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## Post-Combustion CO<sub>2</sub> Capture Using Solid Sorbents: A Review

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1394	Granular bamboo-derived activated carbon for high CO <sub>2</sub> adsorption: the dominant role of narrow micropores. <b>2012</b> , 5, 2354-60		252
1393	Silica/Polyethyleneimine Composite Adsorbent S-PEI for CO <sub>2</sub> Capture by Vacuum Swing Adsorption (VSA). <b>2012</b> , 177-205		8
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1231	Understanding the Performance of New Amine-Functionalized Mesoporous Silica Materials for CO <sub>2</sub> Adsorption. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 15611-15619	3.9	21
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1223	Nanoporous rice husk derived carbon for gas storage and high performance electrochemical energy storage. <b>2014</b> , 21, 839-847		59
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1218	Effects of Minor SO <sub>2</sub> on the Transport Properties of Fixed Carrier Membranes for CO <sub>2</sub> Capture. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2014</b> , 53, 7758-7767	3.9	27
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1198	The effect of post-processing conditions on aminosilane functionalization of mesocellular silica foam for post-combustion CO <sub>2</sub> capture. <i>Fuel</i> , <b>2014</b> , 123, 66-72	7.1	32

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1177	Synthesis of CaCO <sub>3</sub> @C yolk-shell particles for CO <sub>2</sub> adsorption. <b>2015</b> , 5, 24872-24876	15
1176	Adsorbents for CO <sub>2</sub> Capture. <b>2015</b> , 25-41	
1175	Mixed amine-modified MCM-41 sorbents for CO <sub>2</sub> capture. <b>2015</b> , 37, 90-98	65
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1172	Postcombustion CO <sub>2</sub> capture using N-(3-trimethoxysilylpropyl)diethylenetriamine-grafted solid adsorbent. <b>2015</b> , 3, 207-220	44
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1152	Progress in hydrotalcite like compounds and metal-based oxides for CO <sub>2</sub> capture: a review. <b>2015</b> , 103, 171-196	152
1151	Adsorptive absorption: A preliminary experimental and modeling study on CO <sub>2</sub> solubility. <b>2015</b> , 127, 260-268	27
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1138	The role of density functional theory methods in the prediction of nanostructured gas-adsorbent materials. <b>2015</b> , 300, 142-163		32
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1120	Microbial Electrolytic Carbon Capture for Carbon Negative and Energy Positive Wastewater Treatment. <b>2015, 49, 8193-201</b>	63
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1116	Mechanical performance and CO <sub>2</sub> uptake of ion-exchanged zeolite A structured by freeze-casting. <b>2015, 35, 2607-2618</b>	44
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1114	Incorporation of CaO into novel Nd <sub>2</sub> O <sub>3</sub> inert solid support for high temperature CO <sub>2</sub> capture. <b>2015, 273, 333-343</b>	81
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1108	Adsorption Properties of Activated Carbons Prepared from Waste CDs and DVDs. <b>2015, 3, 733-742</b>	52

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1106	Deep Eutectic Solvents: Physicochemical Properties and Gas Separation Applications. <b>2015</b> , 29, 2616-2644		575
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1095	CO <sub>2</sub> Scrubbing Processes and Applications. <b>2015</b> , 239-280		
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1092	An investigation of the textural properties of mesostructured silica-based adsorbents for predicting CO <sub>2</sub> adsorption capacity. <b>2015</b> , 5, 103147-103154		15
1091	Colloidal Nanoclusters of MgO Coated with Alkali Metal Nitrates/Nitrites for Rapid, High Capacity CO <sub>2</sub> Capture at Moderate Temperature. <b>2015</b> , 27, 8153-8161		70
1090	Kinetics of CO <sub>2</sub> methanation over Ru/Al <sub>2</sub> O <sub>3</sub> and implications for renewable energy storage applications. <b>2015</b> , 12, 27-33		88

1089	Temperature and CO <sub>2</sub> responsive polyethylenimine for highly efficient carbon dioxide release. <b>2015</b> , 5, 9556-9560	14
1088	Effects of feed gas concentration, temperature and process parameters on vacuum swing adsorption performance for CO <sub>2</sub> capture. <b>2015</b> , 265, 47-57	30
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1074	CO <sub>2</sub> SORPTION USING NA <sub>2</sub> CO <sub>3</sub> /AL <sub>2</sub> O <sub>3</sub> SORBENT WITH VARIOUS FLOW PATTERNS OF FIXED/FLUIDIZED BED REACTORS. <b>2016</b> , 78,	1
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1072	The Potential of CO <sub>2</sub> Capture and Storage Technology in South Africa's Coal-Fired Thermal Power Plants. <b>2016</b> , 3, 24	30

1071	Pentaethylenehexamine-Loaded Hierarchically Porous Silica for CO <sub>2</sub> Adsorption. <b>2016</b> , 9,		19
1070	CO <sub>2</sub> capture using nanoporous TiO(OH) <sub>2</sub> /tetraethylenepentamine. <i>Fuel</i> , <b>2016</b> , 183, 601-608	7.1	30
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1067	Importance of Micropore-Mesopore Interfaces in Carbon Dioxide Capture by Carbon-Based Materials. <b>2016</b> , 55, 9173-7		48
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1059	CO <sub>2</sub> Adsorption Behavior of Activated Coal Char Modified with Tetraethylenepentamine. <b>2016</b> , 30, 3281-3288		26
1058	Feasibility of CO <sub>2</sub> adsorption by solid adsorbents: a review on low-temperature systems. <b>2016</b> , 13, 1839-1860		120
1057	One-Pot Synthesis and Pelletizing of Polyethylenimine-Containing Mesoporous Silica Powders for CO <sub>2</sub> Capture. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2016</b> , 55, 6481-6491	3.9	38
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1055	Geopolymers as solid adsorbent for CO <sub>2</sub> capture. <b>2016</b> , 148, 267-274		63
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1053	Performance improvement of vacuum swing adsorption processes for CO <sub>2</sub> removal with integrated phase change material. <b>2016</b> , 47, 364-375		15
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1050	CO <sub>2</sub> Uptake Behavior of Supported Tetraethylenepentamine Sorbents. <b>2016</b> , 30, 5083-5091		16
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764	Hierarchically Porous Carbon Materials for CO <sub>2</sub> Capture: The Role of Pore Structure. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 1262-1268	3.9	51
763	O-containing hyper-cross-linked polymers and porous carbons for CO <sub>2</sub> capture. <b>2018</b> , 264, 104-111		45
762	Utilization of alumina-supported K <sub>2</sub> CO <sub>3</sub> as CO <sub>2</sub> -selective sorbent: A promising strategy to mitigate the carbon footprint of the maritime sector. <b>2018</b> , 24, 139-148		5
761	CO <sub>2</sub> absorption and diffusion in ionic liquid [P66614][Triz] modified molecular sieves SBA-15 with various pore lengths. <b>2018</b> , 172, 216-224		24
760	Recent progress of amine modified sorbents for capturing CO <sub>2</sub> from flue gas. <b>2018</b> , 26, 2292-2302		20
759	New Insights into CO Adsorption on Layered Double Hydroxide (LDH)-Based Nanomaterials. <b>2018</b> , 13, 55		12
758	Insights into Selective Gas Sorbent Functionality Gained by Using Time-Resolved Neutron Diffraction. <b>2018</b> , 83, 669-675		2
757	Amine-impregnated silicic acid composite as an efficient adsorbent for CO <sub>2</sub> capture. <b>2018</b> , 223, 293-301		30
756	Efficiency and Energy Analysis of Power Plants with Amine-Impregnated Solid Sorbents CO <sub>2</sub> Capture. <b>2018</b> , 6, 1649-1659		8
755	Constrained growth of solid amino alkyl siloxane (an organic/inorganic hybrid): The ultimate selective sorbent for CO <sub>2</sub> . <b>2018</b> , 65, 156-166		1
754	Carbon dioxide capture under postcombustion conditions using amine-functionalized SBA-15: Kinetics and multicyclic performance. <b>2018</b> , 53, 2683-2694		7
753	Isotherms and thermodynamics of CO <sub>2</sub> adsorption on a novel carbon-magnetite composite sorbent. <b>2018</b> , 134, 540-552		87
752	Simulated moving bed adsorption process based on a polyethylenimine-silica sorbent for CO <sub>2</sub> capture with sensible heat recovery. <b>2018</b> , 150, 950-964		30
751	Synthetic approaches for the incorporation of free amine functionalities in porous coordination polymers for enhanced CO <sub>2</sub> sorption. <b>2018</b> , 365, 1-22		36
750	Perspectives on NMR studies of CO <sub>2</sub> adsorption. <b>2018</b> , 33, 53-62		17
749	Thermal Stability Enhanced Tetraethylenepentamine/Silica Adsorbents for High Performance CO <sub>2</sub> Capture. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 4632-4639	3.9	35
748	Accurate prediction of miscibility of CO <sub>2</sub> and supercritical CO <sub>2</sub> in ionic liquids using machine learning. <b>2018</b> , 25, 99-107		50

747	CO <sub>2</sub> sorption/desorption performance study on K <sub>2</sub> CO <sub>3</sub> -doped Li <sub>4</sub> SiO <sub>4</sub> -based pellets. <b>2018</b> , 339, 51-60	44
746	Thermal Decomposition of Biomineralized Calcium Carbonate: Correlation between the Thermal Behavior and Structural Characteristics of Avian Eggshell. <b>2018</b> , 6, 5283-5295	23
745	Carbon capture and storage (CCS): the way forward. <b>2018</b> , 11, 1062-1176	1368
744	Cooperative CO <sub>2</sub> adsorption promotes high CO <sub>2</sub> adsorption density over wide optimal nanopore range. <b>2018</b> , 36, 625-639	22
743	Surface characteristics of KOH-treated commercial carbons applied for CO <sub>2</sub> adsorption. <b>2018</b> , 36, 478-492	25
742	Crystal morphology-based kinetic study of carbon dioxide-hydrogen-tetra-n-butyl ammonium bromide hydrates formation in a static system. <b>2018</b> , 143, 546-553	16
741	CO <sub>2</sub> capture using triamine-grafted SBA-15: The impact of the support pore structure. <b>2018</b> , 334, 1260-1269	82
740	Overcoming double-step CO adsorption and minimizing water co-adsorption in bulky diamine-appended variants of Mg(dobpdc). <b>2018</b> , 9, 160-174	61
739	Tuning the textural properties of HMS mesoporous silica. Functionalization towards CO <sub>2</sub> adsorption. <b>2018</b> , 260, 235-244	54
738	Alternative pathways for efficient CO <sub>2</sub> capture by hybrid processes—A review. <b>2018</b> , 82, 215-231	150
737	Thermodynamic research of adsorbent materials on energy efficiency of vacuum-pressure swing adsorption cycle for CO <sub>2</sub> capture. <b>2018</b> , 128, 818-829	34
736	Metal-organic frameworks for solar energy conversion by photoredox catalysis. <b>2018</b> , 373, 83-115	113
735	CO <sub>2</sub> capture by ion exchange resins as amine functionalised adsorbents. <b>2018</b> , 331, 335-342	27
734	CO <sub>2</sub> adsorption and desorption performance of waste ion-exchange resin-based activated carbon. <b>2018</b> , 37, 703-711	11
733	Adsorption of CO <sub>2</sub> on mixed oxides derived from hydrotalcites at several temperatures and high pressures. <b>2018</b> , 332, 24-32	32
732	Nickel-doped sodium zirconate catalysts for carbon dioxide storage and hydrogen production through dry methane reforming process. <b>2018</b> , 224, 80-87	17
731	Synthesis of a variety of key medicinal heterocyclic compounds via chemical fixation of CO <sub>2</sub> onto o-alkynylaniline derivatives. <b>2018</b> , 23, 42-50	31
730	Polyamine-Grafted Magadiite: High CO <sub>2</sub> Selectivity at Capture from CO <sub>2</sub> /N <sub>2</sub> and CO <sub>2</sub> /CH <sub>4</sub> Mixtures. <b>2018</b> , 23, 29-41	16

729	CO <sub>2</sub> adsorption on oxygen enriched porous carbon monoliths: Kinetics, isotherm and thermodynamic studies. <b>2018</b> , 60, 321-332		30
728	Preparation of Li <sub>4</sub> SiO <sub>4</sub> Sorbents for Carbon Dioxide Capture via a Spray-Drying Technique. <b>2018</b> , 32, 4521-4527		21
727	CO <sub>2</sub> adsorption/regeneration kinetics and regeneration properties of amine functionalized SBA-16. <b>2018</b> , 25, 1219-1227		5
726	Chemically activated microporous carbons derived from petroleum coke: Performance evaluation for CF <sub>4</sub> adsorption. <b>2018</b> , 336, 297-305		34
725	Soft-Pillared@Magadiite: influence of the interlayer space and amine type on CO adsorption. <b>2018</b> , 47, 3102-3111		8
724	CO <sub>2</sub> Adsorption by Amine-Functionalized MCM-41: A Comparison between Impregnation and Grafting Modification Methods. <b>2018</b> , 32, 670-677		59
723	CO <sub>2</sub> chemisorption enhancement produced by K <sub>2</sub> CO <sub>3</sub> - and Na <sub>2</sub> CO <sub>3</sub> -addition on Li <sub>2</sub> CuO <sub>2</sub> . <b>2018</b> , 23, 143-151		19
722	Improvement in CO <sub>2</sub> adsorption capacity of cocoa shell through functionalization with amino groups and immobilization of cobalt nanoparticles. <b>2018</b> , 6, 325-331		15
721	Effect of isopropyl-substituent introduction into tetraethylenepentamine-based solid sorbents for CO <sub>2</sub> capture. <i>Fuel</i> , <b>2018</b> , 214, 14-19	7.1	11
720	Kinetic modeling of CO <sub>2</sub> adsorption on an amine-functionalized solid sorbent. <b>2018</b> , 177, 122-131		29
719	Parametric effect of adsorption variables on CO <sub>2</sub> adsorption of amine-grafted polyaspartamide composite adsorbent during post-combustion CO <sub>2</sub> capture: a response surface methodology approach. <b>2018</b> , 17, 321		1
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717	. <b>2018</b> ,		3
716	Design and CPFD Simulation of a Novel Fluidized Beds Reactor. <b>2018</b> ,		
715	Thermally induced carbonation of Ca(OH) in a CO atmosphere: kinetic simulation of overlapping mass-loss and mass-gain processes in a solid-gas system. <b>2018</b> , 20, 26173-26189		20
714	Template-free amine-bridged silsesquioxane with dangling amino groups and its CO <sub>2</sub> adsorption performance. <b>2018</b> , 6, 23690-23702		4
713	Chlorine-functionalized keto-enamine-based covalent organic frameworks for CO <sub>2</sub> separation and capture. <b>2018</b> , 20, 7621-7625		16
712	Investigation of H <sub>2</sub> adsorption on amine-functionalized silicas and metal-organic polymers. <b>2018</b> , 67, 1595-1600		1

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708	Consumer Attitudes towards Industrial CO <sub>2</sub> Capture and Storage Products and Technologies. <b>2018</b> , 11, 2787		16
707	Preparation and Evaluation of a Coconut Shell-Based Activated Carbon for CO <sub>2</sub> /CH <sub>4</sub> Separation. <b>2018</b> , 11, 1748		15
706	Application of density functional theory in studying CO <sub>2</sub> capture with TiO <sub>2</sub> -supported K <sub>2</sub> CO <sub>3</sub> being an example. <b>2018</b> , 231, 167-178		8
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703	Steam-Stable Covalently Bonded Polyethylenimine Modified Multiwall Carbon Nanotubes for Carbon Dioxide Capture. <b>2018</b> , 32, 11701-11709		15
702	Facile and Controllable Preparation of Ultramicroporous Biomass-Derived Carbons and Application on Selective Adsorption of Gas-mixtures. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 14191-14207	3.9	15
701	The effect of nitrogen adsorption on vacuum swing adsorption based post-combustion CO <sub>2</sub> capture. <b>2018</b> , 78, 437-447		27
700	Control of CO Capture Process on Transition-Metal-Porphyrin-like Graphene with Mechanical Strain. <b>2018</b> , 3, 10554-10563		6
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698	Stabilization of NaNO-Promoted Magnesium Oxide for High-Temperature CO Capture. <b>2018</b> , 52, 11952-11959		7
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696	Molecular simulation and experimental investigation of CO <sub>2</sub> capture in a polymetallic cation-exchanged 13X zeolite. <b>2018</b> , 6, 19570-19583		30
695	Electrochemical CO <sub>2</sub> Capture and Conversion. <b>2018</b> , 213-266		1
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692	Pore Reorganization of Porous Carbon during Trace Calcium-Catalyzed Coal Activation for Adsorption Applications. <b>2018</b> , 32, 9191-9201		11
691	Modeling Amorphous Microporous Polymers for CO Capture and Separations. <b>2018</b> , 118, 5488-5538		134
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689	Adsorption of carbon dioxide on solid amine-functionalized sorbents: A dual kinetic model. <i>Separation and Purification Technology</i> , <b>2018</b> , 204, 13-20	8.3	16
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687	Efficient CO <sub>2</sub> Adsorption on Nitrogen-Doped Porous Carbons Derived from d-Glucose. <b>2018</b> , 32, 6955-6963		70
686	Challenges and opportunities for the utilisation of ionic liquids as solvents for CO <sub>2</sub> capture. <b>2018</b> , 3, 560-571		43
685	Development of a Pressure Swing Adsorption Cycle for Producing High Purity CO <sub>2</sub> from Dilute Feed Streams. Part I: Feasibility Study. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2018</b> , 57, 8011-8022		7
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683	Supported ionic liquid sorbents for CO <sub>2</sub> capture from simulated flue-gas. <b>2018</b> , 26, 2377-2384		12
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681	Advancements in six-membered cyclic carbonate (1,3-dioxan-2-one) synthesis utilizing carbon dioxide as a C1 source.. <b>2018</b> , 8, 17976-17988		39
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679	Solar-assisted pressure-temperature swing adsorption for CO <sub>2</sub> capture: Effect of adsorbent materials. <b>2018</b> , 185, 494-504		17
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676	Relationships between the Charge/Discharge Methods and the Performance of a Supercapacitive Swing Adsorption Module for CO <sub>2</sub> Separation. <b>2018</b> , 122, 18476-18483		2

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673	Graphitic carbon nitride nano sheets functionalized with selected transition metal dopants: an efficient way to store CO. <b>2018</b> , 29, 415502		23
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669	Design, Development, and Operation of an Integrated Fluidized Carbon Capture Unit Using Polyethylenimine Sorbents. <b>2018</b> , 140,		2
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663	Carbon nanotube/PVA aerogels impregnated with PEI: solid adsorbents for CO <sub>2</sub> capture. <b>2018</b> , 2, 1630-1640		8
662	Progress in O <sub>2</sub> separation for oxy-fuel combustion: A promising way for cost-effective CO <sub>2</sub> capture: A review. <b>2018</b> , 67, 188-205		73
661	The effect of topology in Lewis pair functionalized metal organic frameworks on CO <sub>2</sub> adsorption and hydrogenation. <b>2018</b> , 8, 4609-4617		11
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655	Tuning Expanded Pores in Metal-Organic Frameworks for Selective Capture and Catalytic Conversion of Carbon Dioxide. <b>2018</b> , 11, 3751-3757		32
654	Realising the environmental benefits of metal-organic frameworks: recent advances in microwave synthesis. <b>2018</b> , 6, 11564-11581		63
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651	Optimization of CO <sub>2</sub> Capture from Simulated Flue Gas Using K <sub>2</sub> CO <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> in a Micro Fluidized Bed Reactor. <b>2018</b> , 32, 7978-7990		13
650	Current approaches to waste polymer utilization and minimization: a review. <b>2019</b> , 94, 8-21		89
649	Porous Organic Polymers for CO <sub>2</sub> Storage and Conversion Reactions. <b>2019</b> , 11, 244-257		91
648	CO <sub>2</sub> adsorption testing on fly ash derived cancrinite-type zeolite and its amine-functionalized derivatives. <b>2019</b> , 38, 77-88		8
647	Utilization of rice husk to enhance calcium oxide-based sorbent prepared from waste cockle shells for cyclic CO capture in high-temperature condition. <b>2019</b> , 26, 33882-33896		2
646	Synergistic Enhancement of CO <sub>2</sub> Adsorption Capacity and Kinetics in Triethylenetetrammonium Nitrate Protic Ionic Liquid Functionalized SBA-15. <b>2019</b> , 33, 8967-8975		14
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644	Self-supported branched poly(ethyleneimine) materials for CO <sub>2</sub> adsorption from simulated flue gas. <b>2019</b> , 7, 19513-19521		27
643	Trends in Solid Adsorbent Materials Development for CO Capture. <b>2019</b> , 11, 34533-34559		108
642	A novel one-pot method to synthesize hierarchical mesoporous carbon foams with ZnO coating. <b>2019</b> , 45, 21475-21482		0
641	Equilibrium and Diffusion of CO <sub>2</sub> Adsorption on Micro-Mesoporous NaX/MCM-41 via Molecular Simulation. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 14380-14388	3-9	4
640	Synthesis of Porous Organic Polymers with Tunable Amine Loadings for CO Capture: Balanced Physisorption and Chemisorption. <b>2019</b> , 9,		13

639	Novel cement curing technique by using controlled release of carbon dioxide coupled with nanosilica. <b>2019</b> , 223, 692-704		4
638	Modelling and experimental investigation of effects of moisture and operating parameters during the adsorption of CO <sub>2</sub> onto polyaspartamide. <b>2019</b> , 6, 225-234		11
637	Ionic liquid gated 2D-CAP membrane for highly efficient CO <sub>2</sub> /N <sub>2</sub> and CO <sub>2</sub> /CH <sub>4</sub> separation. <b>2019</b> , 494, 477-483		8
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635	Fabrication of Strong Solid Base FeO/MgO for Warm CO <sub>2</sub> Capture. <b>2019</b> , 47, 1800447		6
634	Rational design of a porous gel encapsulated bio-hybrid solvent for accelerated CO <sub>2</sub> capture and low energy stripping. <b>2019</b> , 90, 102785		1
633	Combined heat and mass transfer performance enhancement by nanoemulsion absorbents during the CO <sub>2</sub> absorption and regeneration processes. <b>2019</b> , 141, 1196-1204		6
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629	Combined carbon capture cycles: An opportunity for size and energy penalty reduction. <b>2019</b> , 88, 290-298		5
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627	Understanding the CO <sub>2</sub> sorption mechanisms of the MgO-doped Na-based sorbent at low temperatures. <b>2019</b> , 9, 672-686		4
626	Insights into CO <sub>2</sub> /N <sub>2</sub> Selectivity in Porous Carbons from Deep Learning. <b>2019</b> , 1, 558-563		16
625	Carbon Spheres as CO <sub>2</sub> Sorbents. <b>2019</b> , 9, 3349		16
624	Process Optimization-Based Screening of Zeolites for Post-Combustion CO <sub>2</sub> Capture by Vacuum Swing Adsorption. <b>2019</b> , 7, 17747-17755		19
623	CO <sub>2</sub> and CH <sub>4</sub> sorption on carbon nanomaterials and coals [Comparative characteristics. <b>2019</b> , 72, 103003		13
622	Advanced Amino Acid-Based Technologies for CO <sub>2</sub> Capture: A Review. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 20181-20194	3.9	38

621	Continuous CO <sub>2</sub> Capture Performance of K <sub>2</sub> CO <sub>3</sub> /Al <sub>2</sub> O <sub>3</sub> Sorbents in a Novel Integrated Bubbling-Transport Fluidized Reactor. <i>Industrial &amp; Engineering Chemistry Research</i> , <b>2019</b> , 58, 19733-19740	3.9	7
620	A Review of Evaluation, Optimization and Synthesis of Energy Systems: Methodology and Application to Thermal Power Plants. <b>2019</b> , 12, 73		24
619	Poly(glycidyl amine)-Loaded SBA-15 Sorbents for CO <sub>2</sub> Capture from Dilute and Ultradilute Gas Mixtures. <b>2019</b> , 1, 3137-3147		19
618	A Novel Indicator Of Lipid Accumulation Product Associated With Metabolic Syndrome In Chinese Children And Adolescents. <b>2019</b> , 12, 2075-2083		11
617	Exploring the Acid Gas Sorption Properties of Oxidatively Degraded Supported Amine Sorbents. <b>2019</b> , 33, 1372-1382		3
616	Experimental methods in chemical engineering: specific surface area and pore size distribution measurements BET, BJH, and DFT. <b>2019</b> , 97, 2781-2791		172
615	High Efficiency and Eco-Friendly TEPA-Functionalized Adsorbent with Enhanced Porosity for CO <sub>2</sub> Capture. <b>2019</b> , 33, 11465-11476		11
614	Adsorptive separation of carbon dioxide: From conventional porous materials to metal-organic frameworks. <b>2019</b> , 1, 100016		64
613	Solid-Waste-Derived Carbon Dioxide-Capturing Materials. <b>2019</b> , 12, 2055-2082		27
612	Facile large-scale synthesis of macroscopic 3D porous graphene-like carbon nanosheets architecture for efficient CO <sub>2</sub> adsorption. <b>2019</b> , 145, 751-756		36
611	Integrated hybrid process for solvent-based CO <sub>2</sub> capture using a pre-concentrating membrane: A pilot scale study. <b>2019</b> , 82, 204-209		7
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608	Polyetheramine improves the CO <sub>2</sub> adsorption behavior of tetraethylenepentamine-functionalized sorbents. <b>2019</b> , 364, 475-484		24
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604	Effect of Triblock Copolymer on Carbon-Based Boron Nitride Whiskers for Efficient CO Adsorption. <b>2019</b> , 11,		11

603	Modelling and parameter estimation of breakthrough curves for amine-modified activated carbons under pre-combustion carbon capture conditions. <i>Fuel</i> , <b>2019</b> , 253, 1130-1139	7.1	6
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598	Epoxy Cross-Linked Polyamine CO <sub>2</sub> Sorbents Enhanced via Hydrophobic Functionalization. <b>2019</b> , 31, 4673-4684		19
597	Measuring heat capacity of activated carbons for CO <sub>2</sub> capture. <b>2019</b> , 33, 148-156		7
596	Structurally improved, urea-templated, K <sub>2</sub> CO <sub>3</sub> -based sorbent pellets for CO <sub>2</sub> capture. <b>2019</b> , 374, 20-28		17
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278	High temperature CO <sub>2</sub> sorption using mixed oxides with different Mg/Al molar ratios and synthesis pH. <b>2021</b> , 420, 129731		1
277	Enhancing effect of UV activation of graphene oxide on carbon capture performance of metal-organic framework / graphene oxide hybrid adsorbents. <b>2021</b> , 420, 129677		9
276	Highly selective hollow fiber membranes for carbon capture via in-situ layer-by-layer surface functionalization. <b>2021</b> , 633, 119381		6
275	Cold plasma-Metal Organic Framework (MOF)-177 breathable system for atmospheric remediation. <b>2021</b> , 51, 101642		3
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271	A comprehensive review of biomass based thermochemical conversion technologies integrated with CO <sub>2</sub> capture and utilisation within BECCS networks. <b>2021</b> , 173, 105734		20
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120	Potential applications for geopolymers in carbon capture and storage. <b>2022</b> , 118, 103687	1
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110	Synthesis, Characterization and Application of Amine-Functionalized Hierarchically Micro-Mesoporous Silicon Composites for CO <sub>2</sub> Capture in Flue Gas. <b>2022</b> , 27, 3429		2
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