interlaced laser beam scanning method for ultrashort pulse laser micromachining applications. Journal of Materials Processing Technology, 2020, 285, 116807.	6.3	7
28	Review and Analysis of CO₂ Photoreduction Kinetics. ACS Sustainable Chemistry and Engineering, 2020, 8, 4677-4692.	6.7	94
29	Development of photocatalysts and system optimization for CO2 photoreduction. , 2020, , 39-73.		2
30	Upscaling smart local energy systems: A review of technical barriers. Renewable and Sustainable Energy Reviews, 2020, 131, 110020.	16.4	37
31	Advanced High-Temperature CO₂ Sorbents with Improved Long-Term Cycling Stability. ACS Applied Materials & Interfaces, 2020, 12, 33765-33774.	8.0	12
32	Life cycle environmental analysis of â€˜drop inâ€™ alternative aviation fuels: a review. Sustainable Energy and Fuels, 2020, 4, 3229-3263.	4.9	39
33	Conceptual Design for Integrating Lithium-Based Carbon Capture Looping Systems into Natural Gas Combined Cycle Power Plants. Industrial & Engineering Chemistry Research, 2019, 58, 14975-14990.	3.7	5
34	Systematic study of TiO₂/ZnO mixed metal oxides for CO₂ photoreduction. RSC Advances, 2019, 9, 21660-21666.	3.6	19
35	Raspberryâ€Like Microspheres of Coreâ€“Shell Cr₂O₃@TiO₂ Nanoparticles for CO₂ Photoreduction. ChemSusChem, 2019, 12, 5246-5252.	6.8	23
36	Novel Porous Carbons Derived from Coal Tar Rejects: Assessment of the Role of Pore Texture in CO₂ Capture under Realistic Postcombustion Operating Temperatures. ACS Applied Materials & Interfaces, 2019, 11, 36789-36799.	8.0	19

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37	Modeling and simulation for photoelectrochemical CO2 utilization. Energy Procedia, 2019, 158, 809-815.	1.8	3
38	Thermodynamic Analysis of the Efficiency of Photoelectrochemical CO2 Reduction to Ethanol. Energy Procedia, 2019, 158, 767-772.	1.8	11
39	Modeling of a combined CH4-assisted solid oxide co-electrolysis and Fischer-Tropsch synthesis system for low-carbon fuel production. Energy Procedia, 2019, 158, 1666-1671.	1.8	6
40	Laser Induced Plasmonic Heating with Au Decorated TiO2 Nanoparticles. Energy Procedia, 2019, 158, 5647-5652.	1.8	4
41	Capture of cold energy from liquid nitrogen using a brazed plate heat exchanger. Energy Procedia, 2019, 158, 5622-5628.	1.8	2
42	A framework for waste heat energy recovery within data centre. Energy Procedia, 2019, 158, 3788-3794.	1.8	9
43	Life-cycle assessment of emerging CO2 mineral carbonation-cured concrete blocks: Comparative analysis of CO2 reduction potential and optimization of environmental impacts. Journal of Cleaner Production, 2019, 241, 118359.	9.3	64
44	A microfluidic photoelectrochemical cell for solar-driven CO₂ conversion into liquid fuels with CuO-based photocathodes. Faraday Discussions, 2019, 215, 329-344.	3.2	28
45	Interlaced Laser Beam Scanning: A Method Enabling an Increase in the Throughput of Ultrafast Laser Machining of Borosilicate Glass. Journal of Manufacturing and Materials Processing, 2019, 3, 14.	2.2	4
46	A decision support system for waste heat recovery and energy efficiency improvement in data centres. Applied Energy, 2019, 250, 1217-1224.	10.1	38
47	Continuous flow-based laser-assisted plasmonic heating: A new approach for photothermal energy conversion and utilization. Applied Energy, 2019, 247, 517-524.	10.1	27
48	Modelling of a hybrid system for on-site power generation from solar fuels. Applied Energy, 2019, 240, 709-718.	10.1	11
49	Low carbon fuel production from combined solid oxide CO2 co-electrolysis and Fischer-Tropsch synthesis system: A modelling study. Applied Energy, 2019, 242, 911-918.	10.1	23
50	A review of nanostructured non-titania photocatalysts and hole scavenging agents for CO₂ photoreduction processes. Journal of Materials Chemistry A, 2019, 7, 9368-9385.	10.3	41
51	Photo-generation of cyclic carbonates using hyper-branched Ruâ€“TiO₂. Faraday Discussions, 2019, 215, 407-421.	3.2	8
52	Maskless, rapid manufacturing of glass microfluidic devices using a picosecond pulsed laser. Scientific Reports, 2019, 9, 20215.	3.3	67
53	A simple and green synthesis method for Ca-adamantanecarboxylate: a novel precursor for high temperature CO₂ capture sorbent materials. Sustainable Energy and Fuels, 2019, 3, 3318-3323.	4.9	3
54	Data-driven design of metalâ€“organic frameworks for wet flue gas CO2 capture. Nature, 2019, 576, 253-256.	27.8	438

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55	Carbonation curing for wollastonite-Portland cementitious materials: CO2 sequestration potential and feasibility assessment. Journal of Cleaner Production, 2019, 211, 830-841.	9.3	67
56	Modeling of all-porous solid oxide fuel cells with a focus on the electrolyte porosity design. Applied Energy, 2019, 235, 602-611.	10.1	28
57	Optimization of Li₄SiO₄ synthesis conditions by a solid state method for maximum CO₂ capture at high temperature. Journal of Materials Chemistry A, 2018, 6, 3249-3257.	10.3	53
58	Solar carbon fuel via photoelectrochemistry. Catalysis Today, 2018, 317, 56-75.	4.4	87
59	Experimental investigation of CO2-brine-calcite interactions under reservoir conditions. Fuel Processing Technology, 2018, 169, 122-131.	7.2	21
60	Density of carbon dioxide with impurities by Coriolis flow meter, oscillation-type densitometer and equations of state. Applied Energy, 2018, 212, 162-174.	10.1	10
61	High-Temperature CO₂ Capture by Li₄SiO₄ Sorbents: Effect of CO₂ Concentration and Cyclic Performance under Representative Conditions. Industrial & Engineering Chemistry Research, 2018, 57, 13802-13810.	3.7	16
62	Rapid Laser Manufacturing of Microfluidic Devices from Glass Substrates. Micromachines, 2018, 9, 409.	2.9	42
63	Systematic study of sol-gel parameters on TiO2 coating for CO2 photoreduction. Applied Catalysis B: Environmental, 2018, 238, 136-146.	20.2	59
64	Carbon dioxide sequestration using NaHSO 4 and NaOH: A dissolution and carbonation optimisation study. Journal of Environmental Management, 2017, 189, 84-97.	7.8	17
65	Polymeric Templating Synthesis of Anatase TiO₂ Nanoparticles from Lowâ€Cost Inorganic Titanium Sources. ChemistrySelect, 2017, 2, 702-706.	1.5	7
66	Review of flowmeters for carbon dioxide transport in CCS applications. , 2017, 7, 10-28.		8
67	Thermal Degradation of Morpholine in CO2 Post-combustion Capture. Energy Procedia, 2017, 114, 1033-1037.	1.8	3
68	Understanding CO2-brine-wellbore Cement-rock Interactions for CO2 Storage. Energy Procedia, 2017, 114, 5206-5211.	1.8	2
69	The Fiscal Metering of Transported CO2-Rich Mixtures in CCS Operations. Energy Procedia, 2017, 114, 6766-6777.	1.8	6
70	Process Integration of Post-combustion CO2 Capture with Li4SiO4/Li2CO3 Looping in a NGCC Plant. Energy Procedia, 2017, 114, 2611-2617.	1.8	15
71	Mineral Carbonation Technology Overview. , 2017, , 1-15.		1
72	Novel Amine-impregnated Mesostructured Silica Materials for CO2 Capture. Energy Procedia, 2017, 114, 2252-2258.	1.8	27

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73	Effect of Limestone and Buffer Solution in the Aqueous Speciation and pH of Brines for CO2 Sequestration. Energy Procedia, 2017, 114, 4865-4871.	1.8	5
74	Modeling photocatalytic conversion of carbon dioxide in bubbling twin reactor. Energy Conversion and Management, 2017, 149, 514-525.	9.2	22
75	Effects of titania based catalysts on in-situ pyrolysis of Pavlova microalgae. Fuel Processing Technology, 2017, 166, 291-298.	7.2	43
76	A Microfluidic Reactor for Solar Fuel Production from Photocatalytic CO 2 Reduction. Energy Procedia, 2017, 142, 501-506.	1.8	5
77	CO₂solubility measurements in brine under reservoir conditions: A comparison of experimental and geochemical modeling methods. , 2016, 6, 197-217.		29
78	COP-21 and CCS: A tale of two cities. , 2016, 6, 161-162.		2
79	Ceria promoted deoxygenation and denitrogenation of Thalassiosira weissflogii and its model compounds by catalytic in-situ pyrolysis. Bioresource Technology, 2016, 208, 140-148.	9.6	39
80	Understanding the importance of iron speciation in oil-field brine pH for CO2 mineral sequestration. Journal of CO2 Utilization, 2016, 16, 78-85.	6.8	6
81	Performance of Coriolis flowmeters in CO2 pipelines with pre-combustion, post-combustion and oxyfuel gas mixtures in carbon capture and storage. International Journal of Greenhouse Gas Control, 2016, 54, 297-308.	4.6	17
82	Apparatus and method for calibrating a Coriolis mass flow meter for carbon dioxide at pressure and temperature conditions represented to CCS pipeline operations. Applied Energy, 2016, 165, 759-764.	10.1	17
83	A pH-differential dual-electrolyte microfluidic electrochemical cells for CO2 utilization. Renewable Energy, 2016, 95, 277-285.	8.9	49
84	Photocatalytic reduction of CO 2 by CO co-feed combined with photocatalytic water splitting in a novel twin reactor. Energy Conversion and Management, 2016, 116, 184-193.	9.2	25
85	CO₂ Capture at High Temperature Using Fly Ash-Derived Sodium Silicates. Industrial & Engineering Chemistry Research, 2016, 55, 4080-4088.	3.7	46
86	Speciation, behaviour, and fate of mercury under oxy-fuel combustion conditions. Environmental Research, 2016, 145, 154-161.	7.5	17
87	A comparison of devices using thermal desorption for mercury speciation in solids. Talanta, 2016, 150, 272-277.	5.5	46
88	Potassium-based sorbents from fly ash for high-temperature CO2 capture. Environmental Science and Pollution Research, 2016, 23, 22242-22252.	5.3	30
89	Synthesis, characterization and visible light photocatalytic activity of metal based TiO2 monoliths for CO2 reduction. Chemical Engineering Journal, 2016, 283, 1244-1253.	12.7	64
90	Carbon dioxide capture and storage by pH swing mineralization using recyclable ammonium salts and flue gas mixtures. , 2015, 5, 389-402.		5

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91	Influence of a CO2 long term exposure on the mobilisation and speciation of metals in soils. Chemie Der Erde, 2015, 75, 475-482.	2.0	9
92	Transition metal oxide based TiO2 nanoparticles for visible light induced CO2 photoreduction. Applied Catalysis A: General, 2015, 502, 114-121.	4.3	90
93	Review of material design and reactor engineering on TiO2 photocatalysis for CO2 reduction. Journal of Photochemistry and Photobiology C: Photochemistry Reviews, 2015, 24, 16-42.	11.6	762
94	Development of sodium/lithium/fly ash sorbents for high temperature post-combustion CO 2 capture. Applied Energy, 2015, 156, 197-206.	10.1	72
95	The potential leaching and mobilization of trace elements from FGD-gypsum of a coal-fired power plant under water re-circulation conditions. Journal of Environmental Sciences, 2015, 32, 72-80.	6.1	10
96	CO2 Conversion into Valuable Fuels Using Chromium Based Supports. Energy Procedia, 2014, 63, 7963-7967.	1.8	2
97	Coriolis Metering Technology for CO2 Transportation for Carbon Capture and Storage. Energy Procedia, 2014, 63, 2723-2726.	1.8	7
98	Performance Evaluation of Carbon Dioxide Sequestration in Oil Shale Fly Ashes. Energy Procedia, 2014, 63, 5892-5896.	1.8	2
99	Accelerated MEA Degradation Study in Hybrid CO2 Capture Systems. Energy Procedia, 2014, 63, 745-749.	1.8	15
100	CO2 desorption via microwave heating for post-combustion carbon capture. Microporous and Mesoporous Materials, 2014, 197, 288-290.	4.4	34
101	Out with the old; in with CCS!. , 2014, 4, 1-2.		3
102	The variation in composition of ultramafic rocks and the effect on their suitability for carbon dioxide sequestration by mineralization following acid leaching. , 2014, 4, 440-451.		21
103	Degradation of amine-based solvents in CO₂capture process by chemical absorption. , 2014, 4, 707-733.		91
104	Mass and Energy Balance of NH4-salts pH Swing Mineral Carbonation Process Using Steel Slag. Energy Procedia, 2014, 63, 6544-6547.	1.8	6
105	Study of Mineral Trapping of CO2 and Seal Leakage Mitigation. Energy Procedia, 2014, 63, 5490-5494.	1.8	5
106	CO2 Sequestration Using a Novel Na-salts pH Swing Mineral Carbonation Process. Energy Procedia, 2014, 63, 5897-5903.	1.8	9
107	An investigation of reaction parameters on geochemical storage of non-pure CO 2 streams in iron oxide-bearing formations. Fuel Processing Technology, 2014, 128, 402-411.	7.2	2
108	Copper based TiO₂ honeycomb monoliths for CO₂ photoreduction. Catalysis Science and Technology, 2014, 4, 1631-1637.	4.1	57

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109	An overview of current status of carbon dioxide capture and storage technologies. Renewable and Sustainable Energy Reviews, 2014, 39, 426-443.	16.4	2,253
110	A review of mineral carbonation technologies to sequester CO₂. Chemical Society Reviews, 2014, 43, 8049-8080.	38.1	677
111	A novel high pressureâ€high temperature experimental apparatus to study sequestration of CO₂â€SO₂ mixtures in geological formations. , 2014, 4, 544-554.		10
112	Silicate rock dissolution by ammonium bisulphate for pH swing mineral CO2 sequestration. Fuel Processing Technology, 2014, 120, 128-135.	7.2	50
113	Role of catalyst carriers in CO2 photoreduction over nanocrystalline nickel loaded TiO2-based photocatalysts. Journal of Catalysis, 2014, 309, 300-308.	6.2	58
114	Photocatalytic conversion of CO2 to hydrocarbons by light-harvesting complex assisted Rh-doped TiO2 photocatalyst. Journal of CO2 Utilization, 2014, 5, 33-40.	6.8	49
115	Speciation of Hg retained in gasification biomass chars by temperature-programmed decomposition. Fuel Processing Technology, 2014, 126, 1-4.	7.2	13
116	Mineral carbonation from metal wastes: Effect of solid to liquid ratio on the efficiency and characterization of carbonated products. Applied Energy, 2014, 113, 515-523.	10.1	79
117	Laboratory experiments for the assessment of the physical and chemical impact of potential CO2 seepage on seawater and freshwater environments. Energy Procedia, 2014, 63, 3138-3148.	1.8	0
118	Utilisation Of Microwave Energy for CO2 Desorption in Post-combustion Carbon Capture Using Solid Sorbents. Energy Procedia, 2014, 63, 2109-2115.	1.8	13
119	Novel Na-silicates CO2 Sorbents from Fly Ash. Energy Procedia, 2014, 63, 739-744.	1.8	19
120	Aqueous Ammonia Capture Integrated With ex-Situ Mineralisation Using Recyclable Salts for Industrial CCS. Energy Procedia, 2013, 37, 7199-7204.	1.8	2
121	Enhancing Mg extraction from lizardite-rich serpentine for CO2 mineral sequestration. Minerals Engineering, 2013, 49, 135-144.	4.3	76
122	Laboratory Simulations and Field-study of CO2 Seepage in Aquatic Environments. Energy Procedia, 2013, 37, 3403-3412.	1.8	0
123	Carbon dioxide capture and storage by pH swing aqueous mineralisation using a mixture of ammonium salts and antigorite source. Fuel, 2013, 114, 153-161.	6.4	58
124	Turning CO2 into Valuable Chemicals. Energy Procedia, 2013, 37, 6704-6709.	1.8	32
125	Experimental Studies on Mineral Sequestration of CO2 with Buffer Solution and Fly Ash in Brines. Energy Procedia, 2013, 37, 5870-5874.	1.8	11
126	Optimization of carbon dioxide capture and storage with mineralisation using recyclable ammonium salts. Energy, 2013, 51, 431-438.	8.8	50

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127	Laboratory experiments and field study for the detection and monitoring of potential seepage from CO2 storage sites. Applied Geochemistry, 2013, 30, 105-113.	3.0	11
128	Preliminary Cost Evaluation of Integrated Aqueous Ammonia Capture with Mineralisation Using Recyclable Salts for Distributed CCS. Energy Procedia, 2013, 37, 2529-2535.	1.8	3
129	An Experimental Study of the Effects of Potential CO2 Seepage in Sediments. Energy Procedia, 2013, 37, 3513-3520.	1.8	0
130	CO2 adsorption performance of amino-functionalized SBA-15 under post-combustion conditions. International Journal of Greenhouse Gas Control, 2013, 17, 366-375.	4.6	107
131	Study of design parameters affecting the performance of CO2 purification units in oxy-fuel combustion. International Journal of Greenhouse Gas Control, 2013, 12, 441-449.	4.6	24
132	Dissolution of steel slag and recycled concrete aggregate in ammonium bisulphate for CO2 mineral carbonation. Fuel Processing Technology, 2013, 113, 114-122.	7.2	62
133	Micro-Silica for High-End Application from Carbon Capture and Storage by Mineralisation. Key Engineering Materials, 2012, 517, 737-744.	0.4	10
134	Scientific diving techniques for the study of flooded sinkholes in Italy. Underwater Technology, 2012, 31, 29-41.	0.3	1
135	Scientific diving techniques in restricted overhead environments. Underwater Technology, 2012, 31, 13-19.	0.3	2
136	CCS: doing more, but still not enough. , 2012, 2, 397-398.		1
137	Post-processing pathways in carbon capture and storage by mineral carbonation (CCSM) towards the introduction of carbon neutral materials. Energy and Environmental Science, 2012, 5, 7781.	30.8	101
138	Unusual Speciation and Retention of Hg at a Coal-Fired Power Plant. Environmental Science & Technology, 2012, 46, 7890-7897.	10.0	12
139	On the impact of Cu dispersion on CO2 photoreduction over Cu/TiO2. Catalysis Communications, 2012, 25, 78-82.	3.3	105
140	Effect of SCR operation variables on mercury speciation. Chemical Engineering Journal, 2012, 198-199, 87-94.	12.7	53
141	Sequestration of non-pure carbon dioxide streams in iron oxyhydroxide-containing saline repositories. International Journal of Greenhouse Gas Control, 2012, 7, 89-97.	4.6	37
142	Performance comparison of CO2 conversion in slurry and monolith photoreactors using Pd and Rh-TiO2 catalyst under ultraviolet irradiation. Applied Catalysis B: Environmental, 2012, 126, 172-179.	20.2	82
143	Waste materials for carbon capture and storage by mineralisation (CCSM) â€“ A UK perspective. Applied Energy, 2012, 99, 545-554.	10.1	126
144	Design and use of a laboratory rig for the study of the chemicalâ€physical effects on aquatic environments of potential seepage from CO₂ storage sites. , 2012, 2, 136-143.		4

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145	Development of adsorbents for CO₂ capture from waste materials: a review. , 2012, 2, 20-35.		120
146	Mercury policy and regulations for coal-fired power plants. Environmental Science and Pollution Research, 2012, 19, 1084-1096.	5.3	67
147	Computational and experimental studies of mercury adsorption on unburned carbon present in fly ash. Carbon, 2012, 50, 1913-1924.	10.3	43
148	Studies of pH buffer systems to promote carbonate formation for CO2 sequestration in brines. Fuel Processing Technology, 2012, 98, 6-13.	7.2	38
149	Photoreduction of CO2 using copper-decorated TiO2 nanorod films with localized surface plasmon behavior. Chemical Physics Letters, 2012, 531, 149-154.	2.6	88
150	Photocatalytic CO2 reduction using an internally illuminated monolith photoreactor. Energy and Environmental Science, 2011, 4, 1487.	30.8	131
151	Eight years of research on a marine natural analogue for sub-seabed CO<inf>2</inf> storage seepage. , 2011, , .		2
152	The influence of the precursor and synthesis method on the CO2 capture capacity of carpet waste-based sorbents. Journal of Environmental Management, 2011, 92, 2810-2817.	7.8	30
153	Climate change is about impact; CCS is about opportunity. , 2011, 1, 93-95.		3
154	Is Panarea Island (Italy) a valid and costâ€effective natural laboratory for the development of detection and monitoring techniques for submarine CO₂ seepage?. , 2011, 1, 200-210.		20
155	Parameters affecting mineral trapping of CO₂ sequestration in brines. , 2011, 1, 211-222.		37
156	Why carbon capture and storage?. , 2011, 1, 3-4.		3
157	Integration of CO₂ Capture and Mineral Carbonation by Using Recyclable Ammonium Salts. ChemSusChem, 2011, 4, 1291-1300.	6.8	97
158	Development of regenerable sorbents from abundant wastes for capture of CO2. Energy Procedia, 2011, 4, 1118-1124.	1.8	16
159	Environmental consequences of potential leaks of CO2 in soil. Energy Procedia, 2011, 4, 3224-3230.	1.8	34
160	Monitoring techniques of a natural analogue for sub-seabed CO2 leakages. Energy Procedia, 2011, 4, 3262-3268.	1.8	13
161	Investigation of the effect of brine composition and pH buffer on CO2 -brine sequestration. Energy Procedia, 2011, 4, 4503-4507.	1.8	13
162	Integration of CO2 capture and storage based on pH-swing mineral carbonation using recyclable ammonium salts. Energy Procedia, 2011, 4, 4930-4936.	1.8	32

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163	Experimental and simulation studies of iron oxides for geochemical fixation of CO2â€“SO2 gas mixtures. Energy Procedia, 2011, 4, 5108-5113.	1.8	8
164	Dissolution of serpentine using recyclable ammonium salts for CO2 mineral carbonation. Fuel, 2011, 90, 1229-1237.	6.4	134
165	Preparation of a highly microporous carbon from a carpet material and its application as CO2 sorbent. Fuel Processing Technology, 2011, 92, 322-329.	7.2	42
166	Speciation of mercury in fly ashes by temperature programmed decomposition. Fuel Processing Technology, 2011, 92, 707-711.	7.2	89
167	Underground carbon dioxide storage in saline formations. Proceedings of Institution of Civil Engineers: Waste and Resource Management, 2010, 163, 77-88.	0.8	5
168	Novel lithium-based sorbents from fly ashes for CO2 capture at high temperatures. International Journal of Greenhouse Gas Control, 2010, 4, 623-629.	4.6	167
169	Use of small-amplitude oscillatory shear rheometry to study the flow properties of pure and potassium-doped Li2ZrO3 sorbents during the sorption of CO2 at high temperatures. Separation and Purification Technology, 2010, 73, 415-420.	7.9	31
170	Study of mercury in by-products from a Dutch co-combustion power station. Journal of Hazardous Materials, 2010, 174, 28-33.	12.4	32
171	Analysis of mercury species present during coal combustion by thermal desorption. Fuel, 2010, 89, 629-634.	6.4	185
172	Mercury speciation in gypsums produced from flue gas desulfurization by temperature programmed decomposition. Fuel, 2010, 89, 2157-2159.	6.4	63
173	Catalytic effects of inorganic compounds on the development of surface areas of fly ash carbon during steam activation. Fuel, 2010, 89, 3436-3441.	6.4	15
174	Investigation of the pH effect of a typical host rock and buffer solution on CO2 sequestration in synthetic brines. Fuel Processing Technology, 2010, 91, 1321-1329.	7.2	40
175	Overview of carbon dioxide (CO2) capture and storage technology. , 2010, , 1-24.		5
176	A model of carbon dioxide dissolution andÂmineralÂcarbonationÂkinetics. Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences, 2010, 466, 1265-1290.	2.1	70
177	Development of collaborative training and capacity building in carbon capture and storage. Energy Procedia, 2009, 1, 4735-4740.	1.8	1
178	Sorbents for CO2 capture from high carbon fly ashes. Waste Management, 2008, 28, 2320-2328.	7.4	165
179	Role of active sites in the steam activation of high unburned carbon fly ashes. Fuel, 2008, 87, 2598-2605.	6.4	18
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