# M Mercedes Maroto-Valer

List of Publications by Year
in descending order



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|---|---|---|---|
| 209 papers | 11,543 citations | 38720 50 h-index | 32815 100 g-index |
| 214 all docs | 214 docs citations | 214 times ranked | 11495 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. | 2.3 | 6 |
| 2 | Coreâ€“shell TiO<sub>2â^'x</sub>-Cu<sub>y</sub>O microspheres for photogeneration of cyclic carbonates under simulated sunlight. Nanoscale, 2022, 14, 6349-6356. | 2.8 | 1 |
| 3 | Investigation of CO<sub>2</sub> Photoreduction in an Annular Fluidized Bed Photoreactor by MP-PIC Simulation. Industrial & Engineering Chemistry Research, 2022, 61, 3123-3136. | 1.8 | 5 |
| 4 | The Impact of Wettability on Dynamic Fluid Connectivity and Flow Transport Kinetics in Porous Media. Water Resources Research, 2022, 58, . | 1.7 | 12 |
| 5 | Production of CH4 and CO on CuxO and NixOy coatings through CO2 photoreduction. Journal of Environmental Chemical Engineering, 2022, 10, 108199. | 3.3 | 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 CO<sub>2</sub>capture. Dalton Transactions, 2021, 50, 7474-7483. | 1.6 | 11 |
| 7 | Layered Double Hydroxides-Based Mixed Metal Oxides: Development of Novel Structured Sorbents for CO<sub>2</sub>Capture Applications. ACS Applied Materials & Interfaces, 2021, 13, 11805-11813. | 4.0 | 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. | 2.2 | 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. | 3.3 | 18 |
| 10 | Simulation of CO2 photoreduction in a twin reactor by multiphysics models. Chemical Engineering Research and Design, 2021, 171, 125-138. | 2.7 | 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. | 3.3 | 18 |
| 12 | A stakeholdersâ€™ participatory approach to multi-criteria assessment of sustainable aviation fuels production pathways. International Journal of Production Economics, 2021, 238, 108156. | 5.1 | 16 |
| 13 | An Investigation into CO2â€“Brineâ€“Cementâ€“Reservoir Rock Interactions for Wellbore Integrity in CO2 Geological Storage. Energies, 2021, 14, 5033. | 1.6 | 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. | 1.6 | 12 |
| 15 | Particle carbonation kinetics models and activation methods under mild environment: The case of calcium silicate. Chemical Engineering Journal, 2021, 423, 130157. | 6.6 | 20 |
| 16 | Hierarchical hyper-branched titania nanorods with tuneable selectivity for CO<sub>2</sub> photoreduction. RSC Advances, 2021, 11, 32022-32029. | 1.7 | 0 |
| 17 | Manufacturing of Microfluidic Devices with Interchangeable Commercial Fiber Optic Sensors. Sensors, 2021, 21, 7493. | 2.1 | 1 |
| 18 | CO2â€“CO capture and kinetic analyses of sodium cobaltate under various partial pressures. Adsorption, 2020, 26, 781-792. | 1.4 | 2 |

| # | Article | IF | Citations |
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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. | 10.8 | 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. | 3.3 | 13 |
| 21 | The effect of the layer-interlayer chemistry of LDHs on developing high temperature carbon capture materials. Dalton Transactions, 2020, 49, 923-931. | 1.6 | 12 |
| 22 | Theoretical Efficiency Limits of Photoelectrochemical CO<sub>2</sub> Reduction: A Routeâ€Ðependent Thermodynamic Analysis. ChemPhysChem, 2020, 21, 232-239. | 1.0 | 4 |
| 23 | Review of Microfluidic Devices and Imaging Techniques for Fluid Flow Study in Porous Geomaterials. Sensors, 2020, 20, 4030. | 2.1 | 33 |
| 24 | Alkali modified P25 with enhanced CO<sub>2</sub> adsorption for CO<sub>2</sub> photoreduction. RSC Advances, 2020, 10, 27989-27994. | 1.7 | 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. | 2.2 | 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 CO<sub>2</sub> capture.. ChemistrySelect, 2020, 5, 5587-5594. | 0.7 | 10 |
| 27 | Investigation of an interlaced laser beam scanning method for ultrashort pulse laser micromachining applications. Journal of Materials Processing Technology, 2020, 285, 116807. | 3.1 | 7 |
| 28 | Review and Analysis of CO<sub>2</sub> Photoreduction Kinetics. ACS Sustainable Chemistry and Engineering, 2020, 8, 4677-4692. | 3.2 | 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. | 8.2 | 37 |
| 31 | Advanced High-Temperature CO<sub>2</sub> Sorbents with Improved Long-Term Cycling Stability. ACS Applied Materials & Interfaces, 2020, 12, 33765-33774. | 4.0 | 12 |
| 32 | Life cycle environmental analysis of â€˜drop inâ€™ alternative aviation fuels: a review. Sustainable Energy and Fuels, 2020, 4, 3229-3263. | 2.5 | 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. | 1.8 | 5 |
| 34 | Systematic study of TiO<sub>2</sub>/ZnO mixed metal oxides for CO<sub>2</sub> photoreduction. RSC Advances, 2019, 9, 21660-21666. | 1.7 | 19 |
| 35 | Raspberryâ€Like Microspheres of Coreâ€“Shell Cr<sub>2</sub>O<sub>3</sub>@TiO<sub>2</sub> Nanoparticles for CO<sub>2</sub> Photoreduction. ChemSusChem, 2019, 12, 5246-5252. | 3.6 | 23 |
| 36 | Novel Porous Carbons Derived from Coal Tar Rejects: Assessment of the Role of Pore Texture in CO<sub>2</sub> Capture under Realistic Postcombustion Operating Temperatures. ACS Applied Materials & Interfaces, 2019, 11, 36789-36799. | 4.0 | 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. | 4.6 | 64 |
| 44 | A microfluidic photoelectrochemical cell for solar-driven CO<sub>2</sub> conversion into liquid fuels with CuO-based photocathodes. Faraday Discussions, 2019, 215, 329-344. | 1.6 | 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. | 1.0 | 4 |
| 46 | A decision support system for waste heat recovery and energy efficiency improvement in data centres. Applied Energy, 2019, 250, 1217-1224. | 5.1 | 38 |
| 47 | Continuous flow-based laser-assisted plasmonic heating: A new approach for photothermal energy conversion and utilization. Applied Energy, 2019, 247, 517-524. | 5.1 | 27 |
| 48 | Modelling of a hybrid system for on-site power generation from solar fuels. Applied Energy, 2019, 240, 709-718. | 5.1 | 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. | 5.1 | 23 |
| 50 | A review of nanostructured non-titania photocatalysts and hole scavenging agents for CO<sub>2</sub> photoreduction processes. Journal of Materials Chemistry A, 2019, 7, 9368-9385. | 5.2 | 41 |
| 51 | Photo-generation of cyclic carbonates using hyper-branched Ruâ€“TiO<sub>2</sub>. Faraday Discussions, 2019, 215, 407-421. | 1.6 | 8 |
| 52 | Maskless, rapid manufacturing of glass microfluidic devices using a picosecond pulsed laser. Scientific Reports, 2019, 9, 20215. | 1.6 | 67 |
| 53 | A simple and green synthesis method for Ca-adamantanecarboxylate: a novel precursor for high temperature CO<sub>2</sub> capture sorbent materials. Sustainable Energy and Fuels, 2019, 3, 3318-3323. | 2.5 | 3 |
| 54 | Data-driven design of metalâ€“organic frameworks for wet flue gas CO2 capture. Nature, 2019, 576, 253-256. | 13.7 | 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. | 4.6 | 67 |
| 56 | Modeling of all-porous solid oxide fuel cells with a focus on the electrolyte porosity design. Applied Energy, 2019, 235, 602-611. | 5.1 | 28 |
| 57 | Optimization of Li<sub>4</sub>SiO<sub>4</sub> synthesis conditions by a solid state method for maximum CO<sub>2</sub> capture at high temperature. Journal of Materials Chemistry A, 2018, 6, 3249-3257. | 5.2 | 53 |
| 58 | Solar carbon fuel via photoelectrochemistry. Catalysis Today, 2018, 317, 56-75. | 2.2 | 87 |
| 59 | Experimental investigation of CO2-brine-calcite interactions under reservoir conditions. Fuel Processing Technology, 2018, 169, 122-131. | 3.7 | 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. | 5.1 | 10 |
| 61 | High-Temperature CO<sub>2</sub> Capture by Li<sub>4</sub>SiO<sub>4</sub> Sorbents: Effect of CO<sub>2</sub> Concentration and Cyclic Performance under Representative Conditions. Industrial & Engineering Chemistry Research, 2018, 57, 13802-13810. | 1.8 | 16 |
| 62 | Rapid Laser Manufacturing of Microfluidic Devices from Glass Substrates. Micromachines, 2018, 9, 409. | 1.4 | 42 |
| 63 | Systematic study of sol-gel parameters on TiO2 coating for CO2 photoreduction. Applied Catalysis B: Environmental, 2018, 238, 136-146. | 10.8 | 59 |
| 64 | Carbon dioxide sequestration using NaHSO 4 and NaOH: A dissolution and carbonation optimisation study. Journal of Environmental Management, 2017, 189, 84-97. | 3.8 | 17 |
| 65 | Polymeric Templating Synthesis of Anatase TiO<sub>2</sub> Nanoparticles from Lowâ€Cost Inorganic Titanium Sources. ChemistrySelect, 2017, 2, 702-706. | 0.7 | 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. | 4.4 | 22 |
| 75 | Effects of titania based catalysts on in-situ pyrolysis of Pavlova microalgae. Fuel Processing Technology, 2017, 166, 291-298. | 3.7 | 43 |
| 76 | A Microfluidic Reactor for Solar Fuel Production from Photocatalytic CO 2 Reduction. Energy Procedia, 2017, 142, 501-506. | 1.8 | 5 |
| 77 | CO<sub>2</sub>solubility 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. | 4.8 | 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. | 3.3 | 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. | 2.3 | 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. | 5.1 | 17 |
| 83 | A pH-differential dual-electrolyte microfluidic electrochemical cells for CO2 utilization. Renewable Energy, 2016, 95, 277-285. | 4.3 | 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. | 4.4 | 25 |
| 85 | CO<sub>2</sub> Capture at High Temperature Using Fly Ash-Derived Sodium Silicates. Industrial & Engineering Chemistry Research, 2016, 55, 4080-4088. | 1.8 | 46 |
| 86 | Speciation, behaviour, and fate of mercury under oxy-fuel combustion conditions. Environmental Research, 2016, 145, 154-161. | 3.7 | 17 |
| 87 | A comparison of devices using thermal desorption for mercury speciation in solids. Talanta, 2016, 150, 272-277. | 2.9 | 46 |
| 88 | Potassium-based sorbents from fly ash for high-temperature CO2 capture. Environmental Science and Pollution Research, 2016, 23, 22242-22252. | 2.7 | 30 |
| 89 | Synthesis, characterization and visible light photocatalytic activity of metal based TiO2 monoliths for CO2 reduction. Chemical Engineering Journal, 2016, 283, 1244-1253. | 6.6 | 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. | 0.8 | 9 |
| 92 | Transition metal oxide based TiO2 nanoparticles for visible light induced CO2 photoreduction. Applied Catalysis A: General, 2015, 502, 114-121. | 2.2 | 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. | 5.6 | 762 |
| 94 | Development of sodium/lithium/fly ash sorbents for high temperature post-combustion CO 2 capture. Applied Energy, 2015, 156, 197-206. | 5.1 | 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. | 3.2 | 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. | 2.2 | 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 CO<sub>2</sub>capture 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. | 3.7 | 2 |
| 108 | Copper based TiO<sub>2</sub> honeycomb monoliths for CO<sub>2</sub> photoreduction. Catalysis Science and Technology, 2014, 4, 1631-1637. | 2.1 | 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. | 8.2 | 2,253 |
| 110 | A review of mineral carbonation technologies to sequester CO<sub>2</sub>. Chemical Society Reviews, 2014, 43, 8049-8080. | 18.7 | 677 |
| 111 | A novel high pressureâ€high temperature experimental apparatus to study sequestration of CO<sub>2</sub>â€SO<sub>2</sub> 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. | 3.7 | 50 |
| 113 | Role of catalyst carriers in CO2 photoreduction over nanocrystalline nickel loaded TiO2-based photocatalysts. Journal of Catalysis, 2014, 309, 300-308. | 3.1 | 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. | 3.3 | 49 |
| 115 | Speciation of Hg retained in gasification biomass chars by temperature-programmed decomposition. Fuel Processing Technology, 2014, 126, 1-4. | 3.7 | 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. | 5.1 | 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. | 1.8 | 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. | 3.4 | 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. | 4.5 | 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. | 1.4 | 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. | 2.3 | 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. | 2.3 | 24 |
| 132 | Dissolution of steel slag and recycled concrete aggregate in ammonium bisulphate for CO2 mineral carbonation. Fuel Processing Technology, 2013, 113, 114-122. | 3.7 | 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. | 15.6 | 101 |
| 138 | Unusual Speciation and Retention of Hg at a Coal-Fired Power Plant. Environmental Science & Technology, 2012, 46, 7890-7897. | 4.6 | 12 |
| 139 | On the impact of Cu dispersion on CO2 photoreduction over Cu/TiO2. Catalysis Communications, 2012, 25, 78-82. | 1.6 | 105 |
| 140 | Effect of SCR operation variables on mercury speciation. Chemical Engineering Journal, 2012, 198-199, 87-94. | 6.6 | 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. | 2.3 | 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. | 10.8 | 82 |
| 143 | Waste materials for carbon capture and storage by mineralisation (CCSM) â€“ A UK perspective. Applied Energy, 2012, 99, 545-554. | 5.1 | 126 |
| 144 | Design and use of a laboratory rig for the study of the chemicalâ€physical effects on aquatic environments of potential seepage from CO<sub>2</sub> storage sites. , 2012, 2, 136-143. | | 4 |

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| 145 | Development of adsorbents for CO<sub>2</sub> 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. | 2.7 | 67 |
| 147 | Computational and experimental studies of mercury adsorption on unburned carbon present in fly ash. Carbon, 2012, 50, 1913-1924. | 5.4 | 43 |
| 148 | Studies of pH buffer systems to promote carbonate formation for CO2 sequestration in brines. Fuel Processing Technology, 2012, 98, 6-13. | 3.7 | 38 |
| 149 | Photoreduction of CO2 using copper-decorated TiO2 nanorod films with localized surface plasmon behavior. Chemical Physics Letters, 2012, 531, 149-154. | 1.2 | 88 |
| 150 | Photocatalytic CO2 reduction using an internally illuminated monolith photoreactor. Energy and Environmental Science, 2011, 4, 1487. | 15.6 | 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. | 3.8 | 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 CO<sub>2</sub> seepage?. , 2011, 1, 200-210. | | 20 |
| 155 | Parameters affecting mineral trapping of CO<sub>2</sub> sequestration in brines. , 2011, 1, 211-222. | | 37 |
| 156 | Why carbon capture and storage?. , 2011, 1, 3-4. | | 3 |
| 157 | Integration of CO<sub>2</sub> Capture and Mineral Carbonation by Using Recyclable Ammonium Salts. ChemSusChem, 2011, 4, 1291-1300. | 3.6 | 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. | 3.4 | 134 |
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