CITATION REPORT List of articles citing

Hydrothermal conversion of biomass waste to activated carbon with high porosity: A review

DOI: 10.1016/j.cej.2015.08.014 Chemical Engineering Journal, 2016, 283, 789-805.

Source: https://exaly.com/paper-pdf/65713410/citation-report.pdf

Version: 2024-04-28

This report has been generated based on the citations recorded by exaly.com for the above article. For the latest version of this publication list, visit the link given above.

The third column is the impact factor (IF) of the journal, and the fourth column is the number of citations of the article.

#	Paper	IF	Citations
723	Preparation and Characterization of K2CO3-Activated Kraft Lignin Carbon. 2015 , 11,		5
722	Waste Composite Sensor Designed by Cellulose and Activated Carbon as Ethylene Absorber. 2016 , 2016, 1-7		3
721	New Frontiers in the Catalytic Synthesis of Levulinic Acid: From Sugars to Raw and Waste Biomass as Starting Feedstock. 2016 , 6, 196		136
720	Preparation and Characterization of High Surface Area Activated Carbon Fibers from Lignin. 2016 , 8,		24
719	Biomass-Derived Electrode for Next Generation Lithium-Ion Capacitors. 2016 , 9, 849-54		69
718	Effects of hydrothermal treatment temperature and residence time on characteristics and combustion behaviors of green waste. 2016 , 104, 678-686		61
717	Catalytic hydrogenation of corn stalk into polyol over NiW/MCM-41 catalyst. <i>Chemical Engineering Journal</i> , 2016 , 299, 386-392	14.7	19
716	Strategies for development and implementation of bio-based materials as effective renewable resources of energy: A comprehensive review on adsorbent technology. 2016 , 62, 654-664		40
715	Research progress in Na-ion capacitors. 2016 , 4, 7538-7548		121
714	Microwave-assisted hydrothermal carbonization of rapeseed husk: A strategy for improving its solid fuel properties. 2016 , 149, 305-312		45
713	Palmyra tuber peel derived activated carbon and anatase TiO2 nanotube based nanocomposites with enhanced photocatalytic performance in rhodamine 6G dye degradation. 2016 , 104, 346-357		27
712	Novel synthesis of carbon spheres supported nanoscale zero-valent iron for removal of metronidazole. 2016 , 390, 50-59		62
711	Preparation of activated carbon from doum stone and its application on adsorption of Co and Eu: Equilibrium, kinetic and thermodynamic studies. 2016 , 164, 113-124		45
710	Activated Carbons Prepared through H PO -Assisted Hydrothermal Carbonisation from Biomass Wastes: Porous Texture and Electrochemical Performance. 2016 , 81, 1349-1359		36
709	Scalable preparation of monodisperse micron-sized carbon microspheres and their application in anion-exchange chromatography. 2016 , 6, 88633-88639		3
708	Hierarchically porous carbons with graphene incorporation for efficient supercapacitors. 2016 , 213, 382	2-392	33
707	Hydrothermal treatment of biomass for energy and chemicals. 2016 , 116, 1312-1322		45

(2017-2016)

706	High performance of electrochemical lithium storage batteries: ZnO-based nanomaterials for lithium-ion and lithium-sulfur batteries. 2016 , 8, 18578-18595	110
705	Morphology evolution, formation mechanism and adsorption properties of hydrochars prepared by hydrothermal carbonization of corn stalk. 2016 , 6, 107829-107835	33
704	Simple Synthesis of Fluorinated Graphene: Thermal Exfoliation of Fluorographite. 2016 , 22, 17696-17703	20
703	Activated carbon from nitrogen rich watermelon rind for high-performance supercapacitors. 2016 , 6, 59333-59342	57
702	Biomass-derived nanostructured porous carbons for lithium-sulfur batteries. 2016 , 59, 389-407	83
701	Green processing of plant biomass into mesoporous carbon as catalyst support. <i>Chemical Engineering Journal</i> , 2016 , 295, 301-308	41
700	Removal of anionic pollutants from liquids by biomass materials: A review. 2016 , 215, 565-595	95
699	High energy asymmetric supercapacitor with 1D@2D structured NiCo2O4@Co3O4 and jackfruit derived high surface area porous carbon. 2016 , 306, 248-257	122
698	Hydrothermal Carbonization (HTC) and Pelletization of Two Arid Land Plants Bagasse for Energy Densification. 2016 , 4, 1106-1114	40
697	Carbon-Based Functional Materials Derived from Waste for Water Remediation and Energy Storage. 2017 , 29, 1605361	221
696	Activated carbon with hierarchical microthesoporous structure obtained from rice husk and its application for lithium fulfur batteries. 2017 , 7, 4144-4151	51
695	Li-ion vs. Na-ion capacitors: A performance evaluation with coconut shell derived mesoporous carbon and natural plant based hard carbon. <i>Chemical Engineering Journal</i> , 2017 , 316, 506-513	64
694	Hollow activated carbon with unique through-pore structure derived from reed straw for high-performance supercapacitors. 2017 , 193, 279-282	24
693	Highly mesoporous carbon from Teak wood sawdust as prospective electrode for the construction of high energy Li-ion capacitors. 2017 , 228, 131-138	56
692	Preparation and characterization of activated carbons from tobacco stem by chemical activation. 2017 , 67, 713-724	79
691	Preparation of binderless activated carbon monoliths from cocoa bean husk. 2017 , 243, 28-38	29
690	Activated carbon derived from spherical hydrochar functionalized with triethylenetetramine: synthesis, characterizations, and adsorption application. 2017 , 6,	15
689	Insight into adsorption mechanism of cationic dye onto agricultural residues-derived hydrochars: Negligible role of Interaction. 2017 , 34, 1708-1720	56

688	Green Polyelectrolyte-Functionalization of Carbonaceous Nanospheres and Its Application in Ion Chromatography. 2017 , 5, 112-118		4
687	High electrochemical performance of hierarchical porous activated carbon derived from lightweight cork (Quercus suber). 2017 , 52, 10600-10613		27
686	Biomass-derived carbon electrode materials for supercapacitors. 2017 , 1, 1265-1281		198
685	A pilot-scale study of wet torrefaction treatment for upgrading palm oil empty fruit bunches as clean solid fuel. 2017 , 65, 012003		
684	Effects of additives on sucrose-derived activated carbon microspheres synthesized by hydrothermal carbonization. 2017 , 52, 10787-10799		27
683	Convenient preparation of nitrogen-doped activated carbon from Macadamia nutshell and its application in supercapacitor. 2017 , 28, 13880-13887		21
682	Integrated processes of anaerobic digestion and pyrolysis for higher bioenergy recovery from lignocellulosic biomass: A brief review. 2017 , 77, 1272-1287		89
681	The Formation of Char, Gaseous and Liquid Products during Lignin Carbonization in Super- and Subcritical Solvents. 2017 , 2, 2828-2831		3
68o	Heteroatoms doped porous carbon derived from hydrothermally treated sewage sludge: Structural characterization and environmental application. 2017 , 197, 151-158		30
679	Study on biomass derived activated carbons for adsorptive heat pump application. 2017 , 110, 7-19		67
678	Magnetic carbon composites with a hierarchical structure for adsorption of tetracycline, prepared from sugarcane bagasse via hydrothermal carbonization coupled with simple heat treatment process. 2017 , 226, 164-172		96
677	Hydrothermal carbonization of dried olive pomace: Energy potential and process performances. 2017 , 128, 281-290		49
676	Cellulose hydrolysis catalyzed by highly acidic lignin-derived carbonaceous catalyst synthesized via hydrothermal carbonization. 2017 , 24, 5327-5339		33
675	Bio-butanol sorption performance on novel porous-carbon adsorbents from corncob prepared via hydrothermal carbonization and post-pyrolysis method. 2017 , 7, 11753		12
674	Removal of Copper, Lead, Methylene Green 5, and Acid Red 1 by Saccharide-Derived Spherical Biochar Prepared at Low Calcination Temperatures: Adsorption Kinetics, Isotherms, and Thermodynamics. 2017 , 228, 1		19
673	Nano-CeO2/SiO2 as an efficient catalytic conversion of waste engine oil into liquid fuel. 2017 , 166, 1010-	1019	11
672	Nitrogen and oxygen-codoped carbon nanospheres for excellent specific capacitance and cyclic stability supercapacitor electrodes. <i>Chemical Engineering Journal</i> , 2017 , 330, 1166-1173	14.7	80
671	Charge storage at the nanoscale: understanding the trends from the molecular scale perspective. 2017 , 5, 21049-21076		39

(2017-2017)

670	Hydrothermal liquefaction of agricultural and forestry wastes: state-of-the-art review and future prospects. 2017 , 245, 1184-1193	147
669	High performance hybrid supercapacitor device based on cobalt manganese layered double hydroxide and activated carbon derived from cork (Quercus Suber). 2017 , 252, 41-54	39
668	Black aspergillus-derived highly porous carbon fibers for capacitive applications. 2017 , 28, 17592-17600	7
667	Photochemistry of Hydrochar: Reactive Oxygen Species Generation and Sulfadimidine Degradation. 2017 , 51, 11278-11287	121
666	Porous high specific surface area-activated carbon with co-doping N, S and P for high-performance supercapacitors. 2017 , 7, 43780-43788	27
665	Synthesis of copper/carbon support catalyst from Cattail flower by calcination with hydrothermal carbonization. 2017 , 4, 6153-6158	2
664	Synthesis and characterization of novel activated carbon from Medlar seed for chromium removal: Experimental analysis and modeling with artificial neural network and support vector regression. 2017 , 3, 236-248	18
663	A highly active biomass-derived electrode for all vanadium redox flow batteries. 2017 , 248, 197-205	35
662	Simultaneous phosphorus and nitrogen recovery from anaerobically digested sludge using a hybrid system coupling hydrothermal pretreatment with MAP precipitation. 2017 , 243, 634-640	52
661	Efficient decolorization of citric acid fermentation broth using carbon materials prepared from phosphoric acid activation of hydrothermally treated corncob. 2017 , 7, 37112-37121	14
660	Persulfate oxidation assisted hydrochar production from Platanus Orientalis Leaves: Physiochemical and combustion characteristics. 2017 , 244, 517-524	15
659	Leaching of niobium- and REE-bearing iron ores: Significant reduction of H2SO4 consumption using SO2 and activated carbon. 2017 , 189, 1-10	11
658	A novel hierarchical porous nitrogen-doped carbon derived from bamboo shoot for high performance supercapacitor. 2017 , 7, 7362	69
657	Preparation of mono-dispersed carbonaceous spheres via a hydrothermal process. 2017 , 28, 2648-2657	20
656	Ultrahigh-surface-area hierarchical porous carbon from chitosan: acetic acid mediated efficient synthesis and its application in superior supercapacitors. 2017 , 5, 24775-24781	112
655	Naturally three-dimensional laminated porous carbon network structured short nano-chains bridging nanospheres for energy storage. 2017 , 5, 15759-15770	59
654	Removal of chromium (VI) by a self-regenerating and metal free g-C3N4/graphene hydrogel system via the synergy of adsorption and photo-catalysis under visible light. 2017 , 219, 53-62	163
653	Enhanced electrochemical performance of straw-based porous carbon fibers for supercapacitor. 2017 , 21, 3449-3458	13

652	Methane potentials of wastewater generated from hydrothermal liquefaction of rice straw: focusing on the wastewater characteristics and microbial community compositions. 2017 , 10, 140		52
651	Effects of wet torrefaction on the physicochemical properties and pyrolysis product properties of rice husk. 2017 , 141, 403-409		61
650	Lignin-based resin production from lignocellulosic biomass combining acidic saccharification and acetone-water treatment. <i>Chemical Engineering Journal</i> , 2017 , 308, 754-759	14.7	22
649	Fish gill-derived activated carbon for supercapacitor application. 2017 , 694, 636-642		54
648	Chemical activation of hickory and peanut hull hydrochars for removal of lead and methylene blue from aqueous solutions. 2017 , 29, 197-204		40
647	Preparation of Husk-Based Porous Carbon-TiO2 Composites for Adsorption-Photocatalytic Degradation of Toluene in Aqueous Solution. 2017 , 274, 012093		1
646	Preparation and Characterisation of Optimised Hydrochar from Hydrothermal Carbonisation of Macadamia Shells. 2017 , 13,		
645	Persistent free radicals in carbon-based materials on transformation of refractory organic contaminants (ROCs) in water: A critical review. 2018 , 137, 130-143		158
644	Co-hydrothermal treatment of fallen leaves with iron sludge to prepare magnetic iron product and solid fuel. 2018 , 257, 229-237		29
643	Degradation of lincomycin in aqueous solution with hydrothermal treatment: Kinetics, pathway, and toxicity evaluation. <i>Chemical Engineering Journal</i> , 2018 , 343, 138-145	14.7	18
642	High porous bio-nanocarbons prepared by carbonization and NaOH activation of polysaccharides for electrode material of EDLC. 2018 , 118, 137-143		13
641	Lignin-derived heteroatom-doped porous carbons for supercapacitor and CO2 capture applications. 2018 , 42, 2686-2700		59
640	A review of the hydrothermal carbonization of biomass waste for hydrochar formation: Process conditions, fundamentals, and physicochemical properties. 2018 , 90, 223-247		467
639	Ferric ion pair mediated biomass redox flow fuel cell and related chemical reaction kinetics study. <i>Chemical Engineering Journal</i> , 2018 , 348, 476-484	14.7	16
638	Removal of methylene blue from aqueous solution by modified bamboo hydrochar. 2018 , 157, 300-306		95
637	Wet torrefaction of biomass for high quality solid fuel production: A review. 2018 , 91, 259-271		89
636	Utilization of Municipal Organic Solid Waste for Production of Activated Carbon in Saudi Arabia. 2018 , 43, 3585-3599		3
635	Multipurpose Use of a Corncob Biomass for the Production of Polysaccharides and the Fabrication of a Biosorbent. 2018 , 6, 3830-3839		23

(2018-2018)

634	Sustainable activated carbons from dead ginkgo leaves for supercapacitor electrode active materials. 2018 , 181, 36-45	128
633	Adsorption of 2,4-dichlorophenoxyacetic acid and 4-chloro-2-metylphenoxyacetic acid onto activated carbons derived from various lignocellulosic materials. 2018 , 53, 290-297	21
632	Microstructure and properties of C/CI/rC composites prepared by hydrothermal deposition combined with carbothermal reduction. 2018 , 741, 323-330	17
631	Adsorption of Methyl Blue onto uniform carbonaceous spheres prepared via an anionic polyacrylamide-assisted hydrothermal route. 2018 , 208, 8-18	8
630	Elimination of micropollutants by activated carbon produced from fibers taken from wastewater screenings using hydrothermal carbonization. 2018 , 211, 278-286	28
629	Towards a better understanding on mercury adsorption by magnetic bio-adsorbents with FeO from pinewood sawdust derived hydrochar: Influence of atmosphere in heat treatment. 2018 , 256, 269-276	39
628	Recent advances in applications of activated carbon from biowaste for wastewater treatment: A short review. 2018 , 175, 361-375	282
627	Porosity enhancement of spherical activated carbon: Influence and optimization of hydrothermal synthesis conditions using response surface methodology. 2018 , 6, 991-999	29
626	Biomass-derived carbon materials with structural diversities and their applications in energy storage. 2018 , 61, 133-158	130
625	Nitrogen-doped porous carbon from ionic liquid@Al-metal-organic framework: A prominent adsorbent for purification of both aqueous and non-aqueous solutions. <i>Chemical Engineering</i> 14.7 <i>Journal</i> , 2018 , 338, 107-116	49
624	Recent advancement and prospective of heterogeneous carbonaceous catalysts in chemical and enzymatic transformation of biodiesel. 2018 , 167, 176-202	74
623	Method for promoting in-situ hydrochar porosity in hydrothermal carbonization of almond shells with air activation. 2018 , 138, 187-192	17
622	Symbiotic relationship between hydrothermal carbonization technology and anaerobic digestion for food waste in China. 2018 , 260, 404-412	42
621	Manufacturing Carbon Material by Carbonization of Cellulosic Palm Oil Waste for Supercapacitor Material. 2018 , 156, 03018	7
620	Production of crude bio-oil and biochar from hydrothermal conversion of jujube stones with metal carbonates. 2018 , 9, 613-623	3
619	Hydrothermal Carbonization of Seaweed For Advanced Biochar Production. 2018 , 156, 05012	5
618	Synthesis of magnetic carbon nanocomposites by hydrothermal carbonization and pyrolysis. 2018 , 16, 821-844	48
617	Dechlorination of PVC wastes by hydrothermal treatment using alkaline additives. 2018 , 39, 977-985	25

616	A review on the current status of various hydrothermal technologies on biomass feedstock. 2018 , 81, 1742-1770	255
615	Investigation on mechanism of phosphate removal on carbonized sludge adsorbent. 2018 , 64, 335-344	29
614	Preparation and characterization of distillers@rain based activated carbon as low cost methylene blue adsorbent: Mass transfer and equilibrium modeling. 2018 , 29, 27-35	36
613	20 renewable biowastes derived carbon materials as green counter electrodes for dye-sensitized solar cells. 2018 , 204, 294-304	26
612	Prospects of banana waste utilization in wastewater treatment: A review. 2018 , 206, 330-348	115
611	The severity factor as a useful tool for producing hydrochars and derived carbon materials. 2018 , 25, 1497-1507	10
610	The effects of temperature and color value on hydrochars' properties in hydrothermal carbonization. 2018 , 249, 574-581	47
609	Effect of hydrothermal carbonization on migration and environmental risk of heavy metals in sewage sludge during pyrolysis. 2018 , 247, 282-290	105
608	Coordination polymer-derived cobalt nanoparticle-embedded carbon nanocomposite as a magnetic multi-functional catalyst for energy generation and biomass conversion. <i>Chemical Engineering</i> 14.7 <i>Journal</i> , 2018 , 332, 717-726	33
607	Microalgae as feedstock for biodiesel production under ultrasound treatment - A review. 2018 , 250, 877-887	70
606	Acidic hydrothermal treatment: Characteristics of organic, nitrogen and phosphorus releasing and process optimization on lincomycin removal from lincomycin mycelial residues. <i>Chemical Engineering Journal</i> , 2018 , 336, 436-444	30
605	Preparation of walnut shell-based activated carbon and its properties for simultaneous removal of H2S, COS and CS2 from yellow phosphorus tail gas at low temperature. 2018 , 44, 1209-1233	8
604	Sustainable coffee-based CO2 adsorbents: toward a greener production via hydrothermal carbonization. 2018 , 8, 309-323	10
603	Saccharide-derived microporous spherical biochar prepared from hydrothermal carbonization and different pyrolysis temperatures: synthesis, characterization, and application in water treatment. 2018 , 39, 2747-2760	28
602	Effect of hydro-thermal carbonisation on the structural properties of bulk-type wood (Chamaecyparis obtusa) upon high-temperature heat treatment. 2018 , 25, 603-609	1
601	The synthesis and characterization of high purity mixed microporous/mesoporous activated carbon from rice husk. 2018 , 56, 684-688	2
600	Characterization of Natural Zeolite and Chicken Manure Derived Biochar for Carbon Dioxide Adsorption in Biogas. 2018 , 43, 01008	1
599	Coconut-based activated carbon fibers for efficient adsorption of various organic dyes 2018 , 8, 42280-42291	65

598	Nanoporous Carbon Synthesis: An Old Story with Exciting New Chapters. 2018,	10
597	Hydrothermal Conversion of Cd-Enriched Rice Straw and Cu-Enriched Elsholtzia splendens with the Aims of Harmless Treatment and Resource Reuse. 2018 , 57, 15683-15689	10
596	A Review on the Synthesis and Characterization of Biomass-Derived Carbons for Adsorption of Emerging Contaminants from Water. 2018 , 4, 63	46
595	Hydrothermal Carbonization Brewer Spent Grains with the Focus on Improving the Degradation of the Feedstock. 2018 , 11, 3226	30
594	The Effects of Methane Storage Capacity Using Upgraded Activated Carbon by KOH. 2018 , 8, 1596	16
593	Preparation of chemically-activated high surface area carbon from waste vinasse and its efficiency as adsorbent material. 2018 , 272, 189-197	28
592	Amperometric sensing of ascorbic acid by using a glassy carbon electrode modified with mesoporous carbon nanorods. 2018 , 185, 474	8
591	Effects of pretreatment and FeCl3 preload of rice husk on synthesis of magnetic carbon composites by pyrolysis for supercapacitor application. 2018 , 135, 22-31	25
590	Solvent-Free Mechanochemical Preparation of Hierarchically Porous Carbon for Supercapacitor and Oxygen Reduction Reaction. 2018 , 24, 18097-18105	29
589	Removal of Pb2+ in Wastewater via Adsorption onto an Activated Carbon Produced from Winemaking Waste. 2018 , 8, 697	29
588	Effect of silica removal and steam activation on extra-porous activated carbons from rice husks for methane storage. 2018 , 43, 22377-22384	19
587	Self-Templated Synthesis of Hierarchically Porous N-Doped Carbon Derived from Biomass for Supercapacitors. 2018 , 6, 13932-13939	41
586	<i>Investigation of the initiation temperature causing the self-heating of biomass in oxidative torrefaction</i> . 2018,	
585	Activated carbon nanoparticles from biowaste as new generation antimicrobial agents: A review. 2018 , 16, 306-321	33
584	Pickering emulsions stabilized by amphiphilic carbonaceous materials derived from wheat straw. 2018 , 558, 65-72	13
583	Electroless decoration of cellulose paper with nickel nanoparticles: A hybrid carbon fiber for supercapacitors. 2018 , 215, 157-162	13
582	Bean dregs-derived hierarchical porous carbons as metal-free catalysts for efficient dehydrogenation of propane to propylene. 2018 , 93, 3410-3417	8
581	Hydrothermal conversions of waste biomass: Assessment of kinetic models using liquid-phase electrical conductivity measurements. 2018 , 77, 586-592	9

580	Effect of oxidation processing on the preparation of post-hydrothermolysis acid from cotton stalk. 2018 , 263, 289-296	7
579	A combined strategy of acid-assisted polymerization and solid state activation to synthesize functionalized nanoporous activated biocarbons from biomass for CO2 capture. 2018 , 271, 23-32	31
578	Towards sustainable micro-pollutantsIremoval from wastewaters: caffeine solubility, self-diffusion and adsorption studies from aqueous solutions into hydrochars. 2018 , 116, 2129-2141	10
577	High surface area carbon materials derived from corn stalk core as electrode for supercapacitor. 2018 , 88, 18-22	39
576	Promising Carbon Matrix Derived from Willow Catkins for the Synthesis of SnO2/C Composites with Enhanced Electrical Performance for Li-Ion Batteries. 2018 , 13, 1850087	4
575	Hydrothermal Carbonization: Modeling, Final Properties Design and Applications: A Review. 2018 , 11, 216	96
574	Recent developments and consideration issues in solid adsorbents for CO2 capture from flue gas. 2018 , 26, 2303-2317	43
573	Hyperspectral near infrared imaging quantifies the heterogeneity of carbon materials. 2018 , 8, 10442	5
572	In-situ hydrothermal growth of Zn4Si2O7(OH)2[H2O anchored on 3D N, S-enriched carbon derived from plant biomass for flexible solid-state asymmetrical supercapacitors. <i>Chemical Engineering Journal</i> , 2018 , 352, 519-529	7 115
571	High-Surface-Area Mesoporous Activated Carbon from Hemp Bast Fiber Using Hydrothermal Processing. 2018 , 4, 38	6
570	A new approach to stabilize waste biomass for valorization using an oxidative process at 90 °C. 2018 , 13, e0196249	8
569	One-Step Green Hydrothermal Synthesis of Few-Layer Graphene Oxide from Humic Acid. 2018, 8,	20
568	Microwave Assisted Hydrothermal Carbonization and Solid State Postmodification of Carbonized Polypropylene. 2018 , 6, 11105-11114	23
567	Carbon Materials from Technical Lignins: Recent Advances. 2018 , 376, 33	25
566	Preparation and characterization of activated carbons from winemaking wastes and their adsorption of methylene blue. 2018 , 36, 1331-1351	26
565	Winery wastes as precursors of sustainable porous carbons for environmental applications. 2018 , 193, 614-624	29
564	Highly Uniform Carbon Sheets with Orientation-Adjustable Ordered Mesopores. 2018, 12, 5436-5444	68
563	Hierarchical porous carbon/selenium composites derived from abandoned paper cup as Li-Se battery cathodes. 2018 , 84, 15-22	2

562	Biomass-waste derived graphene quantum dots and their applications. 2018 , 140, 77-99	119
561	Recent advancements in supercapacitor technology. 2018 , 52, 441-473	729
560	Hierarchical porous carbon materials derived from waste lentinus edodes by a hybrid hydrothermal and molten salt process for supercapacitor applications. 2018 , 462, 862-871	76
559	From glucose-based carbohydrates to phenol-rich bio-oils integrated with syngas production via catalytic pyrolysis over an activated carbon catalyst. 2018 , 20, 3346-3358	55
558	Nanostructured porous carbons with high rate cycling and floating performance for supercapacitor application. 2018 , 8, 055208	13
557	Correlations between hydrochar properties and chemical constitution of orange peel waste during hydrothermal carbonization. 2018 , 265, 432-436	37
556	Jute-derived microporous/mesoporous carbon with ultra-high surface area using a chemical activation process. 2019 , 274, 251-256	38
555	Hydrothermal Carbonization-Derived Carbon from Waste Biomass as Renewable Pt Support for Fuel Cell Applications: Role of Carbon Activation. 2019 , 7, 1900344	12
554	N, S, P-Triple Doped Porous Carbon as an Improved Electrochemical Sensor for Metronidazole Determination. 2019 , 166, B1131-B1137	9
553	Effect of nitric acid oxidation on the surface of hydrochars to sorb methylene blue: An adsorption mechanism comparison. 2019 , 37, 607-622	27
552	Hydrothermal conversion of the hyperaccumulator Sedum alfredii Hance for efficiently recovering heavy metals and bio-oil. 2019 , 7, 103321	18
551	Green and sustainable zero-waste conversion of water hyacinth () into superior magnetic carbon composite adsorbents and supercapacitor electrodes 2019 , 9, 24248-24258	23
550	Preparation, characterization and cost analysis of activated biochar and hydrochar derived from agricultural waste: a comparative study. 2019 , 1, 1	15
549	ObtenB de hydrochar a partir de carbonizaB hidrotEmica de cascas do fruto de Magonia pubescens A. St. Hil. Sapindaceae: CaracterizaB e avaliaB em processo de adsorB. 2019 , 24,	
548	Water adsorption on nitrogen-doped carbons for adsorption heat pump/desiccant cooling: Experimental and density functional theory calculation studies. 2019 , 492, 776-784	6
547	Fast and efficient adsorptive removal of organic dyes and active pharmaceutical ingredient by microporous carbon: Effect of molecular size and charge. <i>Chemical Engineering Journal</i> , 2019 , 378, 1222 18 ^{1.7}	57
546	Advanced Hydrothermal Liquefaction of Biomass for Bio-Oil Production. 2019, 245-266	4
545	Biomass-Derived Carbon: A Value-Added Journey Towards Constructing High-Energy Supercapacitors in an Asymmetric Fashion. 2019 , 12, 4353-4382	32

544	Nitrogen-doped porous carbon derived from ginkgo leaves with remarkable supercapacitance performance. 2019 , 98, 107475	21
543	Effectiveness of synthesized aluminum and iron based inorganic polymer coagulants for pulping wastewater treatment. 2019 , 7, 103204	11
542	Porous carbonaceous composite derived from Mg(OH)2 pre-filled PAN based membrane for supercapacitor and dye adsorption application. 2019 , 277, 493-501	10
541	Facile preparation and properties of porous carbon from chlorinated polymer with high chlorine content. 2019 , 579, 123628	3
540	Glucose-based carbon materials as supports for the efficient catalytic transformation of cellulose directly to ethylene glycol. 2019 , 26, 7337-7353	10
539	Microwave-assisted hydrothermal carbonization of corn stalk for solid biofuel production: Optimization of process parameters and characterization of hydrochar. 2019 , 186, 115795	61
538	Ultrafast preparation of saccharide-derived carbon microspheres with excellent dispersibility via ammonium persulfate-assisted hydrothermal carbonization. 2019 , 7, 18840-18845	24
537	Highly graphitized and N, O co-doped porous carbon derived from leaves of viburnum sargenti with outstanding electrochemical performance for effective supercapacitors. 2019 , 580, 123721	7
536	Hydrothermal carbonization of cellulose and xylan into hydrochars and application on glucose isomerization. 2019 , 237, 117831	41
535	Simultaneous activation and N-doping of hydrothermal carbons by NaNH2: An effective approach to CO2 adsorbents. 2019 , 33, 405-412	15
534	Nano Carbon Produced by Advanced Mild Hydrothermal Process of Oil Palm Biomass for Supercapacitor Material. 2019 , 543, 012031	5
533	Carbohydrates-rich corncobs supported metal-organic frameworks as versatile biosorbents for dye removal and microbial inactivation. 2019 , 222, 115042	57
532	Porous Carbons Derived from Collagen-Enriched Biomass: Tailored Design, Synthesis, and Application in Electrochemical Energy Storage and Conversion. 2019 , 29, 1905095	60
531	Direct Visualization and Semi-Quantitative Analysis of Payload Loading in the Case of Gold Nanocages. 2019 , 131, 17835-17838	
530	Hydrochar-derived fuels from waste walnut shell through hydrothermal carbonization: characterization and effect of processing parameters. 2019 , 11, 1443	16
529	Achieving high-energy-density and ultra-stable zinc-ion hybrid supercapacitors by engineering hierarchical porous carbon architecture. 2019 , 327, 134999	61
528	Electroactive Biochar for Large-Scale Environmental Applications of Microbial Electrochemistry. 2019 , 7, 18198-18212	25
527	Hydrothermal carbonization of various lignocellulosics: Fuel characteristics of hydrochars and surface characteristics of activated hydrochars. 2019 , 100, 259-268	36

526	Measurement of SSC in processing tomatoes (Lycopersicon esculentum Mill.) by applying Vis-NIR hyperspectral transmittance imaging and multi-parameter compensation models. 2019 , 42, e13100	13
525	CO2 adsorption in hydrochar produced from waste biomass. 2019 , 1, 1	5
524	Hierarchically Porous Carbon Derived from Neolamarckia cadamba for Electrochemical Capacitance and Hydrogen Storage. 2019 , 7, 15385-15393	22
523	Hydrothermal pre-treatment, an efficient tool to improve activated carbon performances. 2019 , 140, 111717	21
522	Hydrothermal carbonization of lignocellulosic biomass for carbon rich material preparation: A review. 2019 , 130, 105384	103
521	Influence of ammonium salts and temperature on the yield, morphology and chemical structure of hydrothermally carbonized saccharides. 2019 , 1, 1	10
520	Biomass-Derived Carbon Materials as Prospective Electrodes for High-Energy Lithium- and Sodium-Ion Capacitors. 2019 , 14, 936-951	42
519	Biomass-Derived Carbonaceous Materials: Recent Progress in Synthetic Approaches, Advantages, and Applications. 2019 , 7, 4564-4585	111
518	New and Advanced Porous Carbon Materials in Fine Chemical Synthesis. Emerging Precursors of Porous Carbons. 2019 , 9, 133	34
517	A critical review of clay-based composites with enhanced adsorption performance for metal and organic pollutants. 2019 , 369, 780-796	166
516	Polyaniline/carbon nanotube coreBhell hybrid and redox active electrolyte for high-performance flexible supercapacitor. 2019 , 30, 4427-4436	16
515	Renewable phenol production from lignin with acid pretreatment and ex-situ catalytic pyrolysis. 2019 , 231, 331-340	34
514	Porous Layered Carbon with Interconnected Pore Structure Derived from Reed Membranes for Supercapacitors. 2019 , 7, 10742-10750	33
513	Carbon-Support-Based Heterogeneous Nanocatalysts: Synthesis and Applications in Organic Reactions. 2019 , 8, 1263-1305	39
512	Valorization of coal treatment residues as a host matrix of nanosized nickel, copper and zinc ferrites. 2019 , 127, 691-703	1
511	Polymer Supported Carbon for Safe and Effective Remediation of PFOA- and PFOS-Contaminated Water. 2019 , 7, 11044-11049	27
510	Development of renewable adsorbent from cigarettes for lead removal from water. 2019 , 7, 103200	16
509	Optimization of Benzodiazepine Drugs Removal from Water by Heterogeneous Photocatalysis Using TiO2/Activated Carbon Composite. 2019 , 230, 1	13

508	Glucose-derived carbon materials with tailored properties as electrocatalysts for the oxygen reduction reaction. 2019 , 10, 1089-1102	21
507	Hydrothermal carbonization of yard waste for solid bio-fuel production: Study on combustion kinetic, energy properties, grindability and flowability of hydrochar. 2019 , 91, 108-119	48
506	Hydrothermal carbonization of sewage sludge: A critical analysis of process severity, hydrochar properties and environmental implications. 2019 , 93, 1-13	60
505	Metal-organic frameworks and their derivatives for metal-air batteries. 2019 , 23, 757-771	60
504	Carbon Adsorbents from Sugarcane Bagasse Prepared through Hydrothermal Carbonization for Adsorption of Methylene Blue: Effect of Heat Treatment on Adsorption Efficiency. 2019 , 515, 012003	9
503	Blue rose-inspired approach towards highly graphitic carbons for efficient electrocatalytic water splitting. 2019 , 150, 21-26	17
502	Activated carbon with hierarchical porosity derived from biomass for lithium sulfur batteries. 2019 , 57, 182-188	3
501	Cost-effective porous carbon materials synthesized by carbonizing rice husk and K2CO3 activation and their application for lithium-sulfur batteries. 2019 , 4, 223-229	9
500	A green, rapid, scalable and versatile hydrothermal strategy to fabricate monodisperse carbon spheres with tunable micrometer size and hierarchical porosity. <i>Chemical Engineering Journal</i> , 2019 , 372, 1164-1173	20
499	Converting eggplant biomass into multifunctional porous carbon electrodes for self-powered capacitive deionization. 2019 , 5, 1054-1063	10
498	NixZn1-xFe2O4 modified activated carbons from industrial waste as catalysts for hydrogen production. 2019 , 285, 96-104	7
497	Low-Temperature Hydrothermal Carbonization of Fresh Pig Manure: Effects of Temperature on Characteristics of Hydrochars. 2019 , 145, 04019029	14
496	Nanoporous Carbons with Tuned Porosity. 2019 , 91-135	2
495	A new approach to obtain mesoporous-activated carbon via hydrothermal carbonization of Brazilian Cerrado biomass combined with physical activation for bisphenol-A removal. 2019 , 206, 1498-1514	11
494	Hierarchical porous biomass carbon derived from cypress coats for high energy supercapacitors. 2019 , 30, 7324-7336	12
493	Hydrothermal carbonization of Chinese fan palm. 2019 , 282, 28-36	32
492	Sulphur-doped banana peel-derived activated carbon as electrode materials for supercapacitors. 2019 , 15, 181	6
491	Char properties and pollutant adsorption capability of oil palm shell using hydrothermal process. 2019 , 9, 681-688	6

490	Hard carbons derived from waste tea bag powder as anodes for sodium ion battery. 2019 , 34, 515-524	14
489	The physicochemical investigation of hydrothermally reduced textile waste and application within carbon-based electrodes 2019 , 9, 11239-11252	8
488	Production of Materials from Sustainable Biomass Resources. 2019,	2
487	Carbonaceous Catalysts from Biomass. 2019 , 185-231	1
486	Waste-cellulose-derived porous carbon adsorbents for methyl orange removal. <i>Chemical Engineering Journal</i> , 2019 , 371, 55-63	104
485	All-Carbon Electrode Directly Derived from Wax Gourd for Supercapacitor. 2019 , 216, 1800798	4
484	Green chemical engineering in China. 2019 , 35, 995-1077	1
483	Activated carbon from citric acid catalyzed hydrothermal carbonization and chemical activation of salacca peel as potential electrode for lithium ion capacitor cathode. 2019 , 25, 3915-3925	21
482	High-Performance Organic Electric Double-Layer Capacitors Using Allergen-Derived Activated Carbons. 2019 , 166, A3950-A3958	7
481	Activated Carbons from Hydrochars Prepared in Milk. 2019 , 9, 16956	4
480	Study of the modification mechanism of heavy metal ions adsorbed by biomass-activated carbon doped with a solid nitrogen source 2019 , 9, 37440-37449	7
480 479		7
	doped with a solid nitrogen source 2019 , 9, 37440-37449 Synthesis of flowerlike carbon nanosheets from hydrothermally carbonized glucose: an	7 2 21
479	Synthesis of flowerlike carbon nanosheets from hydrothermally carbonized glucose: an self-generating template strategy 2019, 9, 37355-37364 Self-Nitrogen-Doped Porous Biocarbon from Watermelon Rind: A High-Performance Supercapacitor Electrode and Its Improved Electrochemical Performance Using Redox Additive	2
479 478	Synthesis of flowerlike carbon nanosheets from hydrothermally carbonized glucose: an self-generating template strategy 2019, 9, 37355-37364 Self-Nitrogen-Doped Porous Biocarbon from Watermelon Rind: A High-Performance Supercapacitor Electrode and Its Improved Electrochemical Performance Using Redox Additive Electrolyte. 2019, 7, 1800628 Fabrication of hydrochar based on food waste (FWHTC) and its application in aqueous solution rare	2 21
479 478 477	Synthesis of flowerlike carbon nanosheets from hydrothermally carbonized glucose: an self-generating template strategy 2019, 9, 37355-37364 Self-Nitrogen-Doped Porous Biocarbon from Watermelon Rind: A High-Performance Supercapacitor Electrode and Its Improved Electrochemical Performance Using Redox Additive Electrolyte. 2019, 7, 1800628 Fabrication of hydrochar based on food waste (FWHTC) and its application in aqueous solution rare earth ions adsorptive removal: Process, mechanisms and disposal methodology. 2019, 212, 1423-1433 A review of the current knowledge and challenges of hydrothermal carbonization for biomass	2 21 25
479 478 477 476	Synthesis of flowerlike carbon nanosheets from hydrothermally carbonized glucose: an self-generating template strategy 2019, 9, 37355-37364 Self-Nitrogen-Doped Porous Biocarbon from Watermelon Rind: A High-Performance Supercapacitor Electrode and Its Improved Electrochemical Performance Using Redox Additive Electrolyte. 2019, 7, 1800628 Fabrication of hydrochar based on food waste (FWHTC) and its application in aqueous solution rare earth ions adsorptive removal: Process, mechanisms and disposal methodology. 2019, 212, 1423-1433 A review of the current knowledge and challenges of hydrothermal carbonization for biomass conversion. 2019, 92, 1779-1799 Review of the Selected Carbon-Based Materials for Symmetric Supercapacitor Application. 2019,	2 21 25 133

472	Heteroatom-Doped Carbon Materials for Hydrazine Oxidation. 2019, 31, e1804394	47
471	Hydrothermal Treatment of E-Waste Plastics for Tertiary Recycling: Product Slate and Decomposition Mechanisms. 2019 , 7, 1464-1473	27
470	Protein hydrogel networks: A unique approach to heteroatom self-doped hierarchically porous carbon structures as an efficient ORR electrocatalyst in both basic and acidic conditions. 2019 , 246, 89-99	68
469	Heteroatom-Doped Sheet-Like and Hierarchical Porous Carbon Based on Natural Biomass Small Molecule Peach Gum for High-Performance Supercapacitors. 2019 , 7, 3389-3403	80
468	Structural and electrochemical properties of babassu coconut mesocarp-generated activated carbon and few-layer graphene. 2019 , 145, 175-186	25
467	Insights into biochar and hydrochar production and applications: A review. 2019 , 171, 581-598	241
466	Biomass-derived porous carbon materials for advanced lithium sulfur batteries. 2019 , 34, 171-185	69
465	Chemically activated high grade nanoporous carbons from low density renewable biomass (Agave sisalana) for the removal of pharmaceuticals. 2019 , 536, 681-693	26
464	Synthesis and Zn(II) modification of hierarchical porous carbon materials from petroleum pitch for effective adsorption of organic dyes. 2019 , 216, 379-386	25
463	Fabrication of bean dreg-derived carbon with high adsorption for methylene blue: Effect of hydrothermal pretreatment and pyrolysis process. 2019 , 274, 525-532	28
462	Fabrication of advance magnetic carbon nano-materials and their potential applications: A review. 2019 , 7, 102812	43
461	A highly pyridinic N-doped carbon from macroalgae with multifunctional use toward CO2 capture and electrochemical applications. 2019 , 54, 1606-1615	17
460	Hydrothermal conversion of sewage sludge: Focusing on the characterization of liquid products and their methane yields. <i>Chemical Engineering Journal</i> , 2019 , 357, 367-375	88
459	Carbon Dioxide Capture Using Amine Functionalized Hydrothermal Carbons from Technical Lignin. 2019 , 10, 2725-2731	4
458	Synthesis of High Grade Activated Carbons From Waste Biomass. 2020 , 584-595	3
457	Biomass-derived nanoporous carbons as electrocatalysts for oxygen reduction reaction. 2020 , 357, 269-278	9
456	Utilization of The Indonesian Spent Tea Leaves as Promising Porous Hard Carbon Precursors for Anode Materials in Sodium Ion Batteries. 2020 , 11, 3121-3131	9
455	Characteristics of Hydrochars Prepared from Cassava Residues Using Different Aqueous Media. 2020 , 11, 2857-2862	3

454	Biomass-Based Photocatalysts for Environmental Applications. 2020 , 55-86	3
453	Predictions of energy recovery from hydrochar generated from the hydrothermal carbonization of organic wastes. 2020 , 145, 1883-1889	18
452	Excellent performance of porous carbon from urea-assisted hydrochar of orange peel for toluene and iodine adsorption. <i>Chemical Engineering Journal</i> , 2020 , 382, 122997	49
451	Heteroatoms in situ-doped hierarchical porous hollow-activated carbons for high-performance supercapacitor. 2020 , 30, 331-344	7
450	Saccharum spontaneum, a precursor of sustainable activated carbon: Synthesis, characterization and optimization of process parameters and its suitability for supercapacitor applications. 2020 , 101, 107598	6
449	Biomass-based carbon electrode materials for capacitive deionization: a review. 2020 , 10, 1327-1356	14
448	Novel catalyst from two-phase olive mill wastes using hydrothermal carbonisation for the removal of methylene blue by heterogeneous Fenton-like oxidation. 2020 , 100, 854-872	3
447	Synthesis of carbon nanostructures from corn stalk using mechano-thermal method. 2020 , 1199, 126976	4
446	Flocculation of Chlorella vulgaris by shell waste-derived bioflocculants for biodiesel production: Process optimization, characterization and kinetic studies. 2020 , 702, 134995	34
445	Larch-derived hierarchical nitrogen-doped carbon with echinus-like architecture for supercapacitor applications. 2020 , 74, 529-538	1
444	Facile synthesis of high nitrogen-doped content, mesopore-dominated biomass-derived hierarchical porous graphitic carbon for high performance supercapacitors. 2020 , 334, 135615	33
443	Challenges and alternatives for the adequacy of hydrothermal carbonization of lignocellulosic biomass in cleaner production systems: A review. 2020 , 252, 119899	54
442	Carbonization: A feasible route for reutilization of plastic wastes. 2020 , 710, 136250	53
441	Electrode materials derived from plastic wastes and other industrial wastes for supercapacitors. 2020 , 31, 1474-1489	20
440	Preparation and characterization of nano silver immobilized hydrochar derived from hydrothermal carbonization of tobacco stem. 2020 , 7, 015611	0
439	Technologies for wastewater sludge utilization and energy production: Hydrothermal carbonization of lignocellulosic biomass and sewage sludge. 2020 , 133-153	1
438	Sewage sludge-derived hydrochar that inhibits ammonia volatilization, improves soil nitrogen retention and rice nitrogen utilization. 2020 , 245, 125558	33
437	Nitrogen release of hydrothermal treatment of antibiotic fermentation residue and preparation of struvite from hydrolysate. 2020 , 713, 135174	14

436	Memristive synapses with high reproducibility for flexible neuromorphic networks based on biological nanocomposites. 2020 , 12, 720-730	29
435	Hydrothermal carbonization synthesis of cassava slag biochar with excellent adsorption performance for Rhodamine B. 2020 , 251, 119717	58
434	Areca nutderived porous carbons for supercapacitor and CO2 capture applications. 2020, 26, 1419-1429	4
433	Supermagnetic Sugarcane Bagasse Hydrochar for Enhanced Osteoconduction in Human Adipose Tissue-Derived Mesenchymal Stem Cells. 2020 , 10,	2
432	Adsorption of endocrine disrupting compounds and other emerging contaminants using lignocellulosic biomass-derived porous carbons: A review. 2020 , 38, 101380	23
431	A new double layer super-capacitor made by free-standing activated carbon membranes and highly concentrated potassium acetate solutions. 2020 , 364, 137323	3
430	Process Waters from Hydrothermal Carbonization of Sludge: Characteristics and Possible Valorization Pathways. 2020 , 17,	15
429	Fabrication of layered double hydroxide/carbon nanomaterial for heavy metals removal. 2020 , 199, 105867	7
428	Pre-Treatment Methods for Regeneration of Spent Activated Carbon. 2020 , 25,	3
427	Magnetic modification of coffee husk hydrochar for adsorptive removal of methylene blue: Isotherms, kinetics and thermodynamic studies. 2020 , 2, 205-212	7
426	Crosslinked Polymer Hydrogels. 2020 , 91-116	
425	Onion-derived activated carbons with enhanced surface area for improved hydrogen storage and electrochemical energy application 2020 , 10, 26928-26936	5
424	Selectable Microporous Carbons Derived from Poplar Wood by Three Preparation Routes for CO Capture. 2020 , 5, 17450-17462	8
423	Phosphorus-doped carbon/carbon nanotube hybrids as high-performance electrodes for supercapacitors. 2020 , 354, 136713	4
422	Machine learning exploration of the critical factors for CO2 adsorption capacity on porous carbon materials at different pressures. 2020 , 273, 122915	32
421	Fabrication and Characterization of Activated Carbon Fibers from Oil Palm Trunk. 2020 , 12,	3
420	A critical review on the biochar production techniques, characterization, stability and applications for circular bioeconomy. 2020 , 28, e00570	91
419	Novel oxone treated hydrochar for the removal of Pb(II) and methylene blue (MB) dye from aqueous solutions. 2020 , 260, 127683	32

(2020-2020)

418	Production of an iron-coated adsorbent for arsenic removal by hydrothermal carbonization of olive pomace: Effect of the feedwater pH. 2020 , 273, 111164	14
417	Record-high capture of volatile benzene and toluene enabled by activator implant-optimized banana peel-derived engineering carbonaceous adsorbents. 2020 , 143, 105774	14
416	Recent advances in the development and applications of biomass-derived carbons with uniform porosity. 2020 , 8, 18464-18491	27
415	Engineering Adsorption Case for Efficient Capture of VOCs Using Biomass-based Corncobs via a Carbonized Strategy. 2020 , 5, 9162-9169	8
414	Fe oxides-biochar composites produced by hydrothermal carbonization and pyrolysis of biomass waste. 2020 , 151, 104893	14
413	Envisaging wastewater-to-energy practices for sustainable urban water pollution control: Current achievements and future prospects. 2020 , 134, 110134	7
412	High-value utilization of biomass waste: from garbage floating on the ocean to high-performance rechargeable ZnMnO2 batteries with superior safety. 2020 , 8, 18198-18206	13
411	Insight into activated carbon from different kinds of chemical activating agents: A review. 2020 , 746, 141094	99
410	Recent advances in biomass derived activated carbon electrodes for hybrid electrochemical capacitor applications: Challenges and opportunities. 2020 , 170, 1-29	50
409	Activated Carbons From Winemaking Biowastes for Electrochemical Double-Layer Capacitors. 2020 , 8, 686	6
408	Biorefining of sugarcane bagasse to fermentable sugars and surface oxygen group-rich hierarchical porous carbon for supercapacitors. 2020 , 162, 2306-2317	9
407	Elucidating hydrochar morphology and oxygen functionality change with hydrothermal treatment temperature ranging from subcritical to supercritical conditions. 2020 , 152, 104965	3
406	Facile preparation of porous biomass charcoal from peanut shell as adsorbent. 2020 , 10, 15845	2
405	Synergistic Effect of Nitrogen Doping and Ultra-Microporosity on the Performance of Biomass and Microalgae-Derived Activated Carbons for CO Capture. 2020 , 12, 42711-42722	30
404	Current Status of Energy Production from Solid Biomass in North-West Italy. 2020 , 13, 4390	6
403	Nanocarbons-Mediated Water Purification. 2020 , 57-99	1
402	Bioprocess Engineering for Bioremediation. 2020,	1
401	Preparation of MnO2 Loaded Hydrothermal Carbon-coated Electrospun PAN Fiber Membranes for Highly Efficient Adsorption and Separation of Cationic Dye. 2020 , 36, 1292-1301	4

400	Hydrothermal Carbonization and Liquefaction of Sludge for Harmless and Resource Purposes: A Review. 2020 , 34, 13268-13290	15
399	Catalytic HTL-derived biochar and sol-gel synthesized (Mn, Ti)-oxides for asymmetric supercapacitors. 2020 , 44, 12546-12558	3
398	Biomass-Derived Porous Carbons Derived from Soybean Residues for High Performance Solid State Supercapacitors. 2020 , 25,	4
397	Hydrothermal Conversion of Biomass into Fuel and Fine Chemicals. 2020 , 201-224	O
396	Sustainable Production of Solid Biofuels and Biomaterials by Microwave-Assisted, Hydrothermal Carbonization (MA-HTC) of Brewersl Spent Grain (BSG). 2020 , 8, 18982-18991	5
395	Optimization Strategies of Preparation of Biomass-Derived Carbon Electrocatalyst for Boosting Oxygen Reduction Reaction: A Minireview. 2020 , 10, 1472	8
394	Experimental study and validation of a kinetic scheme for hydrothermal carbonization reactions. 2020 , 1-6	4
393	Hydrothermal carbonization of agricultural and municipal solid waste digestates Istructure and energetic properties of the solid products. 2020 , 275, 117837	27
392	Microwave Assisted KOH Activation of Salacca Peel Dericed Activated Carbons as Adsorbents for Methylene Blue Removal from Aqueous Phase. 2020 , 742, 012046	1
391	Benign-by-design N-doped carbonaceous materials obtained from the hydrothermal carbonization of sewage sludge for supercapacitor applications. 2020 , 22, 3885-3895	39
390	Efficient removal of heavy metal ions from the water of oil-rich regions using layered metal-phosphate incorporated activated carbon nanocomposite. 2020 , 34, 893-905	1
389	Mechanochemical defect engineering of HKUST-1 and impact of the resulting defects on carbon dioxide sorption and catalytic cyclopropanation 2020 , 10, 19822-19831	6
388	Adsorption behaviour of 1,3,5-trinitroperhydro-1,3,5-triazine, 2,4-dinitroanisole and 3-nitro-1,2,4-triazol-5-one on commercial activated carbons. 2020 , 255, 126848	10
387	Recent advances in mechanochemical production of chemicals and carbon materials from sustainable biomass resources. 2020 , 130, 109944	59
386	Enhanced phosphorus storage in suspended biofilm by increasing dissolved oxygen. 2020, 722, 137876	12
385	Synthesis and characterization of sulfonated carbon catalysts derived from biomass waste and its evaluation in glycerol acetylation. 2020 , 1	14
384	Activated carbon as catalyst support: precursors, preparation, modification and characterization. 2020 , 16, 1188-1202	27
383	Comparison on solid biofuel production from wet and dry carbonization processes of food wastes. 2020 , 272, 115264	13

(2020-2020)

382	Synthesis of graphene-like carbon from biomass pyrolysis and its applications. <i>Chemical Engineering Journal</i> , 2020 , 399, 125808	52
381	Advances in application of cotton-based adsorbents for heavy metals trapping, surface modifications and future perspectives. 2020 , 201, 110825	24
380	A benchmark for CO2 uptake onto newly synthesized biomass-derived activated carbons. 2020 , 264, 114720	30
379	Synthesis and characterization of rice husk-based magnetic porous carbon by pyrolysis of pretreated rice husk with FeCl3 and ZnCl2. 2020 , 147, 104806	18
378	Thermal oxidation activation of hydrochar for tetracycline adsorption: the role of oxygen concentration and temperature. 2020 , 306, 123096	24
377	Dual potassium salt-assisted lyophilization of natural fibres for the high-yield synthesis of one-dimensional carbon microtubes for supercapacitors and the oxygen reduction reaction. 2020 , 44, 6297-6311	5
376	Electrochemical Energy Storage Electrodes via Citrus Fruits Derived Carbon: A Minireview. 2020 , 20, 820-830	18
375	Lignin Chemistry. 2020 ,	3
374	Nucleobase derived boron and nitrogen co-doped carbon nanosheets as efficient catalysts for selective oxidation and reduction reactions. 2020 , 12, 7797-7803	9
373	Reduction, detoxification and recycling of solid waste by hydrothermal technology: A review. Chemical Engineering Journal, 2020 , 390, 124651	36
372	Tuning ratios of KOH and NaOH on acetic acid-mediated chitosan-based porous carbons for improving their textural features and CO2 uptakes. 2020 , 40, 101212	30
371	Techno-economic assessment of wet and dry torrefaction of biomass feedstock. 2020 , 207, 118287	18
370	Hydrothermal carbonization of organic wastes to carbonaceous solid fuel 🖪 review of mechanisms and process parameters. 2020 , 279, 118472	54
369	Optimized synthesis of granular fuel and granular activated carbon from sawdust hydrochar without binder. 2020 , 276, 122711	10
368	Development of quantitative C NMR characterization and simulation of C, H, and O content for pyrolysis oils based on C NMR analysis 2020 , 10, 25918-25928	1
367	Synthesis of Functional Nanomaterials for Electrochemical Energy Storage. 2020 ,	1
366	Dual-Carbon Lithium-Ion Capacitors: Principle, Materials, and Technologies. 2020 , 3, 1137-1146	16
365	Innovative spherical biochar for pharmaceutical removal from water: Insight into adsorption mechanism. 2020 , 394, 122255	119

364	Characteristics and comparison of activated carbons prepared from oleaster (Elaeagnus angustifolia L.) fruit using KOH and ZnCl2. 2020 , 267, 117232	48
363	New insight about the relationship between the main characteristics of precursor materials and activated carbon properties using multivariate analysis. 2020 , 98, 1501-1511	4
362	Porous carbons derived from hydrothermally treated biogas digestate. 2020 , 105, 170-179	15
361	Sludge-based mesoporous activated carbon: the effect of hydrothermal pretreatment on material preparation and adsorption of bisphenol A. 2020 , 95, 1666-1674	4
360	Energy recovery and nutrients recycling from municipal sewage sludge. 2020 , 715, 136775	24
359	Effect of carbon-rich biochar on mechanical properties of PLA-biochar composites. 2020 , 15, 100204	19
358	Preparation and Characterization of Magnetic Biochar Nanocomposites via a Modified Solvothermal Method and Their Use as Efficient Heterogeneous Fenton-like Catalysts. 2020 , 59, 1809-1821	12
357	Pyrolysis behavior of hydrochar from hydrothermal carbonization of pinewood sawdust. 2020 , 146, 104771	21
356	Jatropha Oil Cake Based Activated Carbon for Symmetric Supercapacitor Application: A Comparative Study on Conventional and Hydrothermal Carbonization Processes. 2020 , 5, 1375-1384	7
355	A review on hydrothermal carbonization of biomass and plastic wastes to energy products. 2020 , 134, 105479	105
354	Characterization and biogas production potentials of aqueous phase produced from hydrothermal carbonization of biomass [Major components and their binary mixtures. <i>Chemical Engineering Journal</i> , 2020 , 388, 124201	17
353	Structure Design and Composition Engineering of Carbon-Based Nanomaterials for Lithium Energy Storage. 2020 , 10, 1903030	71
352	Effects of Solid Acid Supports on the Bifunctional Catalysis of Levulinic Acid to EValerolactone: Catalytic Activity and Stability. 2020 , 15, 1182-1201	21
351	Simple and green fabrication of a biomass-derived N and O self-doped hierarchical porous carbon via a self-activation route for supercapacitor application. 2020 , 30, 709-719	9
350	Adsorption isotherms and kinetic modeling of methylene blue dye onto a carbonaceous hydrochar adsorbent derived from coffee husk waste. 2020 , 725, 138325	97
349	Synthesis of porous carbon materials derived from waste buttonwoods, pineapple peels, and lettuce leaves and comparison of the electrochemical performances for lithium-ion battery. 2020 , 31, 7766-7775	2
348	Cellulose-derived hydrothermally carbonized materials and their emerging applications. 2020 , 23, 18-24	14
347	The effect of post-pyrolysis treatment on waste biomass derived hydrochar. 2020 , 106, 55-61	11

(2021-2020)

346	Hydochar and biochar: Production, physicochemical properties and techno-economic analysis. 2020 , 310, 123442		53
345	Selective adsorption of organic pigments on inorganically modified mesoporous biochar and its mechanism based on molecular structure. 2020 , 573, 21-30		20
344	Review on sustainable production of biochar through hydrothermal liquefaction: Physico-chemical properties and applications. 2020 , 310, 123414		56
343	Fabrication of photo-responsive cellulose based intelligent imprinted material and selective adsorption on typical pesticide residue. <i>Chemical Engineering Journal</i> , 2020 , 394, 124841	14.7	19
342	Microwave assisted low-temperature hydrothermal treatment of solid anaerobic digestate for optimising hydrochar and energy recovery. <i>Chemical Engineering Journal</i> , 2020 , 395, 124999	14.7	18
341	Preparation and Application of Hierarchical Porous Carbon Materials from Waste and Biomass: A Review. 2021 , 12, 1699-1724		30
340	Catalytic Hydrothermal Carbonization Treatment of Biomass for Enhanced Activated Carbon: A Review. 2021 , 12, 2171-2186		14
339	Investigations into distribution and characterisation of products formed during hydrothermal carbonisation of paunch waste. 2021 , 9, 104672		5
338	Three-dimensional hierarchical porous carbon derived from lignin for supercapacitors: Insight into the hydrothermal carbonization and activation. 2021 , 166, 923-933		9
337	Effects of temperature and catalytic methods on the physicochemical properties of microwave-assisted hydrothermal products of crop residues. 2021 , 279, 123512		5
336	One-pot conversion of highly acidic waste cooking oil into biodiesel over a novel bio-based bi-functional catalyst. 2021 , 283, 118914		12
335	Recent advances and challenges of inter-disciplinary biomass valorization by integrating hydrothermal and biological techniques. 2021 , 135, 110370		52
334	Applications of carbon dots in environmental pollution control: A review. <i>Chemical Engineering Journal</i> , 2021 , 406, 126848	14.7	70
333	Bamboo derived hydrochar microspheres fabricated by acid-assisted hydrothermal carbonization. 2021 , 263, 128093		23
332	Hydrothermal and Pyrolytic Conversion of Biomasses into Catalysts for Advanced Oxidation Treatments. 2021 , 31, 2006505		25
331	Biomass waste derived functionalized hierarchical porous carbon with high gravimetric and volumetric capacitances for supercapacitors. 2021 , 310, 110659		54
330	A waste corn cob core-derived SiO2 @ graphene-like carbon nanocomposite and its application in lithium-ion battery. 2021 , 32, 1278-1288		4
329	Bifunctional nano-catalyst produced from palm kernel shell via hydrothermal-assisted carbonization for biodiesel production from waste cooking oil. 2021 , 137, 110638		11

328	Functional porous carbons: Synthetic strategies and catalytic application in fine chemical synthesis. 2021 , 299-352	O
327	Synthesis of gold nanoflakes decorated biomass-derived porous carbon and its application in electrochemical sensing of luteolin. 2021 , 880, 114832	8
326	Catalytic cracking of biomass tar using Ni nanoparticles embedded carbon nanofiber/porous carbon catalysts. 2021 , 216, 119285	23
325	Effect of carbonization methods on the properties of tea waste biochars and their application in tetracycline removal from aqueous solutions. 2021 , 267, 129283	29
324	Coffee-derived activated carbon from second biowaste for supercapacitor applications. 2021 , 120, 280-289	29
323	Bridging the gap to hydrochar production and its application into frameworks of bioenergy, environmental and biocatalysis areas. 2021 , 320, 124399	15
322	Sweet potato derived three-dimensional carbon aerogels with a hierarchical meso-macroporous and branching nanostructure for electroanalysis. 2021 , 146, 1216-1223	1
321	Biomass derived porous carbon (BPC) and their composites as lightweight and efficient microwave absorption materials. 2021 , 207, 108562	53
320	Recent Advances on Carbon-Based Materials for High Performance Lithium-Ion Capacitors. 2021 , 4, 407-428	8
319	Enhanced adsorptive removal of sulfamethoxazole from water using biochar derived from hydrothermal carbonization of sugarcane bagasse. 2021 , 407, 124825	60
318	A review on nitrogen transformation in hydrochar during hydrothermal carbonization of biomass containing nitrogen. 2021 , 756, 143679	23
317	Enhanced adsorption activity for phosphate removal by functional lignin-derived carbon-based adsorbent: Optimization, performance and evaluation. 2021 , 761, 143217	27
316	Techno-economic analysis of biomass processing with dual outputs of energy and activated carbon. 2021 , 319, 124108	16
315	Understanding and Tuning the Electrical Conductivity of Activated Carbon: A State-of-the-Art Review. 2021 , 46, 1-37	20
314	Recent Trends of Recycled Carbon-Based Nanomaterials and Their Applications. 2021, 443-464	
313	Upgrading the Quality of Solid Fuel Made from Nyamplung (Calophyllum inophyllum) Wastes Using Hydrothermal Carbonization Treatment. 2021 , 118, 189-197	O
312	Supercritical Fluids as a Tool for Green Energy and Chemicals. 2021 , 761-791	
311	Preparation of Activated Carbon from Durian Rind with Difference Activations and Its Optimization. 2021 , 9, 311-324	2

310	Hydrochar-based soil amendments for agriculture: a review of recent progress. 2021, 14, 1	7
309	Advances in porous material research towards the management of air pollution. 2021 , 4, 607-643	5
308	Activated carbon: Synthesis, properties, and applications. 2021 , 783-827	0
307	Optimization of hydrothermal liquefaction process through machine learning approach: process conditions and oil yield. 1	13
306	Functional green-based nanomaterials towards sustainable carbon capture and sequestration. 2021 , 125-177	1
305	Current Research Trends and Perspectives on Solid-State Nanomaterials in Hydrogen Storage. 2021 , 2021, 3750689	9
304	The role of resource recovery technologies in reducing the demand of fossil fuels and conventional fossil-based mineral fertilizers. 2021 , 3-24	5
303	High Efficiency Biomass-Based Metal-Free Catalyst as a Promising Supercapacitor Electrode for Energy Storage.	Ο
302	Magnetic biochar-based composites for removal of recalcitrant pollutants in water. 2021 , 163-187	1
301	Assisted hydrothermal carbonization of agroindustrial byproducts as effective step in the production of activated carbon catalysts for wet peroxide oxidation of micro-pollutants. 2021 , 9, 105004	7
300	Effect of Biochar Prepared from Food Waste through Different Thermal Treatment Processes on Crop Growth. 2021 , 9, 276	2
299	Synthesis, characterization and absorbability of Crocus sativus petals hydrothermal carbonized hydrochar and activated hydrochar. 2021 , 159, 108236	8
298	Machine learning prediction of the conversion of lignocellulosic biomass during hydrothermal carbonization. 1-13	6
297	Rapid Fabrication of Renewable Carbon Fibres by Plasma Arc Discharge and Their Humidity Sensing Properties. 2021 , 21,	O
296	Renewable biomass-derived carbons for electrochemical capacitor applications. 2021 , 1, 211-240	32
295	A novel approach to develop activated carbon by an ingenious hydrothermal treatment methodology using Phyllanthus emblica fruit stone. 2021 , 288, 125643	8
294	Physico-chemical properties and toxicological effects on plant and algal models of carbon nanosheets from a nettle fibre clone. 2021 , 11, 6945	21
293	Transition metal assisted ionothermal carbonization of cellulose towards high yield and recycling. 2021 , 28, 4025-4037	1

292	Self-sacrificial template synthesis of heteroatom doped porous biochar for enhanced electrochemical energy storage. 2021 , 488, 229455	15
291	Sustainable Carbon Materials toward Emerging Applications 2021 , 5, e2001250	12
29 0	Hydrochar from sugarcane industry by-products: assessment of its potential use as a soil conditioner by germination and growth of maize. 2021 , 8,	4
289	Valorizing municipal solid waste via integrating hydrothermal carbonization and downstream extraction for biofuel production. 2021 , 289, 125781	13
288	Nitrogen-doped and hierarchically porous carbon derived from spent coffee ground for efficient adsorption of organic dyes. 1	0
287	Synthesis and characterization of biomass-derived surface-modified activated carbon for enhanced CO2 adsorption. 2021 , 46, 101476	21
286	A High-Performance Symmetric Supercapacitor from Porous Activated Carbon under Compression. 2021 , 9, 2100068	4
285	Removal of heavy metals from water using engineered hydrochar: Kinetics and mechanistic approach. 2021 , 40, 101929	11
284	Mesoporous Carbon from Optimized Date Stone Hydrochar by Catalytic Hydrothermal Carbonization Using Response Surface Methodology: Application to Dyes Adsorption. 2021 , 2021, 1-16	2
283	Low temperature CO2 capture on biomass-derived KOH-activated hydrochar established through hydrothermal carbonization with water-soaking pre-treatment. 2021 , 9, 105074	15
282	Organic salt-assisted pyrolysis for preparation of porous carbon from cellulose, hemicellulose and lignin: New insight from structure evolution. 2021 , 291, 120185	12
281	Nitrogen-Doped Porous Carbon Derived from Cellulose Microfibers of Rice Straw for High-Performance Electrodes of Supercapacitors. 2021 , 35, 10190-10198	3
2 80	Methanolysis of duckweed and azolla: A comparative analysis. 2021 , 765, 012099	
279	Uncatalyzed and acid-aided microwave hydrothermal carbonization of orange peel waste. 2021 , 126, 106-118	3
278	Ruthenium modified defatted spent coffee catalysts for supercapacitor and methanolysis application. 2021 , 3, e243	8
277	Silica-Confined Activation for Biomass-Derived Porous Carbon Materials for High-Performance Supercapacitors. 2021 , 8, 2028-2033	0
276	Biomass-Derived Carbon Materials: Controllable Preparation and Versatile Applications. 2021 , 17, e2008079	21
275	Microcystis aeruginosa supported-Mn catalyst as a new promising supercapacitor electrode: A dual functional material. 2021 , 46, 21534-21541	11

274	Advances in metal/ biochar catalysts for biomass hydro-upgrading: A review. 2021 , 303, 126825		15
273	Synthesis and Characterization of Cobalt and Nitrogen Co-Doped Peat-Derived Carbon Catalysts for Oxygen Reduction in Acidic Media. 2021 , 11, 715		O
272	Carbon substrates: a review on fabrication, properties and applications. 2021, 31, 557-580		15
271	Polarization induced covalent bonding: A new force of heavy metal adsorption on charged particle surface. 2021 , 412, 125168		2
270	Application of Catalysts in Biodiesel Production. 2021 , 85-136		1
269	Biomass-derived porous carbons as supercapacitor electrodes 🖪 review. 2021 , 36, 546-572		16
268	Engineered technologies for the separation and degradation of microplastics in water: A review. <i>Chemical Engineering Journal</i> , 2021 , 414, 128692	14.7	27
267	Effect analysis of pore wall thickness, pore size, and functional group of activated carbon on adsorption behavior based on molecular simulation. 2021 , 28, 59908-59924		1
266	Advances in bio-waste derived activated carbon for supercapacitors: Trends, challenges and prospective. 2021 , 169, 105548		22
265	Investigation of dual-functionalized novel carbon supported Sn material from corn stalk for energy storage and fuel cell systems on distributed generations. 2021 , 32, 18123-18137		3
264	Hydrothermal carbonization of wet biomass from nitrogen and phosphorus approach: A review. 2021 , 171, 401-415		27
263	Activated carbon from agave wastes (agave tequilana) for supercapacitors via potentiostatic floating test. 2021 , 32, 21432-21440		3
262	Large-scale fabrication of biomass-derived N, S co-doped porous carbon with ultrahigh surface area for oxygen reduction. 2021 , 267, 124601		2
261	Efficient toluene adsorption/desorption on biochar derived from in situ acid-treated sugarcane bagasse. 2021 , 28, 62616-62627		O
260	A novel activation-hydrochar via hydrothermal carbonization and KOH activation of sewage sludge and coconut shell for biomass wastes: Preparation, characterization and adsorption properties. 2021 , 593, 390-407		26
259	Defatted spent coffee grounds-supported cobalt catalyst as a promising supercapacitor electrode for hydrogen production and energy storage. 1		2
258	Phosphorylated biomass-derived porous carbon material for efficient removal of U(VI) in wastewater. 2021 , 413, 125282		7
257	Bionanocarbon Functional Material Characterisation and Enhancement Properties in Nonwoven Kenaf Fibre Nanocomposites. 2021 , 13,		4

256	Nitrogen-doped porous carbons synthesized with low-temperature sodium amide activation as metal-free catalysts for oxidative coupling of amines to imines. 2021 , 56, 16865-16876	1
255	Cerium chloride-assisted subcritical water carbonization for fabrication of high-performance cathodes for lithium-ion capacitors. 2021 , 51, 1449-1462	O
254	A review of treatment methods for insensitive high explosive contaminated wastewater. 2021 , 7, e07438	3
253	Enhanced adsorption of Cu(II) and Zn(II) from aqueous solution by polyethyleneimine modified straw hydrochar. 2021 , 778, 146116	52
252	Synthesis of activated carbon from hydrothermally carbonized tamarind seeds for lipase immobilization: characterization and application in aroma ester synthesis. 2021 , 96, 3316	Ο
251	A Review of Hydrothermal Liquefaction of Biomass for Biofuels Production with a Special Focus on the Effect of Process Parameters, Co-Solvents, and Extraction Solvents. 2021 , 14, 4916	3
250	P-enriched hydrochar for soil remediation: Synthesis, characterization, and lead stabilization. 2021 , 783, 146983	3
249	An empirical literature analysis of adsorbent performance for methylene blue uptake from aqueous media. 2021 , 9, 105658	35
248	Coupling hydrothermal carbonization of digestate and supercritical water gasification of liquid products. 2021 , 173, 934-941	5
247	Effect of cations on the enhanced adsorption of cationic dye in Fe3O4-loaded biochar and mechanism. 2021 , 9, 105744	9
246	Low-Cost Activated Carbon Electrodes from Waste Maple Leaves for Organic Electric Double-Layer Capacitors. 2021 , 168, 080532	O
245	Conversion of residual biomass into valuable biofuels by co-hydrothermal carbonization for utilization in household pellet stoves. 2021 , 151, 106153	2
244	Synthesis of modified char-supported Nifle catalyst with hierarchical structure for catalytic cracking of biomass tar. 2021 , 174, 188-198	12
243	Direct catalytic conversion of agro-forestry biomass wastes into ethylene glycol over CNT supported Ru and W catalysts. 2021 , 166, 113461	4
242	Biomass-based hierarchical porous carbon with ultrahigh surface area for super-efficient adsorption and separation of acetone and methanol. 2021 , 269, 118690	7
241	Potential of yak dung-derived hydrochar as fertilizer: Mechanism and model of controlled release of nitrogen. 2021 , 781, 146665	4
240	O-doped porous carbon derived from biomass waste for high-performance zinc-ion hybrid supercapacitors. 2021 , 27, 4495-4505	4
239	Preparation of mesoporous batatas biochar via soft-template method for high efficiency removal of tetracycline. 2021 , 787, 147397	14

238	Recent advances and challenges on removal and recycling of phosphate from wastewater using biomass-derived adsorbents. 2021 , 278, 130377	19
237	Revalorization of Pleurotus djamor Fungus Culture: Fungus-Derived Carbons for Supercapacitor Application. 2021 , 13, 10765	
236	New bifunctional carbon material of metal-free pomegranate peel catalyst and supercapacitor for highly efficient hydrogen production and energy storage.	1
235	Catalytic hydrothermal carbonization of microalgae biomass for low-carbon emission power generation: the environmental impacts of hydrochar co-firing. 2021 , 300, 120927	12
234	A systematic preparation mechanism for directional regulation of pore structure in activated carbon including specific surface area and pore hierarchy. 2021 , 158, 105266	3
233	Potassium demineralization of coconut fiber via combined hydrothermal treatment and washing: Effect on pyrolysis kinetics, mechanisms, and bio-oil composition. 2021 , 152, 106194	3
232	A review of recent advancements in Ni-related materials used for microwave absorption. 2021 , 54, 473003	Ο
231	Wet organic waste treatment via hydrothermal processing: A critical review. 2021 , 279, 130557	16
230	Mesoporous carbon spheres produced by hydrothermal carbonization from rice husk: Optimization, characterization and hydrogen storage. 2021 ,	1
229	A review of sulfonic group bearing porous carbon catalyst for biodiesel production. 2021 , 175, 430-452	8
228	Hydrothermal carbonisation of raw and dewatered paunch waste: Experimental observations, process modelling and techno-economic analysis. 2021 , 245, 114631	1
227	Preparation of novel porous carbon from hydrothermal pretreated textile wastes: Effects of textile type and activation agent on structural and adsorptive properties. 2021 , 43, 102286	3
226	Lignin-based adsorbent-catalyst with high capacity and stability for polychlorinated aromatics removal. 2021 , 337, 125453	5
225	Adsorptive removal of Fe(II) ions from water using carbon derived from thermal/chemical treatment of agricultural waste biomass: Application in groundwater contamination. 2021 , 282, 131060	3
224	Activated carbons from biomass-based sources for CO capture applications. 2021 , 282, 131111	19
223	Systematic study of dynamic CO2 adsorption on activated carbons derived from different biomass. 2021 , 887, 161406	4
222	Algal carbons hydrothermally produced from Spirulina and Chlorella with the assistance of phthalaldehyde: An effective precursor for nitrogen-containing porous carbon. 2021 , 60, 102502	1
221	Presence of microplastics alone and co-existence with hydrochar unexpectedly mitigate ammonia volatilization from rice paddy soil and affect structure of soil microbiome. 2022 , 422, 126831	4

220	Influence of lipid extraction and processing conditions on hydrothermal conversion of microalgae feedstocks Effect on hydrochar composition, secondary char formation and phytotoxicity. Chemical Engineering Journal, 2022, 428, 129559	8
219	Historical Background and Present Status of the Capacitors and Supercapacitor for High Bioenergy Storage Applications. 2021 ,	
218	Applications of supercritical fluids in environmental remediation. 2021, 257-265	
217	Cotton stalk-derived hydrothermal carbon for methylene blue dye removal: investigation of the raw material plant tissues. 2021 , 8,	7
216	Metal oxide-doped activated carbons from bakery waste and coffee grounds for application in supercapacitors. 2021 , 4, 69-80	6
215	Progress of Biomaterials Applications in Supercapacitors. 2021 ,	
214	Synthesis of activated carbon from salacca peel with hydrothermal carbonization for supercapacitor application. 2021 , 44, 3268-3272	3
213	Hydrothermal Carbonization of Organic Fraction of Municipal Solid Waste: Advantage, Disadvantage, and Different Application of Hydrochar. 2021 , 197-206	1
212	Hemp Fibers for Wastewater Treatment. 2020 , 295-326	5
211	Characteristics of Activated Carbon. 2020 , 125-154	29
211	Characteristics of Activated Carbon. 2020, 125-154 Activated Carbon as Electrode Materials for Supercapacitors. 2020, 113-144	29 16
210	Activated Carbon as Electrode Materials for Supercapacitors. 2020 , 113-144 Amine Functionalized Wheat Bran Husk as Bio-Based Organic Adsorbent for Low-Density	16
210	Activated Carbon as Electrode Materials for Supercapacitors. 2020, 113-144 Amine Functionalized Wheat Bran Husk as Bio-Based Organic Adsorbent for Low-Density Polyethylene Composite of Carbon Dioxide Capture. 2020, 28, 1289-1296 Valorization of refractory keratinous waste using a new and sustainable bio-catalysis. Chemical	16
210 209 208	Activated Carbon as Electrode Materials for Supercapacitors. 2020, 113-144 Amine Functionalized Wheat Bran Husk as Bio-Based Organic Adsorbent for Low-Density Polyethylene Composite of Carbon Dioxide Capture. 2020, 28, 1289-1296 Valorization of refractory keratinous waste using a new and sustainable bio-catalysis. Chemical Engineering Journal, 2020, 397, 125420 14-7 Impact of hydrothermal carbonization conditions on the formation of hydrochars and secondary	16 3 8
210209208207	Activated Carbon as Electrode Materials for Supercapacitors. 2020, 113-144 Amine Functionalized Wheat Bran Husk as Bio-Based Organic Adsorbent for Low-Density Polyethylene Composite of Carbon Dioxide Capture. 2020, 28, 1289-1296 Valorization of refractory keratinous waste using a new and sustainable bio-catalysis. Chemical Engineering Journal, 2020, 397, 125420 Impact of hydrothermal carbonization conditions on the formation of hydrochars and secondary chars from the organic fraction of municipal solid waste. 2018, 233, 257-268	16 3 8 125
210 209 208 207 206	Activated Carbon as Electrode Materials for Supercapacitors. 2020, 113-144 Amine Functionalized Wheat Bran Husk as Bio-Based Organic Adsorbent for Low-Density Polyethylene Composite of Carbon Dioxide Capture. 2020, 28, 1289-1296 Valorization of refractory keratinous waste using a new and sustainable bio-catalysis. Chemical Engineering Journal, 2020, 397, 125420 Impact of hydrothermal carbonization conditions on the formation of hydrochars and secondary chars from the organic fraction of municipal solid waste. 2018, 233, 257-268 Potential of Jerusalem Artichoke Stem for Cellulose Production. 2019, 21, 173	16 3 8 125 3

202	A Separator with Activated Carbon Powder Layer to Enhance the Performance of Lithium-Sulfur Batteries. 2018 , 25, 466-474	2
2 01	A comparative study on defluoridation capabilities of biosorbents: Isotherm, kinetics, thermodynamics, cost estimation and regeneration study. 2020 , 25, 384-392	12
200	Synthesis, formation mechanisms and applications of biomass-derived carbonaceous materials: a critical review. 2021 , 9, 24759-24802	3
199	Production and characterization of hydrochars and their application in soil improvement and environmental remediation. <i>Chemical Engineering Journal</i> , 2021 , 133142	8
198	High removal of crystal violet dye and tetracycline by hydrochloric acid assisted hydrothermal carbonization of sugarcane bagasse prepared at high yield. 2021 , 24, 100541	1
197	Assessment of Calorific Value of Biogas after Carbon Dioxide Adsorption Process Using Natural Zeolite and Biochar. 2018 , 9, 327-330	2
196	Effect of Temperature, Time and ZnCl2 Addition on Formation of Oxygenated Functional Groups on the Surface of Flexible Carbon Prepared by Hydrothermal Carbonization. 2018 , 44, 123-128	О
195	Experimental, Thermodynamic and Kinetic Studies for the Adsorption of Phenolic Compounds Derived from Oilfield Wastewater by the Corncob Hydrochar. 2019 , 04, 285-300	1
194	Atk lignosellbzik biyoklleden hidrotermal karbon letimi ve karakterizasyonu.	О
193	Cu Nanoparticles Supported on Fe3O4@SiO2@N-Doped Carbon CoreBhell Nanocomposites for CN Coupling Reactions in Water.	1
192	Synthesis and characterization of activated carbon from Delonix regia seeds for CO2 adsorption. 2021 , 100064	1
191	Hydrothermal carbonization as a preliminary step to pine cone pyrolysis for bioenergy production. 1-15	3
190	Two-phase synthesis of Fe-loaded hydrochar for As removal: The distinct effects of initial pH, reaction time and Fe/hydrochar ratio. 2022 , 302, 114058	1
189	Sulfonated carbon: synthesis, properties and production of biodiesel. 2022 , 170, 108668	1
188	Valorization of biomass-derived CO2 residues with Cu-MnOx catalysts for RWGS reaction. 2022 , 182, 443-451	3
187	Recent advances in lithium-sulfur batteries using biomass-derived carbons as sulfur host. 2022 , 154, 111783	14
186	Synthesis of Three-Dimensional Nanomaterials. 2020 , 79-105	
185	Green Synthesis and Characterization of Carbon-Based Materials for Sensitive Detection of Heavy Metal Ions. 2021 , 116473	3

184	Modulated photoluminescence and photodynamic efficiency of hydroxyapatite-methylene blue@carbon-ions by ion-lboupling interactions. 2022 , 634, 127927	0
183	A review on the utilization of industrial biowaste via hydrothermal carbonization. 2022, 154, 111877	4
182	Optimized production, Pb(II) adsorption and characterization of alkali modified hydrochar from sugarcane bagasse. 2021 , 11, 22328	4
181	High performance nanoporous carbon from mulberry leaves (Morus alba L.) residues via microwave treatment assisted hydrothermal-carbonization for methyl orange adsorption: Kinetic, equilibrium and thermodynamic studies. 2021 , 21, 101288	2
180	Enhanced Breaking of Lignin and Mesopore Formation in Zinc Chloride Assisted Hydrothermal Carbonization of Waste Biomasses. 2021 , 7, 77	1
179	Enhanced adsorption performance of tetracycline in aqueous solutions by KOH-modified peanut shell-derived biochar. 1	O
178	Biomass Peach Gum-Derived Heteroatom-Doped Porous Carbon via In Situ Molten Salt Activation for High-Performance Supercapacitors. 2021 , 35, 19801-19810	O
177	Preparation of copper-loaded porous carbons through hydrothermal carbonization and ZnCl activation and their application to selective CO adsorption: Experimental and DFT calculation studies. 2021 , 426, 127816	O
176	Chemical Reaction: Understanding the Key to the Formation of Carbonaceous Materials from Sucralose. 2021 , 6, 11846-11855	
175	Thermophysical Characteristics of Novel Biomass-Derived Activated Carbon as a Function of Synthesis Parameters. 1-14	1
174	The redistribution and migration mechanism of chlorine during hydrothermal carbonization of waste biomass and fuel properties of hydrochars. 2021 , 244, 122578	1
173	Critical assessment of the performance of next-generation carbon-based adsorbents for CO capture based on their structural properties. 2021 , 151720	3
172	Microwave-assisted Hydrothermal Carbonization for Solid Biofuel Application: A Brief Review. 2021 , 1, 100014	1
171	Biochar as a Tool for the Remediation of Agricultural Soils. 2021 , 281-303	
170	Application of Biochar for Soil Remediation. 2021 , 455-471	
169	Recent advances in adsorptive removal and catalytic reduction of hexavalent chromium by metal B rganic frameworks composites. 2022 , 347, 118274	2
168	Hierarchical porous biochars with controlled pore structures derived from co-pyrolysis of potassium/calcium carbonate with cotton straw for efficient sorption of diethyl phthalate from aqueous solution 2021 , 346, 126604	1
167	Design of functional biocarbons for selective adsorption of 5-hydroxymethylfurfural from aqueous solutions. 2022 , 637, 128187	O

166	Optimization of Microwave Hydrothermal Carbonization Conditions of Hydrochar for Ammonium Adsorption. 2020 ,	
165	Hydrothermal carbonization of digested sewage sludge coupled with Alkali activation: Integrated approach for sludge handling, optimized production, characterization and Pb(II) adsorption. 2022 , 104203	1
164	Fabrication and characterization of spherical and cavernous activated carbon from dates stone precursor through hydro- and drythermal activation. 1	
163	Hydrothermal Carbonization of Residual Algal Biomass for Production of Hydrochar as a Biobased Metal Adsorbent. 2022 , 14, 455	O
162	Black Charcoal for Green and Scalable Wooden Electrodes for Supercapabatteries. 2101072	
161	Nanosized copper stabilized on ternary P, N, S-doped graphene from chitosan shellfish waste: preparation and catalysis of single and double A3-type amine coupling. 2022 , 18, 100109	Ο
160	Surface analysis of solid products of thermal treatment of lignocellulosic biomass. 2022 , 161, 105429	0
159	Hydrothermal Carbonization of Waste Sugarcane Bagasse for the Effective Removal of Emerging Contaminants from Aqueous Solution. 2022 , 2022, 1-13	Ο
158	Carbon Dots: An Excellent Fluorescent Probe for Contaminant Sensing and Remediation 2022, e2105579	5
157	Synthesis of high surface area activated carbon derived from cocoa pods husk by hydrothermal carbonization and chemical activation using zinc chloride as activating agent. 2022 ,	1
156	A Sustainable Approach on Spruce Bark Waste Valorization through Hydrothermal Conversion. 2022 , 10, 111	0
155	Synthesis and Characterization of Hydrochar and Bio-oil from Hydrothermal Carbonization of Sargassum sp. using Choline Chloride (ChCl) Catalyst. 2022 , 11, 403-412	1
154	Effect of Solvent and Feedstock Selection on Primary and Secondary Chars Produced via Hydrothermal Carbonization of Food Wastes 2022 , 126799	2
153	Production of solid hydrochar from waste seaweed by hydrothermal carbonization: effect of process variables. 1	1
152	Corncob pyrolysis: Improvement in hydrocarbon group types distribution of bio oil from co-catalysis over HZSM-5 and activated carbon 2022 , 141, 8-15	0
151	Valorization of cow manure via hydrothermal carbonization for phosphorus recovery and adsorbents for water treatment 2022 , 308, 114561	1
150	Kinetic and isotherm insights of Diclofenac removal by sludge derived hydrochar 2022, 12, 2184	2
149	New prospects on solvothermal carbonisation assisted by organic solvents, ionic liquids and eutectic mixtures [A critical review. 2022 , 126, 100932	1

148	Bio-cleaned lignin-based carbon fiber and its application in adsorptive water treatment. 2022 , 139, 52054	О
147	Recent advancement of biomass-derived porous carbon based materials for energy and environmental remediation applications. 2022 , 10, 6965-7005	5
146	Process Optimization for Preparation of Hydrochar with Abundant Surface Functional Groups and Promising Adsorption Capacity. 2022 , 14, 86-97	1
145	Co-Hydrothermal Carbonization of Cellulose, Hemicellulose, and Protein with Aqueous Phase Recirculation: Insight into the Reaction Mechanisms on Hydrochar Formation.	
144	Thermochemical conversion of organic waste: New horizons for production of green energy. 2022 , 1-21	0
143	Comparative Behavior of Viscose-Based Supercapacitor Electrodes Activated by KOH, HO, and CO 2022 , 12,	O
142	Collagen Fiber-based Advanced Separation Materials: Recent Developments and Future Perspectives. 2021 , e2107891	4
141	Hydrothermal carbonization of biomass: experimental study, energy balance, process simulation, design, and techno-economic analysis. 1	O
140	Biobutanol preparation through sugar-rich biomass by Clostridium saccharoperbutylacetonicum conversion using ZnO nanoparticle catalyst. 1	0
139	Chemical Activation of Lignocellulosic Precursors and Residues: What Else to Consider?. 2022 , 27,	O
138	Valorization of Brassica carinata biomass through conversion to hydrolysate and hydrochar. 1	
137	Computational Modeling Approaches of Hydrothermal Carbonization: A Critical Review. 2022 , 15, 2209	O
136	Capturing organics from municipal wastewater using a primary sludge-derived polymer. 2022, 46, 102567	
135	Biomass-based carbon microspheres for removing heavy metals from the environment: A review. 2022 , 100136	1
134	Co-hydrothermal carbonization of sewage sludge and coal slime with sulfuric acid for N, S doped hydrochar. 2022 , 131615	0
133	Activated carbon induced hydrothermal carbonization for the treatment of cotton pulp black liquor. 2022 , 47, 102733	O
132	Preparation of rice husk hydrochar as an atrazine adsorbent: Optimization, characterization, and adsorption mechanisms. 2022 , 10, 107575	1
131	Targeted ginkgo kernel biomass precursor using eco-friendly synthesis of efficient carbon quantum dots for detection of trace nitrite ions and cell imaging. 2022 , 140, 109442	2

130	Theoretical modeling of hydrochar precursor formation during the hydrothermal carbonization of sewage sludge. 2022 , 231, 107212		2
129	Heteroatoms self-doped porous carbon from cottonseed meal using K2CO3 as activator and DES electrolyte for supercapacitor with high energy density. 2022 , 24, 100828		1
128	Preparing hierarchical porous carbon with well-developed microporosity using alkali metal-catalyzed hydrothermal carbonization for VOCs adsorption 2022 , 134248		1
127	Sugar beet pulp derived oxygen-rich porous carbons for supercapacitor applications. 2022 , 51, 104363		3
126	A Study on Electron Acceptor of Carbonaceous Materials for Highly Efficient Hydrogen Uptakes. 2021 , 11, 1524		О
125	Conversion of Plastic Waste to Carbon-Based Compounds and Application in Energy Storage Devices 2022 , 7, 13403-13435		5
124	Rapid and efficient oil removal from O/W emulsions by hydrophobic porous polystyrene microspheres embedded with hydrophilic surface micro-regions 2022 , 434, 128898		О
123	Co-hydrothermal carbonization of cellulose, hemicellulose, and protein with aqueous phase recirculation: Insight into the reaction mechanisms on hydrochar formation. 2022 , 251, 123965		1
122	Emerging application of biochar as a renewable and superior filler in polymer composites 2022 , 12, 13938-13949		1
121	Enhanced Degradation of Ddt Using a Novel Iron -Assisted Hydrochar Catalyst Combined with Peroxymonosulfate: Experiment and Mechanism Analysis.		
120	P-doped carbon quantum dot graft-functionalized amorphous WO3 for stable and flexible electrochromic energy-storage devices. <i>Chemical Engineering Journal</i> , 2022 , 445, 136826	14.7	О
119	Carbon-Based Nanocatalysts (CnCs) for Biomass Valorization and Hazardous Organics Remediation. 2022 , 12, 1679		1
118	Microwave-Assisted Hydrothermal Carbonization of Pomegranate Peels into Hydrochar for Environmental Applications. 2022 , 15, 3629		О
117	Nitrogen self-doped hierarchical porous carbon via penicillin fermentation residue (PR) hydrothermal carbonization (HTC) and activation for supercapacitance. 2022 , 165452		0
116	Activated Carbon-Based Supercapacitors. 2022 , 165-182		
115	One-step preparation of char-supported iron nanocatalysts under microwave irradiation and their application for tar removal. 2022 , 105564		1
114	Closing the Carbon Loop in the Circular Plastics Economy. 2200247		1
	H2O2-assisted self-template synthesis of N-doped biochar with interconnected mesopore for		

112	Nano-Structured Carbon: Its Synthesis from Renewable Agricultural Sources and Important Applications. 2022 , 15, 3969		2
111	Cutting-edge development in waste-recycled nanomaterials for energy storage and conversion applications. 2022 , 11, 2215-2294		1
110	Characteristics optimization of empty fruit bunches chars using central composite design.		
109	Review on Recent Advancements in Chemically Synthesized Manganese Cobalt Oxide (MnCo2O4) and Its Composites for Energy Storage Application. <i>Chemical Engineering Journal</i> , 2022 , 137425	14.7	1
108	Recent advances in hydrochar application for the adsorptive removal of wastewater pollutants. 2022 , 184, 419-456		1
107	Hydrochar and microplastics disturb soil dissolved organic matter and prominently mitigate ammonia volatilization from wheat growing soil. 2022 , 178, 104552		2
106	Green and efficient synthesis of carbon quantum dots from cordia myxa L. and their application in photocatalytic degradation of organic dyes. 2022 , 1266, 133456		1
105	Hydrothermal carbonization processes applied to wet organic waste streams.		Ο
104	Facile preparation of N-doped porous carbon and its CO2 gas adsorption performance. 2022 , 57, 12438	3-12448	3 0
103	Efficient Removal of Lead and Chromium From Aqueous Media Using Selenium Based Nanocomposite Supported by Orange Peel. 10,		
102	Hydrothermal Carbonization: A Pilot-Scale Reactor Design for Bio-waste and Sludge Pre-treatment.		1
101	Hydrochars produced by hydrothermal carbonisation of seaweed, coconut shell and oak: effect of processing temperature on physicochemical adsorbent characteristics. 2022 , 4,		2
100	Recent advances in supported ionic liquid catalysts for sustainable biomass valorisation to high-value chemicals and fuels. <i>Chemical Engineering Journal</i> , 2022 , 450, 138032	14.7	4
99	Novel hydrochar as low-cost alternative adsorbent for the removal of noxious impurities from water. 2022 , 149-160		
98	Biomass-based metal-free catalyst as a promising supercapacitor electrode for energy storage. 2022 , 33, 18111-18123		
97	Metal-Free Biomass-Derived Environmentally Persistent Free Radicals (Bio-EPFRs) from Lignin Pyrolysis.		
96	Preparation of High-Performance Porous Carbon Materials by Citric Acid-Assisted Hydrothermal Carbonization of Bamboo and Their Application in Electrode Materials. 2022 , 36, 9303-9312		0
95	Dispose of Chinese cabbage waste via hydrothermal carbonization: hydrochar characterization and its potential as a soil amendment.		

94	Recycling of Tannery (chrome) sludge into sludge biochar (SB) /TiO2 nanocomposite via chemical activation through hydrothermal pre-treatment.	1
93	Adsorption of the most common non-steroidal analgesics from aquatic environment on agricultural wastes-based activated carbons; experimental adsorption study supported by molecular modeling. 2022 , 154607	0
92	Uniform and dispersible carbonaceous microspheres as quasi-liquid sorbent. 2022, 136079	2
91	The Influence of Key Reactions During Hydrothermal Carbonization of Sewage Sludge on Aqueous Phase Properties: A Review. 2022 , 105678	1
90	Preparation of renewable porous carbons for CO2 capture 🖪 review. 2022 , 236, 107437	3
89	Enhanced degradation of DDT using a novel iron-assisted hydrochar catalyst combined with peroxymonosulfate: Experiment and mechanism analysis. 2022 , 307, 135893	O
88	Investigation on the evolution of hydrothermal biochar. 2022, 307, 135774	0
87	Co-hydrothermal carbonization of sewage sludge and swine manure: Hydrochar properties and heavy metal chemical speciation. 2022 , 330, 125573	O
86	Recent advances in biodiesel production using functional carbon materials as acid/base catalysts. 2022 , 237, 107421	2
85	Emerging Modification Technologies of Lignin-based Activated Carbon toward Advanced Applications.	1
84	Improved Na-ion kinetics of 1T MoS2 nanopatterned porous hard carbon as an ultra-long life anode. 2022 , 432, 141130	0
83	Technical progress and perspective on the thermochemical conversion of kitchen waste and relevant applications: A comprehensive review. 2023 , 331, 125803	1
82	Microwave-Assisted Hydrothermal Preparation of Magnetic Hydrochar for the Removal of Organophosphorus Insecticides from Aqueous Solutions.	O
81	Effects of pH and Metal Ions on the Hydrothermal Treatment of Penicillin: Kinetic, Pathway, and Antibacterial Activity. 2022 , 19, 10701	o
80	Effect of rGO wt.% on the Preparation of rGO/CuO Nanocomposites at Different Test Periods and Temperatures. 2022 , 12, 1325	0
79	Recent Developments in Activated Carbon Catalysts Based on Pore Size Regulation in the Application of Catalytic Ozonation. 2022 , 12, 1085	1
78	High performance bio-supercapacitor electrodes composed of graphitized hemicellulose porous carbon spheres. 10,	O
77	Production of biocoal from wastewater sludge and sugarcane bagasse using hydrothermal carbonization.	O

76	Recent insights in synthesis and energy storage applications of porous carbon derived from biomass waste: A review. 2022 ,	1
75	Acid-promoted hydrothermal on Chinese herbal residue toward upgradation and denitrogenation capabilities. 2022 , 238, 107518	Ο
74	High-efficiency N-doped activated carbon-based defluoridation adsorbent prepared from itaconic acid fermentation waste liquid.	О
73	Catalytic wet torrefaction of lignocellulosic biomass: An overview with emphasis on fuel application. 2022 ,	О
72	Efficient adsorption and reduction of Cr(VI) in water using one-step H3PO4-assisted prepared Leersia hexandra Swartz hydrochar. 2022 , 100260	1
71	Activity of a Sulfonated Carbon-Based Catalyst Derived from Organosolv Lignin toward Esterification of Stearic Acid under Near-Critical Alcohol Conditions.	O
70	Synthesis of grape-seed derived carbon with high specific surface area for CO2 selective adsorption.	0
69	Review on the preparation of high value-added carbon materials from biomass. 2022, 168, 105747	2
68	Comprehensive study of used cigarette filters-derived porous activated carbon for Supercapacitors: From biomass waste to sustainable energy source. 2022 , 925, 116915	1
67	Preparation, characterization, and desulfurization performance of the activated carbon prepared from mixed agro-wastes: an isothermal and kinetic study. 1-26	2
66	Anchoring of transition metals to CN as efficient single-atom catalysts for propane dehydrogenation. 2022 , 809, 140154	О
65	A flexible and high energy density -hydrous RuO2 and keratin-derived renewable carbon composite-based asymmetric supercapacitor in redox-mediated electrolytes. 2022 , 435, 141368	O
64	A review on hydrothermal carbonization of potential biomass wastes, characterization and environmental applications of hydrochar, and biorefinery perspectives of the process. 2023 , 857, 159627	3
63	Ammonia modification of activated carbon derived from biomass via gamma irradiation vs. hydrothermal method for methylene blue removal. 2023 , 43, 67-78	O
62	SiO2-mediated fabrication of hydrophilic biomass-carbon and its expediting effect on Rh nanoparticles catalyzed dehydrogenation of ammonia borane. 2023 , 333, 126366	0
61	Facile synthesis of novel helical imprinted fibers based on zucchini-derived microcoils for efficient recognition of target protein in biological sample. 2023 , 404, 134645	O
60	Microwave-assisted hydrothermal preparation of magnetic hydrochar for the removal of organophosphorus insecticides from aqueous solutions. 2023 , 306, 122569	0
59	Physicochemical Properties of Waste Palm-Based Catalysts Synthesized from Pyrolyzed and Hydrothermalized Chars for Biodiesel Production.	O

58	Biowaste Valorization to Produce Advance Carbon Material-Hydrochar for Potential Application of Cr (VI) and Cd (II) Adsorption in Wastewater: A Review. 2022 , 14, 3675	O
57	Ru on Modified Carbon Submicrometric Spheres as Novel Catalysts for the Oxidative Cleavage of Oleic Acid with N-Methylmorpholine-N-Oxide as Green Oxidizing Agent.	O
56	An Improvement of Catalytic Converter Activity Using Copper Coated Activated Carbon Derived from Banana Peel. 2023 , 12, 144-154	0
55	Phosphoric acid-activated bamboo hydrochar for methylene blue adsorption: isotherm and kinetic studies.	O
54	Rational design of carbon-based materials for purification and storage of energy carrier gases of methane and hydrogen. 2022 , 56, 105967	0
53	Recent advances in lignin-based carbon materials and their applications: A review. 2022 , 223, 980-1014	Ο
52	Conversion of novel tannery sludge-derived biochar/TiO2 nanocomposite for efficient removal of Cr (VI) under UV light: photocatalytic performance and mechanism insight.	0
51	Recent Advances of Biomass-Derived Porous Carbon Materials in Catalytic Conversion of Organic Compounds. 2022 , 293-315	O
50	Effect of physical and thermal pretreatment of lignocellulosic biomass on biohydrogen production by thermochemical route: A critical review. 2023 , 369, 128458	0
49	Hydrocarbonization of Biomass and Hydrochar for Sustainable Renewable Fuel. 2022, 1-10	O
48	Hydrothermal Carbonization vs. Pyrolysis: Effect on the Porosity of the Activated Carbon Materials. 2022 , 14, 15982	0
47	Development of activated carbon for removal of pesticides from water: case study. 2022 , 12,	1
46	Hybrid Hydrothermal Carbonization and Ultrasound Technology on Oil Palm Biomass for Hydrochar Production.	1
45	Influence of Different Activators on the Structure and Properties of Activated Carbon Based on Bamboo Fiber. 2022 , 14, 5500	O
44	Oleaster seed-derived activated carbon/ferrite nanocomposite for microwave absorption in the X-band range. 9,	1
43	Effect of Biochar and Process Water Derived from the Co-Processed Sewage Sludge and Food Waste on Garden Cressl G rowth and Quality. 2022 , 14, 16652	O
42	Insights into the adsorption of tetracycline onto cellulose nanocrystal structured MgAl/LDH composite. 2022 , 127247	0
41	Hydrothermal Liquefaction of Waste Agricultural Biomass for Biofuel and Biochar. 2023 , 238-250	O

40	Activated carbon from biomass precursors using phosphoric acid: A review. 2022, 8, e11940	0
39	Agricultural biomass-based carbon cathode materials for lithium-sulfur batteries: A systematic review. 2023 , 6, 205-225	O
38	Sustainable treatment of sewage sludge via plasma-electrolytic liquefaction for bio-friendly production of polyurethane foam. 2023 , 329, 117072	0
37	Sustainable Application for Agriculture Using Biochar-Based Slow-Release Fertilizers: A Review. 2023 , 11, 1-12	1
36	Pyrolytic Preparation of Active Carbons from Peanut Shell Biomass for Adsorptive Elimination of Fluoride from Groundwater of Shekhawati Region. 2023 , 38, 1338-1350	0
35	Sustainable production and application of biochar for energy storage and conversion. 2023, 333-364	O
34	Carbon Materials for Organophosphate Pesticide Sensing. 2023 , 11, 93	0
33	SupercapacitorsEew developments. 2023 , 39-64	O
32	Water-catalyzed conversion of glucose to small molecules during hydrothermal carbonization: A density functional theory study.	0
31	Operando Forming of Lattice Vacancy Defect in Ultrathin Crumpled NiVW-Layered Metal Hydroxides Nanosheets for Valorization of Biomass. 2207236	O
30	N-doped activated carbon as support of Pd-Sn bimetallic catalysts for nitrate catalytic reduction. 2023 ,	0
29	Enhanced performance with ionic and organic redox-couple electrolytes on MTMO anchored CQD nanocomposites and renewable carbon-based asymmetric flexible supercapacitor. 2023 , 32, 101806	O
28	Surfactants/citric acid catalyzed hydrothermal carbonization of pomelo peel for solid fuels: Conversion mechanism and combustion performance. 2023 , 342, 127762	0
27	Experimental investigation on decomposition characteristics of doxycycline in wastewater using hydrothermal treatment: Exploring the way to complete decomposition. 2023 , 11, 109849	O
26	Acid assisted-hydrothermal carbonization of solid waste from essential oils industry: Optimization using I-optimal experimental design and removal dye application. 2023 , 16, 104872	0
25	Treatment of industrial ferric sludge through a facile acid-assisted hydrothermal reaction: Focusing on dry mass reduction and hydrochar recyclability performance. 2023 , 869, 161879	1
24	Environmental life cycle assessment of biomass conversion using hydrothermal technology: A review. 2023 , 246, 107747	0
23	Tuning the core-shell ratio in nanostructured CuS@In2S3 photocatalyst for efficient dye degradation. 2023 , 5, 100093	O

22	Characterisation of chemical properties of the produced organic fractions via hydrothermal liquefaction of biosolids from a wastewater treatment plant. 2023 , 170, 106703	0
21	Carbon based adsorbents for the removal of U(VI) from aqueous medium: A state of the art review. 2023 , 52, 103458	Ο
20	Synthesis of grape-seed derived carbon with high specific surface area for CO2 selective adsorption.	Ο
19	Recent Advancements and Perspectives of Biodegradable Polymers for Supercapacitors. 2023 , 33,	Ο
18	New Azo Derivatives of Ethanol Lignin: Synthesis, Structure, and Photosensitive Properties. 2023 , 16, 1525	0
17	Recent Progress and Future Directions of Biomass-Derived Hierarchical Porous Carbon: Designing, Preparation, and Supercapacitor Applications. 2023 , 37, 3523-3554	Ο
16	Nar Posasādan Betilen Manyetik Hidroklīhlī Kompozitin Sulu Beltiden Pb(II) °yonlarā— Uzaklalīēma Potansiyeli. 213-224	0
15	Synthesis of porous carbon from orange peel waste for effective volatile organic compounds adsorption: role of typical components.	Ο
14	Activated Carbon Produced from the Hydrothermal Treatment of Glucose with KOH Activation for Catalytic Absorption of CO2 in a BEA-AMP Bi-Solvent Blend. 2023 , 8, 9346-9355	Ο
13	Porous Carbon-Based Sensors and Their Applications. 2023 , 381-404	O
12	Valorization of Primary Sludge and Biosludge from the Pulp Mill Industry in Uruguay Through Hydrothermal Carbonization.	0
11	Structural Effects of Microcrystalline Cellulose-Derived Carbon Supports on Catalytic Performance of the Pd(OH)2/C Catalysts for the Hydrogenolytic Debenzylation of Hexanitrohexaazaisowurtzitane Derivatives. 2023 , 13, 637	Ο
10	Prospects of low-temperature solid sorbents in industrial COL apture: A focus on biomass residues as precursor material. 2023 , 13, 245-284	Ο
9	Exploring the Impact of Ni Doping on Bagasse Biochar and Its Efficient Hydrogen Production via Assisted Water Electrolysis.	Ο
8	Electrospun PVDF Membranes Incorporated with Functionalized Carbon-based Material for Removal of Cationic Dyes.	Ο
7	Hydrothermal carbonisation of sewage sludge and resulting biofuels as a sustainable energy source. 2023, 127337	Ο
6	Utilization and Comparison of Different Food Wastes for the Synthesis of Two-Stage Activated Carbon-Based Mixed Matrix Membranes for Gas Separation Applications.	Ο
5	Hydrothermal Carbonization of Corn Stover: Structural Evolution of Hydro-Char and Degradation Kinetics. 2023 , 16, 3217	O

4	Thermal Fabrication of Magnetic Fe3O4 (Nanoparticle)@Carbon Sheets from Waste Resources for the Adsorption of Dyes: Kinetic, Equilibrium, and UVII isible Spectroscopy Investigations. 2023, 13, 1266	O
3	A comparative study on electrochemical performance of KOH activated carbons derived from different biomass sources - Musa acuminata stem, Pongamia pinnata seed oil extract cake, cajanus cajan stem and Asclepias syriaca floss. 2023 , 9, e15399	O
2	Alkaline etched hydrocharBased magnetic adsorbents produced from pharmaceutical industry waste for organic dye removal.	0
1	A review of nitrogen-doped carbon materials for lithium-ion battery anodes. 2023 , 38, 247-278	O