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The production of carbon materials by hydrothermal carbonization of cellulose

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|------|--|------|-----------|
| 1408 | pH-Elicited Luminescence Functionalities of Carbon Dots: Mechanistic Insights. | | |
| 1407 | Bionic Preparation of CeO2Encapsulated Nitrogen Self-Doped Biochars for Highly Efficient Oxygen Reduction. | | |
| 1406 | Self-Healing Amorphous Polymers with Room-Temperature Phosphorescence Enabled by Boron-Based Dative Bonds. | | |
| 1405 | Single-hole Carbonaceous Microcapsules. 2010 , 39, 451-453 | | 5 |
| 1404 | Graphitic carbon nanostructures from cellulose. 2010 , 490, 63-68 | | 104 |
| 1403 | Hydrothermal pyrolysis of swine manure to bio-oil: Effects of operating parameters on products yield and characterization of bio-oil. 2010 , 88, 73-79 | | 144 |
| 1402 | A new route for preparation of hydrochars from rice husk. 2010 , 101, 9807-10 | | 74 |
| 1401 | Carbon molecular sieve membranes from cellophane paper. 2010 , 350, 180-188 | | 45 |
| 1400 | Preparation and li storage properties of hierarchical porous carbon fibers derived from alginic acid. 2010 , 3, 703-7 | | 87 |
| 1399 | Ultrathin Carbon Film Electrodes from Vacuum-Carbonised Cellulose Nanofibril Composite. 2010 , 22, 619-624 | | 17 |
| 1398 | Engineering carbon materials from the hydrothermal carbonization process of biomass. 2010 , 22, 813-2 | 18 | 1282 |
| 1397 | Amphiphilic Hollow Carbonaceous Microspheres with Permeable Shells. 2010 , 122, 4319-4323 | | 8 |
| 1396 | Amphiphilic hollow carbonaceous microspheres with permeable shells. 2010 , 49, 4223-7 | | 84 |
| 1395 | Hydrothermal carbonization of biomass: A summary and discussion of chemical mechanisms for process engineering. 2010 , 4, 160-177 | | 1055 |
| 1394 | Hydrothermal carbonization of microalgae. 2010 , 34, 875-882 | | 256 |
| 1393 | Alcohol-assisted hydrothermal carbonization to fabricate spheroidal carbons with a tunable shape and aspect ratio. <i>Carbon</i> , 2010 , 48, 1224-1233 | 10.4 | 87 |
| 1392 | Hydrothermal preparation of carbon microspheres from mono-saccharides and phenolic compounds. <i>Carbon</i> , 2010 , 48, 1990-1998 | 10.4 | 244 |

(2011-2010)

| 1391 | Synthesis and capacitive properties of carbonaceous sphere@MnO2 rattle-type hollow structures. 2010 , 25, 1476-1484 | 18 |
|------|---|-----|
| 1390 | Chemical and structural properties of carbonaceous products obtained by pyrolysis and hydrothermal carbonisation of corn stover. 2010 , 48, 618 | 253 |
| 1389 | Accurately tuning the dispersity and size of palladium particles on carbon spheres and using carbon spheres/palladium composite as support for polyaniline in H2O2 electrochemical sensing. 2010 , 26, 5985-90 | 69 |
| 1388 | Carbonization under pressure. 2010 , 25, 409-420 | 45 |
| 1387 | Biodiesel Production from Wet Algal Biomass through in Situ Lipid Hydrolysis and Supercritical Transesterification. 2010 , 24, 5235-5243 | 226 |
| 1386 | Knitting an oxygenated network-coat on carbon nanotubes from biomass and their applications in catalysis. 2011 , 21, 10929 | 21 |
| 1385 | Characterization of products from hydrothermal liquefaction and carbonation of biomass model compounds and real biomass. 2011 , 39, 893-900 | 53 |
| 1384 | Hydrothermal carbonization of municipal waste streams. 2011 , 45, 5696-703 | 473 |
| 1383 | Morphological and structural differences between glucose, cellulose and lignocellulosic biomass derived hydrothermal carbons. 2011 , 13, 3273 | 483 |
| 1382 | Sustainable porous carbons with a superior performance for CO2 capture. 2011 , 4, 1765 | 749 |
| 1381 | Hydrothermal carbon from biomass: structural differences between hydrothermal and pyrolyzed carbons via 13C solid state NMR. 2011 , 27, 14460-71 | 209 |
| 1380 | Effect of Solution pH on the Carbon Microsphere Synthesized by Hydrothermal Carbonization. 2011 , 11, 1322-1327 | 32 |
| 1379 | High density hydrogen storage in superactivated carbons from hydrothermally carbonized renewable organic materials. 2011 , 4, 1400 | 339 |
| 1378 | Synthesis of carbon-based materials by microwave-assisted hydrothermal process. 2011 , | 4 |
| 1377 | An Assessment of U(VI) removal from groundwater using biochar produced from hydrothermal carbonization. 2011 , 92, 2504-12 | 213 |
| 1376 | Preparation of nickel oxide and carbon nanosheet array and its application in glucose sensing. 2011 , 184, 2738-2743 | 43 |
| 1375 | Hydrothermal carbonization of anaerobically digested maize silage. 2011 , 102, 9255-60 | 263 |
| 1374 | Intrinsically fluorescent nitrogen-containing carbon nanoparticles synthesized by a hydrothermal process. <i>Carbon</i> , 2011 , 49, 5207-5212 | 139 |

Hydrothermal Carbonization of Abundant Renewable Natural Organic Chemicals for High-Performance Supercapacitor Electrodes. **2011**, n/a-n/a

| 1372 Pyrolytic formation of a carbonaceous solid for heavy metal adsorption. 2011 , 46, 975-982 | 11 |
|---|-----------------|
| High surface area porous carbons prepared from hydrochars by phosphoric acid activation. 20 102, 1947-50 |)11, 120 |
| Hydrothermal synthesis, characterization, and KOH activation of carbon spheres from glucose 2011 , 346, 999-1004 | e. 246 |
| Hydrothermal Carbonization of Abundant Renewable Natural Organic Chemicals for High-Performance Supercapacitor Electrodes. 2011 , 1, 356-361 | 470 |
| 1368 Hydrothermal Carbonization 🛭 . Înfluence of Lignin in Lignocelluloses. 2011 , 34, 2037-2043 | 95 |
| 1367 Hydrothermale Carbonisierung: Ein Berblick. 2011 , 83, 1932-1943 | 19 |
| 1366 Hydrothermale Karbonisierung: 1. Einfluss des Lignins in Lignocellulosen. 2011 , 83, 1734-1741 | 1 18 |
| 1365 Klimafreundliche Kohle durch Hydrothermale Karbonisierung von Biomasse. 2011 , 83, 1890-1 | 896 20 |
| Hydrothermal pretreatment of switchgrass and corn stover for production of ethanol and car microspheres. 2011 , 35, 956-968 | bon 141 |
| 1363 Hydrothermal carbonization of distiller grains. 2011 , 35, 2526-2533 | 113 |
| Hydrothermal carbonization of biomass as a route for the sequestration of CO2: Chemical and structural properties of the carbonized products. 2011 , 35, 3152-3159 | d 263 |
| Analysis on Products and Residues of Liquefaction of Wheat Straw & Polyester in Supercritica Ethanol. 2011 , 236-238, 142-145 | l |
| ONE-STEP AND CONTROLLABLE SELF-ASSEMBLY OF Au/TiO2/CARBON SPHERES TERNARY NANOCOMPOSITES WITH A NANOPARTICLE MONOSHELL WALL. 2012 , 07, 1250025 | 6 |
| 1359 Mixed Feedstock. 2012 , 251-302 | |
| 1358 Conversion of Waste to Biofuels, Bioproducts, and Bioenergy. 2012 , 205-250 | |
| Carbohydrate-derived hydrothermal carbons: a thorough characterization study. 2012 , 28, 123 | 373-83 212 |
| 1356 Microcosm study on the decomposability of hydrochars in a Cambisol. 2012 , 47, 250-259 | 35 |

(2012-2012)

| 1355 | Production of High-Grade Carbonaceous Materials and Fuel Having Similar Chemical and Physical Properties from Various Types of Biomass by Degradative Solvent Extraction. 2012 , 26, 4521-4531 | 35 |
|------|---|-----|
| 1354 | Control of the morphology and chemical properties of carbon spheres prepared from glucose by a hydrothermal method. 2012 , 27, 1117-1123 | 74 |
| 1353 | Thermal conversion of municipal solid waste via hydrothermal carbonization: comparison of carbonization products to products from current waste management techniques. 2012 , 32, 1353-65 | 130 |
| 1352 | Acid-catalyzed dehydration of fructose into 5-hydroxymethylfurfural by cellulose-derived amorphous carbon. 2012 , 5, 2215-20 | 136 |
| 1351 | Photoluminescent carbogenic nanoparticles directly derived from crude biomass. 2012, 14, 3141 | 60 |
| 1350 | Hybridization of graphene sheets and carbon-coated Fe3O4 nanoparticles as a synergistic adsorbent of organic dyes. 2012 , 22, 25108 | 195 |
| 1349 | Removal of copper and cadmium from aqueous solution using switchgrass biochar produced via hydrothermal carbonization process. 2012 , 109, 61-9 | 340 |
| 1348 | Hydrolysis of cellulose over functionalized glucose-derived carbon catalyst in ionic liquid. 2012 , 116, 355-9 | 112 |
| 1347 | Hydrothermal carbonization of lignocellulosic biomass. 2012 , 118, 619-23 | 285 |
| 1346 | Hydrothermal carbonization as an effective way of densifying the energy content of biomass. 2012 , 103, 78-83 | 185 |
| 1345 | Mineral-templated growth of natural graphite films. 2012 , 83, 252-262 | 33 |
| 1344 | Hydrogen peroxide modification enhances the ability of biochar (hydrochar) produced from hydrothermal carbonization of peanut hull to remove aqueous heavy metals: Batch and column tests. 2012 , 200-202, 673-680 | 451 |
| 1343 | Synthesis and Characterization of Carbonaceous Materials from Saccharides (Glucose and Lactose) and Two Waste Biomasses by Hydrothermal Carbonization. 2012 , 51, 9145-9152 | 67 |
| 1342 | Characterization of Hydrochars Produced by Hydrothermal Carbonization of Lignin, Cellulose, d-Xylose, and Wood Meal. 2012 , 51, 9023-9031 | 454 |
| 1341 | Black perspectives for a green future: hydrothermal carbons for environment protection and energy storage. 2012 , 5, 6796 | 631 |
| 1340 | Hydrothermal Carbons: Synthesis, Characterization, and Applications. 2012 , 351-399 | 10 |
| 1339 | Solvothermal synthesis of Mg-Ni/C nanocomposite for hydrogen storage using vitamin C as carbon source. 2012 , 37, 13849-13854 | 4 |
| 1338 | Characteristics of Ni/YSZ ceramic anode prepared using carbon microspheres as a pore former. 2012 , 37, 15311-15319 | 50 |

| 1337 | Textural properties and surface chemistry of lotus stalk-derived activated carbons prepared using different phosphorus oxyacids: adsorption of trimethoprim. 2012 , 235-236, 367-75 | 91 |
|------|--|-----|
| 1336 | One-step solvothermal synthesis of Fe3O4@C core-shell nanoparticles with tunable sizes. 2012 , 23, 165601 | 99 |
| 1335 | Organic chemistry under hydrothermal conditions. 2012 , 85, 89-103 | 11 |
| 1334 | Hydrothermal processing of algal biomass for the production of biofuels and chemicals. 2012 , 3, 603-623 | 99 |
| 1333 | The effect of the hydrothermal carbonization process on palm oil empty fruit bunch. 2012 , 47, 82-90 | 76 |
| 1332 | Carbon dioxide-assisted fabrication of highly uniform submicron-sized colloidal carbon spheres via hydrothermal carbonization using soft drink. 2012 , 290, 1567-1573 | 14 |
| 1331 | Environmental Chemistry for a Sustainable World. 2012 , | 8 |
| 1330 | Molecular and morphological characterization of hydrochar produced by microwave-assisted hydrothermal carbonization of cellulose. 2012 , 47, 687-692 | 22 |
| 1329 | First identification of primary nanoparticles in the aggregation of HMF. 2012 , 7, 38 | 20 |
| 1328 | Elemental and isotopic carbon and nitrogen records of organic matter accumulation in a Holocene permafrost peat sequence in the East European Russian Arctic. 2012 , 27, 545-552 | 41 |
| 1327 | Chitosan-Based Hydrothermal Nanocarbon: Core-Shell Characteristics and Composite Electrodes. 2012 , 24, n/a-n/a | 1 |
| 1326 | Renewable nitrogen-doped hydrothermal carbons derived from microalgae. 2012 , 5, 1834-40 | 108 |
| 1325 | Polysaccharides Route: A New Green Strategy for Metal Oxides Synthesis. 2012 , 119-169 | 14 |
| 1324 | Transforming collagen wastes into doped nanocarbons for sustainable energy applications. 2012 , 14, 1689 | 49 |
| 1323 | Hydrothermal and conventional H3PO4 activation of two natural bio-fibers. <i>Carbon</i> , 2012 , 50, 3158-3169 _{10.4} | 41 |
| 1322 | A microporous and high surface area active carbon obtained by the heat-treatment of chitosan. Carbon, 2012 , 50, 3098-3101 | 44 |
| 1321 | Continuous preparation of multiscale reinforcement by electrophoretic deposition of carbon nanotubes onto carbon fiber tows. <i>Carbon</i> , 2012 , 50, 3101-3103 | 53 |
| 1320 | Extraction of dietary fiber from Citrus junos peel with subcritical water. 2012 , 90, 180-186 | 48 |

| 1319 | Enhanced photocatalytic water splitting activity of carbon-modified TiO2 composite materials synthesized by a green synthetic approach. 2012 , 37, 8257-8267 | | 91 |
|------|--|------|-----|
| 1318 | Structural characteristics of nanoparticles produced by hydrothermal pretreatment of cellulose and their applications for electrochemical hydrogen generation. 2012 , 37, 9514-9523 | | 13 |
| 1317 | Suppressed photoelectrochemistry at carbon-surface-modified mesoporous TiO2 films. 2012 , 73, 31-35 | | 7 |
| 1316 | Characterization of products from hydrothermal treatments of cellulose. 2012 , 42, 457-465 | | 133 |
| 1315 | Triflate-catalyzed (trans)esterification of lipids within carbonized algal biomass. 2012, 111, 222-9 | | 27 |
| 1314 | Calcium-assisted hydrothermal carbonization of an alginate for the production of carbon microspheres with unique surface nanopores. 2012 , 67, 365-368 | | 22 |
| 1313 | A facile production of microporous carbon spheres and their electrochemical performance in EDLC. 2012 , 73, 385-390 | | 33 |
| 1312 | Polypyrrole-Derived Activated Carbons for High-Performance Electrical Double-Layer Capacitors with Ionic Liquid Electrolyte. 2012 , 22, 827-834 | | 359 |
| 1311 | PtRu/carbon hybrid materials prepared by hydrothermal carbonization as electrocatalysts for methanol electrooxidation. 2012 , 18, 215-222 | | 6 |
| 1310 | Carbon fibres from cellulosic precursors: a review. 2012 , 47, 4236-4250 | | 193 |
| 1309 | A water-dispersible, carboxylate-rich carbonaceous solid: synthesis, heavy metal uptake and EPR study. 2012 , 47, 3140-3149 | | 7 |
| 1308 | Removal of uranium(VI) from aqueous solutions by carboxyl-rich hydrothermal carbon spheres through low-temperature heat treatment in air. 2013 , 298, 361-368 | | 23 |
| 1307 | Sorption study of uranium on carbon spheres hydrothermal synthesized with glucose from aqueous solution. 2013 , 295, 1775-1782 | | 36 |
| 1306 | Versatility with carbon dots Ifrom overcooked BBQ to brightly fluorescent agents and photocatalysts. 2013 , 3, 15604 | | 88 |
| 1305 | Influence of reaction time and temperature on product formation and characteristics associated with the hydrothermal carbonization of cellulose. 2013 , 138, 180-90 | | 163 |
| 1304 | Conversion of sewage sludge to clean solid fuel using hydrothermal carbonization: Hydrochar fuel characteristics and combustion behavior. 2013 , 111, 257-266 | | 563 |
| 1303 | Hydrothermal reactions of agricultural and food processing wastes in sub- and supercritical water: a review of fundamentals, mechanisms, and state of research. 2013 , 61, 8003-25 | | 169 |
| 1302 | One-pot synthesis of Cullarbon hybrid hollow spheres. <i>Carbon</i> , 2013 , 62, 472-480 | 10.4 | 22 |

| 1301 | Effect of residence time on chemical and structural properties of hydrochar obtained by hydrothermal carbonization of water hyacinth. 2013 , 58, 376-383 | 154 |
|------|--|-----|
| 1300 | Formation, molecular structure, and morphology of humins in biomass conversion: influence of feedstock and processing conditions. 2013 , 6, 1745-58 | 380 |
| 1299 | Hydrothermal carbonization of sewage sludge for energy production with coal. 2013 , 111, 201-210 | 145 |
| 1298 | Synthesis and performances of bio-sourced nanostructured carbon membranes elaborated by hydrothermal conversion of beer industry wastes. 2013 , 8, 121 | 2 |
| 1297 | Biochar and Carbon Sequestration. 2013 , 309-322 | 6 |
| 1296 | The effects of alkalinity and acidity of process water and hydrochar washing on the adsorption of atrazine on hydrothermally produced hydrochar. 2013 , 93, 1989-96 | 44 |
| 1295 | Sodium salt effect on hydrothermal carbonization of biomass: a catalyst for carbon-based nanostructured materials for lithium-ion battery applications. 2013 , 15, 2722 | 51 |
| 1294 | Hydrothermal carbonization of food waste and associated packaging materials for energy source generation. 2013 , 33, 2478-92 | 112 |
| 1293 | Hydrothermal wrappingDwith poly(4-vinylpyridine) introduces functionality: pH-sensitive coreBhell carbon nanomaterials. 2013 , 1, 4559 | 6 |
| 1292 | Effects of biomass types and carbonization conditions on the chemical characteristics of hydrochars. 2013 , 61, 9401-11 | 89 |
| 1291 | Chemical and morphological changes in hydrochars derived from microcrystalline cellulose and investigated by chromatographic, spectroscopic and adsorption techniques. 2013 , 150, 98-105 | 26 |
| 1290 | Tunable N-doped or dual N, S-doped activated hydrothermal carbons derived from human hair and glucose for supercapacitor applications. 2013 , 107, 397-405 | 249 |
| 1289 | Hydrothermally Synthesized Carbonaceous Nanocomposites. 2013, 101-124 | |
| 1288 | Applications of Hydrothermal Carbon in Modern Nanotechnology. 2013 , 213-294 | 3 |
| 1287 | Effect of methods for thermal and alkaline modification of birch wood on properties of porous carbon materials obtained. 2013 , 86, 1526-1536 | 3 |
| 1286 | Synthesis of porous NiO materials with preferentially oriented crystalline structures with enhanced stability as lithium ion battery anodes. 2013 , 237, 172-177 | 39 |
| 1285 | Facile preparation of nanoporous and nanocrystalline LiFePO4 with excellent electrochemical properties. 2013 , 3, 20836 | 6 |
| 1284 | One-pot hydrothermal synthesis and reusable oil-adsorbing properties of porous carbonaceous monoliths using multi-walled carbon nanotubes as templates. 2013 , 3, 14938 | 13 |

(2013-2013)

| 1283 | Improved performance of electric double layer capacitor using redox additive (VO2+/VO2+) aqueous electrolyte. 2013 , 1, 7913 | 114 |
|------|--|-----|
| 1282 | Production of low-cost adsorbents with tunable surface chemistry by conjunction of hydrothermal carbonization and activation processes. 2013 , 165, 127-133 | 162 |
| 1281 | Functional nanoporous carbons from hydrothermally treated biomass for environmental purification. 2013 , 168, 92-101 | 100 |
| 1280 | Structure and properties of oxidatively stabilized viscose rayon fibers impregnated with boric acid and phosphoric acid prior to carbonization and activation steps. 2013 , 48, 2009-2021 | 22 |
| 1279 | Biopolymere als vielseitige Ressource fil die Nanochemie. 2013 , 125, 1132-1145 | 7 |
| 1278 | Biopolymers as a flexible resource for nanochemistry. 2013 , 52, 1096-108 | 108 |
| 1277 | Experimental studies on the pyrolysis of humins from the acid-catalysed dehydration of C6-sugars. 2013 , 104, 299-307 | 61 |
| 1276 | Preferential growth of Co3O4 anode material with improved cyclic stability for lithium-ion batteries. 2013 , 1, 3872 | 33 |
| 1275 | Energy balances, greenhouse gas emissions and economics of biochar production from palm oil empty fruit bunches. 2013 , 77, 108-115 | 80 |
| 1274 | Hydrothermale Carbonisierung von Kohlenhydraten: Eine kinetische und mechanistische Studie. 2013 , 85, 516-522 | 7 |
| 1273 | Hydrothermal conversion of glucose in multiscale batch processes. Analysis of the gas, liquid and solid residues. 2013 , 79, 76-83 | 18 |
| 1272 | Adsorption of 1-butyl-3-methylimidazolium chloride ionic liquid by functional carbon microspheres from hydrothermal carbonization of cellulose. 2013 , 47, 2792-8 | 80 |
| 1271 | Sub- and Supercritical Water Technology for Biofuels. 2013 , 147-183 | 10 |
| 1270 | Facile one-pot synthesis of VxOy@C catalysts using sucrose for the direct hydroxylation of benzene to phenol. 2013 , 15, 1150 | 55 |
| 1269 | Improving hydrothermal carbonization by using poly(ionic liquid)s. 2013 , 52, 6028-32 | 126 |
| 1268 | Rice husk-derived carbon anodes for lithium ion batteries. 2013 , 1, 5269 | 230 |
| 1267 | Construction of flame retardant nanocoating on ramie fabric via layer-by-layer assembly of carbon nanotube and ammonium polyphosphate. 2013 , 5, 3013-21 | 110 |
| 1266 | Chemical, structural and combustion characteristics of carbonaceous products obtained by hydrothermal carbonization of palm empty fruit bunches. 2013 , 135, 683-9 | 297 |
| | | |

| 1265 | Hydrothermal liquefaction of cellulose in subcritical waterthe role of crystallinity on the cellulose reactivity. 2013 , 3, 11035 | 56 |
|------|--|-----|
| 1264 | Carbonllay composite obtained from the decomposition of cellulose nanocrystals on the surface of expanded vermiculite. 2013 , 88, 1130-1135 | 4 |
| 1263 | Potential of the hydrothermal carbonization process for the degradation of organic pollutants. 2013 , 92, 674-80 | 35 |
| 1262 | Improving Hydrothermal Carbonization by Using Poly(ionic liquid)s. 2013 , 125, 6144-6148 | 30 |
| 1261 | Cellulose-derived superparamagnetic carbonaceous solid acid catalyst for cellulose hydrolysis in an ionic liquid or aqueous reaction system. 2013 , 15, 2167 | 116 |
| 1260 | Nanoporous carbons from hydrothermally treated biomass as anode materials for lithium ion batteries. 2013 , 174, 25-33 | 64 |
| 1259 | Hydrogenation of nitrobenzene to p-aminophenol using Pt/C catalyst and carbon-based solid acid. 2013 , 229, 105-110 | 27 |
| 1258 | Chemical modification of biomass residues during hydrothermal carbonization \(\text{LW} \) hat makes the difference, temperature or feedstock?. 2013 , 54, 91-100 | 135 |
| 1257 | Effect of Methanol on the Liquefaction Reaction of Biomass in Hot Compressed Water under Microwave Energy. 2013 , 27, 4791-4795 | 9 |
| 1256 | Hydrothermal Carbonization of Macroalgae and the Effects of Experimental Parameters on the Properties of Hydrochars. 2013 , 1, 1092-1101 | 110 |
| 1255 | Solid-State Nuclear Magnetic Resonance Characterization of Chars Obtained from Hydrothermal Carbonization of Corncob and Miscanthus. 2013 , 27, 303-309 | 31 |
| 1254 | Carbon spheres obtained via citric acid catalysed hydrothermal carbonisation of cellulose. 2013 , 17, 546-551 | 28 |
| 1253 | Filter and buffer-pot confinement effect of hollow sphere catalyst for promoted activity and enhanced selectivity. 2013 , 1, 5670 | 30 |
| 1252 | CHAPTER 2:Activated Carbon from Biomass for Water Treatment. 2013 , 46-105 | 4 |
| 1251 | Hydrothermal upgrading of algae paste: Application of 31P-NMR. 2013 , 32, 1002-1012 | 15 |
| 1250 | Hydrothermal Synthesis of Cu@C Composite Spheres by a One-Step Method and Their Use as Sacrificial Templates to Synthesize a CuO@SiO2 CoreBhell Structure. 2013 , 2013, n/a-n/a | 10 |
| 1249 | High Power Density Supercapacitors Based on the Carbon Dioxide Activated D-Glucose Derived Carbon Electrodes and Acetonitrile Electrolyte. 2013 , 160, A1834-A1841 | 41 |
| 1248 | Carbon Sphere Obtained Via Hydrothermal Carbonization as Hard Template: Preparation of Hollow Metal Oxide Sphere. 2013 , 02, | |

1247 Carbide-Derived Carbons. 2013, 319-346

| 1246 | Recovery of Value-Added Products from Hydrothermal Carbonization of Sewage Sludge. 2013 , 2013, 1-6 | | 27 |
|------|--|------|--------------|
| 1245 | Characterization of hydrochars produced by hydrothermal carbonization of rice husk. 2014 , 5, 477-483 | | 103 |
| 1244 | Synthesis of porous silica hollow spheres using sacrificial template for drug delivery applications. 2014 , 3, 141-146 | | 3 |
| 1243 | Shape-controlled Synthesis of Activated Bio-chars by Surfactant-templated Ionothermal Carbonization in Acidic Ionic Liquid and Activation with Carbon Dioxide. 2014 , 9, | | 5 |
| 1242 | Highly efficient antibacterial iron oxide@carbon nanochains from wbtite precursor nanoparticles. 2014 , 6, 20154-63 | | 26 |
| 1241 | Scalable preparation of nitrogen-enriched carbon microspheres for efficient CO2 capture. 2014 , 4, 61456- | 6146 | 5 4 9 |
| 1240 | Analysis of product distribution and characteristics in hydrothermal liquefaction of barley straw in subcritical and supercritical water. 2014 , 33, 737-743 | | 45 |
| 1239 | Flexible cage-like carbon spheres with ordered mesoporous structures prepared via a soft-template/hydrothermal process from carboxymethylcellulose. 2014 , 4, 61518-61524 | | 25 |
| 1238 | Evaluation of Hydrothermally Carbonized Hydrochar in Improving Energy Security and Mitigating Greenhouse Gas Emissions. 2014 , 23-48 | | 2 |
| 1237 | Hydrothermal Carbonization of Lignocellulosic Biomass. 2014 , 275-311 | | 16 |
| 1236 | Hydrothermal Carbonization of Biomass for Energy and Crop Production. 2014 , 1, | | 207 |
| 1235 | Fabrication of hollow silica microspheres utilizing a hydrothermal approach. 2014 , 25, 627-629 | | 12 |
| 1234 | A facile molten-salt route to graphene synthesis. 2014 , 10, 193-200 | | 174 |
| 1233 | Hydrothermal synthesis of magnetic carbon microspheres for effective adsorption of Cd(II) in water. 2014 , 89, 1051-1059 | | 12 |
| 1232 | Solid state NMR study of chemical structure and hydrothermal deactivation of moderate-temperature carbon materials with acidic SO3H sites. <i>Carbon</i> , 2014 , 74, 333-345 | D-4 | 57 |
| 1231 | An easy approach of preparing strongly luminescent carbon dots and their polymer based composites for enhancing solar cell efficiency. <i>Carbon</i> , 2014 , 70, 190-198 | 0.4 | 141 |
| 1230 | Dissolution of mechanically milled chitin in high temperature water. 2014 , 106, 172-8 | | 34 |

| 1229 | Charcoal produced from cellulosic raw materials by microwave-assisted hydrothermal carbonization. 2014 , 117, 269-275 | 23 |
|------|---|-----|
| 1228 | Removal of uranium(VI) from aqueous solutions by new phosphorus-containing carbon spheres synthesized via one-step hydrothermal carbonization of glucose in the presence of phosphoric acid. 2014 , 299, 1479-1487 | 26 |
| 1227 | Hydrothermal carbonization of loblolly pine: reaction chemistry and water balance. 2014 , 4, 311-321 | 142 |
| 1226 | Preparation of magnetic porous carbon from waste hydrochar by simultaneous activation and magnetization for tetracycline removal. 2014 , 154, 209-14 | 252 |
| 1225 | Removal of Pb2+ and Cd2+ from aqueous solution using chars from pyrolysis and microwave-assisted hydrothermal carbonization of Prosopis africana shell. 2014 , 20, 3467-3473 | 118 |
| 1224 | Synthesis of clay/carbon adsorbent through hydrothermal carbonization of cellulose on palygorskite. 2014 , 95, 60-66 | 55 |
| 1223 | Application of Hydrothermal Reactions to Biomass Conversion. 2014, | 20 |
| 1222 | The Hydrochar Characters of Municipal Sewage Sludge Under Different Hydrothermal Temperatures and Durations. 2014 , 13, 471-482 | 88 |
| 1221 | Catalytic growth of a colloidal carbon sphere by hydrothermal reaction with iron oxide (Fe3O4) catalyst. 2014 , 125, 213-217 | 15 |
| 1220 | Engineered hydrochar composites for phosphorus removal/recovery: Lanthanum doped hydrochar prepared by hydrothermal carbonization of lanthanum pretreated rice straw. 2014 , 161, 327-32 | 88 |
| 1219 | Influence of process water quality on hydrothermal carbonization of cellulose. 2014 , 154, 229-39 | 68 |
| 1218 | Hydrothermal pre-treatment for mesoporous carbon synthesis: enhancement of chemical activation. 2014 , 2, 520-528 | 76 |
| 1217 | Carbonization Under Pressure. 2014 , 67-85 | 3 |
| 1216 | Spherical carbons: Synthesis, characterization and activation processes. <i>Carbon</i> , 2014 , 68, 296-307 10.4 | 200 |
| 1215 | Fabrication, characterization and screen printing of conductive ink based on carbon@Ag core-shell nanoparticles. 2014 , 427, 15-9 | 24 |
| 1214 | Kinetics of the hydrothermal treatment of tannin for producing carbonaceous microspheres. 2014 , 151, 271-7 | 52 |
| 1213 | Carbon nanofibres from fructose using a light-driven high-temperature spinning disc processor. 2014 , 50, 1478-80 | 9 |
| 1212 | Characterization of biomass and its derived char using 13C-solid state nuclear magnetic resonance. 2014 , 16, 4839-4869 | 64 |

| 1211 | Controlled Synthesis of Ordered Mesoporous Carbohydrate-Derived Carbons with Flower-like Structure and N-Doping by Self-Transformation. 2014 , 26, 6872-6877 | 70 |
|------|--|-----------------|
| 1210 | One-pot synthesis of photoluminescent carbon nanodots by carbonization of cyclodextrin and their application in Ag+ detection. 2014 , 4, 62446-62452 | 30 |
| 1209 | A novel strategy to synthesize hierarchical, porous carbohydrate-derived carbon with tunable properties. 2014 , 6, 13510-7 | 28 |
| 1208 | Synthesis of TiO2 hollow spheres using titanium tetraisopropoxide: fabrication of high efficiency dye sensitized solar cells with photoanodes of different nanocrystalline TiO2 sub-layers. 2014 , 4, 58064-58076 | 5 ²⁰ |
| 1207 | A phosphorus-, nitrogen- and carbon-containing polyelectrolyte complex: preparation, characterization and its flame retardant performance on polypropylene. 2014 , 4, 48285-48292 | 52 |
| 1206 | Valorization of Biorefinery Side-Stream Products: Combination of Humins with Polyfurfuryl Alcohol for Composite Elaboration. 2014 , 2, 2182-2190 | 70 |
| 1205 | Simple small molecule carbon source strategy for synthesis of functional hydrothermal carbon: preparation of highly efficient uranium selective solid phase extractant. 2014 , 2, 1550-1559 | 84 |
| 1204 | Green and size-controllable synthesis of photoluminescent carbon nanoparticles from waste plastic bags. 2014 , 4, 47169-47176 | 29 |
| 1203 | Cellulose derived magnetic mesoporous carbon nanocomposites with enhanced hexavalent chromium removal. 2014 , 2, 17454-17462 | 143 |
| 1202 | Facile hydrothermal synthesis of SnO2/C microspheres and double layered coreEhell SnO2 microspheres as anode materials for Li-ion secondary batteries. 2014 , 4, 25189-25194 | 23 |
| 1201 | Sustainable and scalable production of monodisperse and highly uniform colloidal carbonaceous spheres using sodium polyacrylate as the dispersant. 2014 , 50, 12633-6 | 48 |
| 1200 | Highly Conductive Microfiber of Graphene Oxide Templated Carbonization of Nanofibrillated Cellulose. 2014 , 24, 7366-7372 | 82 |
| 1199 | Nitrogen-enriched carbon from bamboo fungus with superior oxygen reduction reaction activity. 2014 , 2, 18263-18270 | 63 |
| 1198 | Carbonaceous Spheres IVersatile Intermediaries for Metal Oxide Spherical Structure Synthesis. 2014 , 2014, 1010-1019 | 8 |
| 1197 | Carboxyl-rich carbon microspheres prepared from pentosan with high adsorption capacity for heavy metal ions. 2014 , 60, 516-523 | 29 |
| 1196 | Gasification Characteristics of Hydrothermal Carbonized Biomass in an Updraft Pilot-Scale Gasifier. 2014 , 28, 1992-2002 | 26 |
| 1195 | Using liquid waste streams as the moisture source during the hydrothermal carbonization of municipal solid wastes. 2014 , 34, 2185-95 | 18 |
| 1194 | Influence of Process Water Reuse on the Hydrothermal Carbonization of Paper. 2014 , 2, 2165-2171 | 58 |

| 1193 | Activated carbon/ZnO composites prepared using hydrochars as intermediate and their electrochemical performance in supercapacitor. 2014 , 148, 380-386 | 46 |
|------|---|-------------|
| 1192 | Influence of hydrothermal carbonization on formation of curved graphite structures obtained from a lignocellulosic precursor. <i>Carbon</i> , 2014 , 78, 609-612 | <u>,</u> 26 |
| 1191 | Pentosan-derived water-soluble carbon nano dots with substantial fluorescence: Properties and application as a photosensitizer. 2014 , 315, 66-72 | 28 |
| 1190 | Removal of hydrophilic ionic liquids from aqueous solutions by adsorption onto high surface area oxygenated carbonaceous material. 2014 , 256, 407-414 | 43 |
| 1189 | Nitrogen Doping of Hydrochars Produced Hydrothermal Treatment of Sucrose in H2O, H2SO4, and NaOH. 2014 , 2, 755-764 | 68 |
| 1188 | Characterization of porous graphitic monoliths from pyrolyzed wood. 2014 , 49, 7688-7696 | 35 |
| 1187 | An Efficient Way To Introduce Hierarchical Structure into Biomass-Based Hydrothermal Carbonaceous Materials. 2014 , 2, 2435-2441 | 77 |
| 1186 | Novel hydrothermal carbonization of cellulose catalyzed by montmorillonite to produce kerogen-like hydrochar. 2014 , 21, 2845-2857 | 30 |
| 1185 | Clean solid biofuel production from high moisture content waste biomass employing hydrothermal treatment. 2014 , 131, 345-367 | 248 |
| 1184 | Porous Carbon Spheres from Hydrothermal Carbonization and KOH Activation on Cassava and Tapioca Flour Raw Material. 2014 , 20, 342-351 | 41 |
| 1183 | Hydrogenolysis of cellulose to valuable chemicals over activated carbon supported mono- and bimetallic nickel/tungsten catalysts. 2014 , 16, 3580-3588 | 54 |
| 1182 | Hydrothermal preparation and characterization of novel corncob-derived solid acid catalysts. 2014 , 62, 5345-53 | 31 |
| 1181 | Facile one-pot fabrication of hollow porous silica nanoparticles. 2014 , 20, 673-7 | 19 |
| 1180 | Upgrading of Palm Oil Empty Fruit Bunch Employing Hydrothermal Treatment in Lab-scale and Pilot Scale. 2014 , 20, 46-54 | 34 |
| 1179 | Template-free fabrication and morphology regulation of Ag@carbon composite structure. 2014 , 190, 1-6 | 2 |
| 1178 | Classification of carbon materials for developing structure-properties relationships based on the aggregate state of the precursors. 2014 , 35, 778-782 | 2 |
| 1177 | Preparation of Ultrafine Carbon Spheres by Controlled Polymerization of Furfuryl Alcohol in Microdroplets. 2014 , 53, 3084-3090 | 18 |
| 1176 | Effect of heating rate on biomass liquefaction: Differences between subcritical water and supercritical ethanol. 2014 , 68, 420-427 | 134 |

| 1175 | Adsorptive removal of U(VI) from aqueous solution by hydrothermal carbon spheres with phosphate group. 2014 , 300, 1235-1244 | 38 |
|------|---|-----|
| 1174 | Carbon materials as template for the preparation of mixed oxides with controlled morphology and porous structure. 2014 , 227, 233-241 | 16 |
| 1173 | Influence of feedstock chemical composition on product formation and characteristics derived from the hydrothermal carbonization of mixed feedstocks. 2014 , 166, 120-31 | 62 |
| 1172 | MnO2@colloid carbon spheres nanocomposites with tunable interior architecture for supercapacitors. 2014 , 49, 448-453 | 36 |
| 1171 | Influence of reaction atmosphere and solvent on biochar yield and characteristics. 2014, 164, 177-83 | 33 |
| 1170 | Supercritical water gasification of hydrochar. 2014 , 92, 1864-1875 | 32 |
| 1169 | Activation of a spherical carbon for toluene adsorption at low concentration. <i>Carbon</i> , 2014 , 77, 616-626 10.4 | 26 |
| 1168 | A novel porous carbon derived from hydrothermal carbon for efficient adsorption of tetracycline. Carbon, 2014 , 77, 627-636 | 197 |
| 1167 | Sequential hydrothermal fractionation of yeast Cryptococcus curvatus biomass. 2014 , 164, 106-12 | 35 |
| 1166 | Fourier transform infrared spectroscopy analysis for hydrothermal transformation of microcrystalline cellulose on montmorillonite. 2014 , 95, 74-82 | 82 |
| 1165 | A polymeric route to multielemental boron siliconcarbide ceramic. 2015 , 73, 012028 | |
| 1164 | Hydrothermale Karbonisierung. 4. Thermische Eigenschaften der Produkte. 2015 , 87, 1707-1712 | 5 |
| 1163 | Synthesis and characterization of hydrochars produced by hydrothermal carbonization of oil palm shell. 2015 , 93, 1916-1921 | 48 |
| 1162 | Glucose- and cellulose-derived Ni/C-SO3H catalysts for liquid phase phenol hydrodeoxygenation. 2015 , 21, 1567-77 | 9 |
| 1161 | In Situ Carbon-Doped Mo(Se0.85 S0.15)2 Hierarchical Nanotubes as Stable Anodes for High-Performance Sodium-Ion Batteries. 2015 , 11, 5667-74 | 89 |
| 1160 | Synthese von Kohlenstoffnanostrukturen durch ionothermale Karbonisierung von gewlinlichen Llungsmitteln und Llungen. 2015 , 127, 5598-5603 | 6 |
| 1159 | Effect of Residence Time on Hydrothermal Carbonization of Corn Cob Residual. 2015, 10, | 20 |
| 1158 | Characteristics of Biochar Obtained by Hydrothermal Carbonization of Cellulose for Renewable Energy. 2015 , 8, 14040-14048 | 42 |

| 1157 | Discussion Remarks on the Role of Wood and Chitin Constituents during Carbonization. 2015 , 2, | 6 |
|------------------------------|--|----------------------------|
| 1156 | Catalytic Hydrothermal Upgrading of Ecellulose using Iron Salts as a Lewis Acid. 2015 , 10, | 13 |
| 1155 | Functionalized Activated Carbon Derived from Biomass for Photocatalysis Applications Perspective. 2015 , 2015, 1-30 | 33 |
| 1154 | Spectroscopic Analysis of Heterogeneous Biocatalysts for Biodiesel Production from Expired Sunflower Cooking Oil. 2015 , 2015, 1-8 | 14 |
| 1153 | Hydrothermal synthesis and characterization of carbon spheres using citric-acid-catalyzed carbonization of starch. 2015 , 15, 179-183 | 4 |
| 1152 | Ultrahigh surface area carbon from carbonated beverages: Combining self-templating process and in situ activation. <i>Carbon</i> , 2015 , 93, 39-47 | 20 |
| 1151 | Improved Synthesis of Cellulose Carbamates with Minimum Urea Based on an Easy Scale-up Method. 2015 , 3, 1510-1517 | 30 |
| 1150 | How do nitrogen-doped carbon dots generate from molecular precursors? An investigation of the formation mechanism and a solution-based large-scale synthesis. 2015 , 3, 5608-5614 | 92 |
| 1149 | Removal of Trace As(V) from Water with the Titanium Dioxide/ACF Composite Electrode. 2015 , 226, 1 | 23 |
| | | |
| 1148 | Boron-doped, carbon-coated SnO2/graphene nanosheets for enhanced lithium storage. 2015 , 21, 5617-22 | 25 |
| 1148 | Boron-doped, carbon-coated SnO2/graphene nanosheets for enhanced lithium storage. 2015 , 21, 5617-22 Hydrothermal conversion of commercial lignin to carbonaceous materials. 2015 , 12, 29-36 | 25 8 |
| <u>'</u> | Hydrothermal conversion of commercial lignin to carbonaceous materials. 2015 , 12, 29-36 | |
| 1147 | Hydrothermal conversion of commercial lignin to carbonaceous materials. 2015 , 12, 29-36 Solid-State Fabrication of SnS2/C Nanospheres for High-Performance Sodium Ion Battery Anode. | 8 |
| 1147 1146 | Hydrothermal conversion of commercial lignin to carbonaceous materials. 2015 , 12, 29-36 Solid-State Fabrication of SnS2/C Nanospheres for High-Performance Sodium Ion Battery Anode. 2015 , 7, 11476-81 Low-potassium Fuel Production from Empty Fruit Bunches by Hydrothermal Treatment Processing | 8 |
| 1147 1146 1145 | Hydrothermal conversion of commercial lignin to carbonaceous materials. 2015, 12, 29-36 Solid-State Fabrication of SnS2/C Nanospheres for High-Performance Sodium Ion Battery Anode. 2015, 7, 11476-81 Low-potassium Fuel Production from Empty Fruit Bunches by Hydrothermal Treatment Processing and Water Leaching. 2015, 75, 584-589 Tuning the Wettability of Halloysite Clay Nanotubes by Surface Carbonization for Optimal Emulsion | 8 161 21 |
| 1147 1146 1145 | Hydrothermal conversion of commercial lignin to carbonaceous materials. 2015, 12, 29-36 Solid-State Fabrication of SnS2/C Nanospheres for High-Performance Sodium Ion Battery Anode. 2015, 7, 11476-81 Low-potassium Fuel Production from Empty Fruit Bunches by Hydrothermal Treatment Processing and Water Leaching. 2015, 75, 584-589 Tuning the Wettability of Halloysite Clay Nanotubes by Surface Carbonization for Optimal Emulsion Stabilization. 2015, 31, 13700-7 Hydrothermal carbonization of off-specification compost: a byproduct of the organic municipal | 8 161 21 31 |
| 1147 1146 1145 1144 | Hydrothermal conversion of commercial lignin to carbonaceous materials. 2015, 12, 29-36 Solid-State Fabrication of SnS2/C Nanospheres for High-Performance Sodium Ion Battery Anode. 2015, 7, 11476-81 Low-potassium Fuel Production from Empty Fruit Bunches by Hydrothermal Treatment Processing and Water Leaching. 2015, 75, 584-589 Tuning the Wettability of Halloysite Clay Nanotubes by Surface Carbonization for Optimal Emulsion Stabilization. 2015, 31, 13700-7 Hydrothermal carbonization of off-specification compost: a byproduct of the organic municipal solid waste treatment. 2015, 182, 217-224 Single-crystal octahedral CoFe2O4 nanoparticles loaded on carbon balls as a lightweight microwave | 8 161 21 31 69 |

(2015-2015)

| 1139 | Oxygen-driven, high-efficiency production of nitrogen-doped carbon dots from alkanolamines and their application for two-photon cellular imaging. 2015 , 5, 15366-15373 | 29 |
|------|---|-----|
| 1138 | One-pot syntheses and characterization of zirconium carbide microspheres by carbon microencapsulation. 2015 , 41, 6740-6746 | 7 |
| 1137 | A comparative review of biochar and hydrochar in terms of production, physico-chemical properties and applications. 2015 , 45, 359-378 | 788 |
| 1136 | Comparison of the characteristics of hydrothermal carbons derived from holocellulose and crude biomass. 2015 , 50, 1624-1631 | 27 |
| 1135 | Full, Reactive Solubilization of Humin Byproducts by Alkaline Treatment and Characterization of the Alkali-Treated Humins Formed. 2015 , 3, 533-543 | 45 |
| 1134 | Green and facile synthesis of highly biocompatible carbon nanospheres and their pH-responsive delivery of doxorubicin to cancer cells. 2015 , 5, 17532-17540 | 16 |
| 1133 | Tailoring of porous and nitrogen-rich carbons derived from hydrochar for high-performance supercapacitor electrodes. 2015 , 155, 201-208 | 135 |
| 1132 | Food waste-to-energy conversion technologies: current status and future directions. 2015 , 38, 399-408 | 365 |
| 1131 | A wide-spectrum-responsive TiO 2 photoanode for photoelectrochemical cells. 2015 , 168-169, 483-489 | 22 |
| 1130 | Hydrothermal carbonization of carboxymethylcellulose: One-pot preparation of conductive carbon microspheres and water-soluble fluorescent carbon nanodots. 2015 , 266, 112-120 | 71 |
| 1129 | Efficient synthesis of promising liquid fuels 5-ethoxymethylfurfural from carbohydrates. 2015 , 150, 236-242 | 66 |
| 1128 | Autocatalytic Production of 5-Hydroxymethylfurfural from Fructose-Based Carbohydrates in a Biphasic System and Its Purification. 2015 , 54, 2657-2666 | 50 |
| 1127 | Synthesis of nanostructured carbon through ionothermal carbonization of common organic solvents and solutions. 2015 , 54, 5507-12 | 54 |
| 1126 | Flame-retardant wrapped ramie fibers towards suppressing Bandlewick effectlbf polypropylene/ramie fiber composites. 2015 , 33, 84-94 | 24 |
| 1125 | Construction of intumescent flame retardant and antimicrobial coating on cotton fabric via layer-by-layer assembly technology. 2015 , 276, 726-734 | 54 |
| 1124 | One-step synthesis of CBi2WO6 crystallites with improved photo-catalytic activities under visible light irradiation. 2015 , 5, 66464-66470 | 9 |
| 1123 | Characterization of products from hydrothermal carbonization of orange pomace including anaerobic digestibility of process liquor. 2015 , 196, 35-42 | 151 |
| 1122 | Low-Temperature Hydrothermal Synthesis of Green Luminescent Carbon Quantum Dots (CQD), and Optical Properties of Blends of the CQD with Poly(3-hexylthiophene). 2015 , 44, 3436-3443 | 25 |

| 1121 | Synthesis of twisted ribbon-like carbon, carbon microtubes and carbon rod from mercerized cotton fiber. 2015 , 206, 115-119 | 4 |
|------|---|-----|
| 1120 | Co3Fe7/C coreBhell microspheres as a lightweight microwave absorbent. 2015 , 163, 431-438 | 13 |
| 1119 | Preparation of Nitrogen-Doped Carbon Spheres by Injecting Pyrolysis of Pyridine. 2015 , 3, 1786-1793 | 31 |
| 1118 | Thermal Conversion of Lignintellulose Composite Particles into Aggregates of Fine Carbon Grains Holding Micro- and Mesoporous Spaces. 2015 , 3, 1690-1695 | 8 |
| 1117 | Effects of hydrolysis and carbonization reactions on hydrochar production. 2015 , 192, 328-34 | 31 |
| 1116 | Eco-friendly, catalyst-free synthesis of highly pure carbon spheres using vegetable oils as a renewable source and their application as a template for ZnO and MgO hollow spheres. 2015 , 5, 57114-57121 | 5 |
| 1115 | Nitrogen- and oxygen-containing activated carbons from sucrose for electrochemical supercapacitor applications. 2015 , 5, 63000-63011 | 41 |
| 1114 | Mesoporous activated carbons with enhanced porosity by optimal hydrothermal pre-treatment of biomass for supercapacitor applications. 2015 , 218, 55-61 | 118 |
| 1113 | Mobility of black pigments for electrophoretic display depending on the characteristics of carbon sphere. 2015 , 121, 276-281 | 4 |
| 1112 | Solvothermal synthesis of microporous superhydrophobic carbon with tunable morphology from natural cotton for carbon dioxide and organic solvent removal applications. 2015 , 3, 16213-16221 | 20 |
| 1111 | Investigating the role of feedstock properties and process conditions on products formed during the hydrothermal carbonization of organics using regression techniques. 2015 , 187, 263-274 | 36 |
| 1110 | Carbonaceous microspheres prepared by hydrothermal carbonization of glucose for direct use in catalytic dehydration of fructose. 2015 , 5, 17526-17531 | 59 |
| 1109 | Organic breakdown products resulting from hydrothermal carbonization of brewer's spent grain. 2015 , 131, 71-7 | 17 |
| 1108 | Fabrication of hollow spheres of metal oxide using fructose-derived carbonaceous spheres as sacrificial templates. 2015 , 18, 379-384 | 13 |
| 1107 | Characterization of biochars and dissolved organic matter phases obtained upon hydrothermal carbonization of Elodea nuttallii. 2015 , 189, 145-153 | 29 |
| 1106 | Modification of Bacterial Cellulose with Organosilanes to Improve Attachment and Spreading of Human Fibroblasts. 2015 , 22, 2311-2324 | 45 |
| 1105 | Characterization of hydrochar obtained from hydrothermal carbonization of wheat straw digestate. 2015 , 5, 425-435 | 44 |
| 1104 | Oligosaccharides and sugars production from olive stones by autohydrolysis and enzymatic hydrolysis. 2015 , 70, 100-106 | 24 |

(2015-2015)

| 1103 | Production, characterization, and biogas application of magnetic hydrochar from cellulose. 2015 , 186, 34-43 | 32 |
|------|---|-----|
| 1102 | Biomass-Derived Porous Carbon Materials: Synthesis and Catalytic Applications. 2015 , 7, 1608-1629 | 173 |
| 1101 | Role of Hydrochar Properties on the Porosity of Hydrochar-based Porous Carbon for Their Sustainable Application. 2015 , 3, 833-840 | 72 |
| 1100 | Flexible Fiber Supercapacitor Using Biowaste-Derived Porous Carbon. 2015 , 2, 1111-1116 | 55 |
| 1099 | Solid vs. hollow oxide spheres obtained by hydrothermal carbonization of various types of carbohydrates. 2015 , 5, 31768-31771 | 7 |
| 1098 | Removal of fluoxetine from water by adsorbent materials produced from paper mill sludge. 2015 , 448, 32-40 | 42 |
| 1097 | Methylene blue adsorption on factory-rejected tea activated carbon prepared by conjunction of hydrothermal carbonization and sodium hydroxide activation processes. 2015 , 52, 57-64 | 111 |
| 1096 | Green Synthesis of Carbon- and Silver-Modified Hierarchical ZnO with Excellent Solar Light Driven Photocatalytic Performance. 2015 , 3, 1010-1016 | 25 |
| 1095 | Cr(VI) removal by magnetic carbon nanocomposites derived from cellulose at different carbonization temperatures. 2015 , 3, 9817-9825 | 106 |
| 1094 | Production of high surface area mesoporous activated carbons from waste biomass using hydrogen peroxide-mediated hydrothermal treatment for adsorption applications. 2015 , 273, 622-629 | 116 |
| 1093 | Recent advances in carbon nanospheres: synthetic routes and applications. 2015 , 51, 9246-56 | 168 |
| 1092 | Yolk/shell nanoparticles: classifications, synthesis, properties, and applications. 2015 , 7, 19789-873 | 214 |
| 1091 | Hydrothermal Carbonization of Digestate in the Presence of Zeolite: Process Efficiency and Composite Properties. 2015 , 3, 2967-2974 | 42 |
| 1090 | Versatile Cellulose-Based Carbon Aerogel for the Removal of Both Cationic and Anionic Metal Contaminants from Water. 2015 , 7, 25875-83 | 97 |
| 1089 | Characterization of potassium hydroxide (KOH) modified hydrochars from different feedstocks for enhanced removal of heavy metals from water. 2015 , 22, 16640-51 | 110 |
| 1088 | Micro/nano-scaled carbon spheres based on hydrothermal carbonization of agarose. 2015 , 484, 386-393 | 41 |
| 1087 | Effect of reaction time on structure of ordered mesoporous carbon microspheres prepared from carboxymethyl cellulose by soft-template method. 2015 , 76, 866-872 | 24 |
| 1086 | Assessing the environmental impact of energy production from hydrochar generated via hydrothermal carbonization of food wastes. 2015 , 43, 203-17 | 80 |

| 1085 | Blood Compatibility Evaluations of Fluorescent Carbon Dots. 2015 , 7, 19153-62 | 62 |
|------|--|-----|
| 1084 | Effect of reaction temperature on properties of carbon nanodots and their visible-light photocatalytic degradation of tetracyline. 2015 , 5, 75711-75721 | 24 |
| 1083 | Production of Biochar for Soil Application: A Comparative Study of Three Kiln Models. 2015 , 25, 696-702 | 26 |
| 1082 | Conversion of Natural Tannin to Hydrothermal and Graphene-Like Carbons Studied by Wide-Angle X-ray Scattering. 2015 , 119, 8692-701 | 19 |
| 1081 | Porous carbon derived from disposable shaddock peel as an excellent catalyst toward VO2+/VO2+ couple for vanadium redox battery. 2015 , 299, 301-308 | 39 |
| 1080 | Hydrothermal preparation of highly porous carbon spheres from hemp (Cannabis sativa L.) stem hemicellulose for use in energy-related applications. 2015 , 65, 216-226 | 89 |
| 1079 | Hydrothermal carbonisation of sewage sludge: effect of process conditions on product characteristics and methane production. 2015 , 177, 318-27 | 199 |
| 1078 | SulfurDarbon yolkDhell particle based 3D interconnected nanostructures as cathodes for rechargeable lithiumBulfur batteries. 2015 , 3, 1853-1857 | 71 |
| 1077 | Chars as carbonaceous adsorbents/catalysts for tar elimination during biomass pyrolysis or gasification. 2015 , 43, 281-295 | 241 |
| 1076 | Fabrication of hydrophobic, electrically conductive and flame-resistant carbon aerogels by pyrolysis of regenerated cellulose aerogels. 2015 , 118, 115-8 | 53 |
| 1075 | Removal of thorium(IV) from aqueous solutions by carboxyl-rich hydrothermal carbon spheres through low-temperature heat treatment in air. 2015 , 54, 2516-2529 | 7 |
| 1074 | Novel Metal@Carbon Spheres CoreBhell Arrays by Controlled Self-Assembly of Carbon Nanospheres: A Stable and Flexible Supercapacitor Electrode. 2015 , 5, 1401709 | 129 |
| 1073 | Humin based by-products from biomass processing as a potential carbonaceous source for synthesis gas production. 2015 , 17, 959-972 | 111 |
| 1072 | Design and fabrication of hierarchically porous carbon with a template-free method. 2014 , 4, 6349 | 65 |
| 1071 | Tuning hydrochar properties for enhanced mesopore development in activated carbon by hydrothermal carbonization. 2015 , 203, 178-185 | 53 |
| 1070 | Sustainable carbon materials. 2015 , 44, 250-90 | 826 |
| 1069 | Formation of self-extinguishing flame retardant biobased coating on cotton fabrics via Layer-by-Layer assembly of chitin derivatives. 2015 , 115, 516-24 | 106 |
| 1068 | Hydrothermal liquefaction of barley straw to bio-crude oil: Effects of reaction temperature and aqueous phase recirculation. 2015 , 137, 183-192 | 234 |

| 1067 | Biochar from woody biomass for removing metal contaminants and carbon sequestration. 2015 , 22, 103-109 | 143 |
|------|--|-----|
| 1066 | An advanced MoS2 /carbon anode for high-performance sodium-ion batteries. 2015 , 11, 473-81 | 348 |
| 1065 | Activated carbon xerogels with a cellular morphology derived from hydrothermally carbonized glucose-graphene oxide hybrids and their performance towards CO2 and dye adsorption. <i>Carbon</i> , 2015, 81, 137-147 | 59 |
| 1064 | Hydrothermally Treated Banana Empty Fruit Bunch Fiber Activated Carbon for Pb(II) and Zn(II) Removal. 2016 , 11, | 11 |
| 1063 | Mesoporous Carbons for Energy-Efficient Water Splitting to Produce Pure Hydrogen at Room Temperature. 2016 , | 1 |
| 1062 | Exceptional Adsorption of Phenol and p-Nitrophenol from Water on Carbon Materials Prepared via Hydrothermal Carbonization of Corncob Residues. 2016 , 11, | 12 |
| 1061 | Subcritical Water Hydrolysis Treatment of Waste Biomass for Nutrient Extraction. 2016, 11, | 6 |
| 1060 | Biomass Supply and Trade Opportunities of Preprocessed Biomass for Power Generation. 2016 , 91-114 | 2 |
| 1059 | Biochar in thermal and thermochemical biorefineriesproduction of biochar as a coproduct. 2016 , 655-671 | 4 |
| 1058 | Hydrothermal Conversion of Neutral Sulfite Semi-Chemical Red Liquor into Hydrochar. 2016 , 9, 435 | 18 |
| 1057 | Characterization and Application of Magnetic Biochars from Corn Stalk by Pyrolysis and Hydrothermal Treatment. 2016 , 12, | 4 |
| 1056 | Production of biofuels via hydrothermal conversion. 2016 , 509-547 | 7 |
| 1055 | Hydrothermal synthesis of manganese oxide encapsulated multiporous carbon nanofibers for supercapacitors. 2016 , 9, 2672-2680 | 30 |
| 1054 | In Situ Carbonic Acid from CO2: A Green Acid for Highly Effective Conversion of Cellulose in the Presence of Lewis acid. 2016 , 4, 4146-4155 | 28 |
| 1053 | Fastest Formation Routes of Nanocarbons in Solution Plasma Processes. 2016 , 6, 36880 | 57 |
| 1052 | Spectroscopic tracking of mechanochemical reactivity and modification of a hydrothermal char. 2016 , 6, 12021-12031 | 13 |
| 1051 | Electrospun Carbon Nanofibers. 2016 , 287-307 | |
| 1050 | Effects of Cellulose, Hemicellulose, and Lignin on the Structure and Morphology of Porous Carbons. 2016 , 4, 3750-3756 | 186 |

| 1049 | Carbon doped solid solution Bi0.5Dy0.5VO4 for efficient photocatalytic hydrogen evolution from water. 2016 , 41, 16032-16039 | 4 |
|------------------------------|---|------------------------------------|
| 1048 | Cellulose nanocrystals: A versatile precursor for the preparation of different carbon structures and luminescent carbon dots. 2016 , 93, 121-128 | 32 |
| 1047 | Nitrogen-doped porous carbon materials: promising catalysts or catalyst supports for heterogeneous hydrogenation and oxidation. 2016 , 6, 3670-3693 | 202 |
| 1046 | The effect of phenolic compounds on the preparation of hydrochars from saccharides. 2016 , 35, 189-194 | 7 |
| 1045 | Production of char from sewage sludge employing hydrothermal carbonization: Char properties, combustion behavior and thermal characteristics. 2016 , 176, 110-118 | 223 |
| 1044 | Simulating hydrothermal treatment of sludge within a pulp and paper mill. 2016 , 173, 177-183 | 20 |
| 1043 | A critical analysis on palm kernel shell from oil palm industry as a feedstock for solid char production. 2016 , 32, | 39 |
| 1042 | Synthesis and formation mechanistic investigation of nitrogen-doped carbon dots with high quantum yields and yellowish-green fluorescence. 2016 , 8, 11185-93 | 131 |
| 1041 | Evaluation of the structure and fuel properties of lignocelluloses through carbon dioxide torrefaction. 2016 , 119, 463-472 | 42 |
| | | |
| 1040 | Low temperature pyrolysis of carboxymethylcellulose. 2016 , 23, 1713-1724 | 15 |
| 1040 | Low temperature pyrolysis of carboxymethylcellulose. 2016 , 23, 1713-1724 Ash behavior during hydrothermal treatment for solid fuel applications. Part 1: Overview of different feedstock. 2016 , 121, 402-408 | 15 38 |
| | Ash behavior during hydrothermal treatment for solid fuel applications. Part 1: Overview of | 38 |
| 1039 | Ash behavior during hydrothermal treatment for solid fuel applications. Part 1: Overview of different feedstock. 2016 , 121, 402-408 Catalytic activation and application of micro-spherical carbon derived from hydrothermal | 38 |
| 1039 | Ash behavior during hydrothermal treatment for solid fuel applications. Part 1: Overview of different feedstock. 2016 , 121, 402-408 Catalytic activation and application of micro-spherical carbon derived from hydrothermal carbonization of lignocellulosic biomass: statistical analysis using BoxBehnken design. 2016 , 6, 102680-10269 Upgrading the characteristics of biochar from cellulose, lignin, and xylan for solid biofuel | 38 4 ²⁴ |
| 1039 | Ash behavior during hydrothermal treatment for solid fuel applications. Part 1: Overview of different feedstock. 2016, 121, 402-408 Catalytic activation and application of micro-spherical carbon derived from hydrothermal carbonization of lignocellulosic biomass: statistical analysis using BoxBehnken design. 2016, 6, 102680-10269 Upgrading the characteristics of biochar from cellulose, lignin, and xylan for solid biofuel production from biomass by hydrothermal carbonization. 2016, 42, 95-100 Thermal & chemical analyses of hydrothermally derived carbon materials from corn starch. 2016, | 38 4 ²⁴ 135 |
| 1039 1038 1037 | Ash behavior during hydrothermal treatment for solid fuel applications. Part 1: Overview of different feedstock. 2016, 121, 402-408 Catalytic activation and application of micro-spherical carbon derived from hydrothermal carbonization of lignocellulosic biomass: statistical analysis using BoxBehnken design. 2016, 6, 102680-10269 Upgrading the characteristics of biochar from cellulose, lignin, and xylan for solid biofuel production from biomass by hydrothermal carbonization. 2016, 42, 95-100 Thermal & chemical analyses of hydrothermally derived carbon materials from corn starch. 2016, 153, 43-49 | 38 4 ²⁴ 135 20 |
| 1039 1038 1037 1036 | Ash behavior during hydrothermal treatment for solid fuel applications. Part 1: Overview of different feedstock. 2016, 121, 402-408 Catalytic activation and application of micro-spherical carbon derived from hydrothermal carbonization of lignocellulosic biomass: statistical analysis using BoxBehnken design. 2016, 6, 102680-10269 Upgrading the characteristics of biochar from cellulose, lignin, and xylan for solid biofuel production from biomass by hydrothermal carbonization. 2016, 42, 95-100 Thermal & chemical analyses of hydrothermally derived carbon materials from corn starch. 2016, 153, 43-49 Sustainable production of activated carbon spheres from ethyl cellulose. 2016, 6, 95656-95662 High yield and high packing density porous carbon for unprecedented CO2 capture from the first | 38 4 ²⁴ 135 20 |

(2016-2016)

| 1031 | Activated Carbons Prepared through H PO -Assisted Hydrothermal Carbonisation from Biomass Wastes: Porous Texture and Electrochemical Performance. 2016 , 81, 1349-1359 | | 36 |
|------|---|----|-----|
| 1030 | One-Step Hydrothermal Synthesis of Carbonaceous Spheres from Glucose with an Aluminum Chloride Catalyst and Its Adsorption Characteristic for Uranium(VI). 2016 , 55, 9648-9656 | | 27 |
| 1029 | Pyrolysis of hydrochar from digestate: Effect of hydrothermal carbonization and pyrolysis temperatures on pyrochar formation. 2016 , 220, 168-174 | | 88 |
| 1028 | On the structural and reactivity differences between biomass- and coal-derived chars. <i>Carbon</i> , 2016 , 109, 253-263 | ·4 | 22 |
| 1027 | DNA mediated electrocatalytic enhancement of Fe2O3PEDOTI -MoS2 hybrid nanostructures for riboflavin detection on screen printed electrode. 2016 , 6, 81500-81509 | | 9 |
| 1026 | Magnetically-recoverable carbonaceous material: An efficient catalyst for the synthesis of 5-hydroxymethylfurfural and 5-ethoxymethylfurfural from carbohydrates. 2016 , 86, 1698-1704 | | 8 |
| 1025 | Hydrothermal carbonization of tobacco stalk for fuel application. 2016 , 220, 305-311 | | 127 |
| 1024 | Sugarcane molasses as a pseudocapacitive material for supercapacitors. 2016 , 6, 88826-88836 | | 15 |
| 1023 | Enhanced photocatalytic activity of C@ZnO core-shell nanostructures and its photoluminescence property. 2016 , 389, 303-310 | | 30 |
| 1022 | Fermentative Hydrogen Production from Waste Sludge Solubilized by Low-Pressure Wet Oxidation Treatment. 2016 , 30, 5878-5884 | | 28 |
| 1021 | Biochar properties: Transport, fate, and impact. 2016 , 46, 1183-1296 | | 75 |
| 1020 | The roles of formic acid and levulinic acid on the formation and growth of carbonaceous spheres by hydrothermal carbonization. 2016 , 6, 102428-102435 | | 17 |
| 1019 | Approachable Way to Synthesize 3D Silica Hollow Nanospheres with Mesoporous Shells via Simple Template-Assisted Technique. 2016 , 1, 5961-5966 | | 1 |
| 1018 | Carbon-Stabilized Interlayer-Expanded Few-Layer MoSe Nanosheets for Sodium Ion Batteries with Enhanced Rate Capability and Cycling Performance. 2016 , 8, 32324-32332 | | 105 |
| 1017 | Activated carbon derived from hydrothermal treatment of sucrose and its air filtration application. 2016 , 6, 109950-109959 | | 11 |
| 1016 | Amidoxime-functionalized hydrothermal carbon materials for uranium removal from aqueous solution. 2016 , 6, 102462-102471 | | 26 |
| 1015 | Dechlorination of Poly(vinyl chloride) Wastes via Hydrothermal Carbonization with Lignin for Clean Solid Fuel Production. 2016 , 55, 11638-11644 | | 38 |
| 1014 | Morphology evolution, formation mechanism and adsorption properties of hydrochars prepared by hydrothermal carbonization of corn stalk. 2016 , 6, 107829-107835 | | 33 |

| 1013 | Catalytic Hydrotreatment of Humins in Mixtures of Formic Acid/2-Propanol with Supported Ruthenium Catalysts. 2016 , 9, 951-61 | 33 |
|------|--|-----|
| 1012 | Hydrothermal treatment of palm oil empty fruit bunches: an investigation of the solid fuel and liquid organic fertilizer applications. 2016 , 7, 627-636 | 22 |
| 1011 | Ash behavior during hydrothermal treatment for solid fuel applications. Part 2: Effects of treatment conditions on industrial waste biomass. 2016 , 121, 409-414 | 29 |
| 1010 | Solid fuel production by hydrothermal carbonization of water-like phase of bio-oil. 2016 , 180, 591-596 | 11 |
| 1009 | Chemical, structural and energy properties of hydrochars from microwave-assisted hydrothermal carbonization of glucose. 2016 , 7, 449-456 | 36 |
| 1008 | Hydrothermal carbonization of pulp mill streams. 2016 , 212, 236-244 | 19 |
| 1007 | Cellulose: A review as natural, modified and activated carbon adsorbent. 2016 , 216, 1066-76 | 417 |
| 1006 | Assessment of hydrogen storage in activated carbons produced from hydrothermally treated organic materials. 2016 , 41, 12146-12156 | 42 |
| 1005 | A Novel Aluminum-Ion Battery: Al/AlCl3-[EMIm]Cl/Ni3S2@Graphene. 2016 , 6, 1600137 | 306 |
| 1004 | A combined H3PO4 activation and boron templating process for easy synthesis of highly porous, spherical activated carbons as a superior adsorbent for rhodamine B. 2016 , 6, 15226-15233 | 14 |
| 1003 | Preparation and characterization of hydrochar from waste eucalyptus bark by hydrothermal carbonization. 2016 , 97, 238-245 | 159 |
| 1002 | Hydroxylation of benzene to phenol on Cu x O y @C with hydrogen peroxide. 2016 , 117, 693-704 | 4 |
| 1001 | Synthesis and magnetic properties of highly dispersed tantalum carbide nanoparticles decorated on carbon spheres. 2016 , 18, 1427-1438 | 3 |
| 1000 | Selective simultaneous determination of levodopa and acetaminophen in the presence of ascorbic acid using a novel TiO2 hollow sphere/multi-walled carbon nanotube/poly-aspartic acid composite modified carbon paste electrode. 2016 , 8, 1135-1144 | 9 |
| 999 | Microwave synthesis of carbon dots with multi-response using denatured proteins as carbon source. 2016 , 6, 11711-11718 | 28 |
| 998 | Effects of selected process conditions on the stability of hydrochar in low-carbon sandy soil. 2016 , 267, 137-145 | 23 |
| 997 | Synthesis and characterization of lignite-like fuels obtained by hydrothermal carbonization of cellulose. 2016 , 171, 54-58 | 38 |
| 996 | Hydrothermal carbonization of industrial mixed sludge from a pulp and paper mill. 2016 , 200, 444-50 | 58 |

(2016-2016)

| 995 | Biomass-derived activated carbon with simultaneously enhanced CO2 uptake for both pre and post combustion capture applications. 2016 , 4, 280-289 | 178 |
|-----|--|-----|
| 994 | Removal of Malachite Green, a hazardous dye from aqueous solutions using Avena sativa (oat) hull as a potential adsorbent. 2016 , 213, 162-172 | 80 |
| 993 | Synthesis and adsorption properties of halloysite/carbon nanocomposites and halloysite-derived carbon nanotubes. 2016 , 119, 284-293 | 38 |
| 992 | Felle3C/C microspheres as a lightweight microwave absorbent. 2016 , 6, 24820-24826 | 35 |
| 991 | Mechanism for the formation and growth of carbonaceous spheres from sucrose by hydrothermal carbonization. 2016 , 6, 20814-20823 | 46 |
| 990 | Hierarchical nanotubes assembled from MoS 2 -carbon monolayer sandwiched superstructure nanosheets for high-performance sodium ion batteries. 2016 , 22, 27-37 | 278 |
| 989 | Study of Biochar Properties by Scanning Electron Microscope Energy Dispersive X-Ray Spectroscopy (SEM-EDX). 2016 , 47, 593-601 | 32 |
| 988 | Hydrothermal synthesis of N-doped spherical carbon from carboxymethylcellulose for CO 2 capture. 2016 , 369, 101-107 | 26 |
| 987 | Hydrothermal synthesis of pectin derived nanoporous carbon material. 2016 , 171, 212-215 | 6 |
| 986 | Size-controllable synthesis of carbon spheres with assistance of metal ions. 2016 , 214, 1-4 | 8 |
| 985 | Cellulose-derived carbon spheres produced under supercritical ethanol conditions. 2016 , 18, 331-338 | 11 |
| 984 | Fate of inorganic material during hydrothermal carbonisation of biomass: Influence of feedstock on combustion behaviour of hydrochar. 2016 , 169, 135-145 | 187 |
| 983 | Sodium modified molybdenum sulfide via molten salt electrolysis as an anode material for high performance sodium-ion batteries. 2016 , 18, 3204-13 | 36 |
| 982 | Influence of sucrose solution's pH on hydrothermally synthesized carbon microspheres. 2016 , 24, 139-143 | 9 |
| 981 | Microwave-assisted and conventional hydrothermal carbonization of lignocellulosic waste material: Comparison of the chemical and structural properties of the hydrochars. 2016 , 118, 1-8 | 81 |
| 980 | Predicting the drying properties of sludge based on hydrothermal treatment under subcritical conditions. 2016 , 91, 11-8 | 15 |
| 979 | Preparation of graphene oxide-wrapped carbon sphere@silver spheres for high performance chlorinated phenols sensor. 2016 , 302, 188-197 | 34 |
| 978 | Molecular structure, morphology and growth mechanisms and rates of 5-hydroxymethyl furfural (HMF) derived humins. 2016 , 18, 1983-1993 | 201 |

| 977 | Hydrothermal conversion of biomass waste to activated carbon with high porosity: A review. 2016 , 283, 789-805 | 614 |
|-----|--|-------------------|
| 976 | Microorganism-derived carbon microspheres for uranium removal from aqueous solution. 2016 , 284, 630-639 | 96 |
| 975 | Low-cost, green synthesis of highly porous carbons derived from lotus root shell as superior performance electrode materials in supercapacitor. 2016 , 25, 26-34 | 40 |
| 974 | Insight into formation of montmorillonite-hydrochar nanocomposite under hydrothermal conditions. 2016 , 119, 116-125 | 29 |
| 973 | The study on the generation of porous carbonaceous microspheres from waste cotton fabric. 2017 , 108, 750-754 | |
| 972 | Quantitative multiphase model for hydrothermal liquefaction of algal biomass. 2017 , 19, 1163-1174 | 67 |
| 971 | Chiroptical luminescent nanostructured cellulose films. 2017 , 1, 979-987 | 35 |
| 970 | Relationship between enhanced dewaterability and structural properties of hydrothermal sludge after hydrothermal treatment of excess sludge. 2017 , 112, 72-82 | 94 |
| 969 | Synchrotron based NEXAFS study on nitrogen doped hydrothermal carbon: Insights into surface functionalities and formation mechanisms. <i>Carbon</i> , 2017 , 114, 566-578 | 47 |
| 968 | Structural analysis and capacitive properties of carbon spheres prepared by hydrothermal carbonization. 2017 , 28, 884-889 | 31 |
| 967 | Excellent electrochemical performances of nanocast ordered mesoporous carbons based on tannin-related polyphenols as supercapacitor electrodes. 2017 , 344, 15-24 | 45 |
| 966 | Li-ion vs. Na-ion capacitors: A performance evaluation with coconut shell derived mesoporous carbon and natural plant based hard carbon. 2017 , 316, 506-513 | 64 |
| 965 | Valorization of Furfural Residue by Hydrothermal Carbonization: Processing Optimization, Chemical and Structural Characterization. 2017 , 2, 583-590 | 5 |
| 964 | Highly mesoporous carbon from Teak wood sawdust as prospective electrode for the construction of high energy Li-ion capacitors. 2017 , 228, 131-138 | 56 |
| 963 | Preparation of porous carbon directly from hydrothermal carbonization of fructose and phloroglucinol for adsorption of tetracycline. 2017 , 28, 960-962 | 14 |
| 962 | Exploratory catalyst screening studies on the liquefaction of model humins from C6 sugars. 2017 , 7, 5136-5 ⁻⁷ | 147 ₁₄ |
| 961 | Finding of coal organic microspheres during hydrothermal treatment of brown coal. 2017 , 195, 143-150 | 9 |
| 960 | Evaluation of hydrothermal carbonization as a preliminary step for the production of functional materials from biogas digestate. 2017 , 124, 461-474 | 54 |

(2017-2017)

| 959 | VxOy@C catalyst prepared from biomass for hydroxylation of benzene to phenol with molecular oxygen. 2017 , 7, 12738-12744 | 11 |
|-----|---|----------|
| 958 | Slow Pyrolysis Magnetization of Hydrochar for Effective and Highly Stable Removal of Tetracycline from Aqueous Solution. 2017 , 56, 3059-3066 | 31 |
| 957 | A simplistic approach to green future with eco-friendly luminescent carbon dots and their application to fluorescent nano-sensor 'turn-off' probe for selective sensing of copper ions. 2017 , 75, 1456-1464 | 67 |
| 956 | Synthesis of Zn2SnO4 hollow spheres by a template route for high-performance acetone gas sensor. 2017 , 245, 493-506 | 62 |
| 955 | 5 A Novel Ultrafast Rechargeable Multi-Ions Battery. 2017 , 29, 1606349 | 74 |
| 954 | 4 Preparation and Electrochemical Characterization of Carbonaceous Thin Layer. 2017 , 29, 1062-1068 | 1 |
| 953 | Effect of the reaction medium on the immobilization of nutrients in hydrochars obtained using sugarcane industry residues. 2017 , 237, 213-221 | 27 |
| 952 | 2 Liquefaction of wood and its model components. 2017 , 125, 136-143 | 22 |
| 95 | Activated carbon derived from spherical hydrochar functionalized with triethylenetetramine: synthesis, characterizations, and adsorption application. 2017 , 6, | 15 |
| 950 | Hydrothermal Carbon-Mediated Fenton-Like Reaction Mechanism in the Degradation of Alachlor: Direct Electron Transfer from Hydrothermal Carbon to Fe(III). 2017 , 9, 17115-17124 | 103 |
| 949 | 9 Hydrothermal treatment of grape marc for solid fuel applications. 2017 , 145, 371-377 | 32 |
| 94 | Biomass to porous carbon in one step: directly activated biomass for high performance CO2 storage. 2017 , 5, 12330-12339 | 89 |
| 947 | Converting Carbohydrates to Carbon-Based Photocatalysts for Environmental Treatment. 2017 , 51, 7076 | 5-708363 |
| 94 | Enhanced photocatalytic water splitting by gold carbon dot core shell nanocatalyst under visible/sunlight. 2017 , 41, 4573-4581 | 31 |
| 94. | Insight into adsorption mechanism of cationic dye onto agricultural residues-derived hydrochars: Negligible role of Interaction. 2017 , 34, 1708-1720 | 56 |
| 94 | Cellulose-Derived Hollow Carbonaceous Nanospheres from Rice Husks as Anode for Lithium-Ion Batteries with Enhanced Reversible Capacity and Cyclic Performance. 2017 , 2, 3627-3632 | 7 |
| 943 | Efficient valorisation of palm shell powder to bio-sorbents for copper remediation from aqueous solutions. 2017 , 5, 2480-2487 | 8 |
| 94 | Functionalized Natural Carbon-Supported Nanoparticles as Excellent Catalysts for Hydrocarbon Production. 2017 , 12, 366-371 | 7 |
| | | |

| 941 | Biomass-derived carbon electrode materials for supercapacitors. 2017 , 1, 1265-1281 | 198 |
|-----|---|-----|
| 940 | Ethylenediamine and glucose based-assisted coating of activated carbon on silica sand prepared via hydrothermal technique for entrapping Cr(VI) as a glass colorant. 2017 , 718, 270-278 | 9 |
| 939 | Novel glucose-based adsorbents (Glc-Cs) with high CO 2 capacity and excellent CO 2 /CH 4 /N 2 adsorption selectivity. 2017 , 327, 51-59 | 37 |
| 938 | Effects of additives on sucrose-derived activated carbon microspheres synthesized by hydrothermal carbonization. 2017 , 52, 10787-10799 | 27 |
| 937 | Preparation of Carbon Dots for Cellular Imaging by the Molecular Aggregation of Cellulolytic Enzyme Lignin. 2017 , 33, 5786-5795 | 56 |
| 936 | Comparative Study of the Structure of Hydroproducts Derived from Loblolly Pine and Straw Grass. 2017 , 5, 6131-6138 | 2 |
| 935 | Hydrothermal Carbonization of Lignin with Vanillin as a Model Component. 2017, 40, 1190-1195 | 6 |
| 934 | Hyperspectral Imaging to Determine the Properties and Homogeneity of Renewable Carbon Materials. 2017 , 10, 2751-2757 | 3 |
| 933 | Structural elucidation of hydro-products from hydrothermal carbonization of loblolly pine at different temperatures using NMR techniques. 2017 , 133, 171-178 | 8 |
| 932 | Comparative evaluation of conventional and microwave hydrothermal carbonization of human biowaste for value recovery. 2017 , 75, 2852-2863 | 19 |
| 931 | Hydrothermal treatment followed by enzymatic hydrolysis and hydrothermal carbonization as means to valorise agro- and forest-based biomass residues. 2017 , 235, 70-78 | 18 |
| 930 | Hydrothermal carbonization of forestry residues: influence of reaction temperature on holocellulose-derived hydrochar properties. 2017 , 52, 1736-1746 | 34 |
| 929 | A comparative study of graphene oxide affecting the nanoarchitecture and electrochemical properties of urchin-shape nickel cobalt oxide. 2017 , 137, 125-136 | 11 |
| 928 | Hydrothermal carbonization of medical wastes and lignocellulosic biomass for solid fuel production from lab-scale to pilot-scale. 2017 , 118, 312-323 | 92 |
| 927 | Facile one-pot synthesis of iron nanoparticles immobilized into the porous hydrochar for catalytic decomposition of phenol. 2017 , 204, 566-576 | 92 |
| 926 | Facile approach for synthesis of doped carbon electrocatalyst from cellulose nanofibrils toward high-performance metal-free oxygen reduction and hydrogen evolution. 2017 , 32, 336-346 | 100 |
| 925 | High-Performance Aluminum-Ion Battery with CuS@C Microsphere Composite Cathode. 2017 , 11, 469-477 | 298 |
| 924 | One-step Preparation of Carbon-based Solid Acid Catalyst from Water Hyacinth Leaves for Esterification of Oleic Acid and Dehydration of Xylose. 2017 , 12, 3178-3186 | 23 |

| 923 | Morphological and chemical structure of hydrothermally carbonized saccharides. 2017 , 18, 1602-1608 | 5 |
|--------------------------|---|--|
| 922 | Steam gasification of sewage sludge with CaO as CO 2 sorbent for hydrogen-rich syngas production. 2017 , 107, 52-62 | 37 |
| 921 | Hydrothermal carbonization of dried olive pomace: Energy potential and process performances. 2017 , 128, 281-290 | 49 |
| 920 | Bio-butanol sorption performance on novel porous-carbon adsorbents from corncob prepared via hydrothermal carbonization and post-pyrolysis method. 2017 , 7, 11753 | 12 |
| 919 | Capacitance-enhanced sodium-ion storage in nitrogen-rich hard carbon. 2017 , 5, 22186-22192 | 59 |
| 918 | Acetic Acid and Sodium Hydroxide-Aided Hydrothermal Carbonization of Woody Biomass for Enhanced Pelletization and Fuel Properties. 2017 , 31, 12200-12208 | 45 |
| 917 | Optimizing the Preparation of Meso- and Microporous Canola Stalk-Derived Hydrothermal Carbon via Response Surface Methodology for Methylene Blue Removal. 2017 , 31, 12327-12338 | 22 |
| 916 | Physico-chemical characterization of carbons produced from technical lignin by sub-critical hydrothermal carbonization. 2017 , 107, 172-181 | 34 |
| 915 | Cigarette butt-derived carbons have ultra-high surface area and unprecedented hydrogen storage capacity. 2017 , 10, 2552-2562 | 115 |
| | | |
| 914 | Synthesis of carbon nanofibers via hydrothermal conversion of cellulose nanocrystals. 2017 , 24, 4599-4604 | 10 |
| 914 | Synthesis of carbon nanofibers via hydrothermal conversion of cellulose nanocrystals. 2017 , 24, 4599-4604 Influence of temperature on yield, composition and properties of the sub-fractions derived from slow pyrolysis of Calophyllum inophyllum de-oiled cake. 2017 , 127, 159-169 | 10 |
| | Influence of temperature on yield, composition and properties of the sub-fractions derived from | |
| 913 | Influence of temperature on yield, composition and properties of the sub-fractions derived from slow pyrolysis of Calophyllum inophyllum de-oiled cake. 2017 , 127, 159-169 RETRACTED: Effect of temperature on yield and properties of the sub-fractions derived from | |
| 913 | Influence of temperature on yield, composition and properties of the sub-fractions derived from slow pyrolysis of Calophyllum inophyllum de-oiled cake. 2017, 127, 159-169 RETRACTED: Effect of temperature on yield and properties of the sub-fractions derived from pyrolysis of Calophyllum inophyllum deoiled cake. 2017, 141, 159-169 | 27 |
| 913 912 911 | Influence of temperature on yield, composition and properties of the sub-fractions derived from slow pyrolysis of Calophyllum inophyllum de-oiled cake. 2017, 127, 159-169 RETRACTED: Effect of temperature on yield and properties of the sub-fractions derived from pyrolysis of Calophyllum inophyllum deoiled cake. 2017, 141, 159-169 Hydrothermal carbonization of food waste for nutrient recovery and reuse. 2017, 69, 480-491 | 27 53 |
| 913 912 911 910 | Influence of temperature on yield, composition and properties of the sub-fractions derived from slow pyrolysis of Calophyllum inophyllum de-oiled cake. 2017, 127, 159-169 RETRACTED: Effect of temperature on yield and properties of the sub-fractions derived from pyrolysis of Calophyllum inophyllum deoiled cake. 2017, 141, 159-169 Hydrothermal carbonization of food waste for nutrient recovery and reuse. 2017, 69, 480-491 Study on the quality of oat hull fuel pellets using bio-additives. 2017, 106, 166-175 | 275331 |
| 913 912 911 910 | Influence of temperature on yield, composition and properties of the sub-fractions derived from slow pyrolysis of Calophyllum inophyllum de-oiled cake. 2017, 127, 159-169 RETRACTED: Effect of temperature on yield and properties of the sub-fractions derived from pyrolysis of Calophyllum inophyllum deoiled cake. 2017, 141, 159-169 Hydrothermal carbonization of food waste for nutrient recovery and reuse. 2017, 69, 480-491 Study on the quality of oat hull fuel pellets using bio-additives. 2017, 106, 166-175 Easy Preparation of Tannin-Based Ag Catalysts for Ethylene Epoxidation. 2017, 2, 8509-8516 One-Step Synthesis of Acidophilic Highly-Photoluminescent Carbon Dots Modified by Ionic Liquid | 2753313 |

| 905 | Carbon-coated sepiolite clay fibers with acid pre-treatment as low-cost organic adsorbents. <i>Carbon</i> , 2017 , 123, 259-272 | 19 |
|-----|---|-----|
| 904 | Characterization of dairy manure hydrochar and aqueous phase products generated by hydrothermal carbonization at different temperatures. 2017 , 127, 335-342 | 49 |
| 903 | Graphene oxide induced hydrothermal carbonization of egg proteins for high-performance supercapacitors. 2017 , 5, 17040-17047 | 53 |
| 902 | Effect of the Amount of Sludge on Physicochemical Properties and Chemical Structure of Low-rank Coal under Hydrothermal Conditions. 2017 , 12, 755-764 | 2 |
| 901 | Characterization of products from hydrothermal carbonization of pine. 2017, 244, 78-83 | 57 |
| 900 | Parametric study of the hydrothermal carbonization of cellulose and effect of acidic conditions. <i>Carbon</i> , 2017 , 123, 421-432 | 62 |
| 899 | One-stage Template-free KOH Activation for Mesopore-enriched Carbons and Their Application in CO2 Capture. 2017 , 64, 1041-1047 | 4 |
| 898 | Influence of the Carbonization Process on Activated Carbon Properties from Lignin and Lignin-Rich Biomasses. 2017 , 5, 8222-8233 | 86 |
| 897 | Evaluation of Arrhenius-type overall kinetic equations for hydrothermal carbonization. 2017, 127, 286-291 | 18 |
| 896 | Oxygen-rich microporous carbons with exceptional hydrogen storage capacity. 2017 , 8, 1545 | 117 |
| 895 | Effects of organic and inorganic metal salts on thermogravimetric pyrolysis of biomass components. 2017 , 34, 3077-3084 | 19 |
| 894 | From harmful Microcystis blooms to multi-functional core-double-shell microsphere bio-hydrochar materials. 2017 , 7, 15477 | 11 |
| 893 | Ultra-low charge transfer resistance carbons by one-pot hydrothermal method for glucose sensing. 2017 , 60, 1234-1244 | 5 |
| 892 | Hydrothermal Carbonization and Its Role in Catalysis. 2017 , 715-752 | 2 |
| 891 | Solvothermal polycondensation of novolacs phenolic-resin to nanopowders and their derived activated nanocarbons as efficient adsorbents for water cleaning. 2017 , 24, 1555-1564 | 7 |
| 890 | Controllable Morphologies of Carbon Microspheres via Green Hydrothermal Method Using Fructose and Xylose. 2017 , 46, 1400-1402 | 10 |
| 889 | Influence of precursor pH on the structure and photo-Fenton performance of Fe/hydrochar. 2017 , 7, 35257-35264 | 9 |
| 888 | Preparation of porous carbon sphere from waste sugar solution for electric double-layer capacitor. 2017 , 361, 249-258 | 61 |

(2017-2017)

| 887 | Hydrothermal carbonization for the preparation of hydrochars from glucose, cellulose, chitin, chitosan and wood chips via low-temperature and their characterization. 2017 , 246, 82-87 | 96 |
|-----|--|-----|
| 886 | Nitrogen doped hollow MoS2/C nanospheres as anode for long-life sodium-ion batteries. 2017 , 327, 522-529 | 77 |
| 885 | Hydrothermal Carbonization of Glucose, Fructose, and Xyloseldentification of Organic Products with Medium Molecular Masses. 2017 , 5, 6420-6428 | 38 |
| 884 | Graphene oxide mediated cellulose-derived carbon as a highly selective catalyst for the hydrolysis of cellulose to glucose. 2017 , 543, 218-224 | 29 |
| 883 | Humins as promising material for producing sustainable carbohydrate-derived building materials. 2017 , 139, 594-601 | 45 |
| 882 | Effect of core-shell microspheres as pore-forming agent on the properties of porous alumina ceramics. 2017 , 113, 384-390 | 27 |
| 881 | Hydrothermal carbonization of macrophyte Potamogeton lucens for solid biofuel production: Production of solid biofuel from macrophyte Potamogeton lucens. 2017 , 20, 168-174 | 5 |
| 880 | Efficient catalytic system for the direct transformation of lignocellulosic biomass to furfural and 5-hydroxymethylfurfural. 2017 , 224, 656-661 | 88 |
| 879 | Green synthesis of carbon dots from Ocimum sanctum for effective fluorescent sensing of Pb2+ ions and live cell imaging. 2017 , 242, 679-686 | 212 |
| 878 | Energy Recovery Efficiency of Poultry Slaughterhouse Sludge Cake by Hydrothermal Carbonization. 2017 , 10, 1876 | 16 |
| 877 | Size controllable synthesis of hard carbon spheres from aqueous D-glucose. 2017 , 11, 213 | 1 |
| 876 | Calcium-Mediated Control of Polydopamine Film Oxidation and Iron Chelation. 2016, 18, | 22 |
| 875 | Geomimetics and Extreme Biomimetics Inspired by Hydrothermal Systems-What Can We Learn from Nature for Materials Synthesis?. 2017 , 2, | 13 |
| 874 | Diamond-Like Carbon Nanofoam from Low-Temperature Hydrothermal Carbonization of a Sucrose/Naphthalene Precursor Solution. 2017 , 3, 23 | 5 |
| 873 | Efficient Low Temperature Hydrothermal Carbonization of Chinese Reed for Biochar with High Energy Density. 2017 , 10, 2094 | 11 |
| 872 | Status of Biomass Derived Carbon Materials for Supercapacitor Application. 2017 , 2017, 1-14 | 51 |
| 871 | The Effect of Calcium-Based Salt on Hydrothermal Carbonization of Corncob. 2017 , 751, 477-482 | O |
| 870 | Equilibrium Isotherm, Kinetic, and Thermodynamic Studies of Divalent Cation Adsorption onto Calamus gracilis Sawdust-Based Activated Carbon. 2017 , 12, | 7 |

| 869 | HYDROTHERMAL CARBONIZATION OF BIOMASS WASTE BY USING A STIRRED REACTOR: AN INITIAL EXPERIMENTAL RESULTS. 2017 , 16, 212 | 3 |
|--------------------------|--|----------------------------|
| 868 | Synthesis of Magnetic Carbon Supported Manganese Catalysts for Phenol Oxidation by Activation of Peroxymonosulfate. 2017 , 7, 3 | 6 |
| 867 | Process characteristics for microwave assisted hydrothermal carbonization of cellulose. 2018 , 259, 91-98 | 34 |
| 866 | Persistent free radicals in carbon-based materials on transformation of refractory organic contaminants (ROCs) in water: A critical review. 2018 , 137, 130-143 | 158 |
| 865 | High-energy green supercapacitor driven by ionic liquid electrolytes as an ultra-high stable next-generation energy storage device. 2018 , 383, 102-109 | 84 |
| 864 | Study on an alternative approach for the preparation of wood vinegar from the hydrothermolysis process of cotton stalk. 2018 , 254, 231-238 | 18 |
| 863 | Hydrothermal synthesis of halloysite nanotubes @carbon nanocomposites with good biocompatibility. 2018 , 266, 155-163 | 10 |
| 862 | Hydrothermal Carbonization of Biomass: A Review. 2018 , 52, 91-103 | 42 |
| 861 | Effects of Sphingomonas sp. GY2B on the structure and physicochemical properties of stearic acid-modified montmorillonite in the biodegradation of phenanthrene. 2018 , 156, 36-44 | 13 |
| | | |
| 860 | A review of the hydrothermal carbonization of biomass waste for hydrochar formation: Process conditions, fundamentals, and physicochemical properties. 2018 , 90, 223-247 | 467 |
| 860 859 | | 467 42 |
| | conditions, fundamentals, and physicochemical properties. 2018 , 90, 223-247 | |
| 859 | conditions, fundamentals, and physicochemical properties. 2018 , 90, 223-247 Influence of Interactions among Three Biomass Components on the Pyrolysis Behavior. 2018 , 57, 5241-5249 Rapid transformation of heterocyclic building blocks into nanoporous carbons for | 42 |
| 859 858 | conditions, fundamentals, and physicochemical properties. 2018 , 90, 223-247 Influence of Interactions among Three Biomass Components on the Pyrolysis Behavior. 2018 , 57, 5241-5249 Rapid transformation of heterocyclic building blocks into nanoporous carbons for high-performance supercapacitors 2018 , 8, 12300-12309 Hydrothermal Carbonization of Microalgae (Chlorococcum sp.) for Porous Carbons With High Cr(VI) | 42 |
| 859 858 857 | Influence of Interactions among Three Biomass Components on the Pyrolysis Behavior. 2018, 57, 5241-5249 Rapid transformation of heterocyclic building blocks into nanoporous carbons for high-performance supercapacitors 2018, 8, 12300-12309 Hydrothermal Carbonization of Microalgae (Chlorococcum sp.) for Porous Carbons With High Cr(VI) Adsorption Performance. 2018, 186, 414-424 | 42 33 19 |
| 859 858 857 856 | Influence of Interactions among Three Biomass Components on the Pyrolysis Behavior. 2018, 57, 5241-5249 Rapid transformation of heterocyclic building blocks into nanoporous carbons for high-performance supercapacitors 2018, 8, 12300-12309 Hydrothermal Carbonization of Microalgae (Chlorococcum sp.) for Porous Carbons With High Cr(VI) Adsorption Performance. 2018, 186, 414-424 Hydrothermal Degradation of Cellulose at Temperature from 200 to 300 °C. 2018, 57, 6576-6584 | 42 33 19 26 |
| 859 858 857 856 | Influence of Interactions among Three Biomass Components on the Pyrolysis Behavior. 2018, 57, 5241-5249 Rapid transformation of heterocyclic building blocks into nanoporous carbons for high-performance supercapacitors 2018, 8, 12300-12309 Hydrothermal Carbonization of Microalgae (Chlorococcum sp.) for Porous Carbons With High Cr(VI) Adsorption Performance. 2018, 186, 414-424 Hydrothermal Degradation of Cellulose at Temperature from 200 to 300 °C. 2018, 57, 6576-6584 Biochar characteristics and early applications in anaerobic digestion-a review. 2018, 6, 2892-2909 Spherical cobalt/cobalt oxide - Carbon composite anodes for enhanced lithium-ion storage. 2018, | 42 33 19 26 70 |

(2018-2018)

| 851 | Elimination of micropollutants by activated carbon produced from fibers taken from wastewater screenings using hydrothermal carbonization. 2018 , 211, 278-286 | 28 |
|-----|---|-----|
| 850 | Room temperature solid state dual-ion batteries based on gel electrolytes. 2018 , 6, 4313-4323 | 29 |
| 849 | Targeted production of reactive oxygen species in mitochondria to overcome cancer drug resistance. 2018 , 9, 562 | 190 |
| 848 | Nanocatalysts in Environmental Applications. 2018, | 1 |
| 847 | Synthesis and chromatic properties of zircon encapsulated ceramic black pigment with carbon sphere as carbon source. 2018 , 38, 2218-2227 | 13 |
| 846 | Natural cotton as precursor for the refractory boron carbidell hydrothermal synthesis and characterization. 2018 , 5, 015603 | 13 |
| 845 | Nitrogen/phosphorus dual-doped hierarchically porous graphitic biocarbon with greatly improved performance on oxygen reduction reaction in alkaline media. 2018 , 809, 163-170 | 16 |
| 844 | A novel dual-graphite aluminum-ion battery. 2018 , 12, 119-127 | 61 |
| 843 | Synthesis of carbon microspheres under ambient pressure. 2018 , 25, 1245-1250 | 2 |
| 842 | Hydrothermal Carbon-Coated TiO2 as Support for Co-Based Catalyst in Fischer Tropsch Synthesis. 2018 , 8, 1591-1600 | 55 |
| 841 | Porosity enhancement of spherical activated carbon: Influence and optimization of hydrothermal synthesis conditions using response surface methodology. 2018 , 6, 991-999 | 29 |
| 840 | Revealing the Dynamic Formation Process and Mechanism of Hollow Carbon Spheres: From Bowl to Sphere. 2018 , 6, 2797-2805 | 28 |
| 839 | Structural analysis of humins formed in the Brtsted acid catalyzed dehydration of fructose. 2018 , 20, 997-1006 | 85 |
| 838 | Optimization of hydrothermal conversion of bamboo (Phyllostachys aureosulcata) to levulinic acid via response surface methodology. 2018 , 219, 95-102 | 16 |
| 837 | Method for promoting in-situ hydrochar porosity in hydrothermal carbonization of almond shells with air activation. 2018 , 138, 187-192 | 17 |
| 836 | Comparative evaluation of dry and wet carbonization of agro industrial wastes for the production of soil improver. 2018 , 6, 3366-3375 | 14 |
| 835 | Hydrochar supported bimetallic Nife nanocatalysts with tailored composition, size and shape for improved biomass steam reforming performance. 2018 , 20, 2788-2800 | 49 |
| 834 | Naturally abundant high-performance rechargeable aluminum/iodine batteries based on conversion reaction chemistry. 2018 , 6, 9984-9996 | 42 |

| 833 | Hydrothermal carbonization of biomass waste under low temperature condition. 2018, 154, 01025 | 10 |
|-----|---|-----|
| 832 | Formation mechanism of highly dispersed semi-embedded ruthenium nanoparticles in porous carbon matrix determined by in situ temperature-programmed infrared spectroscopy. 2018 , 39, 146-156 | 5 |
| 831 | Symbiotic relationship between hydrothermal carbonization technology and anaerobic digestion for food waste in China. 2018 , 260, 404-412 | 42 |
| 830 | Zinc and nitrogen ornamented bluish white luminescent carbon dots for engrossing bacteriostatic activity and Fenton based bio-sensor. 2018 , 88, 115-129 | 53 |
| 829 | Heteroatom doped photoluminescent carbon dots for sensitive detection of acetone in human fluids. 2018 , 266, 583-593 | 75 |
| 828 | Production of crude bio-oil and biochar from hydrothermal conversion of jujube stones with metal carbonates. 2018 , 9, 613-623 | 3 |
| 827 | Preparation of hydrothermal carbon acid catalyst from defatted rice bran. 2018 , 117, 286-294 | 19 |
| 826 | Cellulose nanocrystals effect on the stabilization of polyacrylonitrile composite films. <i>Carbon</i> , 2018 , 134, 92-102 | 13 |
| 825 | Quantitative analysis of the aqueous fraction from the Fe-assisted hydrothermal liquefaction of oil palm empty fruit bunches. 2018 , 132, 72-81 | 14 |
| 824 | A novel route for the flexible preparation of hydrocarbon jet fuels from biomass-based platform chemicals: a case of using furfural and 2,3-butanediol as feedstocks. 2018 , 20, 2018-2026 | 30 |
| 823 | Synthesis of magnetic carbon nanocomposites by hydrothermal carbonization and pyrolysis. 2018 , 16, 821-844 | 48 |
| 822 | Catalytic insights into the production of biomass-derived side products methyl levulinate, furfural and humins. 2018 , 302, 2-15 | 100 |
| 821 | Possibilities of Using Liquids from Slow Pyrolysis and Hydrothermal Carbonization in Acidification of Animal Slurry. 2018 , 9, 1429-1433 | 8 |
| 820 | Hydrochars derived from sewage sludge: effects of pre-treatment with water on char properties, phytotoxicity and chemical structure. 2018 , 64, 860-872 | 11 |
| 819 | NMR studies of stock process water and reaction pathways in hydrothermal carbonization of furfural residue. 2018 , 3, 163-171 | 18 |
| 818 | Conversion of sweet potato waste to solid fuel via hydrothermal carbonization. 2018 , 249, 900-907 | 101 |
| 817 | Characterization of pig manure-derived hydrochars for their potential application as fertilizer. 2018 , 25, 25772-25779 | 26 |
| 816 | Formation mechanism for oxidation synthesis of carbon nanomaterials and detonation process for core-shell structure. <i>Carbon</i> , 2018 , 127, 21-30 | 8 |

| 815 | Faecal sludge treatment and utilization by hydrothermal carbonization. 2018, 216, 421-426 | 28 |
|-----|--|-----|
| 814 | Hollow Structure and Electron Promotion Effect of Mesoporous Pd/CeO2 Catalyst for Enhanced Catalytic Hydrogenation. 2018 , 10, 1019-1026 | 19 |
| 813 | Preparation of hydrothermal carbon as catalyst support for conversion of biomass to 5-hydroxymethylfurfural. 2018 , 104, 41-47 | 38 |
| 812 | Influence of temperature on nitrogen fate during hydrothermal carbonization of food waste. 2018 , 247, 182-189 | 93 |
| 811 | Minireview of potential applications of hydrochar derived from hydrothermal carbonization of biomass. 2018 , 57, 15-21 | 268 |
| 810 | Hybrid system of nickellobalt hydroxide on carbonised natural cellulose materials for supercapacitors. 2018 , 22, 387-393 | 10 |
| 809 | Comparative sorption isotherms and removal studies for Pb(II) by physical and thermochemical modification of low-cost agro-wastes from Tanzania. 2018 , 195, 135-145 | 50 |
| 808 | Production of furan based biofuel with an environmental benign carbon catalyst. 2018 , 37, 1455-1461 | 2 |
| 807 | Green Strategy to Reduced Nanographene Oxide through Microwave Assisted Transformation of Cellulose. 2018 , 6, 1246-1255 | 29 |
| 806 | 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 |
| 805 | 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 |
| 804 | Preparation of Microporous Carbon from Sargassum horneri by Hydrothermal Carbonization and KOH Activation for CO2 Capture. 2018 , 2018, 1-11 | 11 |
| 803 | Effect of hydrothermal carbonization on dewatering performance of dyeing sludge 2018, 8, 38574-38581 | 13 |
| 802 | Hydrolysis and carbonization mechanism of cotton fibers in subcritical water. 2018 , 33, 245-251 | 11 |
| 801 | Hydrochar Generation from Hydrothermal Carbonization of Organic Wastes. 2018, 159, 012001 | 6 |
| 800 | Advanced Nanomaterials Synthesis from Pyrolysis and Hydrothermal Carbonization: A Review. 2018 , 22, 446-461 | 19 |
| 799 | Hydrothermal Carbonization of Fruit Wastes: A Promising Technique for Generating Hydrochar. 2018 , 11, 2022 | 50 |
| 798 | A Review on the Synthesis and Characterization of Biomass-Derived Carbons for Adsorption of Emerging Contaminants from Water. 2018 , 4, 63 | 46 |

| 797 | Hydrothermal Carbonization Brewer Spent Grains with the Focus on Improving the Degradation of the Feedstock. 2018 , 11, 3226 | 30 |
|------------------|--|----|
| 796 | Facile fabrication of hyper-branched TiO2 hollow spheres for high efficiency dye-sensitized solar cells. 2018 , 174, 888-896 | 4 |
| 795 | Hydrothermal Carbonization of Fructose: Growth Mechanism and Kinetic Model. 2018, 6, 13877-13887 | 50 |
| 794 | Removal of Pb2+ in Wastewater via Adsorption onto an Activated Carbon Produced from Winemaking Waste. 2018 , 8, 697 | 29 |
| 793 | A ZnO/rice husk-based hollow carbonaceous nanosphere composite as an anode for high-performance lithium-ion batteries 2018 , 8, 33019-33024 | 6 |
| 79 ² | Waste Biomass as in Situ Carbon Source for Sodium Vanadium Fluorophosphate/C Cathodes for Na-Ion Batteries. 2018 , 6, 16386-16398 | 9 |
| 791 | New Understandings of the Relationship and Initial Formation Mechanism for Pseudo-lignin, Humins, and Acid-Induced Hydrothermal Carbon. 2018 , 66, 11981-11989 | 36 |
| 790 | Hydrothermal processing of biomass for anaerobic digestion [A review. 2018 , 98, 108-124 | 91 |
| 7 ⁸ 9 | Nanocarbons from Synthetic Polymer Precursors and Their Catalytic Properties. 2018, 133-166 | |
| 788 | Pickering emulsions stabilized by amphiphilic carbonaceous materials derived from wheat straw. 2018 , 558, 65-72 | 13 |
| 787 | A two-step process for sewage sludge treatment: Hydrothermal treatment of sludge and catalytic hydrothermal gasification of its derived liquid. 2018 , 180, 67-74 | 18 |
| 786 | Microwell Confined Iron Oxide Nanoparticles in Honeycomblike Carbon Spheres for the Adsorption of Sb(III) and Sequential Utilization as a Catalyst. 2018 , 6, 12925-12934 | 25 |
| 785 | Anisotropic thermally conductive composite with wood-derived carbon scaffolds. 2018, 112, 18-24 | 35 |
| 7 ⁸ 4 | Effect of oxidation processing on the preparation of post-hydrothermolysis acid from cotton stalk. 2018 , 263, 289-296 | 7 |
| 783 | Interaction of Yarrowia lipolytica lipase with dithiocarbamate modified magnetic carbon FeO@C-NHCSH core-shell nanoparticles. 2018 , 117, 218-224 | 30 |
| 782 | Towards sustainable micro-pollutantsIremoval from wastewaters: caffeine solubility, self-diffusion and adsorption studies from aqueous solutions into hydrochars. 2018 , 116, 2129-2141 | 10 |
| 781 | Fast preparation of carbon spheres from enzymatic hydrolysis lignin: Effects of hydrothermal carbonization conditions. 2018 , 8, 9501 | 31 |
| 78o | Sulfonated covalent triazine-based frameworks as catalysts for the hydrolysis of cellobiose to glucose 2018 , 8, 22392-22401 | 6 |

(2018-2018)

| 779 | Facile Synthesis of Iron- and Nitrogen-Doped Porous Carbon for Selective CO2 Electroreduction. 2018 , 1, 3608-3615 | 17 |
|-----|---|----|
| 778 | Auto-Crosslinked Rigid Foams Derived from Biorefinery Byproducts. 2018 , 11, 2797-2809 | 31 |
| 777 | Opal promotes hydrothermal carbonization of hydroxypropyl methyl cellulose and formation of carbon nanospheres 2018 , 8, 20095-20107 | 6 |
| 776 | Green Synthesis of Carbon Dot Weak Gel from Pear Juice: Optical Properties and Sensing Application. 2018 , 3, 8444-8457 | 10 |
| 775 | Microporous Humins Synthesized in Concentrated Sulfuric Acid Using 5-Hydroxymethyl Furfural. 2018 , 3, 8537-8545 | 9 |
| 774 | Mesoporous silica-carbon composites fabricated by a universal strategy of hydrothermal carbonization: controllable synthesis and applications 2018 , 8, 27207-27215 | 7 |
| 773 | Effects of alumina hollow microspheres on the properties of water-borne polyurethane films. 2018 , 33, 2486-2493 | 2 |
| 772 | Large area ultra-thin graphene films for functional photovoltaic devices. 2018 , 33, 2306-2317 | 1 |
| 771 | Factors controlling the formation of persistent free radicals in hydrochar during hydrothermal conversion of rice straw. 2018 , 16, 1463-1468 | 30 |
| 770 | CO2 Sensing by in-situ Raman spectroscopy using activated carbon generated from mesocarp of babassu coconut. 2018 , 98, 111-118 | 19 |
| 769 | Layer-Stacking Activated Carbon Derived from Sunflower Stalk as Electrode Materials for High-Performance Supercapacitors. 2018 , 6, 11397-11407 | 69 |
| 768 | Role of phosphoric acid in the bioavailability of potentially toxic elements in hydrochars produced by hydrothermal carbonisation of sewage sludge. 2018 , 79, 232-239 | 8 |
| 767 | Granular Activated Carbon from Grape Seeds Hydrothermal Char. 2018, 8, 331 | 32 |
| 766 | The preparation of porous carbon spheres with hierarchical pore structure and the application for high-performance supercapacitors. 2018 , 53, 13987-14000 | 10 |
| 765 | Spherical Activated Carbons with High Mechanical Strength Directly Prepared from Selected Spherical Seeds. 2018 , 11, | 12 |
| 764 | Three-Dimensional SnS Decorated Carbon Nano-Networks as Anode Materials for Lithium and Sodium Ion Batteries. 2018 , 8, | 17 |
| 763 | Microwave Assisted Hydrothermal Carbonization and Solid State Postmodification of Carbonized Polypropylene. 2018 , 6, 11105-11114 | 23 |
| 762 | Evaluation of the clean characteristics and combustion behavior of hydrochar derived from food waste towards solid biofuel production. 2018 , 266, 275-283 | 51 |

| 761 | Low temperature microwave assisted hydrothermal carbonization (MAHC) reduces combustion emission precursors in short rotation coppice willow wood. 2018 , 134, 162-166 | 11 |
|-----------------|---|-------------|
| 760 | Direct conversion of lignocellulosic biomass to biomimetic tendril-like functional carbon helices: a protein friendly host for cytochrome C. 2018 , 20, 3711-3716 | 15 |
| 759 | Preparation of Monodispersed Carbon Spheres via Hydrothermal Carbonization of Ascorbic Acid and Their Application in Lithium Ion Batteries. 2018 , 34, 628-634 | 5 |
| 758 | A 3D MoO/carbon composite array as a binder-free anode in lithium-ion batteries. 2018 , 47, 14897-14907 | 11 |
| 757 | A multiscale hydrothermal carbon layer modified carbon fiber for composite fabrication 2018 , 8, 23339-233 | 47 6 |
| 756 | Preparation and characterization of activated carbons from winemaking wastes and their adsorption of methylene blue. 2018 , 36, 1331-1351 | 26 |
| 755 | The pelletization and combustion properties of torrefied Camellia shell via dry and hydrothermal torrefaction: A comparative evaluation. 2018 , 264, 78-89 | 43 |
| 754 | Flexible carbonized cellulose/single-walled carbon nanotube films with high conductivity. 2018 , 196, 168-175 | 17 |
| 753 | Carbon composite lignin-based adsorbents for the adsorption of dyes. 2018 , 206, 587-596 | 169 |
| 75 ² | Hydrothermal carbonization of holocellulose into hydrochar: Structural, chemical characteristics, and combustion behavior. 2018 , 263, 508-516 | 54 |
| 751 | Direct Hydroxylation of Benzene to Phenol over CuxOy@C-HP Catalyst. 2018 , 21, 109-117 | |
| 750 | Adsorption of anionic and cationic dyes on biochars, produced by hydrothermal carbonization of waste biomass: effect of surface functionalization and ionic strength. 2018 , 42, 86-99 | 17 |
| 749 | Molecular Dynamics Simulations of Furfural and 5-Hydroxymethylfurfural at Ambient and Hydrothermal Conditions. 2018 , 122, 8416-8428 | 4 |
| 748 | Adsorption of Basic Dyes Using Walnut Shell-based Biochar Produced by Hydrothermal Carbonization. 2018 , 34, 622-627 | 14 |
| 747 | Biomass-waste derived graphene quantum dots and their applications. <i>Carbon</i> , 2018 , 140, 77-99 | 119 |
| 746 | Effect of Temperature on the Physical, Electro-Chemical and Adsorption Properties of Carbon Micro-Spheres Using Hydrothermal Carbonization Process. 2018 , 8, | 17 |
| 745 | Microwave-Assisted Conversion of Fructose to 5-Hydroxymethylfurfural Using Sulfonated Porous Carbon Derived from Biomass. 2018 , 71, 24 | 5 |
| 744 | A simple flash carbonization route for conversion of biomass to porous carbons with high CO2 storage capacity. 2018 , 6, 12393-12403 | 54 |

| 743 | Mercury adsorption from aqueous solution by regenerated activated carbon produced from depleted mercury-containing catalyst by microwave-assisted decontamination. 2018 , 196, 109-121 | 20 |
|-----|---|-----|
| 742 | The fabrication of bio-renewable and recyclable cellulose based carbon microspheres incorporated by CoFe2O4 and the photocatalytic properties. 2018 , 196, 594-603 | 40 |
| 741 | From lignocellulosic biomass to levulinic acid: A review on acid-catalyzed hydrolysis. 2018 , 94, 340-362 | 271 |
| 740 | An investigation on mechanical property of MSW-derived fuel pellet produced from hydrothermal treatment. 2018 , 20, 2028-2040 | 4 |
| 739 | Correlations between hydrochar properties and chemical constitution of orange peel waste during hydrothermal carbonization. 2018 , 265, 432-436 | 37 |
| 738 | Fe7S8 nanoparticles attached carbon networks as anode materials for both lithium and sodium ion batteries. 2018 , 706, 273-279 | 29 |
| 737 | One-Pot Facile Synthesis of Graphene Quantum Dots from Rice Husks for Fe3+ Sensing. 2018 , 57, 9144-9150 | 40 |
| 736 | Asymmetric 3d Electronic Structure for Enhanced Oxygen Evolution Catalysis. 2018 , 10, 23131-23139 | 40 |
| 735 | The effects of carbon coating on the electrochemical performance of Zn-Al layer double oxides in nickel-zinc secondary cells. 2019 , 25, 1223-1233 | 9 |
| 734 | Upgraded Newsolid Biofuels. 2019 , 451-481 | |
| 733 | Glucose-derived solid acids and their stability enhancement for upgrading biodiesel via esterification. 2019 , 27, 1067-1072 | 6 |
| 732 | Synthesis and Characterization of Hollow Mesoporous Silica Spheres and Studying the Load and Release of Dexamethasone. 2019 , 11, 1401-1411 | 5 |
| 731 | What is the influence of the nitrogen-containing composition during hydrothermal carbonization of biomass? A new perspective from mimic feedstock. 2019 , 5, 343-350 | 13 |
| 730 | Fabrication and characterization of a hierarchical porous carbon from corn straw-derived hydrochar for atrazine removal: efficiency and interface mechanisms. 2019 , 26, 30268-30278 | 7 |
| 729 | Effect of nitric acid oxidation on the surface of hydrochars to sorb methylene blue: An adsorption mechanism comparison. 2019 , 37, 607-622 | 27 |
| 728 | Functions of hydroxyapatite in fabricating N-doped carbon for excellent catalysts and supercapacitors. 2019 , 9, 4952-4960 | 8 |
| 727 | Properties of biochar obtained by hydrothermal carbonization and torrefaction of peat. 2019 , 256, 115929 | 27 |
| 726 | Binary superlattice ceramic membrane-coated soft carbon/hard carbon microspheres for high energy mixed-ion batteries. 2019 , 438, 226980 | 11 |

ObtenB de hydrochar a partir de carbonizaB hidrotEmica de cascas do fruto de Magonia 725 pubescens A. St. Hil. Sapindaceae: Caracterizab e avaliab em processo de adsorb. 2019, 24, Facile fabrication for core-shell BaFe12O19@C composites with excellent microwave absorption 724 29 properties. 2019, 805, 130-137 Sulfamic acid modified hydrochar derived from sawdust for removal of benzotriazole and Cu(II) 24 723 from aqueous solution: Adsorption behavior and mechanism. 2019, 290, 121765 Insight into chlorine evolution during hydrothermal carbonization of medical waste model. 2019, 722 23 380, 120847 Biochar colloids and their use in contaminants removal. 2019, 1, 151-162 721 16 Effects of Acidic and Alkaline Metal Triflates on the Hydrothermal Carbonization of Glucose and 720 13 Cellulose. 2019, 33, 7473-7479 Chitosan derived N-doped carbon coated SnO2 nanocomposite anodes for Na-ion batteries. 2019, 6 719 341, 115035 718 C-scorpionate complexes: Ever young catalytic tools. **2019**, 396, 89-102 25 An evaluation of subcritical hydrothermal treatment of end-of-pipe palm oil mill effluent. 2019, 5, e01792 4 716 Nanoengineering Carbon Spheres as Nanoreactors for Sustainable Energy Applications. 2019, 31, e1903886 147 Reconstruction of humins formation mechanism from decomposition products: A GC-MS study 715 11 based on catalytic continuous flow depolymerizations. 2019, 479, 110564 Sulfonated Hydrothermal Carbons from Cellulose and Glucose as Catalysts for Glycerol 714 7 Ketalization. 2019, 9, 804 Hydrothermal carbonization of various lignocellulosics: Fuel characteristics of hydrochars and 36 713 surface characteristics of activated hydrochars. 2019, 100, 259-268 Ultra-robust carbon fibers for multi-media purification via solar-evaporation. 2019, 7, 586-593 712 81 Biochemical Compositional Analysis and Kinetic Modeling of Hydrothermal Carbonization of 711 12 Australian Saltbush. 2019, 33, 12469-12479 A green and easy way for carbon microspheres synthesis impregnated with palladium for 710 hexavalent chromium reduction. 2019, 7, 103467 Magnetic Behavior of Carbon Materials Made from Biomass by Fe-Assisted Hydrothermal 709 3 Carbonization. 2019, 24, Synthesis of Carbon Quantum Dots with Special Reference to Biomass as a Source - A Review. 2019, 708 21 25, 1455-1476

(2019-2019)

| 707 | Influence of the parameters of the hydrothermal carbonization of the biomass on the biocoal obtained from peat. 2019 , 114, 07003 | | 1 |
|-----|---|------|-----|
| 706 | Friction-induced rehybridization of hydrothermal amorphous carbon in magnesium silicate hydroxide-based nanocomposite. <i>Carbon</i> , 2019 , 155, 650-659 | 10.4 | 13 |
| 7°5 | Improvement of corn stover fuel properties via hydrothermal carbonization combined with surfactant. 2019 , 12, 249 | | 9 |
| 704 | Amorphous/Nanocrystalline Carbonized Hydrochars with Isomeric Heterogeneous Interfacial Polarizations for High-performance Microwave Absorption. 2019 , 9, 12429 | | 10 |
| 703 | Molecular Structure and Formation Mechanism of Hydrochar from Hydrothermal Carbonization of Carbohydrates. 2019 , 33, 9904-9915 | | 26 |
| 702 | Rational design of tailored porous carbon-based materials for CO2 capture. 2019 , 7, 20985-21003 | | 84 |
| 701 | Impact of butanol and ammonium fluoride on synthesizing and optical properties of N-doped-carbon dots. 2019 , 97, 105988 | | O |
| 700 | Hollow Multihole Carbon Bowls: A Stress-Release Structure Design for High-Stability and High-Volumetric-Capacity Potassium-Ion Batteries. 2019 , 13, 11363-11371 | | 91 |
| 699 | Enhanced adsorption of Pb(II) onto modified hydrochar by polyethyleneimine or H3PO4: An analysis of surface property and interface mechanism. 2019 , 583, 123962 | | 35 |
| 698 | The Influence of Residence Time during Hydrothermal Carbonisation of Miscanthus on Bio-Coal Combustion Chemistry. 2019 , 12, 523 | | 12 |
| 697 | Hydrothermal carbonization of lignocellulosic biomass for carbon rich material preparation: A review. 2019 , 130, 105384 | | 103 |
| 696 | Effect of hydrothermal carbonization on the properties, devolatilization, and combustion kinetics of Chilean biomass residues. 2019 , 130, 105387 | | 13 |
| 695 | The correlation of physicochemical properties and combustion performance of hydrochar with fixed carbon index. 2019 , 294, 122053 | | 6 |
| 694 | Synergistic effect of hydrothermal co-carbonization of sewage sludge with fruit and agricultural wastes on hydrochar fuel quality and combustion behavior. 2019 , 100, 171-181 | | 46 |
| 693 | Enhancement of Palm Kernel Shell Fuel Properties via Wet Torrefaction: Response Surface, Optimization, and Combustion Studies. 2019 , 33, 11009-11020 | | 14 |
| 692 | Factors Influencing Cellulosic Sugar Production during Acid-Catalyzed Solvent Liquefaction in 1,4-Dioxane. 2019 , 7, 18076-18084 | | 8 |
| 691 | Production of Organic Compounds through Catalyzed Hydrothermal Carbonization of Woody Biomass. 2019 , 33, 9879-9885 | | 4 |
| 690 | A triple-stimuli responsive hormone delivery system equipped with pillararene magnetic nanovalves. 2019 , 3, 103-110 | | 44 |

| 689 | Self-Templating Synthesis of 3D Hollow Tubular Porous Carbon Derived from Straw Cellulose Waste with Excellent Performance for Supercapacitors. 2019 , 12, 1390-1400 | 42 |
|-----|---|----|
| 688 | Influence of ammonium salts and temperature on the yield, morphology and chemical structure of hydrothermally carbonized saccharides. 2019 , 1, 1 | 10 |
| 687 | Tungsten oxide nanorod architectures as 3D anodes in binder-free lithium-ion batteries. 2019 , 11, 598-610 | 15 |
| 686 | Fabrication, characteristics and applications of carbon materials with different morphologies and porous structures produced from wood liquefaction: A review. 2019 , 364, 226-243 | 75 |
| 685 | 3D Laser Scribed Graphene Derived from Carbon Nanospheres: An Ultrahigh-Power Electrode for Supercapacitors. 2019 , 3, 1900005 | 47 |
| 684 | Methane production from process water of sewage sludge hydrothermal carbonization. A review. Valorising sludge through hydrothermal carbonization. 2019 , 49, 947-988 | 49 |
| 683 | New and Advanced Porous Carbon Materials in Fine Chemical Synthesis. Emerging Precursors of Porous Carbons. 2019 , 9, 133 | 34 |
| 682 | Effects of temperature, time and acidity of hydrothermal carbonization on the hydrochar properties and nitrogen recovery from corn stover. 2019 , 122, 175-182 | 48 |
| 681 | Sustainable Porous Carbon Materials Derived from Wood-Based Biopolymers for COlCapture. 2019 , 9, | 30 |
| 680 | Fluorescent carbon nanoparticles from laser-ablated Bougainvillea alba flower extract for bioimaging applications. 2019 , 125, 1 | 5 |
| 679 | Bio-inspired hierarchical hetero-architectures of in-situ C-doped g-C3N4 grafted on C, N co-doped ZnO micro-flowers with booming solar photocatalytic activity. 2019 , 77, 393-407 | 43 |
| 678 | High-performance asymmetric supercapacitor based on vanadium dioxide/activated expanded graphite composite and carbon-vanadium oxynitride nanostructures. 2019 , 316, 19-32 | 11 |
| 677 | Rapid synthesis of carbon materials by microwave-assisted hydrothermal method at low temperature and its adsorption properties for uranium (VI). 2019 , 321, 629-646 | 4 |
| 676 | Highly-dispersed Fe2O3@C electrode materials for Pb2+ removal by capacitive deionization. Carbon, 2019 , 153, 12-20 | 35 |
| 675 | Hydrothermal carbonization of waste from leather processing and feasibility of produced hydrochar as an alternative solid fuel. 2019 , 247, 115-120 | 24 |
| 674 | Application of Carbon-Based Nanomaterials as Fertilizers in Soils. 2019 , 305-333 | 4 |
| 673 | Amorphous Carbon Doping Nano-Magnesium Silicate Hydroxide with Significant Tribological Property. 2019 , 67, 1 | 3 |
| 672 | Conductive Carbon Materials from the Hydrothermal Carbonization of Vineyard Residues for the Application in Electrochemical Double-Layer Capacitors (EDLCs) and Direct Carbon Fuel Cells (DCFCs). 2019 , 12, | 18 |

(2019-2019)

| 671 | Preparation of TiNb6O17 nanospheres as high-performance anode candidates for lithium-ion storage. 2019 , 374, 937-946 | | 27 |
|-----|---|-----|----|
| 670 | Reducing Willow Wood Fuel Emission by Low Temperature Microwave Assisted Hydrothermal Carbonization. 2019 , | | 3 |
| 669 | Mixed valence CoCuMnOx spinel nanoparticles by sacrificial template method with enhanced ORR performance. 2019 , 487, 1145-1151 | | 64 |
| 668 | Conversion of soybean waste to sub-micron porous-hollow carbon spheres for supercapacitor via a reagent and template-free route. 2019 , 13, 50-55 | | 22 |
| 667 | Effect of Swelling Pretreatment on Properties of Cellulose-Based Hydrochar. 2019 , 7, 10821-10829 | | 13 |
| 666 | High photoluminescent nitrogen and zinc doped carbon dots for sensing Fe ions and temperature. 2019 , 222, 117141 | | 28 |
| 665 | Speciation and transformation of nitrogen for spirulina hydrothermal carbonization. 2019 , 286, 121385 | | 27 |
| 664 | Hydrothermal carbonization of sewage sludge: A critical analysis of process severity, hydrochar properties and environmental implications. 2019 , 93, 1-13 | | 60 |
| 663 | The mechanism of wet/dry torrefaction pretreatment on the pyrolysis performance of tobacco stalk. 2019 , 286, 121390 | | 18 |
| 662 | Solid fuel production through hydrothermal carbonization of sewage sludge and microalgae Chlorella sp. from wastewater treatment plant. 2019 , 230, 157-163 | | 49 |
| 661 | Chitosan-based layered carbon materials prepared via ionic-liquid-assisted hydrothermal carbonization and their performance study. 2019 , 101, 231-243 | | 16 |
| 660 | Structure evolution mechanism of highly ordered graphite during carbonization of cellulose nanocrystals. <i>Carbon</i> , 2019 , 150, 142-152 | 0.4 | 37 |
| 659 | 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 |
| 658 | Close-Packed Langmuir Monolayers of Saccharide-Based Carbon Dots at the Air-Subphase Interface. 2019 , 35, 6708-6718 | | 15 |
| 657 | A green, rapid, scalable and versatile hydrothermal strategy to fabricate monodisperse carbon spheres with tunable micrometer size and hierarchical porosity. 2019 , 372, 1164-1173 | | 20 |
| 656 | Cellulose-Supported Ionic Liquid Phase Catalyst-Mediated Mannich Reaction. 2019 , 72, 513 | | 7 |
| 655 | Biocarbon Production and Use as a Fuel. 2019 , 295-324 | | 2 |
| 654 | Effect of Pyrolysis Temperature on Acidic Oxygen-Containing Functional Groups and Electron Storage Capacities of Pyrolyzed Hydrochars. 2019 , 7, 8387-8396 | | 28 |

| 653 | 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 |
|-----|--|----|
| 652 | Comprehensive thermochemical utilization of biomass residues from furfural plants and ELW technology. 2019 , 252, 116-124 | 12 |
| 651 | Facile and High-Yield Synthesis of Carbon Quantum Dots from Biomass-Derived Carbons at Mild Condition. 2019 , 7, 7833-7843 | 81 |
| 650 | Development of TiO2-Carbon Composite Acid Catalyst for Dehydration of Fructose to 5-Hydroxymethylfurfural. 2019 , 9, 126 | 13 |
| 649 | Facile, Sustainable, and Chemical-Additive-Free Synthesis of Monodisperse Carbon Spheres Assisted by External Pressure. 2019 , 7, 7486-7490 | 5 |
| 648 | 3,4-Hydroxypyridinone-modified carbon quantum dot as a highly sensitive and selective fluorescent probe for the rapid detection of uranyl ions. 2019 , 6, 1457-1465 | 19 |
| 647 | Tunable fluorescence from natural carbon source: Pandanus. 2019 , 92, 1 | 3 |
| 646 | Experimental carbonatite/graphite carbon isotope fractionation and carbonate/graphite geothermometry. 2019 , 253, 290-306 | 7 |
| 645 | Antifouling Wood Matrix with Natural Water Transfer and Microreaction Channels for Water Treatment. 2019 , 7, 6782-6791 | 21 |
| 644 | Simple synthesis of N-doped catalysts with controllable PtNi nanoparticles for high-efficiency ethanol oxidation. 2019 , 25, 3179-3188 | 4 |
| 643 | Applications in catalysis. 2019 , 291-339 | |
| 642 | Borax-assisted hydrothermal carbonization to fabricate monodisperse carbon spheres with high thermostability. 2019 , 6, 065615 | 6 |
| 641 | Pyrolysis vs. hydrothermal carbonization: Understanding the effect of biomass structural components and inorganic compounds on the char properties. 2019 , 140, 137-147 | 45 |
| 640 | Non-catalytic dissolution of biochar in hydrogen donor solvent. 2019 , 140, 227-238 | 2 |
| 639 | Wilmeinduzierte Vorbehandlung lignocellulosehaltiger Biomassen i Prozesse, Verfahren und deren Einordnung. 2019 , 91, 403-419 | 2 |
| 638 | Food waste-driven N-doped carbon dots: Applications for Fe sensing and cell imaging. 2019 , 102, 106-112 | 55 |
| 637 | Effect of surfactant on hydrothermal carbonization of coconut shell. 2019 , 284, 214-221 | 20 |
| 636 | Facile preparation of porous carbon nanospheres via hydrothermal method using chlorinated polypropylene as precursor. 2019 , 6, 0950b8 | |

| 635 | Highly microporous carbon with nitrogen-doping derived from natural biowaste for high-performance flexible solid-state supercapacitor. 2019 , 548, 322-332 | 50 |
|-----|--|-----|
| 634 | Production of Materials from Sustainable Biomass Resources. 2019 , | 2 |
| 633 | Carbon microspheres prepared from the hemicelluloses-rich pre-hydrolysis liquor for contaminant removal. 2019 , 213, 296-303 | 16 |
| 632 | Influence of precursor size in the hydrothermal synthesis of cellulose-based carbon nanodots and its application towards solar cell sensitization. 2019 , 228, 187-193 | 12 |
| 631 | Importance of Surface Functionalities for Antibacterial Properties of Carbon Spheres. 2019 , 3, 1800148 | 9 |
| 630 | Conductive Carbon Microfibers Derived from Wet-Spun Lignin/Nanocellulose Hydrogels. 2019 , 7, 6013-6022 | 36 |
| 629 | 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 |
| 628 | Preparation and Characterization of Carbon Microspheres From Waste Cotton Textiles By Hydrothermal Carbonization. 2019 , 7, 1309-1319 | 4 |
| 627 | Fluororganic Groups Grafted on Carbon Microspheres. 2019, | |
| 626 | The role of capping agents in the fabrication of nano-silver-decorated hydrothermal carbons. 2019 , 7, 103415 | 3 |
| 625 | Modulation doping of absorbent cotton derived carbon dots for quantum dot-sensitized solar cells. 2019 , 21, 26133-26145 | 11 |
| 624 | Highly Photoluminescent Carbon Dots Derived from Discarded Chewing Gum: toward Multiple Sensing of pH, Ferric Ion, and Adenosine Triphosphate. 2019 , 4, 12807-12814 | 9 |
| 623 | Nitridation Temperature Effect on Carbon Vanadium Oxynitrides for a Symmetric Supercapacitor. 2019 , 9, | 5 |
| 622 | Cross-linked polyfuran networks with elastomeric behaviour based on humins biorefinery by-products. 2019 , 21, 6277-6289 | 16 |
| 621 | Low-Cost Activated Grape Seed-Derived Hydrochar through Hydrothermal Carbonization and Chemical Activation for Sulfamethoxazole Adsorption. 2019 , 9, 5127 | 14 |
| 620 | Effect of TiO2 Surface Engineering on the Performance of Cobalt-Based Catalysts for Fischer Tropsch Synthesis. 2019 , 58, 1095-1104 | 6 |
| 619 | Amphiphilic cellulose nanofiber-interwoven graphene aerogel monolith for dyes and silicon oil removal. 2019 , 171, 190-198 | 28 |
| 618 | A review of the current knowledge and challenges of hydrothermal carbonization for biomass conversion. 2019 , 92, 1779-1799 | 133 |

| 617 | Physicochemical characteristics and FTIR-derived structural parameters of hydrochar produced by hydrothermal carbonisation of pea pod (Pisum sativum Linn.) waste. 2019 , 9, 531-540 | 9 |
|-----|--|-----|
| 616 | Clean production of 5-hydroxymethylfurfural from cellulose using a hydrothermal/biomass-based carbon catalyst. 2019 , 213, 1096-1102 | 35 |
| 615 | Preparation of carbon molecular sieve membranes from an optimized ionic liquid-regenerated cellulose precursor. 2019 , 572, 390-400 | 21 |
| 614 | Hydrothermal Carbonization for Hydrochar Production and Its Application. 2019 , 275-294 | 17 |
| 613 | Functional nanocomposites from sustainable regenerated cellulose aerogels: A review. 2019 , 359, 459-475 | 116 |
| 612 | Facile one-pot synthesized hydrothermal carbon from cyclodextrin: A stationary phase for hydrophilic interaction liquid chromatography. 2019 , 1585, 144-151 | 6 |
| 611 | Preparing a magnetic activated carbon with expired beverage as carbon source and KOH as activator. 2019 , 96, 575-587 | 22 |
| 610 | Fluorescent emission from a natural carbon matrix incorporating sodium. 2019 , 30, 508-517 | 4 |
| 609 | Efficiency Threshold of Carbon Layer Growth in Li4Ti5O12/C Composites. 2019 , 166, A5019-A5024 | 10 |
| 608 | Hydrothermal carbonization of dry toilet residues as an added-value strategy - Investigation of process parameters. 2019 , 234, 537-545 | 16 |
| 607 | Efficient removal of several estrogens in water by Fe-hydrochar composite and related interactive effect mechanism of HO and iron with persistent free radicals from hydrochar of pinewood. 2019 , 658, 1013-1022 | 33 |
| 606 | A higher efficiency removal of neonicotinoid insecticides by modified cellulose-based complex particle. 2019 , 126, 857-866 | 7 |
| 605 | Carbon DotBnS2 Heterojunction Photocatalyst for Photoreduction of Cr(VI) under Visible Light: A Combined Experimental and First-Principles DFT Study. 2019 , 123, 2398-2409 | 24 |
| 604 | CORROSION PROTECTION OF AMORPHOUS CARBON COATING FOR THE BIPOLAR PLATES OF PEMFCs. 2019 , 26, 1950059 | 2 |
| 603 | Hydrothermal Synthesis of Cellulose-Derived Carbon Nanospheres from Corn Straw as Anode Materials for Lithium ion Batteries. 2019 , 9, | 24 |
| 602 | Insights into biochar and hydrochar production and applications: A review. 2019 , 171, 581-598 | 241 |
| 601 | Hydrothermal liquefaction of cellulose in ammonia/water. 2019 , 278, 311-317 | 34 |
| 600 | Polymer-Based Synthetic Routes to Carbon-Based Metal-Free Catalysts. 2019 , 31, e1804626 | 26 |

(2020-2019)

| 599 | Correlations between the physicochemical properties of hydrochar and specific components of waste lettuce: Influence of moisture, carbohydrates, proteins and lipids. 2019 , 272, 482-488 | | 25 | |
|-----|---|------|----|--|
| 598 | In-situ ion-activated carbon nanospheres with tunable ultramicroporosity for superior CO2 capture. <i>Carbon</i> , 2019 , 143, 531-541 | 10.4 | 60 | |
| 597 | Nitrogen-Doped Metal-Free Carbon Materials Derived from Cellulose as Electrocatalysts for the Oxygen Reduction Reaction. 2019 , 6, 514-521 | | 26 | |
| 596 | Fabrication of low cost and scalable carbon-based conductive ink for E-textile applications. 2019 , 19, 32-38 | | 21 | |
| 595 | Aloe peel-derived honeycomb-like bio-based carbon with controllable morphology and its superior electrochemical properties for new energy devices. 2019 , 45, 4208-4218 | | 50 | |
| 594 | Synthesis and characterization of carbon microspheres from rubber wood by hydrothermal carbonization. 2019 , 94, 1374-1383 | | 11 | |
| 593 | Hydrochar silicate composite sorbent via simple hydrothermal carbonization and its application to methylene blue removal. 2019 , 6, 035601 | | 6 | |
| 592 | One-step hydrothermal synthesis of fluorescence carbon quantum dots with high product yield and quantum yield. 2019 , 30, 085406 | | 19 | |
| 591 | Three-dimensional (3D) flower-like MoSe2/N-doped carbon composite as a long-life and high-rate anode material for sodium-ion batteries. 2019 , 357, 226-236 | | 58 | |
| 590 | Utilization of waste cotton linter for preparation of activated carbon to be used as catalyst support in aqueous-phase reforming process. 2019 , 38, 445-450 | | 1 | |
| 589 | Characterization of Energy-Rich Hydrochars from Microwave-Assisted Hydrothermal Carbonization of Coconut Shell. 2019 , 10, 1979-1987 | | 18 | |
| 588 | Hydrothermal synthesis of TiO2/carbon composites and their application for removal of organic pollutants. 2019 , 12, 4388-4397 | | 30 | |
| 587 | Remediation of heavy-metal-contaminated soils by biochar: a review. 2020 , 1-14 | | 12 | |
| 586 | Characteristics of Hydrochars Prepared from Cassava Residues Using Different Aqueous Media. 2020 , 11, 2857-2862 | | 3 | |
| 585 | Preparation of magnetic biochar obtained from one-step pyrolysis of salix mongolica and investigation into adsorption behavior of sulfadimidine sodium and norfloxacin in aqueous solution. 2020 , 41, 214-226 | | 7 | |
| 584 | Gasification of torrefied oil palm biomass in a fixed-bed reactor: Effects of gasifying agents on product characteristics. 2020 , 93, 711-722 | | 26 | |
| 583 | Styrene oxidation catalyzed by copper(II) C-scorpionates in homogenous medium and immobilized on sucrose derived hydrochars. 2020 , 357, 56-63 | | 9 | |
| 582 | Hybrid Manufacturing of Oxidation Resistant Cellulose Nanocrystals-Copper-Graphene Nanoplatelets Based Electrodes. 2020 , 7, 375-389 | | 5 | |

| 581 | Dual functional application of pomelo peel-derived bio-based carbon with controllable morphologies: An efficient catalyst for triiodide reduction and accelerant for anaerobic digestion. 2020 , 46, 3292-3303 | 29 |
|-----|--|----|
| 580 | Adsorption of low concentrations of bromide ions from water by cellulose-based beads modified with TEMPO-mediated oxidation and Fe(III) complexation. 2020 , 384, 121195 | 12 |
| 579 | Overview of biochar production from preservative-treated wood with detailed analysis of biochar characteristics, heavy metals behaviors, and their ecotoxicity. 2020 , 384, 121356 | 45 |
| 578 | Optimisation and characterisation of hydrochar production from spent coffee grounds by hydrothermal carbonisation. 2020 , 147, 1380-1391 | 51 |
| 577 | A Comprehensive Review on Hydrothermal Carbonization of Biomass and its Applications. 2020 , 3, 1-19 | 52 |
| 576 | Fabrication, characterization and response surface method optimization for quantum efficiency of fluorescent nitrogen-doped carbon dots obtained from carboxymethylcellulose of oil palms empty fruit bunch. 2020 , 28, 584-592 | 14 |
| 575 | Catalytic ethanolysis of microcrystalline cellulose over a sulfonated hydrothermal carbon catalyst. 2020 , 355, 272-279 | 6 |
| 574 | Pyrolysis and combustion characteristics and kinetics of wood sawdust and wood sawdust hydrochar. 2020 , 39, e13315 | 2 |
| 573 | 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 |
| 572 | Influence of ionic liquid type on porous carbon formation during the ionothermal pyrolysis of cellulose. 2020 , 145, 104728 | 8 |
| 571 | Microporous carbon fibers prepared by carbonization of cellulose as carriers of particles of active substances. 2020 , 74, 1359-1365 | 1 |
| 570 | Biorefinery Byproducts and Epoxy Biorenewable Monomers: A Structural Elucidation of Humins and Triglycidyl Ether of Phloroglucinol Cross-Linking. 2020 , 21, 517-533 | 10 |
| 569 | Application of carbonized ion exchange resin beads as catalyst support for gas phase hydrogenation processes. 2020 , 129, 85-94 | 5 |
| 568 | Carbon-based solid acids: a review. 2020 , 18, 299-314 | 22 |
| 567 | Synthesizing green carbon dots with exceptionally high yield from biomass hydrothermal carbon. 2020 , 27, 415-428 | 17 |
| 566 | Co-hydrothermal carbonization of polyvinyl chloride and corncob for clean solid fuel production. 2020 , 301, 122763 | 28 |
| 565 | Removal of Ibuprofen by Using a Novel Fe/C Granule-Induced Heterogeneous Persulfate System at near Neutral pH. 2020 , 59, 1073-1082 | 3 |
| 564 | Core-shell structured carbon nanotubes/N-doped carbon layer nanocomposites for supercapacitor electrodes. 2020 , 22, 1 | 6 |

| 563 | The synthesis and performance analysis of various biomass-based carbon materials for electric double-layer capacitors: A review. 2020 , 44, 2426-2454 | 16 |
|-----|---|----|
| 562 | The effect of moisture on hydrocarbon-based solvent liquefaction of pine, cellulose and lignin. 2020 , 146, 104758 | 4 |
| 561 | Microporous carbon fibers as electroconductive immobilization matrixes: Effect of their structure on operational parameters of laccase-based amperometric biosensor. 2020 , 109, 110570 | 8 |
| 560 | Carbonization: A feasible route for reutilization of plastic wastes. 2020 , 710, 136250 | 53 |
| 559 | In-depth comparison of morphology, microstructure, and pathway of char derived from sewage sludge and relevant model compounds. 2020 , 102, 432-440 | 6 |
| 558 | Hydrochars from pinewood for adsorption and nonradical catalysis of bisphenols. 2020 , 385, 121548 | 23 |
| 557 | Combustion and Pyrolysis Characteristics of Hydrochar Prepared by Hydrothermal Carbonization of Typical Food Waste: Influence of Carbohydrates, Proteins, and Lipids. 2020 , 34, 430-439 | 15 |
| 556 | Evolution Process and Controlled Synthesis of Humins with 5-Hydroxymethylfurfural (HMF) as Model Molecule. 2020 , 13, 513-519 | 35 |
| 555 | The effect of temperature, residence time, and water-sludge ratio on hydrothermal carbonization of DAF dairy sludge. 2020 , 8, 103599 | 13 |
| 554 | Hydrothermal carbon effect on iron matrix composites produced by powder metallurgy. 2020 , 242, 122557 | 9 |
| 553 | Hydrochar production from defective coffee beans by hydrothermal carbonization. 2020, 300, 122653 | 17 |
| 552 | Achieving high volumetric EDLC carbons via hydrothermal carbonization and cyclic activation. 2020 , 2, 025005 | 1 |
| 551 | Effect of enzymatic hydrolysis lignin on the mechanical strength and hydrophobic properties of molded fiber materials. 2020 , 74, 469-475 | 4 |
| 550 | Study of structural and molecular interaction for the catalytic activity of cellulases: An insight in cellulose hydrolysis for higher bioethanol yield. 2020 , 1204, 127547 | 12 |
| 549 | A simple approach to synthesis uniform 3D hollow yttrium oxide spheres using a hydrothermal scheme. 2020 , 242, 122530 | 3 |
| 548 | Black yet green: Sulfonic acid functionalized carbon as an efficent catalyst for highly selective isomerization of ⊕inene oxide to trans-carveol. 2020 , 268, 118456 | 22 |
| 547 | High-performance electrode material for electric double-layer capacitor based on hydrothermal pre-treatment of lignin by ZnCl2. 2020 , 508, 144536 | 20 |
| 546 | Design and characterization of a biomass template/SnO nanocomposite for enhanced adsorption of 2,4-dichlorophenol. 2020 , 181, 108955 | 20 |

| 545 | Hematite microcube decorated TiO2 nanorods as heterojunction photocatalyst with in-situ carbon doping derived from polysaccharides bio-templates hydrothermal carbonization. 2020 , 820, 153143 | 14 |
|-----|--|----|
| 544 | Electrochemical treatment of organic pollutants in landfill leachate using a three-dimensional electrode system. 2020 , 243, 125438 | 24 |
| 543 | Biochar of distillers' grains anaerobic digestion residue: Influence of pyrolysis conditions on its characteristics and ammonium adsorptive optimization. 2020 , 38, 86-97 | 3 |
| 542 | Bionic Preparation of CeO-Encapsulated Nitrogen Self-Doped Biochars for Highly Efficient Oxygen Reduction. 2020 , 12, 3642-3653 | 16 |
| 541 | Cationic Dye Adsorption on Hydrochars of Winery and Citrus Juice Industries Residues: Performance, Mechanism, and Thermodynamics. 2020 , 13, 4686 | 26 |
| 540 | Rapid removal of uranium(VI) using functionalized luffa rattan biochar from aqueous solution. 2020 , 606, 125480 | 20 |
| 539 | The effect of aqueous phase recirculation on hydrothermal liquefaction/carbonization of biomass: A review. 2020 , 318, 124081 | 29 |
| 538 | Preparation of carbon dots from waste cellulose diacetate as a sensor for tetracycline detection and fluorescence ink. 2020 , 164, 4289-4298 | 9 |
| 537 | Facile synthesis of hard carbon microspheres from polyphenols for sodium-ion batteries: insight into local structure and interfacial kinetics. 2020 , 18, 100505 | 12 |
| 536 | Transforming Waste Poly(Ethylene Terephthalate) into Nitrogen Doped Carbon Nanotubes and Its Utility in Oxygen Reduction Reaction and Bisphenol-A Removal from Contaminated Water. 2020 , 13, | 3 |
| 535 | Adsorption of endocrine disrupting compounds and other emerging contaminants using lignocellulosic biomass-derived porous carbons: A review. 2020 , 38, 101380 | 23 |
| 534 | Physicochemical and Fuel Characteristics of Torrefied Agricultural Residues for Sustainable Fuel Production. 2020 , 34, 14169-14181 | 13 |
| 533 | Activated Carbon Derived from Rice Husk as Efficient Oxygen Reduction Catalyst in Microbial Fuel Cell. 2020 , 32, 2969-2975 | 8 |
| 532 | Designing hierarchical nanoporous membranes for highly efficient gas adsorption and storage. 2020 , 6, | 21 |
| 531 | Process Waters from Hydrothermal Carbonization of Sludge: Characteristics and Possible Valorization Pathways. 2020 , 17, | 15 |
| 530 | Microwave-Assisted Hydrothermal Preparation of Corn Straw Hydrochar as Supercapacitor Electrode Materials. 2020 , 5, 26084-26093 | 10 |
| 529 | Fate of Nitrogen, Phosphate, and Potassium during Hydrothermal Carbonization and the Potential for Nutrient Recovery. 2020 , 8, 15507-15516 | 9 |
| 528 | Hydrothermal carbonization of sewage sludge: effect of inorganic salts on hydrochar's physicochemical properties. 2020 , 22, 7010-7022 | 17 |

| 527 | Production of furfural and levoglucosan from typical agricultural wastes via pyrolysis coupled with hydrothermal conversion: Influence of temperature and raw materials. 2020 , 114, 43-52 | 10 |
|-----|---|----|
| 526 | Oxidized Carbonized Cellulose-Coated Filters for Environmental Contaminant Adsorption and Detection. 2020 , 59, 13578-13587 | 2 |
| 525 | Hydrothermal Carbonization of Renewable Natural Plants as Superior Metal-Free Catalysts for Aerobic Oxidative Coupling of Amines to Imines. 2020 , 8, 11404-11412 | 5 |
| 524 | Kinetic Study of Noncatalytic Dissolution of Cellulose Biochar in Hydrogen Donor Solvent. 2020 , 8, 11606-116 | 17 |
| 523 | Synthesis of Eichhornia crassipes Biochar: Sustainable Efficient Adsorbent for Reducing Cr (VI) Metal Ion. 2020 , 1539, 012003 | 0 |
| 522 | Sustainable Development of Enhanced Luminescence Polymer-Carbon Dots Composite Film for Rapid Cd Removal from Wastewater. 2020 , 25, | 5 |
| 521 | A comparative study of carbon microsphere preparation by the hydrothermal carbonization of waste cotton fibers, viscose fibers and Avicel. 2020 , 35, 286-294 | 5 |
| 520 | Recent advances in the development and applications of biomass-derived carbons with uniform porosity. 2020 , 8, 18464-18491 | 27 |
| 519 | Structural Insights of Humins/Epoxidized Linseed Oil/ Hardener Terpolymerization. 2020, 12, | 8 |
| 518 | Hydrothermal treatment of municipal solid waste into coal-like fuel. 2020 , 483, 012021 | 1 |
| 517 | Investigating the Effect of Processing Parameters on the Products of Hydrothermal Carbonization of Corn Stover. 2020 , 12, 5100 | 15 |
| 516 | Soft templating production of porous carbon adsorbents for CO2 and H2S capture. <i>Carbon</i> , 2020 , 169, 193-204 | 13 |
| 515 | Multi-purpose production with valorization of wood vinegar and briquette fuels from wood sawdust by hydrothermal process. 2020 , 282, 118775 | 8 |
| 514 | Effect of process wastewater recycling on the chemical evolution and formation mechanism of hydrochar from herbaceous biomass during hydrothermal carbonization. 2020 , 277, 123281 | 18 |
| 513 | Design of photoluminescence point-of-care membrane strip for the detection of dopamine. 2020 , 277, 128316 | 9 |
| 512 | Hydrothermal synthesis of carbon microspheres from sucrose with citric acid as a catalyst: physicochemical and structural properties. 2020 , 14, 1042-1050 | 5 |
| 511 | Co-hydrothermal carbonization of food waste-woody sawdust blend: Interaction effects on the hydrochar properties and nutrients characteristics. 2020 , 316, 123900 | 20 |
| 510 | Production of oxalic acid by electrochemical reduction of CO2 using silver-carbon material from babassu coconut mesocarp. 2020 , 147, 109678 | 8 |

| 509 | Hydrothermal synthesis and applications of advanced carbonaceous materials from biomass: a review. 2020 , 3, 267-284 | 34 |
|-----|---|----|
| 508 | Factorial design of experiments for extraction and screening analysis of organic compounds in hydrochar and its process water of sugar cane bagasse and vinasse. 2020 , 1 | 3 |
| 507 | Synthesis, Characterization, and CO Uptake of Adsorbents Prepared by Hydrothermal Carbonization of Chitosan. 2020 , 5, 29520-29529 | 5 |
| 506 | Elucidating hydrochar morphology and oxygen functionality change with hydrothermal treatment temperature ranging from subcritical to supercritical conditions. 2020 , 152, 104965 | 3 |
| 505 | Investigation of physico-chemical properties of hydrochar and composition of bio-oil from the hydrothermal treatment of dairy manure: Effect of type and usage volume of extractant. 2020 , 116, 157-165 | 6 |
| 504 | Hydrothermal Carbonization as a Valuable Tool for Energy and Environmental Applications: A Review. 2020 , 13, 4098 | 45 |
| 503 | Thermo-Fluid Dynamic and Kinetic Modeling of Hydrothermal Carbonization of Olive Pomace in a Batch Reactor. 2020 , 13, 4142 | 4 |
| 502 | The effect of functionalization on rice-husks derived carbon quantum dots properties and cadmium removal. 2020 , 38, 101634 | 12 |
| 501 | Fabrication of Fe7S8/C flexible nanofibers with nano-buffered spaces and their application in Li-ion batteries. 2020 , 44, 17053-17061 | 2 |
| 500 | X-ray Raman scattering for bulk chemical and structural insight into green carbon. 2020 , 22, 18435-18446 | 1 |
| 499 | Retracted Article: Challenges and opportunities of hydrothermal carbonisation in the UK; case study in Chirnside 2020 , 10, 31586-31610 | 17 |
| 498 | Nitrogen-Containing Hydrochar: The Influence of Nitrogen-Containing Compounds on the Hydrochar Formation. 2020 , 9, 864-873 | 8 |
| 497 | Properties of sago waste charcoal using hydrothermal and pyrolysis carbonization. 2020, 1 | 4 |
| 496 | Facile, cost-effective and eco-friendly synthesis of carbonyl-rich partially reduced graphene oxide using glucose as a sole precursor. 2020 , 2, 1 | 2 |
| 495 | Tunable Supercapacitor Materials Derived from Hydrochar/Gold Nanograpes. 2020 , 3, 9348-9359 | 1 |
| 494 | Sustainable Production of Solid Biofuels and Biomaterials by Microwave-Assisted, Hydrothermal Carbonization (MA-HTC) of Brewers (Spent Grain (BSG). 2020 , 8, 18982-18991 | 5 |
| 493 | Influence of chemical activation on synthesis of carbon nanoparticles via carbonization from lignin. 2020 , | |
| 492 | Nanoporous Carbon from Water Hyacinth Via Hydrothermal Carbonization. 2020 , 894, 012007 | |

| 491 | Semivolatile organic compounds in the products from hydrothermal carbonisation of sugar cane bagasse and vinasse by gas chromatography-mass spectrometry. 2020 , 12, 100594 | 2 |
|-----|---|----|
| 490 | Structural Effects of Cellulose on Hydrolysis and Carbonization Behavior during Hydrothermal Treatment. 2020 , 5, 12210-12223 | 21 |
| 489 | Calculating the Reaction Order and Activation Energy for the Hydrothermal Carbonization of Fructose. 2020 , 92, 692-700 | 7 |
| 488 | Investigating the activation of hydrochar from sewage sludge for the removal of terbuthylazine from aqueous solutions. 2020 , 22, 1539-1551 | 8 |
| 487 | Olive mill wastewater: From a pollutant to green fuels, agricultural and water source and bio-fertilizer - Hydrothermal carbonization. 2020 , 733, 139314 | 34 |
| 486 | Wood-Derived Carbon Materials and Light-Emitting Materials. 2021 , 33, e2000596 | 30 |
| 485 | Ionic liquid assisted fabrication of cellulose-based conductive films for Li-ion battery. 2020 , 137, 49430 | 4 |
| 484 | Adsorption of phenanthrene from aqueous solutions by biochar derived from an ammoniation-hydrothermal method. 2020 , 733, 139267 | 12 |
| 483 | Thermochemical conversion of food waste for bioenergy generation. 2020 , 97-118 | 3 |
| 482 | Bio-pitch as a binder in carbon anodes for aluminum production: Bio-pitch properties and its interaction with coke particles. 2020 , 275, 117875 | 11 |
| 481 | Single Step Green Synthesis of Carbon Dots from Murraya koenigii leaves; A Unique Turn-off Fluorescent contrivance for Selective Sensing of Cd (II) ion. 2020 , 400, 112620 | 13 |
| 480 | Polymeric carbon nitrides and related metal-free materials for energy and environmental applications. 2020 , 8, 11075-11116 | 82 |
| 479 | Facile synthesis of zirconium-organic frameworks@biomass-derived porous graphitic nanocomposites: Arsenic adsorption performance and mechanism. 2020 , 314, 113552 | 11 |
| 478 | Hydrothermal conversion of waste cartons into a magnetic carbon-iron composite for use as an efficient and recyclable dye adsorbent. 2020 , 578, 717-725 | 3 |
| 477 | Two-Dimensional Co-Compounded Carbonaceous Nanoplates for Rubber Tire Composites with Enhanced Mechanical Properties. 2020 , 3, 6321-6327 | O |
| 476 | Carbon nanoparticles production using solvent assisted hydrothermal carbonization. 2020 , 108, 107960 | 1 |
| 475 | A cellulose dissolution and encapsulation strategy to prepare carbon nanospheres with ultra-small size and high nitrogen content for the oxygen reduction reaction. 2020 , 44, 10613-10620 | 4 |
| 474 | A comprehensive investigation of hydrothermal carbonization: Energy potential of hydrochar derived from Virginia mallow. 2020 , 156, 942-950 | 23 |
| | | |

| 473 | Comparison on solid biofuel production from wet and dry carbonization processes of food wastes. 2020 , 272, 115264 | 13 |
|-----|--|----|
| 472 | Lab-scale pyrolysis and hydrothermal carbonization of biomass digestate: Characterization of solid products and compliance with biochar standards. 2020 , 139, 105593 | 26 |
| 471 | Surface heterogeneity mediated transport of hydrochar nanoparticles in heterogeneous porous media. 2020 , 27, 32842-32855 | 5 |
| 470 | From cellulose to 1,2,4-benzenetriol via catalytic degradation over a wood-based activated carbon catalyst. 2020 , 10, 3423-3432 | 4 |
| 469 | Bio-Based Carbon Materials from Potato Waste as Electrode Materials in Supercapacitors. 2020 , 13, 2406 | 7 |
| 468 | Present status of biomass-derived carbon-based composites for supercapacitor application. 2020 , 373-415 | 5 |
| 467 | Hydrochar structural determination from artifact-free Raman analysis. <i>Carbon</i> , 2020 , 167, 378-387 10.4 | 6 |
| 466 | Recent Advancement in Bio-precursor derived graphene quantum dots: Synthesis, Characterization and Toxicological Perspective. 2020 , 31, 292001 | 19 |
| 465 | Alkali-catalyzed supercritical water gasification of sewage sludge: effect of liquid residue reuse as homogenous catalyst. 2020 , 17, 2845-2852 | 3 |
| 464 | Spirulina hydrothermal carbonization: Effect on hydrochar properties and sulfur transformation. 2020 , 306, 123148 | 17 |
| 463 | Green one-pot preparation of carbon dots (CD)-embedded cellulose transparent film for Fe3+ indicator using ionic liquid. 2020 , 27, 4609-4621 | 13 |
| 462 | Cellulose Mediated Reduction and Immobilization of Cr(VI) in Chromite Ore Processing Residue. 2020 , 394, 122538 | 5 |
| 461 | Structural analysis and heavy metal adsorption of N-doped biochar from hydrothermal carbonization of Camellia sinensis waste. 2020 , 27, 18866-18874 | 14 |
| 460 | Study on gasification mechanism of biomass waste in supercritical water based on product distribution. 2020 , 45, 28051-28061 | 19 |
| 459 | Low-Temperature Synthesis of Magnetic Carbonaceous Materials Coated with Nanosilica for Rapid Adsorption of Methylene Blue. 2020 , 5, 6100-6112 | 12 |
| 458 | Reduction, detoxification and recycling of solid waste by hydrothermal technology: A review. 2020 , 390, 124651 | 36 |
| 457 | Hydrothermal conversion of beef cattle manure can enhance energy recovery in confined feedlots. 2020 , 6, 1125-1138 | 5 |
| 456 | Impact of pyrochar and hydrochar derived from digestate on the co-digestion of sewage sludge and swine manure. 2020 , 314, 123730 | 17 |

| 455 | to applications and bioenergy. 2020 , 22, 4747-4800 | 58 |
|-----|---|-----|
| 454 | Customised fabrication of nitrogen-doped biochar for environmental and energy applications. 2020 , 401, 126136 | 78 |
| 453 | Hydrothermal carbonization of organic wastes to carbonaceous solid fuel 🖪 review of mechanisms and process parameters. 2020 , 279, 118472 | 54 |
| 452 | Sustainable development of vanadium pentoxide carbon composites derived from Hibiscus sabdariffa family for application in supercapacitors. 2020 , 4, 4814-4830 | 6 |
| 451 | Hydrothermal carbonization of lignocellulosic biomass and effects of combined Lewis and Brilsted acid catalysts. 2020 , 279, 118458 | 17 |
| 450 | Innovative spherical biochar for pharmaceutical removal from water: Insight into adsorption mechanism. 2020 , 394, 122255 | 119 |
| 449 | The replacement of maize (Zea mays L.) by cup plant (Silphium perfoliatum L.) as biogas substrate and its implications for the energy and material flows of a large biogas plant. 2020 , 14, 152-179 | 17 |
| 448 | Intriguing Carbon Flake Formation during Microwave-Assisted Hydrothermal Carbonization of Sodium Lignosulfonate. 2020 , 4, 1900111 | 5 |
| 447 | Effect of three Napier grass varieties on phytoextraction of Cd- and Zn-contaminated cultivated soil under mowing and their safe utilization. 2020 , 27, 16134-16144 | 7 |
| 446 | Carbon Sphere Template Derived Hollow Nanostructure for Photocatalysis and Gas Sensing. 2020 , 10, | 5 |
| 445 | Synthesis of N/S co-doped porous carbon microspheres based on amino acid protic salt for supercapacitor. 2020 , 829, 154549 | 13 |
| 444 | Hydrolysis and carbonization of reactive dyes/cotton fiber in hydrothermal environment. 2020 , 103, 370-377 | 2 |
| 443 | Thermoplastic "All-Cellulose" Composites with Covalently Attached Carbonized Cellulose. 2020 , 21, 1752-176 | 110 |
| 442 | Hydrothermal carbonization of sewage sludge: Effect of feed-water pH on hydrochar's physicochemical properties, organic component and thermal behavior. 2020 , 388, 122084 | 43 |
| 441 | Hydrothermal Carbonization of Nanofibrillated Cellulose: A Pioneering Model Study Demonstrating the Effect of Size on Final Material Qualities. 2020 , 8, 1823-1830 | 4 |
| 440 | Evidence for a core-shell structure of hydrothermal carbon. <i>Carbon</i> , 2020 , 161, 423-431 | 15 |
| 439 | Using sewage sludge with high ash content for biochar production and Cu(II) sorption. 2020, 713, 136663 | 31 |
| 438 | 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 |

| 437 | Pyrolysis behavior of hydrochar from hydrothermal carbonization of pinewood sawdust. 2020 , 146, 104771 | 21 |
|-----|--|----|
| 436 | Reaction and Diffusion Kinetics during Hydrothermal Carbonization by Means of SEM E DX Analysis. 2020 , 59, 1829-1835 | 2 |
| 435 | Versatile by design: Hollow Co3O4 architectures for superior lithium storage prepared by alternative green Pechini method. 2020 , 510, 145431 | 3 |
| 434 | Cost-Effective Green Synthesis of Boron-Rich Carbide Coatings for Infrared Windows and Night-Vision Optics. 2020 , 217, 1901014 | 6 |
| 433 | Design and synthesis of biopolymer-derived porous graphitic carbon covered iron-organic frameworks for depollution of arsenic from waters. 2020 , 254, 126769 | 15 |
| 432 | Efficient removal of Cu(ii) from aqueous systems using enhanced quantum yield nitrogen-doped carbon nanodots 2020 , 10, 14979-14990 | 12 |
| 431 | Reactivity of cellulose during hydrothermal carbonization of lignocellulosic biomass. 2020, 206, 106456 | 33 |
| 430 | 3D hierarchical microspheres constructed by ultrathin MoS2-C nanosheets as high-performance anode material for sodium-ion batteries. 2020 , 49, 307-315 | 18 |
| 429 | Cellulose-derived hydrothermally carbonized materials and their emerging applications. 2020 , 23, 18-24 | 14 |
| 428 | The influence of hydrothermal operation on the surface properties of kitchen waste-derived hydrochar: Biogas upgrading. 2020 , 259, 121020 | 17 |
| 427 | The comparison of dissolved organic matter in hydrochars and biochars from pig manure. 2020 , 720, 137423 | 29 |
| 426 | Sustainable remediation with an electroactive biochar system: mechanisms and perspectives. 2020 , 22, 2688-2711 | 64 |
| 425 | Carbon quantum dots promote charge transfer of Ce0.7Zr0.3O2@Bi2MoO6 heterojunction for efficient photodegradation of RhB in visible region. 2020 , 105, 109828 | 3 |
| 424 | Preparation of sludge-based hydrochar at different temperatures and adsorption of BPA. 2020 , 82, 255-265 | 3 |
| 423 | Sulfonated magnetic nanobiochar as heterogeneous acid catalyst for esterification reaction. 2020 , 8, 103912 | 23 |
| 422 | Microwave assisted low-temperature hydrothermal treatment of solid anaerobic digestate for optimising hydrochar and energy recovery. 2020 , 395, 124999 | 18 |
| 421 | Luminescent carbon dots obtained from polymeric waste. 2020 , 262, 121288 | 16 |
| 420 | In situ functionalization of a cellulosic-based activated carbon with magnetic iron oxides for the removal of carbamazepine from wastewater. 2021 , 28, 18314-18327 | 12 |

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| 419 | Preparation and Application of Hierarchical Porous Carbon Materials from Waste and Biomass: A Review. 2021 , 12, 1699-1724 | 30 |
|-----|---|----|
| 418 | Investigations into distribution and characterisation of products formed during hydrothermal carbonisation of paunch waste. 2021 , 9, 104672 | 5 |
| 417 | Effects of temperature and catalytic methods on the physicochemical properties of microwave-assisted hydrothermal products of crop residues. 2021 , 279, 123512 | 5 |
| 416 | Hydrothermal synthesis of biobased carbonaceous composite from a blend of kraft black liquor and tannin and its application to aspirin and paracetamol removal. 2021 , 608, 125597 | 7 |
| 415 | Recent advances in bio-based carbon materials for anaerobic digestion: A review. 2021 , 135, 110378 | 45 |
| 414 | A two-step process for energy-efficient conversion of food waste via supercritical water gasification: Process design, products analysis, and electricity evaluation. 2021 , 752, 142331 | 9 |
| 413 | Clean solid fuel produced from cotton textiles waste through hydrothermal carbonization with FeCl3: Upgrading the fuel quality and combustion characteristics. 2021 , 214, 118926 | 11 |
| 412 | Organoarsenic conversion to As(III) in subcritical hydrothermal reaction of livestock manure. 2021 , 402, 123571 | 5 |
| 411 | Stepwise carbonization of nanocellulose to N-doped carbons with structural transformation and enhanced peroxymonosulfate activation. 2021 , 407, 127185 | 6 |
| 410 | Conversion of cotton textile waste to clean solid fuel via surfactant-assisted hydrothermal carbonization: Mechanisms and combustion behaviors. 2021 , 321, 124450 | 16 |
| 409 | In Situ hydrochar regulates Cu fate and speciation: Insights into transformation mechanism. 2021 , 410, 124616 | 1 |
| 408 | New micro/nanocomposite with peroxidase-like activity in construction of oxidases-based amperometric biosensors for ethanol and glucose analysis. 2021 , 1143, 201-209 | 5 |
| 407 | In-situ synthesis of carbon dot at cellulose nanofiber for durable water treatment membrane with high selectivity. 2021 , 255, 117387 | 8 |
| 406 | Persulfate assisted hydrothermal processing of spirulina for enhanced deoxidation carbonization. 2021 , 322, 124543 | 8 |
| 405 | Sodium alginate assisted preparation of oxygen-doped microporous carbons with enhanced electrochemical energy storage and hydrogen uptake. 2021 , 46, 896-905 | 4 |
| 404 | Effect of ionic liquid assisted hydrothermal carbonization on the properties and gasification reactivity of hydrochar derived from eucalyptus. 2021 , 586, 423-432 | 8 |
| 403 | Gas-phase hydrodeoxygenation of bio-oil model compound over nitrogen-doped carbon-supported palladium catalyst. 2021 , 38, 4345-4353 | 2 |
| 402 | Biomass derived porous carbon (BPC) and their composites as lightweight and efficient microwave absorption materials. 2021 , 207, 108562 | 53 |

| 401 | Biomass-derived biochar materials as sustainable energy sources for electrochemical energy storage devices. 2021 , 137, 110464 | 35 |
|-----|--|----|
| 400 | Fast benzene vapor capture by natural macroporous carbonized fibers improved with carbon nanostructures. 2021 , 257, 117956 | 3 |
| 399 | Preparation and surface characteristics of phosphoric acid-activated carbon from coconut shell in air. 2021 , 40, e13509 | 3 |
| 398 | Conversion of food waste into biofuel and biocarbon. 2021 , 383-449 | |
| 397 | Experimental Investigation on Hydrophobic Behavior of Carbon Spheres Coated Surface Made from Microplastics. 2021 , 9, 2159-2174 | 2 |
| 396 | Fused sphere carbon monoliths with honeycomb-like porosity from cellulose nanofibers for oil and water separation 2021 , 11, 2202-2212 | 2 |
| 395 | Activated carbon: Synthesis, properties, and applications. 2021 , 783-827 | 0 |
| 394 | Effect of Accumulative Recycling of Aqueous Phase on the Properties of Hydrothermal Degradation of Dry Biomass and Bio-Crude Oil Formation. 2021 , 14, 285 | 2 |
| 393 | Functional green-based nanomaterials towards sustainable carbon capture and sequestration. 2021 , 125-177 | 1 |
| 392 | Wet torrefaction of empty fruit bunches (EFB) and oil palm trunks (OPT): Effects of process parameters on their physicochemical and structural properties. 2021 , 35, 126-136 | 5 |
| 391 | Effects of process parameters on the physicochemical properties of corn stalk hydrochar and the removal of alkali and alkaline earth metals. 2021 , 15, 1397-1407 | 3 |
| 390 | A green and sustainable cellulosic-carbon-shielded PdMNP hybrid material for catalysis and energy storage applications. 2021 , 11, 395-407 | 5 |
| 389 | A review of thermal and thermocatalytic valorization of food waste. 2021 , 23, 2806-2833 | 10 |
| 388 | Biomass-derived functional carbon nanomaterials for the development of futuristic energy devices. 2021 , 317-341 | O |
| 387 | Influence of carbonization on phase transition and electrical conductivity of ferroelectric composite with Rochelle salt inclusion. 2021 , 572, 221-228 | |
| 386 | Formation of Carbon Quantum Dots via Hydrothermal Carbonization: Investigate the Effect of Precursors. 2021 , 14, 986 | 10 |
| 385 | Nitrogen-doped bagasse carbon spheres/graphene composite for high-performance supercapacitors. 2021 , 145, 105949 | 7 |
| 384 | Influence of Pore Architecture and Chemical Structure on the Sodium Storage in Nitrogen-Doped Hard Carbons. 2021 , 17, e2006767 | 14 |

| 383 | Physico-chemical properties of hydrochars produced from raw olive pomace using olive mill wastewater as moisture source. 2020 , 23, 635-652 | 3 |
|-----|---|----|
| 382 | Advances in Post-Combustion CO Capture by Physical Adsorption: From Materials Innovation to Separation Practice. 2021 , 14, 1428-1471 | 16 |
| 381 | Carbonized cellulose microsphere@void@MXene composite films with egg-box structure for electromagnetic interference shielding. 2021 , 141, 106229 | 26 |
| 380 | The effect of biochar, hydrochar particles and dissolved organic matter on the photodegradation of metribuzin herbicide in aquatic media. 2021 , 9, 105027 | 7 |
| 379 | Holey graphitic carbon nano-flakes with enhanced storage characteristics scaled to a pouch cell supercapacitor. 2021 , 285, 119246 | 5 |
| 378 | Machine learning prediction of the conversion of lignocellulosic biomass during hydrothermal carbonization. 1-13 | 6 |
| 377 | Carbon Nanostructures Derived through Hypergolic Reaction of Conductive Polymers with Fuming Nitric Acid at Ambient Conditions. 2021 , 26, | 6 |
| 376 | A novel approach to develop activated carbon by an ingenious hydrothermal treatment methodology using Phyllanthus emblica fruit stone. 2021 , 288, 125643 | 8 |
| 375 | Efficient synthetic approach for nanoporous adsorbents capable of pre- and post-combustion CO2 capture and selective gas separation. 2021 , 45, 101404 | 15 |
| 374 | Regimes of hydrochar yield from hydrothermal degradation of various lignocellulosic biomass: A review. 2021 , 288, 125629 | 15 |
| 373 | Facile synthesis of carbon microspheres/tin ethylenediamine tetramethylene phosphonate hybrid for improving the mechanical, flame-retardant, and thermal properties of epoxy resin. 2021 , 32, 2953-2968 | 2 |
| 372 | Photothermal Fabrics for Efficient Oil-Spill Remediation via Solar-Driven Evaporation Combined with Adsorption. 2021 , 13, 13106-13113 | 5 |
| 371 | Rational Functionalization Towards Redox-Active TEMPO Stable Free-Radical-Hydrochar Composites. 2021 , 14, 2042-2049 | 1 |
| 370 | Transition metal assisted ionothermal carbonization of cellulose towards high yield and recycling. 2021 , 28, 4025-4037 | 1 |
| 369 | Kinetic Study of the Hydrothermal Carbonization Reaction of Glucose and Its Product Structures. 2021 , 60, 4552-4561 | 7 |
| 368 | Effects of Surface Oxygen-Containing Groups of the Flowerlike Carbon Nanosheets on Palladium Dispersion, Catalytic Activity and Stability in Hydrogenolytic Debenzylation of Tetraacetyldibenzylhexaazaisowurtzitane. 2021 , 11, 441 | 1 |
| 367 | LiBr hydrate as reaction medium for preparation of carbon spheres from wood powders via hydrothermal carbonization. 2021 , 113, 108295 | 2 |
| 366 | Hydrochar from sugarcane industry by-products: assessment of its potential use as a soil conditioner by germination and growth of maize. 2021 , 8, | 4 |

| 365 | Biowaste hydrothermal carbonization for hydrochar valorization: Skeleton structure, conversion pathways and clean biofuel applications. 2021 , 324, 124686 | 21 |
|-------------|--|----|
| 364 | A Review on Multifunctional Carbon-Dots Synthesized From Biomass Waste: Design/ Fabrication, Characterization and Applications. 2021 , 9, | 12 |
| 363 | Algae-based carbons: Design, preparation and recent advances in their use in energy storage, catalysis and adsorption. 2021 , 36, 278-303 | 5 |
| 362 | Optimizing the Hydrothermal Carbonization of Sewage Sludge R esponse Surface Methodology and the Effect of Volatile Solids. 2021 , 13, 1225 | 2 |
| 361 | Carbonization of Cellulose in Supercritical CO2 for Value-Added Carbon. 2021, 143, | 1 |
| 3 60 | Fabrication of Rambutan-like Activated Carbon Sphere/Carbon Nanotubes and Their Application as Supercapacitors. 2021 , 35, 8313-8320 | 5 |
| 359 | Sequential Superassembly of Nanofiber Arrays to Carbonaceous Ordered Mesoporous Nanowires and Their Heterostructure Membranes for Osmotic Energy Conversion. 2021 , 143, 6922-6932 | 15 |
| 358 | New insight into the effect of interface supercapacitance on the performance of titanium dioxide/carbon nanowire array for photoelectrochemical water oxidation. 2021 , 32, 3359-3359 | O |
| 357 | Hydrothermal carbonization of sugarcane industry by-products and process water reuse: structural, morphological, and fuel properties of hydrochars. 1 | 1 |
| 356 | Carbon Dot-Triggered Photocatalytic Degradation of Cellulose Acetate. 2021 , 22, 2211-2223 | 5 |
| 355 | Physiochemical Properties of Biochar and Activated Carbon from Biomass Residue: Influence of Process Conditions to Adsorbent Properties. 2021 , 6, 10224-10233 | 10 |
| 354 | Effects of oxidized Ketjen Black as conductive additives on electrochemical performance of the LiMn2O4@Al2O3 cathode in lithium-ion batteries. 2021 , 860, 158482 | 2 |
| 353 | Mesoporous Carbon from Optimized Date Stone Hydrochar by Catalytic Hydrothermal Carbonization Using Response Surface Methodology: Application to Dyes Adsorption. 2021 , 2021, 1-16 | 2 |
| 352 | Kinetic Analysis of the Pyrolysis of Hydrochar Derived from PVC and Its Thermochemical Behaviors in a Blast Furnace. 2021 , 60, 5102-5113 | 1 |
| 351 | Polysaccharides: An Efficient Tool for Fabrication of Carbon Nanomaterials. 2021, 337-366 | 2 |
| 350 | Production of Ferromagnetic Adsorbents from Solid Products of Biowaste Carbonization in a Fluidized Bed in a Medium of Superheated Water Vapor. 2021 , 94, 602-605 | |
| 349 | Carbonized Cellulose Nanofibril with Individualized Fibrous Morphology: toward Multifunctional Applications in Polycaprolactone Conductive Composites 2021 , 4, 5169-5179 | 1 |
| 348 | Effects of Metal Chlorides on the Hydrothermal Carbonization of Grape Seeds. 2021 , 35, 8834-8843 | 1 |

(2021-2021)

| 347 | A N-doped Cobalt@graphitized carbon material derived from ZIF-67 assisted polyvinylidene fluoride hollow fiber membrane for supercapacitors. 2021 , 863, 158682 | 6 |
|-----|---|-----|
| 346 | Ultramicroporous carbons featuring sub-Bgstrom tunable apertures for the selective separation of light hydrocarbon. 2021 , 67, e17285 | 6 |
| 345 | From useless humins by-product to Nb@graphite-like carbon catalysts highly efficient in HMF synthesis. 2021 , 618, 118130 | 5 |
| 344 | Pd-Doped Cellulose Carbon Aerogels for Energy Storage Applications. 2021 , 8, 2100310 | 1 |
| 343 | Process Water Recirculation during Hydrothermal Carbonization of Waste Biomass: Current Knowledge and Challenges. 2021 , 14, 2962 | 7 |
| 342 | Efficient adsorption-reduction synergistic effects of sulfur, nitrogen and oxygen heteroatom co-doped porous carbon spheres for chromium(VI) removal. 2021 , 618, 126502 | 7 |
| 341 | Utilization of Eichhornia crassipes biomass for production of biochar and its feasibility in agroecosystems: a review. 2021 , 4, 285-297 | 3 |
| 340 | Advances in metal/ biochar catalysts for biomass hydro-upgrading: A review. 2021 , 303, 126825 | 15 |
| 339 | Hydrothermal carbonization of spent mushroom compost waste compared against torrefaction and pyrolysis. 2021 , 216, 106795 | 14 |
| 338 | High-Efficient Conversion of Cellulose to Levulinic Acid Catalyzed via Functional Brfisted[lewis Acidic Ionic Liquids. 1 | 4 |
| 337 | Influence of feedwater pH on the CO2 reactivity of hydrochars. Co-carbonisation with a bituminous coal. 2021 , 170, 824-831 | O |
| 336 | Growth of cobalt hexacyanoferrate particles through electrodeposition and chemical etching of cobalt precursors on reticulated vitreous carbon foams for Na-ion electrochemical storage. 2021 , 116, 106603 | 3 |
| 335 | Enhanced photocatalytic performance and reusability of N-doped carbon dots/zinc oxide hybrid nanostructures. 2021 , 32, | |
| 334 | Interactions Between Carbohydrate and Protein During Hydrothermal Liquefaction of Food Waste. 2021 , 38, 547-554 | |
| 333 | Hydrochar derived from municipal sludge through hydrothermal processing: A critical review on its formation, characterization, and valorization. 2021 , 199, 117186 | 22 |
| 332 | Green synthesis of carbon quantum dots from corn stalk shell by hydrothermal approach in near-critical water and applications in detecting and bioimaging. 2021 , 166, 106250 | 11 |
| 331 | 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 |
| 330 | Review of organic and inorganic pollutants removal by biochar and biochar-based composites. 2021 , 3, 255-281 | 124 |

| 329 | Sludge char-to-fuel approaches based on the hydrothermal fueling IV: fermentation. 2021, 84, 880-891 | Ο |
|-----|--|----|
| 328 | Confined Chemical Transitions for Direct Extraction of Conductive Cellulose Nanofibers with Graphitized Carbon Shell at Low Temperature and Pressure. 2021 , 143, 11620-11630 | 11 |
| 327 | Glucose isomerization catalyzed by swollen cellulose derived aluminum-hydrochar. 2021 , 777, 146037 | 7 |
| 326 | Valorization of Wastes from the Food Production Industry: A Review Towards an Integrated Agri-Food Processing Biorefinery. 1 | 4 |
| 325 | Glucose-derived rGO/Zn0.4Co0.6Fe2O4 superparamagnetic nanohybrid: Synthesis, characterization and evaluation of cytotoxicity. 2021 , 129, 108629 | |
| 324 | Process time variation and critical growth onset analysis for nanofoam formation in sucrose-based hydrothermal carbonization. 2021 , 56, 15004-15011 | O |
| 323 | Correlating the chemical properties and bioavailability of dissolved organic matter released from hydrochar of walnut shells. 2021 , 275, 130003 | 1 |
| 322 | Photoluminescence carbon nano dots for the conductivity based optical sensing of dopamine and bioimaging applications. 2021 , 117, 111120 | 13 |
| 321 | Adsorption of estrone, 17 Estradiol, and 17 Ethinylestradiol from water onto modified multi-walled carbon nanotubes, carbon cryogel, and carbonized hydrothermal carbon. 2021 , 1 | 2 |
| 320 | Improving nutrients removal and energy recovery from wastes using hydrochar. 2021 , 783, 146980 | 8 |
| 319 | Conversion of residual biomass into valuable biofuels by co-hydrothermal carbonization for utilization in household pellet stoves. 2021 , 151, 106153 | 2 |
| 318 | Towards a more efficient Hydrothermal Carbonization: Processing water recirculation under different conditions. 2021 , 132, 115-123 | 3 |
| 317 | Orange peels-derived hydrochar for chemical sensing applications. 2021 , 341, 130016 | 3 |
| 316 | Potential of yak dung-derived hydrochar as fertilizer: Mechanism and model of controlled release of nitrogen. 2021 , 781, 146665 | 4 |
| 315 | Impact of hydrofluoric acid treatment on the composition, electrical conductivity, and structure of carbonized metalorganic frameworks. | |
| 314 | N, P Co-doped Porous Graphene with High Electrochemical Properties Obtained via the Laser Induction of Cellulose Nanofibrils. 2021 , | O |
| 313 | Pore characteristics of hydrochars and their role as a vector for soil bacteria: A critical review of engineering options. 1-25 | 3 |
| 312 | Functional biochar for efficient residue treatment of sulfonylurea herbicides by weak molecular interaction. 1 | 2 |

(2021-2021)

| 311 | Enhanced properties of magnetic ultralight pear sponge assisted by Fenton-like reaction for oil-water separation. 2021 , 126, 332-340 | 1 |
|-----|--|----|
| 310 | Twin-fold new methodology arising from microwave induced carbonization of newspaper waste for the adsorptive desulfurization of model oil. 2021 , 299, 120873 | 4 |
| 309 | Quantification and kinetic study of the main compounds in biocrude produced by hydrothermal carbonization of lignocellulosic biomass. 2021 , 15, 100770 | 5 |
| 308 | Ultra-selective ion sieve for thorium recovery from rare earth elements using oxygen-rich microporous carbon adsorption. 2021 , 417, 126115 | 7 |
| 307 | Preparation of an avocado seed hydrochar and its application as heavy metal adsorbent: Properties and advanced statistical physics modeling. 2021 , 419, 129472 | 11 |
| 306 | Hydrothermal carbonization of olive pomace and determining the environmental impacts of post-process products. 2021 , 315, 128087 | 8 |
| 305 | Hydrothermal carbonization of coffee silverskins. 2021 , 36, 102145 | 2 |
| 304 | Non-Catalytic Dissolution of Biochar Obtained by Hydrothermal Carbonization of Sawdust in Hydrogen Donor Solvent. 2021 , 14, 5890 | O |
| 303 | Process Analysis of Main Organic Compounds Dissolved in Aqueous Phase by Hydrothermal Processing of ABI(Euterpe oleraceae, Mart.) Seeds: Influence of Process Temperature, Biomass-to-Water Ratio, and Production Scales. 2021 , 14, 5608 | 1 |
| 302 | A systematic preparation mechanism for directional regulation of pore structure in activated carbon including specific surface area and pore hierarchy. 2021 , 158, 105266 | 3 |
| 301 | Co-hydrothermal carbonization of cotton textile waste and polyvinyl chloride waste for the production of solid fuel: Interaction mechanisms and combustion behaviors. 2021 , 316, 128306 | 2 |
| 300 | Synthesis of N-doped carbon dots for highly selective and sensitive detection of metronidazole in real samples and its cytotoxicity studies. 2021 , 1-14 | 1 |
| 299 | Influence of Reaction Conditions on Hydrothermal Carbonization of Fructose. 2021 , 14, 5271-5282 | 2 |
| 298 | Wet organic waste treatment via hydrothermal processing: A critical review. 2021 , 279, 130557 | 16 |
| 297 | Mesoporous carbon spheres produced by hydrothermal carbonization from rice husk: Optimization, characterization and hydrogen storage. 2021 , | 1 |
| 296 | Biowaste-derived hydrochar microspheres: Realizing metal-free visible-light photocatalytic oxidation of amines. 2021 , | O |
| 295 | Eupatorium adenophorum derived adsorbent by hydrothermal-assisted HNO3 modification and application to Pb2+ adsorption. 2021 , 9, 105972 | 3 |
| 294 | Enhancement of hydrothermal carbonization of chitin by combined pretreatment of mechanical activation and FeCl. 2021 , 189, 242-250 | Ο |

| 293 | Upcycling simulated food wastes into superactivated hydrochar for remarkable hydrogen storage. 2021 , 159, 105322 | 1 |
|-----|--|----|
| 292 | Co-hydrothermal carbonization of swine manure and cellulose: Influence of mutual interaction of intermediates on properties of the products. 2021 , 791, 148134 | 3 |
| 291 | A green path to extract carbon quantum dots by coconut water: Another fluorescent probe towards Fe3+ ions. 2021 , 58, 251-258 | 4 |
| 290 | A critical review on the application of biochar in environmental pollution remediation: Role of persistent free radicals (PFRs). 2021 , 108, 201-216 | 18 |
| 289 | Economical preparation of Fe3O4/C/CG and Fe/C/CG composites as microwave absorbents by recycling of coal gangue. 2021 , 146, 111573 | 1 |
| 288 | Hydrothermal carbonization of crude oil sludge ICharacterization of hydrochar and hydrothermal liquor. 2021 , 154, 89-96 | 2 |
| 287 | Effective adsorption of carbamazepine from water by adsorbents developed from flax shives and oat hulls: Key factors and characterization. 2021 , 170, 113721 | 0 |
| 286 | Vapothermal curing of hemp shives: Influence on some chemical and physical properties. 2021 , 171, 113870 | 2 |
| 285 | Evaluation of pyrochar and hydrochar derived activated carbons for biosorbent and supercapacitor materials. 2021 , 298, 113436 | 2 |
| 284 | Macroscopic rods from assembled colloidal particles of hydrothermally carbonized glucose and their use as templates for silicon carbide and tricopper silicide. 2021 , 602, 480-489 | 2 |
| 283 | Synthesis and optimization of chitosan supported magnetic carbon bio-nanocomposites and bio-oil production by solvothermal carbonization co-precipitation for advanced energy applications. 2021 , 178, 587-599 | 3 |
| 282 | Phosphate modified hydrochars produced via phytic acid-assisted hydrothermal carbonization for efficient removal of U(VI), Pb(II) and Cd(II). 2021 , 298, 113487 | 1 |
| 281 | Nitrogen distribution and evolution during persulfate assisted hydrothermal carbonization of spirulina. 2021 , 342, 125980 | 1 |
| 280 | 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 |
| 279 | Bio-based multifunctional carbon aerogels from sugarcane residue for organic solvents adsorption and solar-thermal-driven oil removal. 2021 , 426, 129580 | 13 |
| 278 | Structure and properties of microcellulose-based coatings deposited via a low-energy electron beam and their effect on the properties of onto wound dressings. 2021 , 2, 100146 | |
| 277 | On-line analysis of the correlation between gasification characteristics and microstructure of woody biowaste after hydrothermal carbonization. 2021 , 342, 126009 | 8 |
| 276 | Modern applications and current status of green nanotechnology in environmental industry. 2022 , 259-281 | 1 |

(2015-2022)

| 275 | Biochar as environmental armour and its diverse role towards protecting soil, water and air. 2022 , 806, 150444 | 12 |
|---------------------------------|---|-------------------------|
| 274 | Energy conversion performance in co-hydrothermal carbonization of sewage sludge and pinewood sawdust coupling with anaerobic digestion of the produced wastewater. 2022 , 803, 149964 | 5 |
| 273 | The fuel properties and adsorption capacities of torrefied camellia shell obtained via different steam-torrefaction reactors. 2022 , 238, 121969 | 4 |
| 272 | Influence of lipid extraction and processing conditions on hydrothermal conversion of microalgae feedstocks Effect on hydrochar composition, secondary char formation and phytotoxicity. 2022 , 428, 129559 | 8 |
| 271 | Green synthesis of walnut shell hydrochar, its antimicrobial activity and mechanism on some pathogens as a natural sanitizer. 2022 , 366, 130608 | 1 |
| 270 | Cotton stalk-derived hydrothermal carbon for methylene blue dye removal: investigation of the raw material plant tissues. 2021 , 8, | 7 |
| 269 | Forest waste to clean water: natural leaf-guar-derived solar desalinator. 2021, 13, 17754-17764 | 2 |
| 268 | Metal oxide-doped activated carbons from bakery waste and coffee grounds for application in supercapacitors. 2021 , 4, 69-80 | 6 |
| 267 | Carbon-Interlayer SnO2Bb2O3 Composite CoreBhell Structure Anodes for Sodium-Ion Batteries. 2021 , 8, | 1 |
| | | |
| 266 | Renewable Energy Systems. 2013, 138-160 | 2 |
| 266 265 | Renewable Energy Systems. 2013 , 138-160 Solid Biomass Pretreatment Processes. 2019 , 25-56 | 2 |
| | | |
| 265 | Solid Biomass Pretreatment Processes. 2019 , 25-56 | 1 |
| 265 | Solid Biomass Pretreatment Processes. 2019 , 25-56 Carbon Materials From Various Sources for Composite Materials. 2020 , 3-33 | 1 |
| 265 264 263 | Solid Biomass Pretreatment Processes. 2019, 25-56 Carbon Materials From Various Sources for Composite Materials. 2020, 3-33 Regeneration and Recycling of Spent Bleaching Earth. 2019, 3147-3167 Characterization of Solid Fuel Chars recovered from Microwave Hydrothermal Carbonization of | 1 1 |
| 265 264 263 262 | Solid Biomass Pretreatment Processes. 2019, 25-56 Carbon Materials From Various Sources for Composite Materials. 2020, 3-33 Regeneration and Recycling of Spent Bleaching Earth. 2019, 3147-3167 Characterization of Solid Fuel Chars recovered from Microwave Hydrothermal Carbonization of Human Biowaste. 2017, 134, 74-89 Hydrochars production, characterization and application for wastewater treatment: A review. 2020, | 1 1 1 43 |
| 265 264 263 262 261 | Solid Biomass Pretreatment Processes. 2019, 25-56 Carbon Materials From Various Sources for Composite Materials. 2020, 3-33 Regeneration and Recycling of Spent Bleaching Earth. 2019, 3147-3167 Characterization of Solid Fuel Chars recovered from Microwave Hydrothermal Carbonization of Human Biowaste. 2017, 134, 74-89 Hydrochars production, characterization and application for wastewater treatment: A review. 2020, 127, 109882 Microbial nanocellulose adherent to human skin used in electrochemical sensors to detect metal | 1 1 1 43 65 |

| 257 | CHAPTER 8:HTC-Derived Materials in Energy and Sequestration Applications. 2015, 225-273 | 1 |
|-----|---|----|
| 256 | Production of carbonaceous microspheres from wood sawdust by a novel hydrothermal carbonization and extraction method. 2017 , 7, 42123-42128 | 6 |
| 255 | Effects of interaction between montmorillonite and Sphingomonas sp. GY2B on the physical and chemical properties of montmorillonite in the clay-modulated biodegradation of phenanthrene. 2018 , 15, 296 | 6 |
| 254 | Application of gene expression programming, artificial neural network and multilinear regression in predicting hydrochar physicochemical properties. 2020 , 7, | 4 |
| 253 | Hydrothermal refining of biomass - an overview and future perspectives. 2015 , 14, 195-207 | 26 |
| 252 | ADVANCED FUNCTIONAL MATERIALS BASED ON CELLULOSE. 2010 , 00, 1376-1398 | 21 |
| 251 | Hydrothermal carbonization of glucose in saline solution: sequestration of nutrients on carbonaceous materials. 2016 , 4, 173-189 | 10 |
| 250 | Modeling of Agave Salmiana bagasse conversion by hydrothermal carbonization (HTC) for solid fuel combustion using surface response methodology. 2020 , 8, 538-562 | 5 |
| 249 | Characterization of hydrochars produced by hydrothermal carbonization of rice husk. | 5 |
| 248 | A Review on Pilot-Scale Applications of Hydrothermal Treatment for Upgrading Waste Materials. 2016 , 7, 425-430 | 6 |
| 247 | Conversion of Wood Waste into Solid Biofuel Using Catalytic HTC Process. 2014 , 10, 12-18 | 3 |
| 246 | Co-Hydrothermal Carbonization of Rape Straw and Microalgae: pH-Enhanced Carbonization Process To Obtain Clean Hydrochar. | |
| 245 | Influence of the Method of Preparation of Biochar from Peat and Sawdust on Its Composition and Thermal Characteristics. 2021 , 55, 306-311 | O |
| 244 | Color-Tunable Fluorescent Nitrogen-doped Graphene Quantum Dots Derived from Pineapple Leaf Fiber Biomass to detect Hg2+. 2021 , | 4 |
| 243 | Wet Torrefaction of Poultry Litter in a Pilot Unit: A Numerical Assessment of the Process Parameters. 2021 , 9, 1835 | 4 |
| 242 | Production and characterization of hydrochars and their application in soil improvement and environmental remediation. 2021 , 133142 | 8 |
| 241 | Effect of operation conditions on fuel characteristics of hydrochar via hydrothermal carbonization of agroforestry biomass. 1 | О |
| 240 | Effects of hydrothermal carbonization on products from fast pyrolysis of cellulose. 2021 , 99, 299-306 | 1 |

| 239 | Wood Biorefinery. 2012 , 61, 803-809 | |
|-----|---|---|
| 238 | Encyclopedia of Sustainability Science and Technology. 2012 , 1067-1089 | |
| 237 | Organic waste as a biomass resource. 2013 , 109-133 | |
| 236 | Review of Biomass Conversion in High Pressure High Temperature Water (HHW) Including Recent Experimental Results (Isomerization and Carbonization). 2014 , 249-274 | 1 |
| 235 | The Characteristics of the Biochar with the Synthetic Food Waste and Wood Waste for Soil Contaminated with Heavy Metals. 2014 , 19, 1-7 | 2 |
| 234 | Preparation of Carbon Materials from Lignocellulosic Biomass. 2014 , 35-63 | 1 |
| 233 | Hydrothermal carbonization of lignocellulosic biomass. 2015 , 2015, 225-231 | |
| 232 | Encyclopedia of Sustainability Science and Technology. 2017 , 1-33 | |
| 231 | Regeneration and Recycling of Spent Bleaching Earth. 2018, 1-21 | 2 |
| 230 | Enhanced Photocatalytic Activity by Using Modification Activated Carbon. 2018 , 1-23 | |
| 229 | 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 | 0 |
| 228 | COMPUTER SIMULATION OF THE POROUS STRUCTURE OF HYDROLYSIS LIGNIN AND ITS HARD COMPO-SITES WITH COMPONENTS OF OIL FUELS AND WATER. 2019 , 73-84 | |
| 227 | Factors affecting photoluminescence of structures based on citric acid and ethylenediamine. 2019, | |
| 226 | Enerji geri kazan m̃ i lh arŧma amurunun hidrotermal karbonizasyonu. 2019 , 10, 1061-1072 | |
| 225 | At₭ lignosell͡bzik biyok田eden hidrotermal karbon letimi ve karakterizasyonu. | 0 |
| 224 | Effects of Carbonization on Electrophysical Properties of Cellulose-Based Nanocomposites with Triglycine Sulfate. 2020 , 61, 1580-1583 | |
| 223 | Organic acid-assisted catalytic wet torrefaction of oil palm trunks (OPT). 2021 , 1195, 012024 | 0 |
| 222 | Highly porous carbon materials for adsorbent from water hyacinth via hydrothermal carbonization. 2020 , | |

| 221 | Hydrothermal carbonization and Liquefaction: differences, progress, challenges, and opportunities. 2022 , 343, 126084 | 15 |
|-------------|---|----|
| 220 | Reaction kinetics for the hydrothermal carbonisation of cellulose in a two-phase pathway. 2022 , 309, 122169 | O |
| 219 | Giant piezoresistive gauge factor in vein-membrane/graphene sensors with a wide linear working range. 2020 , 8, 16957-16966 | 4 |
| 218 | Pyrolysis of sucrose-derived hydrochar. 2022 , 161, 105404 | 1 |
| 217 | Mechanistic and kinetic study of the hydrothermal treatment of paunch waste. 2022 , 177, 541-553 | О |
| 216 | A review on the utilization of industrial biowaste via hydrothermal carbonization. 2022 , 154, 111877 | 4 |
| 215 | How does biochar aging affect NH volatilization and GHGs emissions from agricultural soils?. 2021 , 294, 118598 | 7 |
| 214 | Carbon-dots from babassu coconut (Orbignya speciosa) biomass: Synthesis, characterization, and toxicity to Daphnia magna. 2021 , 5, 100133 | 3 |
| 213 | Optimized production, Pb(II) adsorption and characterization of alkali modified hydrochar from sugarcane bagasse. 2021 , 11, 22328 | 4 |
| 212 | Screening the synergy of sodium dodecylbenzenesulfonate and carboxymethyl cellulose for surfactant-polymer flooding. 2021 , | 2 |
| 211 | Sustainable acid catalyst from the hydrothermal carbonization of carrageenan: use in glycerol conversion to solketal. 1 | 1 |
| 2 10 | A multi-component reaction kinetics model for the hydrothermal liquefaction of carbohydrates and co-liquefaction to produce 5-ethoxymethyl furfural. 2021 , 311, 122499 | 1 |
| 209 | Biomass Peach Gum-Derived Heteroatom-Doped Porous Carbon via In Situ Molten Salt Activation for High-Performance Supercapacitors. 2021 , 35, 19801-19810 | 0 |
| 208 | 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 |
| 207 | Chemical Reaction: Understanding the Key to the Formation of Carbonaceous Materials from Sucralose. 2021 , 6, 11846-11855 | |
| 206 | Green Synthesis of Carbon-Encapsulated Magnetic Fe3O4 Nanoparticles Using Hydrothermal Carbonization from Rattan Holocelluloses. 2021 , 11, 1397 | O |
| 205 | Characteristics of Hydrochar and Liquid Products Obtained by Hydrothermal Carbonization and Wet Torrefaction of Poultry Litter in Mixture with Wood Sawdust. 2021 , 9, 2082 | 3 |
| 204 | Influence of sequential HTC pre-treatment and pyrolysis on wet food-industry wastes: Optimisation toward nitrogen-rich hierarchical carbonaceous materials intended for use in energy storage solutions. 2021 , 151648 | 1 |

| 203 | Specific Features of Combined Hydrothermal Carbonization of Poultry Litter and Sawdust. 2021 , 94, 1582-1589 | |
|-----|--|---|
| 202 | Characterization of hydrochar and process water formed by hydrothermal carbonization of waste wood containing ureaformaldehyde resin. 1 | |
| 201 | Influence of pyrolysis method and nano sizing technique toward properties of ZnO/CNS composite from rice husk for remediation of contaminated Earth crust. 2021 , | |
| 200 | Characteristics of briquettes from bagasse charcoal using XRD and FTIR analysis. 2021, | |
| 199 | A magnetic amino enriched hydrothermal carbon production with molasses as carbon source. 2022 , 10, 107073 | |
| 198 | Multi-response optimization of sewage sludge-derived hydrochar production and its CO2-assisted gasification performance. 2022 , 10, 107036 | O |
| 197 | Hydrothermal conversion of Chinese cabbage residue for sustainable agriculture: Influence of process parameters on hydrochar and hydrolysate 2021 , 152478 | O |
| 196 | NiS/activated carbon composite derived from sodium lignosulfonate for long cycle-life asymmetric supercapacitors. 2022 , 900, 163546 | 1 |
| 195 | Hydrothermal carbonization and slow pyrolysis as two thermal techniques for the production of carbon rich, added-value materials using olive milling byproduct: Quid optimus?. 2020 , | |
| 194 | Beech sawdust based adsorbents for solid-phase extraction of pesticides and pharmaceuticals. 2022 , 87, 205-217 | |
| 193 | Hydrothermal Carbonization of Sewage Sludge: Multi-Response Optimization of Hydrochar Production and CO 2-Assisted Gasification Performance. | |
| 192 | Co-Hydrothermal Carbonization of Rape Straw and Microalgae: pH-Enhanced Carbonization Process to Obtain Clean Hydrochar. | |
| 191 | Olive Mill by-Products Thermochemical Conversion via Hydrothermal Carbonization and Slow Pyrolysis: Detailed Comparison between the Generated Hydrochars and Biochars Characteristics. 2022 , 10, 231 | 2 |
| 190 | Fabrication and characterization of spherical and cavernous activated carbon from dates stone precursor through hydro- and drythermal activation. 1 | |
| 189 | Hydrothermal carbonization of cocoa shell: hydrochar characterization, kinetic triplets, and thermodynamic aspects of the process. 1 | |
| 188 | Metal-free functionalized carbonized cotton for efficient solar steam generation and wastewater treatment 2021 , 12, 1043-1050 | O |
| 187 | Reactive and Mechanistic Insights into the Acid-Catalyzed Conversion of Concentrated C5/C6 Sugars in Ethylene Glycol. 2022 , 10, 1920-1931 | 1 |
| 186 | Biomass-based hydrothermal carbons for catalysis and environmental cleanup: a review. 2022 , 15, 160-184 | O |

| 185 | Investigation of the physical and chemical structure of NSC from sucrose. 1-9 | 1 |
|-----|---|-----|
| 184 | Comparative study on the characteristics of hydrothermal products from lignocellulosic wastes. 2022 , 161, 105408 | 2 |
| 183 | Characterization of municipal solid waste residues for hydrothermal liquefaction into liquid transportation fuels 2022 , 140, 133-142 | 1 |
| 182 | Porous carbon materials derived from discarded COVID-19 masks via microwave solvothermal method for lithium-sulfur batteries 2022 , 817, 152995 | 4 |
| 181 | Hydrothermal carbonization of cellulose in aqueous phase of bio-oil: The significant impacts on properties of hydrochar. 2022 , 315, 123132 | 1 |
| 180 | Hydrothermal pretreatment of cotton textile wastes: Biofuel characteristics and biochar electrocatalytic performance. 2022 , 316, 123327 | 2 |
| 179 | Hollow carbon spheres for diclofenac and venlafaxine adsorption. 2022, 107348 | 0 |
| 178 | Kinetic studies of hydrothermal carbonization of avocado stone and analysis of the polycyclic aromatic hydrocarbon contents in the hydrochars produced. 2022 , 316, 123163 | 1 |
| 177 | Distinctive conductivity improvement by embedding Cu nanoparticles in the carbon shell of submicron Si@C anode materials for LIBs. | 1 |
| 176 | Biorefining of leather solid waste to harness energy and materials Areview. 1 | O |
| 175 | Chemical Activation of Lignocellulosic Precursors and Residues: What Else to Consider?. 2022 , 27, | 0 |
| 174 | Valorisation of sugar cane bagasse using hydrothermal carbonisation in the preparation of magnetic carbon nanocomposite in a single-step synthesis applied to chromium adsorption. | O |
| 173 | Hydrothermal treatment (HTT) for improving the fuel properties of biomass residues. 1 | 1 |
| 172 | Blue hydrochars formed on hydrothermal carbonization of glucose using an iron catalyst. 2022 , 100172 | O |
| 171 | Hierarchical porous biochar fabricated by Aspergillus tubingensis pretreatment coupling with chemical activation for Pb (II) removal. 2022 , 335, 111861 | 0 |
| 170 | Biomass-based carbon microspheres for removing heavy metals from the environment: A review. 2022 , 100136 | 1 |
| 169 | Production of activated carbon with tunable porosity and surface chemistry via chemical activation of hydrochar with phosphoric acid under oxidizing atmosphere. 2022 , 30, 101849 | 1 |
| 168 | Forming mechanism of coke microparticles from polymerization of aqueous organics during hydrothermal carbonization process of biomass. <i>Carbon</i> , 2022 , 192, 50-60 | . 1 |

| 167 | The zebrafish (Danio rerio) embryo-larval contact assay combined with biochemical biomarkers and swimming performance in sewage sludge and hydrochar hazard assessment 2022 , 119053 | О |
|-----|---|---|
| 166 | Advances in understanding the humins: Formation , prevention and application. 2022 , 10, 100062 | Ο |
| 165 | Effect of different flocculants on the characteristics of hydrochar and hydroliquid derived from the hydrothermal treated active sludge. A comparative study. 2022 , 10, 107514 | Ο |
| 164 | Theoretical modeling of hydrochar precursor formation during the hydrothermal carbonization of sewage sludge. 2022 , 231, 107212 | 2 |
| 163 | Physicochemical and structural characterisation of oil palm trunks (OPT) hydrochar made via wet torrefaction. 2022 , 8, 100467 | 0 |
| 162 | Enhancements of surface functional groups and degree of graphitization in gamma irradiated activated carbon as an electrode material. 2022 , 195, 110062 | 1 |
| 161 | Sugar beet pulp derived oxygen-rich porous carbons for supercapacitor applications. 2022, 51, 104363 | 3 |
| 160 | Bio-derived hard carbon nanosheets with high rate sodium-ion storage characteristics. 2022 , 32, e00407 | О |
| 159 | A Study on Electron Acceptor of Carbonaceous Materials for Highly Efficient Hydrogen Uptakes. 2021 , 11, 1524 | 0 |
| 158 | Low-Temperature Hydrothermal Treatment (HTT) Improves the Combustion Properties of Short-Rotation Coppice Willow Wood by Reducing Emission Precursors. 2021 , 14, 8229 | O |
| 157 | Graphitized Biocarbon Derived from Hydrothermally Liquefied Low-Ash Corn Stover. 2022, 61, 392-402 | O |
| 156 | Template-assisted synthesis of single-atom catalysts supported on highly crystalline vanadium pentoxide for stable oxygen evolution. 2022 , | 3 |
| 155 | Effect of hydrothermal treatment and LaMnO3 loading on the oxygen reduction activity of chitosan-derived carbon-based gas diffusion electrodes. 1 | |
| 154 | Investigation of saccharide-based carbons for charge storage applications. 1 | |
| 153 | Photocatalytic-induced bubble-propelled isotropic g-CN-coated carbon microsphere micromotors for dynamic removal of organic pollutants 2022 , 12, 13116-13126 | O |
| 152 | A Comparison of Functional Fillers © reenhouse Gas Emissions and Air Pollutants from Lignin-Based Filler, Carbon Black and Silica. 2022 , 14, 5393 | 1 |
| 151 | Boron-oxy-carbide sheets: A wide voltage symmetric supercapacitor electrode with high temperature tolerance. 2022 , 136983 | 1 |
| 150 | Investigation of hydrothermal carbonization and chemical activation process conditions on hydrogen storage in loblolly pine-derived superactivated hydrochars. 2022 , | 1 |

| 149 | Oxygen-rich microporous carbons with exceptionally high adsorption of iodine. 2022 , 285, 126193 | 0 |
|-----|--|---|
| 148 | Microwave-assisted catalytic alcoholysis of fructose to ethoxymethylfurfural (EMF) over carbon-based microwave-responsive catalyst. 2022 , 233, 107305 | O |
| 147 | Pseudo lignin formed from hygrothermally treated holocellulose and its effect on fungal degradation. 2022 , 184, 115004 | О |
| 146 | Synthesis of nitrogen-enriched hydrochar via co-hydrothermal reaction of liquid digestate and corn stalk 2022 , 155572 | O |
| 145 | State-of-the-art developments in carbon quantum dots (CQDs): Photo-catalysis, bio-imaging, and bio-sensing applications 2022 , 302, 134815 | 5 |
| 144 | One step synthesis of Mo-doped carbon microspheres for valorization corncob to levulinic acid. 2022 , 184, 115019 | O |
| 143 | Transformation of Cellulose via Two-Step Carbonization to Conducting Carbonaceous Particles and Their Outstanding Electrorheological Performance. 2022 , 23, 5477 | О |
| 142 | Biochar as sustainable adsorbents for chromium ion removal from aqueous environment: a review. | О |
| 141 | Nitrogen self-doped hierarchical porous carbon via penicillin fermentation residue (PR) hydrothermal carbonization (HTC) and activation for supercapacitance. 2022 , 165452 | О |
| 140 | All vanadium-based Li-ion hybrid supercapacitor with enhanced electrochemical performance via prelithiation. 2022 , 914, 165288 | О |
| 139 | Fluorescent carbon quantum dots as a novel solution and paper strip-based dual sensor for the selective detection of Cr(VI) ions. 2022 , 109138 | 0 |
| 138 | One-step preparation of char-supported iron nanocatalysts under microwave irradiation and their application for tar removal. 2022 , 105564 | 1 |
| 137 | Levoglucosan as the Intermediate Product on the Pre-treated Sugarcane Bagasse Hydrolysis Catalyzed by Brfisted Acid. | |
| 136 | Characterization and nutritional value of hydrothermal liquid products from distillers grains. 2022 , 316, 115275 | |
| 135 | Mechanistic insights into the effect of feed concentration on product formation during acid-catalyzed conversion of glucose in ethanol. | 1 |
| 134 | Line Patterns and Fractured Coatings in Deposited Colloidal Hydrochar on Glass Substrates after Evaporation of Water. 2022 , 6, 36 | |
| 133 | CHARACTERIZATION AND TRANSFORMATION OF NANCHE STONE (BYRSONIMA CRASSIFOLIA) IN AN ACTIVATED HYDROCHAR WITH HIGH ADSORPTION CAPACITY TOWARDS METFORMIN IN AQUEOUS SOLUTION. 2022 , | О |
| 132 | Enhanced removal of organic contaminants by novel ironBarbon and premagnetization: Performance and enhancement mechanism. 2022 , 303, 135060 | O |

| 131 | Fast pyrolysis of Beauty Leaf Fruit Husk (BLFH) in an auger reactor: Effect of temperature on the yield and physicochemical properties of BLFH oil. 2022 , | 0 |
|--------------------------|---|-------------|
| 130 | Effect of Hydrothermal Carbonization Parameters and Performance of Carbon Dioxide Adsorption on Pineapple Peel Waste Biochar. | Ο |
| 129 | Decoupled temperature and pressure hydrothermal synthesis of carbon sub-micron spheres from cellulose. 2022 , 13, | 3 |
| 128 | Recent advances in hydrochar application for the adsorptive removal of wastewater pollutants. 2022 , 184, 419-456 | 1 |
| 127 | Evolution of kraft lignin during hydrothermal treatment under different reaction conditions. 2022 , 103, 147-153 | O |
| 126 | Constructing thinner micropore-enriched carbon skeleton through molecular configuration transformation of hexose isomers to boost oxygen reduction reaction in Al-air battery. 2022 , 325, 124848 | Ο |
| 125 | Synthesis of biowaste-derived carbon foam for CO2 capture. 2022 , 185, 106453 | |
| 124 | Uncovering the transition between hydrothermal carbonization and liquefaction using differential scanning calorimetry. 2022 , 235, 107349 | O |
| 123 | Rational synthesis of microporous carbons for enhanced post-combustion CO2 capture via non-hydroxide activation of air carbonised biomass. 2022 , 12, 20080-20087 | 1 |
| | | |
| 122 | Thermal processing of biomass for energy and fuel production. 2022, | |
| 122 | Thermal processing of biomass for energy and fuel production. 2022, Layered Oxide Cathode-Inspired Secondary Hard Carbon Microsphere Anode Material for High-Power and Long-Life Rechargeable Batteries. | |
| | Layered Oxide Cathode-Inspired Secondary Hard Carbon Microsphere Anode Material for | O |
| 121 | Layered Oxide Cathode-Inspired Secondary Hard Carbon Microsphere Anode Material for High-Power and Long-Life Rechargeable Batteries. Effects of process water recirculation on yields and quality of hydrochar from hydrothermal | 0 |
| 121 | Layered Oxide Cathode-Inspired Secondary Hard Carbon Microsphere Anode Material for High-Power and Long-Life Rechargeable Batteries. Effects of process water recirculation on yields and quality of hydrochar from hydrothermal carbonization process of rice husk. 2022, 105618 | |
| 121 120 119 | Layered Oxide Cathode-Inspired Secondary Hard Carbon Microsphere Anode Material for High-Power and Long-Life Rechargeable Batteries. Effects of process water recirculation on yields and quality of hydrochar from hydrothermal carbonization process of rice husk. 2022, 105618 Hydrothermal Carbonization: A Pilot-Scale Reactor Design for Bio-waste and Sludge Pre-treatment. Synthesis of Saccharide-based Hydrochar with Macroporous Structure for Effective Organic | 1 |
| 121 120 119 118 | Layered Oxide Cathode-Inspired Secondary Hard Carbon Microsphere Anode Material for High-Power and Long-Life Rechargeable Batteries. Effects of process water recirculation on yields and quality of hydrochar from hydrothermal carbonization process of rice husk. 2022, 105618 Hydrothermal Carbonization: A Pilot-Scale Reactor Design for Bio-waste and Sludge Pre-treatment. Synthesis of Saccharide-based Hydrochar with Macroporous Structure for Effective Organic Pollutant Removal. Hydrochars produced by hydrothermal carbonisation of seaweed, coconut shell and oak: effect of | 1 O |
| 121 120 119 118 | Layered Oxide Cathode-Inspired Secondary Hard Carbon Microsphere Anode Material for High-Power and Long-Life Rechargeable Batteries. Effects of process water recirculation on yields and quality of hydrochar from hydrothermal carbonization process of rice husk. 2022, 105618 Hydrothermal Carbonization: A Pilot-Scale Reactor Design for Bio-waste and Sludge Pre-treatment. Synthesis of Saccharide-based Hydrochar with Macroporous Structure for Effective Organic Pollutant Removal. Hydrochars produced by hydrothermal carbonisation of seaweed, coconut shell and oak: effect of processing temperature on physicochemical adsorbent characteristics. 2022, 4, The role of Fe3O4@biochar as electron shuttle in enhancing the biodegradation of gaseous | 1 O 2 |

| 113 | Co-hydrothermal carbonization of rape straw and microalgae: pH-enhanced carbonization process to obtain clean hydrochar. 2022 , 257, 124733 | О |
|-----|--|---|
| 112 | Hydrothermal carbonization of glucose: Secondary char properties, reaction pathways, and kinetics. 2022 , 449, 137827 | 2 |
| 111 | Low-temperature hydrothermal carbonization of pectin enabled by high pressure. 2022, 105627 | 1 |
| 110 | Fructose-derived hydrochar: combustion thermochemistry and kinetics assessments. | Ο |
| 109 | Biochar characteristics produced via hydrothermal carbonization and torrefaction of peat and sawdust. 2022 , 328, 125220 | 1 |
| 108 | Novel hydrochar as low-cost alternative adsorbent for the removal of noxious impurities from water. 2022 , 149-160 | |
| 107 | Biowaste Valorization Using Hydrothermal Carbonization for Potential Wastewater Treatment Applications. 2022 , 14, 2344 | 1 |
| 106 | Influence of Reaction Time, Temperature, and Heavy Metal Zinc on Characteristics of Cellulose- and Wood-Derived Hydrochars from Hydrothermal Carbonization. | O |
| 105 | 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 |
| 104 | Systematical analysis of sludge treatment and disposal technologies for carbon footprint reduction. 2022 , | O |
| 103 | The utilization of biochar alone and in combination with compost for removal of potentially toxic metals accumulated in soils associated with land-use patterns. | |
| 102 | Transformations of the Structural Components of Sawdust and Peat under Conditions of Hydrothermal Carbonization and Torrefaction. 2022 , 56, 259-264 | |
| 101 | Uniform and dispersible carbonaceous microspheres as quasi-liquid sorbent. 2022 , 136079 | 2 |
| 100 | Preparation and characterization of the poplar micro-nano cellulose sustainable carbon spheres. | |
| 99 | The Influence of Key Reactions During Hydrothermal Carbonization of Sewage Sludge on Aqueous Phase Properties: A Review. 2022 , 105678 | 1 |
| 98 | Evaluation of the production of hydrochar from spent coffee grounds under different operating conditions. 2022 , 49, 103037 | |
| 97 | High performance and sustainable CNF membrane via facile in-situ envelopment of hydrochar for water treatment. 2022 , 296, 119948 | О |
| 96 | Hydrochar Pelletization towards Solid Biofuel from Biowaste Hydrothermal Carbonization. 2023 , 11, 411-422 | |

| 95 | Solvothermal synthesis and applications of micro/nano carbons: A review. 2023, 451, 138572 | 2 |
|----|--|---|
| 94 | N-rich and O-poor doped carbon prepared via facile ammonium nitrate assisted hydrothermal carbonization for robust supercapacitors. 2022 , 373, 133903 | O |
| 93 | One-pot alkaline carbonization hydrothermal synthesis of halloysite nanotubes with amino groups over Pd@CeO2/halloysite to enhance catalysis of three-way reactions. 2022 , 230, 106701 | 0 |
| 92 | Effects of hydrophobic coating on properties of hydrochar produced at different temperatures: Specific surface area and oxygen-containing functional groups. 2022 , 363, 127971 | O |
| 91 | Biofuel characteristics of chars produced from rapeseed, whitewood, and seaweed via thermal conversion technologies Impacts of feedstocks and process conditions. 2022 , 238, 107492 | О |
| 90 | Adsorption of lead ions (Pb2+) from wastewater using effective nanocomposite GO/CMC/FeNPs: Kinetic, isotherm, and desorption studies. 2022 , 655, 130224 | 1 |
| 89 | Synthesis and applications of carbon dots from waste biomass. 2023, 319-328 | O |
| 88 | Technical progress and perspective on the thermochemical conversion of kitchen waste and relevant applications: A comprehensive review. 2023 , 331, 125803 | 1 |
| 87 | Generalised predictability in the synthesis of biocarbons as clean energy materials: targeted high performance CO2 and CH4 storage. | 1 |
| 86 | Carbonization of hydrothermally pre-treated algae using terephthalaldehyde and Mg salts. 2022, | O |
| 85 | Hydrocarbon Synthesis from CO2 and H2 Using the Ultrafine Iron-Containing Catalytic Systems Based on Carbonized Cellulose. 2022 , 24, 149 | O |
| 84 | Control of Electron Pathway in in-situ Synthesized Carbon Dot@Cellulose Nanofiber with Stable Solid-state Emission. 2022 , 23, 2132-2138 | O |
| 83 | Advances in preparation, application in contaminant removal, and environmental risks of biochar-based catalysts: a review. 2022 , 4, | 1 |
| 82 | Nonmetal function groups of biochar for pollutants removal: A review. 2022 , 100171 | Ο |
| 81 | Production of Hydrochars from Lignocellulosic Biomass with and without Boric Acid. | O |
| 80 | Development of N,S-CDs fluorescent probe method for early detection of Cr(VI) in the environment. | O |
| 79 | Recent insights in synthesis and energy storage applications of porous carbon derived from biomass waste: A review. 2022 , | 1 |
| 78 | Preparation of an environmentally friendly demulsifier using waste rice husk as raw materials for oil-water emulsion separation. 2022 , 120497 | O |

| 77 | Kinetics and Mechanisms of Hydrothermal Dehydration of Cyclic 1,2- and 1,4-Diols. | O |
|----|---|---|
| 76 | Effective multipurpose sewage sludge and food waste reduction strategies: A focus on recent advances and future perspectives. 2022 , 136670 | 2 |
| 75 | Multifunctional Loblolly Pine-Derived Superactivated Hydrochar: Effect of Hydrothermal Carbonization on Hydrogen and Electron Storage with Carbon Dioxide and Dye Removal. 2022 , 12, 3575 | O |
| 74 | Catalytic wet torrefaction of lignocellulosic biomass: An overview with emphasis on fuel application. 2022 , | O |
| 73 | Efficient adsorption and reduction of Cr(VI) in water using one-step H3PO4-assisted prepared Leersia hexandra Swartz hydrochar. 2022 , 100260 | 1 |
| 72 | New Family of Hydrothermal Carbons with Super-High Surface Areas Derived from Nucleosides for Oxygen Reduction. 2022 , 10, 14330-14342 | 1 |
| 71 | A review on low-cost adsorbent (biochar) for the elimination of potentially toxic elements (PTEs) from contaminated water. 2022 , 15, | O |
| 70 | Design of biomass-based renewable materials for environmental remediation. 2022, | O |
| 69 | Production of Nanoparticles of MoSe2 and Carbon in One Step to Increase Their Stability for Applications in Sodium-Ion Batteries. 2022 , 5, 15665-15675 | O |
| 68 | Recent methods in the production of activated carbon from date palm residues for the adsorption of textile dyes: A review. 10, | O |
| 67 | Intrinsic conductive cellulose nanofiber induce room-temperature reversible and robust polyvinyl alcohol hydrogel for multifunctional self-healable biosensors. | O |
| 66 | Comprehensive study of used cigarette filters-derived porous activated carbon for Supercapacitors: From biomass waste to sustainable energy source. 2022 , 925, 116915 | 1 |
| 65 | Precise control of morphology and electrochemical properties of buckwheat husk-based biomass carbon spheres. 2022 , 130, 109462 | О |
| 64 | Enhanced Clælectrosorptive performance of activated carbon fibre via modification by TiO2 and polyaniline. 2022 , 10, 108741 | O |
| 63 | Insights into the evolution of chemical structures in hydrochars from hydrothermal carbonization of PVC. 2022 , 105, 323-333 | О |
| 62 | Growth mechanism of glucose-based hydrochar under the effects of acid and temperature regulation. 2023 , 630, 654-665 | O |
| 61 | Layered oxide cathode-inspired secondary hard carbon microsphere anode material for high-power and long-life rechargeable batteries. 2023 , 454, 140252 | O |
| 60 | Preparation of amorphous carbon membranes synthesized via a glucose-solution hydrothermal method. 2022 , | O |

| 59 | Activated Carbons Produced from Hydrothermally Carbonized Prickly Pear Seed Waste. 2022, 14, 14559 | 0 |
|----|--|---|
| 58 | Bottom-up Hydrothermal Carbonization for the Precise Engineering of Carbon Materials. 2022 , 101048 | 1 |
| 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 | Surface functional groups and degree of carbonization of selected chars from different processes and feedstock. 2022 , 17, e0277365 | O |
| 55 | Controllable synthesis of oxygenated carbon supported palladium nanodendrites for highly efficient nitroaromatics reduction. 2023 , 658, 130677 | 0 |
| 54 | Luminescent materials derived from biomass resources. 2023 , 477, 214951 | 1 |
| 53 | Cone/plate structured photothermal evaporator with obviously improved evaporation properties by suppressing thermal conduction-caused heat loss. 2023 , 307, 122754 | 0 |
| 52 | Interactions between Cr(VI) and the hydrochar: The electron transfer routes, adsorption mechanisms, and the accelerating effects of wood vinegar. 2023 , 863, 160957 | Ο |
| 51 | Hydrocarbonization of Biomass and Hydrochar for Sustainable Renewable Fuel. 2022, 1-10 | О |
| 50 | LCA of Zero Valent Iron Nanoparticles Encapsulated in Algal Biomass for Polishing Treated Effluents. 2022 , 26, 1196-1208 | Ο |
| 49 | Influence of the Calcination Temperature on the Thermal Characteristics of Peat-Based Biochar. 2022 , 65, 335-341 | О |
| 48 | Sorption and other properties of polytetrafluoroethylene/cellulose composite aerogels. | 1 |
| 47 | Analysis of Formation Mechanisms of Sugar-Derived Dense Carbons via Hydrogel Carbonization Method. 2022 , 12, 4090 | О |
| 46 | Oxidative Torrefaction of Poultry Litter in a Pilot Unit: A Numerical Assessment of Process Parameters. 2022 , | O |
| 45 | Comparative Studies of the Biochar Production Process Using Hydrothermal Carbonization and Superheated Steam Torrefaction. 2022 , 69, 981-988 | O |
| 44 | One-Step Acid-Induced Confined Conversion of Highly Oriented and Well-Defined Graphitized Cellulose Nanocrystals: Potential Advanced Energy Materials. 2022 , 10, 16760-16769 | O |
| 43 | Density functional theory simulation of heterogeneous polymerization reactions during biomass hydrothermal carbonization. | О |
| 42 | Characteristics of Hydrothermal Carbonization Hydrochar Derived from Cattle Manure. 2022 , 15, 9195 | 1 |

| 41 | Hydrothermal Carbonization of Sewage Sludge with Sawdust and Corn Stalk: Optimization of Process Parameters and Characterization of Hydrochar. | O |
|----|--|---|
| 40 | Breaking the temperature limit of hydrothermal carbonization of lignocellulosic biomass by decoupling temperature and pressure. 2023 , | 2 |
| 39 | Synthesis of N-doped carbon material via hydrothermal carbonization: Effects of reaction solvent and nitrogen source. 2023 , 60, 106588 | 0 |
| 38 | Scavenging of DPPH by Persistent Free Radicals in Carbonized Particles. 2200425 | O |
| 37 | Changes in Selected Organic and Inorganic Compounds in the Hydrothermal Carbonization Process Liquid While in Storage. 2023 , 8, 4234-4243 | O |
| 36 | Resource utilization of thermoplastics in supercritical water. 2023 , 47-200 | O |
| 35 | Hydrothermal treatment of plastic waste within a circular economy perspective. 2023, 32, 100991 | O |
| 34 | Conversion of cellulose into valuable chemicals using sulfonated amorphous carbon in 1-ethyl-3-methylimidazolium chloride. 2023 , 13, 7257-7266 | O |
| 33 | Production and application of biochar. 2023, | O |
| 32 | Optimizing Al and Fe Load during HTC of Water Hyacinth: Improvement of Induced HC Physicochemical Properties. 2023 , 13, 506 | O |
| 31 | Hydrothermal liquefaction of wood wastes in a concentrating solar plant: A techno-economic analysis. 2023 , 282, 116861 | O |
| 30 | Preparation of multi-layered microcapsule-shaped activated biomass carbon with ultrahigh surface area from bamboo parenchyma cells for energy storage and cationic dyes removal. 2023 , 396, 136517 | O |
| 29 | Influence of process water recirculation on hydrothermal carbonization of rice husk at different temperatures. 2023 , 11, 109364 | 0 |
| 28 | Reduction and valorization of dairy manure by organic chelating acid-assisted hydrothermal process: Dewatering performance, energy recovery, and effluent toxicity. 2023 , 163, 134-143 | O |
| 27 | Liquid-solid ratio during hydrothermal carbonization affects hydrochar application potential in soil: Based on characteristics comparison and economic benefit analysis. 2023 , 335, 117567 | 0 |
| 26 | A study on and adsorption mechanism of ammonium nitrogen by modified corn straw biochar. 2023 , 10, | 2 |
| 25 | Additive Manufacturing of Carbon Using Commodity Polypropylene. 2208029 | 0 |
| | In-situ construction of magnetic raspberry-like ZnO/C supporting different transition metal (Fe, Co, | |

| 23 | Highly efficient catalysts of polyoxometalates supported on biochar for antibiotic wastewater treatment: Performance and mechanism. 2023 , 172, 425-436 | 0 |
|----|---|---|
| 22 | Carbon-Based Materials and Their Applications in Sensing by Electrochemical Voltammetry. 2023 , 11, 81 | О |
| 21 | Synthesis of Carbon Microspheres from Inedible Crystallized Date Palm Molasses: Influence of Temperature and Reaction Time. 2023 , 16, 1672 | О |
| 20 | Robust biocompatible bacterial cellulose/silk nonwoven fabric/silk sericin sandwich membrane with strong UV-blocking and antioxidant properties. 2023 , 30, 3973-3993 | О |
| 19 | A universal strategy for green synthesis of biomass-based transition metal single-atom catalysts by simple hydrothermal and compression treatment. 2023 , 461, 142104 | О |
| 18 | Reactant or Product?: Fate of Water During HTC Under Different Conditions. 2023, 406-413 | O |
| 17 | Synthesis of porous carbon from orange peel waste for effective volatile organic compounds adsorption: role of typical components. | О |
| 16 | Preparation of activated biochar with adjustable pore structure by hydrothermal carbonization for efficient adsorption of VOCs and its practical application prospects. 2023 , 11, 109611 | O |
| 15 | Effect of process parameters on phosphorus conversion pathways during hydrothermal treatment of sewage sludge: A review. 2023 , 463, 142342 | О |
| 14 | Palm Oil Valorization through the Oxidative Cleavage of Unsaturated Fatty Acids with Ru-Carbon Catalysts. 2023 , 62, 4928-4939 | O |
| 13 | 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 | О |
| 12 | Functional Carbon from Nature: Biomass-Derived Carbon Materials and the Recent Progress of Their Applications. | O |
| 11 | Comparison of Porous Carbon Electrodes Derived from Madhuca longifolia Leaves by Hydrothermal Technique and Direct Pyrolysis Techniques. 2023 , 35, 1037-1043 | О |
| 10 | Hydrothermal carbonisation of sewage sludge and resulting biofuels as a sustainable energy source. 2023 , 127337 | О |
| 9 | Biomass carbon mining to develop nature-inspired materials for a circular economy. 2023 , 26, 106549 | О |
| 8 | Investigation of the Formation, Characterization, and Oxidative Catalytic Valorization of Humins. 2023 , 16, 2864 | О |
| 7 | Hydrothermal Carbonization of Corn Stover: Structural Evolution of Hydro-Char and Degradation Kinetics. 2023 , 16, 3217 | О |
| 6 | Effect of Different Hydrothermal Parameters on Calorific Value and Pyrolysis Characteristics of Hydrochar of Kitchen Waste. 2023 , 16, 3561 | O |

| 5 | Heteroatom-Rich Carbon Cathodes Toward High-Performance Flexible Zinc-Ion Hybrid Supercapacitors. 2023 , | О |
|---|---|---|
| 4 | Structure and Formation Mechanism of Cellulose-Derived Humins. 2023, 73-84 | O |
| 3 | Structure and Formation Mechanism of Furfural-Derived Humins. 2023, 23-31 | O |
| 2 | Structure and Formation Mechanism of 5-Hydroxymethylfurfural (HMF)-Derived Humins. 2023, 7-21 | O |
| 1 | Structure and Formation Mechanism of Glucose-Derived Humins. 2023 , 33-55 | 0 |