

Natural and waste hydrocarbon precursors for the synthesis of carbon nanomaterials: Graphene and CNTs

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| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 2 | Potential prospects for carbon dots as a fluorescence sensing probe for metal ions. RSC Advances, 2016, 6, 90526-90536. | 3.6 | 60 |
| 3 | Human hair-derived hollow carbon microfibers for electrochemical sensing. Carbon, 2016, 107, 872-877. | 10.3 | 40 |
| 4 | Self-Assembled and One-Step Synthesis of Interconnected 3D Network of Fe ₃ O ₄ /Reduced Graphene Oxide Nanosheets Hybrid for High-Performance Supercapacitor Electrode. ACS Applied Materials & Interfaces, 2017, 9, 8880-8890. | 8.0 | 271 |
| 5 | Characterization of carbon materials and differences from activated carbon particle (ACP) and coal briquettes product (CBP) derived from coconut shell via rotary kiln. Renewable and Sustainable Energy Reviews, 2017, 75, 1175-1186. | 16.4 | 37 |
| 6 | Unique perforated graphene derived from <i>Bougainvillea</i> flowers for high-power supercapacitors: a green approach. Nanoscale, 2017, 9, 4801-4809. | 5.6 | 51 |
| 7 | Synthesis and comparison of different spinel ferrites and their catalytic activity during chemical vapor deposition of polymorphic nanocarbons. International Journal of Precision Engineering and Manufacturing - Green Technology, 2017, 4, 441-451. | 4.9 | 17 |
| 8 | Dichlorobenzene: an effective solvent for epoxy/graphene nanocomposites preparation. Royal Society Open Science, 2017, 4, 170778. | 2.4 | 14 |
| 9 | Direct laser writing of micro-supercapacitors on thick graphite oxide films and their electrochemical properties in different liquid inorganic electrolytes. Journal of Colloid and Interface Science, 2017, 507, 271-278. | 9.4 | 72 |
| 10 | Synthesis, characterization, and application of nickel oxide/CNT nanocomposites to remove Pb ²⁺ from aqueous solution. Journal of Nanostructure in Chemistry, 2017, 7, 273-281. | 9.1 | 39 |
| 11 | Microstructure and Mechanical Properties of CNT-Reinforced AZ31 Matrix Composites Prepared Using Hot-Press Sintering. Journal of Materials Engineering and Performance, 2017, 26, 5495-5500. | 2.5 | 21 |
| 12 | Carbon nanotubes from renewable feedstocks: A move toward sustainable nanofabrication. Journal of Applied Polymer Science, 2017, 134, . | 2.6 | 47 |
| 13 | Synthesis of graphene nanoplatelets from palm-based waste chicken frying oil carbon feedstock by using catalytic chemical vapour deposition. Materials Today Communications, 2018, 15, 81-87. | 1.9 | 20 |
| 14 | Graphene oxide: An efficient material and recent approach for biotechnological and biomedical applications. Materials Science and Engineering C, 2018, 86, 173-197. | 7.3 | 212 |
| 15 | Synthesis of carbon nanotubes from biofuel as a carbon source through a diesel engine. Diamond and Related Materials, 2018, 82, 79-86. | 3.9 | 15 |
| 16 | Synthesis and characterization of graphene-based nanostructures by electron-assisted hot filament plasma CVD. Diamond and Related Materials, 2018, 86, 179-185. | 3.9 | 7 |
| 17 | Hierarchically Porous N-Doped Carbon Nanotubes/Reduced Graphene Oxide Composite for Promoting Flavin-Based Interfacial Electron Transfer in Microbial Fuel Cells. ACS Applied Materials & Interfaces, 2018, 10, 11671-11677. | 8.0 | 77 |
| 18 | Enhanced thermo-mechanical and electrical properties of carbon-carbon composites using human hair derived carbon powder as reinforcing filler. Advanced Powder Technology, 2018, 29, 1417-1432. | 4.1 | 11 |
| 19 | Recent advances in the synthesis and modification of carbon-based 2D materials for application in energy conversion and storage. Progress in Energy and Combustion Science, 2018, 67, 115-157. | 31.2 | 271 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 20 | Recent trends in graphene materials synthesized by CVD with various carbon precursors. Journal of Materials Science, 2018, 53, 851-879. | 3.7 | 45 |
| 21 | Carbon nanotubes: A potential material for energy conversion and storage. Progress in Energy and Combustion Science, 2018, 64, 219-253. | 31.2 | 184 |
| 22 | Preparation, characterization and environmental/electrochemical energy storage testing of low-cost biochar from natural chitin obtained via pyrolysis at mild conditions. Applied Surface Science, 2018, 427, 883-893. | 6.1 | 48 |
| 23 | Synergistic effect of carbon nanotube and graphene nanoplatelet addition on microstructure and mechanical properties of AZ31 prepared using hot-pressing sintering. Journal of Materials Research, 2018, 33, 4261-4269. | 2.6 | 11 |
| 24 | State-of-the-art on the production and application of carbon nanomaterials from biomass. Green Chemistry, 2018, 20, 5031-5057. | 9.0 | 256 |
| 25 | Electrochemical Energy Storage Potentials of Waste Biomass: Oil Palm Leaf- and Palm Kernel Shell-Derived Activated Carbons. Energies, 2018, 11, 3410. | 3.1 | 27 |
| 26 | Carbon Nanotubes and Related Nanomaterials: Critical Advances and Challenges for Synthesis toward Mainstream Commercial Applications. ACS Nano, 2018, 12, 11756-11784. | 14.6 | 388 |
| 27 | Chalcogenides and Carbon Nanostructures: Great Applications for PEM Fuel Cells. , 0, , . | | 2 |
| 28 | Functional graphene oxide as cancer-targeted drug delivery system to selectively induce oesophageal cancer cell apoptosis. Artificial Cells, Nanomedicine and Biotechnology, 2018, 46, 297-307. | 2.8 | 39 |
| 29 | Solution combustion synthesis, energy and environment: Best parameters for better materials. Progress in Crystal Growth and Characterization of Materials, 2018, 64, 23-61. | 4.0 | 215 |
| 30 | Morphology and topography study of graphene synthesized from plant oil. AIP Conference Proceedings, 2018, , . | 0.4 | 5 |
| 31 | Coal derived carbon nanomaterials “ Recent advances in synthesis and applications. Applied Materials Today, 2018, 12, 342-358. | 4.3 | 101 |
| 32 | Co-synthesis of large-area graphene and syngas via CVD method from greenhouse gases. Materials Letters, 2018, 227, 132-135. | 2.6 | 9 |
| 33 | Sustainable N-containing biochars obtained at low temperatures as sorbing materials for environmental application: Municipal biowaste-derived substances and nanosponges case studies. Journal of Analytical and Applied Pyrolysis, 2018, 134, 606-613. | 5.5 | 13 |
| 34 | Carbon spheres derived from biomass residue via ultrasonic spray pyrolysis for supercapacitors. Materials Chemistry and Physics, 2018, 219, 461-467. | 4.0 | 20 |
| 35 | Influence of KOH on the carbon nanostructure of peanut shell. Resolution and Discovery, 2018, 3, 29-32. | 0.4 | 10 |
| 36 | Graphene/Graphene Oxide and Carbon Nanotube Based Sensors for the Determination and Removal of Bisphenols. , 2019, , 329-372. | | 1 |
| 37 | Introduction of graphene-based nanotechnologies. , 2019, , 3-21. | | 4 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 38 | Biomass derived hierarchical 3D graphene framework for high performance energy storage devices. Journal of Electroanalytical Chemistry, 2019, 849, 113388. | 3.8 | 20 |
| 39 | Chemical Recycling of Consumer-Grade Black Plastic into Electrically Conductive Carbon Nanotubes. Journal of Carbon Research, 2019, 5, 32. | 2.7 | 16 |
| 40 | A review on synthesis of graphene, h-BN and MoS ₂ for energy storage applications: Recent progress and perspectives. Nano Research, 2019, 12, 2655-2694. | 10.4 | 283 |
| 41 | Natural Carbon By-Products for Transparent Heaters: The Case of Steam-Cracker Tar. Advanced Materials, 2019, 31, e1900331. | 21.0 | 13 |
| 42 | Disposable electrodes from waste materials and renewable sources for (bio)electroanalytical applications. Biosensors and Bioelectronics, 2019, 146, 111758. | 10.1 | 48 |
| 43 | Synthesis of Doped Porous 3D Graphene Structures by Chemical Vapor Deposition and Its Applications. Advanced Functional Materials, 2019, 29, 1904457. | 14.9 | 64 |
| 44 | The Effect of Multi-Walled Carbon Nanotubes-Additive in Physicochemical Property of Rice Brand Methyl Ester: Optimization Analysis. Energies, 2019, 12, 3291. | 3.1 | 12 |
| 45 | Evolution of dielectric properties of thermally reduced graphene oxide as a function of pyrolysis temperature. Diamond and Related Materials, 2019, 93, 241-251. | 3.9 | 16 |
| 46 | Ionic liquids and cellulose: Innovative feedstock for synthesis of carbon nanostructured material. Materials Chemistry and Physics, 2019, 234, 201-209. | 4.0 | 6 |
| 47 | Photocatalytic water decontamination using graphene and ZnO coupled photocatalysts: A review. Materials Science for Energy Technologies, 2019, 2, 509-525. | 1.8 | 134 |
| 48 | The preparation of carbon nanofillers and their role on the performance of variable polymer nanocomposites. Designed Monomers and Polymers, 2019, 22, 8-53. | 1.6 | 92 |
| 49 | Graphene-Based Hybrid Nanomaterials for Biomedical Applications. , 2019, , 119-141. | | 13 |
| 50 | Rheology Properties of Carbon Nanotube Thick Film Paste for Potential Application in Patch Antenna. , 2019, , . | | 1 |
| 51 | Synthesis and Characterization of Carbon Nanosheets from Stinging Nettle (Urtica Dioica). IOP Conference Series: Materials Science and Engineering, 2019, 613, 012017. | 0.6 | 3 |
| 52 | From Newspaper Substrate to Nanotubes-Analysis of Carbonized Soot Grown on Kaolin Sized Newsprint. Journal of Carbon Research, 2019, 5, 66. | 2.7 | 1 |
| 53 | Effect of Different Amount of Precursor on Graphene Synthesis from Waste Cooking Palm Oil. , 2019, , . | | 2 |
| 54 | Fabrication and characterization of eco-friendly human-hair derived porous carbon-filled carbon fabric-reinforced polymer composites. Polymer Composites, 2019, 40, E1573-E1587. | 4.6 | 12 |
| 55 | Simple synthesis of 1D, 2D and 3D WO ₃ nanostructures on stainless steel substrate for high-performance supercapacitors. Journal of Alloys and Compounds, 2019, 778, 603-611. | 5.5 | 34 |

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 56 | Review on graphene and its derivatives: Synthesis methods and potential industrial implementation. Journal of the Taiwan Institute of Chemical Engineers, 2019, 98, 163-180. | 5.3 | 335 |
| 57 | Investigation into the Electrical Conductivity of Carbon Nanosphere-Based Green Nanofluids. , 2019, , 71-82. | | 0 |
| 58 | Transactions on Engineering Technologies. , 2019, , . | | 0 |
| 59 | Surface functionalization and antibacterial activity of biomedical textiles with metal oxides-carbon nanocomposites. Ceramics International, 2019, 45, 5210-5217. | 4.8 | 10 |
| 60 | Nanomaterials. , 2020, , 515-539. | | 3 |
| 61 | Synthesis of graphene oxide nanosheets from sugar beet bagasse and its application for colorimetric and naked eye detection of trace Hg ²⁺ in the environmental water samples. Microchemical Journal, 2020, 152, 104332. | 4.5 | 19 |
| 62 | An overview of industrial scalable production of graphene oxide and analytical approaches for synthesis and characterization. Journal of Materials Research and Technology, 2020, 9, 11587-11610. | 5.8 | 111 |
| 63 | Toward Next-Generation Carbon-Based Materials Derived from Waste and Biomass for High-Performance Energy Applications. Energy Technology, 2020, 8, 2000714. | 3.8 | 15 |
| 64 | A review on recent advancement of nano-structured-fiber-based metal-air batteries and future perspective. Renewable and Sustainable Energy Reviews, 2020, 134, 110085. | 16.4 | 27 |
| 65 | Characterization of Chemically Activated Pyrolytic Carbon Black Derived from Waste Tires as a Candidate for Nanomaterial Precursor. Nanomaterials, 2020, 10, 2213. | 4.1 | 32 |
| 66 | Thermal Investigations on Carbon Nanotubes by Spectroscopic Techniques. Applied Sciences (Switzerland), 2020, 10, 8159. | 2.5 | 4 |
| 67 | Effect of temperature and concentration of industrial waste graphene on rheological properties of water based mud. IOP Conference Series: Materials Science and Engineering, 2020, 778, 012120. | 0.6 | 2 |
| 68 | A brief review on supercapacitor energy storage devices and utilization of natural carbon resources as their electrode materials. Fuel, 2020, 282, 118796. | 6.4 | 216 |
| 69 | Residual sugarcane bagasse conversion in India: current status, technologies, and policies. Biomass Conversion and Biorefinery, 2022, 12, 3687-3709. | 4.6 | 17 |
| 70 | Effect of the reaction temperature and ethene/hydrogen composition on the nanostructured carbon produced by CVD using supported NiFe ₂ O ₄ as a catalyst. Results in Physics, 2020, 19, 103497. | 4.1 | 2 |
| 71 | Developing carbon nanoparticles with tunable morphology and surface chemistry for use in construction. Construction and Building Materials, 2020, 262, 120780. | 7.2 | 13 |
| 72 | Biomass-derived nanocarbon materials for biological applications: challenges and prospects. Journal of Materials Chemistry B, 2020, 8, 9668-9678. | 5.8 | 16 |
| 73 | Upscaled synthesis of carbon nanotube from palm oil mill effluent using pyrolysis for supercapacitor application. IOP Conference Series: Materials Science and Engineering, 2020, 823, 012040. | 0.6 | 4 |

| # | ARTICLE | IF | CITATIONS |
|----|--|------|-----------|
| 74 | Development of graphene based nanocomposites towards medical and biological applications. Artificial Cells, Nanomedicine and Biotechnology, 2020, 48, 1189-1205. | 2.8 | 33 |
| 75 | Synthesis of Carbon Nanotubes (CNT) by Chemical Vapor Deposition (CVD) using a biogas-based carbon precursor: A review. IOP Conference Series: Materials Science and Engineering, 2020, 959, 012019. | 0.6 | 12 |
| 76 | Recent Advancements of N-Doped Graphene for Rechargeable Batteries: A Review. Crystals, 2020, 10, 1080. | 2.2 | 21 |
| 77 | Modern Trends in Uses of Different Wastes to Produce Nanoparticles and Their Environmental Applications. , 0, , . | | 3 |
| 78 | Fabrication of stretchable and conductive polymer nanocomposites based on interconnected graphene aerogel. Composites Science and Technology, 2020, 200, 108430. | 7.8 | 14 |
| 79 | Heteroatom doped graphene engineering for energy storage and conversion. Materials Today, 2020, 39, 47-65. | 14.2 | 400 |
| 80 | Nickel-cobalt hydroxide: a positive electrode for supercapacitor applications. RSC Advances, 2020, 10, 19410-19418. | 3.6 | 75 |
| 81 | Graphite Nanoplatelets from Waste Chicken Feathers. Materials, 2020, 13, 2109. | 2.9 | 5 |
| 82 | Synthesis, morphology, magnetic and electrochemical studies of nitrogen-doped multiwall carbon nanotubes fabricated using banded iron-formation as catalyst. Journal of Alloys and Compounds, 2020, 835, 155200. | 5.5 | 15 |
| 83 | Heteroatom doped carbon nanosheets from waste tires as electrode materials for electrocatalytic oxygen reduction reaction: Effect of synthesis techniques on properties and activity. Carbon, 2020, 167, 104-113. | 10.3 | 25 |
| 84 | Engineering biomaterials for the bioremediation: advances in nanotechnological approaches for heavy metals removal from natural resources. , 2020, , 323-339. | | 4 |
| 85 | Recent Advancement in Bio-precursor derived graphene quantum dots: Synthesis, Characterization and Toxicological Perspective. Nanotechnology, 2020, 31, 292001. | 2.6 | 36 |
| 86 | Recent developments in the synthesis of graphene and graphene-like structures from waste sources by recycling and upcycling technologies: a review. Graphene Technology, 2020, 5, 59-73. | 1.9 | 24 |
| 87 | Biogenic synthesis of SnO ₂ quantum dots encapsulated carbon nanoflakes: An efficient integrated photocatalytic adsorbent for the removal of bisphenol A from aqueous solution. Journal of Alloys and Compounds, 2020, 828, 154093. | 5.5 | 24 |
| 88 | In situ grown metallic nickel from X-Ni (X=La, Mg, Sr) oxides for converting plastics into carbon nanotubes: Influence of metal-support interaction. Journal of Cleaner Production, 2020, 258, 120633. | 9.3 | 58 |
| 89 | Hydrothermal Carbon/Carbon Nanotube Composites as Electrocatalysts for the Oxygen Reduction Reaction. Journal of Composites Science, 2020, 4, 20. | 3.0 | 6 |
| 90 | Metal foam-carbon nanotube-reduced graphene oxide hierarchical structures for efficient field emission. Diamond and Related Materials, 2020, 106, 107847. | 3.9 | 22 |
| 91 | Facile and scalable green synthesis of N-doped graphene/CNTs nanocomposites via ball milling. Ain Shams Engineering Journal, 2021, 12, 1017-1024. | 6.1 | 16 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 92 | A review on the recent advances in the production of carbon nanotubes and carbon nanofibers via microwave-assisted pyrolysis of biomass. <i>Fuel Processing Technology</i> , 2021, 214, 106686. | 7.2 | 71 |
| 93 | Significantly improved electrochemical characteristics of nickel sulfide nanoplates using graphene oxide thin film for supercapacitor applications. <i>Journal of Energy Storage</i> , 2021, 33, 102091. | 8.1 | 24 |
| 94 | Green synthesis of carbon nanotubes to address the water-energy-food nexus: A critical review. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 104736. | 6.7 | 45 |
| 95 | Facile fabrication of nano zerovalent iron “Reduced graphene oxide composites for nitrate reduction in water. <i>Environmental Advances</i> , 2021, 3, 100024. | 4.8 | 10 |
| 96 | Unraveling the capability of graphene nanosheets and Fe_3O_4 nanoparticles to stimulate anammox granular sludge. <i>Journal of Environmental Management</i> , 2021, 277, 111495. | 7.8 | 33 |
| 97 | Recent Trends of Recycled Carbon-Based Nanomaterials and Their Applications. <i>Topics in Mining, Metallurgy and Materials Engineering</i> , 2021, , 443-464. | 1.6 | 1 |
| 98 | Carbon-based nanomaterials for alcohol fuel cells. , 2021, , 319-336. | | 8 |
| 99 | Design of Graphene/CNT-based Nanocomposites: A Stepping Stone for Energy-related Applications. , 2021, , 77-98. | | 0 |
| 100 | One-pot synthesis of nanomaterials. , 2021, , 137-176. | | 3 |
| 101 | Agricultural waste based-nanomaterials: Green technology for water purification. , 2021, , 577-595. | | 17 |
| 102 | CuMn_2O_4 spinel anchored on graphene nanosheets as a novel electrode material for supercapacitor. <i>Journal of Energy Storage</i> , 2021, 34, 102181. | 8.1 | 59 |
| 103 | Synthesis of three-dimensional porous nitrogen-doped reduced graphene oxide/multi-walled carbon nanotubes composite aerogel as lightweight and high-performance electromagnetic wave absorbers. <i>Diamond and Related Materials</i> , 2021, 112, 108245. | 3.9 | 8 |
| 104 | Enhancing oxygen reduction reaction performance via CNTs/graphene supported iron protoporphyrin IX: A hybrid nanoarchitecture electrocatalyst. <i>Diamond and Related Materials</i> , 2021, 113, 108272. | 3.9 | 54 |
| 105 | Facile synthesis of waste-derived carbon/ MoS_2 composite for energy storage and water purification applications. <i>Biomass Conversion and Biorefinery</i> , 2023, 13, 3247-3258. | 4.6 | 6 |
| 106 | Graphene-based fibers for the energy devices application: A comprehensive review. <i>Materials and Design</i> , 2021, 201, 109476. | 7.0 | 32 |
| 107 | Cost-effective, environmentally-sustainable and scale-up synthesis of vertically oriented graphenes from waste oil and its supercapacitor applications. <i>Waste Disposal & Sustainable Energy</i> , 2021, 3, 31-39. | 2.5 | 11 |
| 108 | Engineering of nickel–cobalt oxide nanostructures based on biomass material for high performance supercapacitor and catalytic water splitting. <i>International Journal of Energy Research</i> , 2021, 45, 12879-12897. | 4.5 | 23 |
| 109 | Emerging trends in sustainable treatment and valorisation technologies for plastic wastes in Nigeria: A concise review. <i>Environmental Progress and Sustainable Energy</i> , 2021, 40, e13660. | 2.3 | 14 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|------|-----------|
| 110 | The use of chemometric tools for screening and optimization of variables in the preparation and application of carbon-based materials. Journal of the Taiwan Institute of Chemical Engineers, 2021, 121, 321-336. | 5.3 | 7 |
| 111 | Low temperature plasma treatment of rice husk derived hybrid silica/carbon biochar using different gas sources. Materials Letters, 2021, 292, 129678. | 2.6 | 13 |
| 112 | Recent Advances on Properties and Utility of Nanomaterials Generated from Industrial and Biological Activities. Crystals, 2021, 11, 634. | 2.2 | 13 |
| 113 | Waste sugar solution polymer-derived N-doped carbon spheres with an ultrahigh specific surface area for superior performance supercapacitors. International Journal of Hydrogen Energy, 2021, 46, 22735-22746. | 7.1 | 15 |
| 114 | Simplification of the CCVD method used in the growth of carbon nanotube forests on titanium substrate. Solid State Sciences, 2021, 117, 106648. | 3.2 | 5 |
| 115 | Sustainable chitosan-based electrical responsive scaffolds for tissue engineering applications. Sustainable Materials and Technologies, 2021, 28, e00260. | 3.3 | 5 |
| 116 | The approaches and prospects for natural organic matter-derived disinfection byproducts control by carbon-based materials in water disinfection progresses. Journal of Cleaner Production, 2021, 311, 127799. | 9.3 | 26 |
| 117 | High electrical conductivity and oxidation reduction reaction activity of tungsten carbide/carbon nanocomposite synthesized from palm oil by solution plasma process. Materials Express, 2021, 11, 1587-1593. | 0.5 | 1 |
| 118 | Heteroatom doping of 2D graphene materials for electromagnetic interference shielding: a review of recent progress. Critical Reviews in Solid State and Materials Sciences, 2022, 47, 570-619. | 12.3 | 68 |
| 119 | Catalytic ozonation membrane reactor integrated with CuMn ₂ O ₄ /rGO for degradation emerging UV absorbers (BP-4) and fouling in-situ self-cleaning. Separation and Purification Technology, 2021, 279, 119804. | 7.9 | 24 |
| 120 | A review of the microwave-assisted synthesis of carbon nanomaterials, metal oxides/hydroxides and their composites for energy storage applications. Nanoscale, 2021, 13, 11679-11711. | 5.6 | 93 |
| 121 | Carbon Materials From Various Sources for Composite Materials. , 2020, , 3-33. | | 2 |
| 122 | Production of Bionanomaterials from Agricultural Wastes. , 2017, , 33-58. | | 31 |
| 123 | Carbon-based Nanomaterials in Analytical Chemistry. RSC Detection Science, 2018, , 1-36. | 0.0 | 10 |
| 124 | Synthesis of graphene: Potential carbon precursors and approaches. Nanotechnology Reviews, 2020, 9, 1284-1314. | 5.8 | 72 |
| 125 | Bioplastics and Carbon-Based Sustainable Materials, Components, and Devices: Toward Green Electronics. ACS Applied Materials & Interfaces, 2021, 13, 49301-49312. | 8.0 | 27 |
| 126 | Facile and economical, single-step single-chemical method for conversion of palm oil fuel ash waste into graphene nanosheets. Applied Materials Today, 2021, 25, 101193. | 4.3 | 3 |
| 127 | Pre-concentration of organophosphorus pesticides in aqueous environments and food extracts by modified magnetic graphene oxide synthesized from sugar beet bagasse waste. Food Analytical Methods, 2022, 15, 625-636. | 2.6 | 6 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 128 | Temperature-dependent synthesis of multi-walled carbon nanotubes and hydrogen from plastic waste over A-site-deficient perovskite $\text{La}_{0.8}\text{Ni}_{1-x}\text{Co}_x\text{O}_{3-\delta}$. <i>Chemosphere</i> , 2022, 291, 132831. | 8.2 | 8 |
| 129 | Quasistatic Equilibrium Chemical Vapor Deposition of Graphene. <i>Advanced Materials Interfaces</i> , 2022, 9, 2101500. | 3.7 | 4 |
| 130 | A review on sustainable production of graphene and related life cycle assessment. <i>2D Materials</i> , 2022, 9, 012002. | 4.4 | 21 |
| 131 | Carbon Nanotubes: General Introduction. , 2022, , 1-13. | | 0 |
| 132 | Laser processing of graphene and related materials for energy storage: State of the art and future prospects. <i>Progress in Energy and Combustion Science</i> , 2022, 91, 100981. | 31.2 | 124 |
| 133 | A review of the recent trend in the synthesis of carbon nanomaterials derived from oil palm by-product materials. <i>Biomass Conversion and Biorefinery</i> , 2024, 14, 13-44. | 4.6 | 11 |
| 134 | Plastic recycling and their use as raw material for the synthesis of carbonaceous materials. <i>Heliyon</i> , 2022, 8, e09028. | 3.2 | 23 |
| 135 | Recent advances in heterogeneous catalysis for green biodiesel production by transesterification. <i>Energy Conversion and Management</i> , 2022, 258, 115406. | 9.2 | 82 |
| 136 | An overview of recent progress in nanostructured carbon-based supercapacitor electrodes: From zero to bi-dimensional materials. <i>Carbon</i> , 2022, 193, 298-338. | 10.3 | 168 |
| 137 | Advances in chemical and biomass-derived graphene/graphene-like nanomaterials for supercapacitors. <i>Journal of Energy Storage</i> , 2022, 51, 104445. | 8.1 | 18 |
| 138 | Post-synthesis treatment of graphene oxide/silica particles nanocomposite with piranha acid for functionalization. <i>Advances in Natural Sciences: Nanoscience and Nanotechnology</i> , 2021, 12, 045009. | 1.5 | 1 |
| 139 | Eco-friendly synthesis of carbon nanotubes and their cancer theranostic applications. <i>Materials Advances</i> , 2022, 3, 4765-4782. | 5.4 | 23 |
| 140 | Carbon nanotubes derived from waste cooking oil for the removal of emerging contaminants. <i>New Journal of Chemistry</i> , 2022, 46, 11315-11328. | 2.8 | 4 |
| 141 | Removal of ciprofloxacin and indigo carmine from water by carbon nanotubes fabricated from a low-cost precursor: Solution parameters and recyclability. <i>Ain Shams Engineering Journal</i> , 2023, 14, 101844. | 6.1 | 18 |
| 142 | Waste-based nanoarchitectonics with face masks as valuable starting material for high-performance supercapacitors. <i>Journal of Colloid and Interface Science</i> , 2022, 627, 978-991. | 9.4 | 16 |
| 143 | Chemical Vapor Deposition Synthesis of Graphene on Copper Foils. , 0, , . | | 0 |
| 144 | Review on conventional preparation, properties of graphene and growth of graphene from fruit wastes. <i>Brazilian Journal of Chemical Engineering</i> , 2023, 40, 343-358. | 1.3 | 1 |
| 145 | Fabrications from Renewable Sources and Agricultural Wastes and Characterization Strategies of Green Nanomaterials. , 2022, , 1-15. | | 0 |

| # | ARTICLE | IF | CITATIONS |
|-----|---|-----|-----------|
| 147 | Influence of growth rates, microstructural properties and biochemical composition on the thermal stability of mycelia fungi. Scientific Reports, 2022, 12, . | 3.3 | 9 |
| 148 | Valorization of carbonaceous waste into graphene materials and their potential application in water & wastewater treatment: a review. Materials Today Chemistry, 2022, 26, 101192. | 3.5 | 4 |
| 149 | Plasma-based synthesis of graphene and applications: a focused review. Reviews of Modern Plasma Physics, 2022, 6, . | 4.1 | 9 |
| 150 | Carbon Nanotubes: General Introduction. , 2022, , 1321-1333. | | 0 |
| 151 | Performance of graphene Oxide/SiO ₂ Nanocomposite-based: Antibacterial Activity, dye and heavy metal removal. Arabian Journal of Chemistry, 2023, 16, 104450. | 4.9 | 18 |
| 152 | Chitosan-Based Carbon Dots with Applied Aspects: New Frontiers of International Interest in a Material of Marine Origin. Marine Drugs, 2022, 20, 782. | 4.6 | 5 |
| 153 | Optimized single-step synthesis of graphene-based carbon nanosheets from palm oil fuel ash. Materials Chemistry and Physics, 2023, 296, 127202. | 4.0 | 2 |
| 154 | Biomass-Derived Carbon Materials in Heterogeneous Catalysis: A Step towards Sustainable Future. Catalysts, 2023, 13, 20. | 3.5 | 12 |
| 155 | Recycling waste sources into nanocomposites of graphene materials: Overview from an energy-focused perspective. Nanotechnology Reviews, 2023, 12, . | 5.8 | 8 |
| 156 | Insight into the Recent Advances in Sustainable Biodiesel Production by Catalytic Conversion of Vegetable Oils: Current Trends, Challenges, and Prospects. Energy & Fuels, 2023, 37, 2631-2647. | 5.1 | 5 |
| 157 | Plasma-Based Synthesis of Freestanding Graphene from a Natural Resource for Sensing Application. Advanced Materials Interfaces, 2023, 10, . | 3.7 | 4 |
| 158 | Carbon Nanomaterials from Biomass for Solar Energy Conversion and Storage. Green Energy and Technology, 2023, , 301-329. | 0.6 | 0 |
| 159 | Fabrications from Renewable Sources and Agricultural Wastes and Characterization Strategies of Green Nanomaterials. , 2023, , 271-285. | | 0 |
| 160 | A PMMA-assisted transfer method of waste cooking palm oil based multi-layered graphene from a nickel substrate onto a glass substrate for the development of a humidity sensor. Journal of Materials Science: Materials in Electronics, 2023, 34, . | 2.2 | 0 |
| 161 | On the mechanical, electronic, and optical properties of the boron nitride analog for the recently synthesized biphenylene network: a DFT study. Journal of Molecular Modeling, 2023, 29, . | 1.8 | 1 |
| 162 | Classification of waste plastics for dimension-controlled graphene growth on natural mineral substrates in terms of polymer processing and thermal techniques. , 2023, , 117-149. | | 0 |
| 163 | Simultaneous preparation of silica and high purity porous graphene from palm oil fuel ash via single step method. Materials Science and Engineering B: Solid-State Materials for Advanced Technology, 2023, 295, 116575. | 3.5 | 1 |
| 164 | Upcycled graphene integrated fiber-based photothermal hybrid nanocomposites for solar-driven interfacial water evaporation. Desalination, 2023, 562, 116707. | 8.2 | 3 |

| # | ARTICLE | IF | CITATIONS |
|-----|--|------|-----------|
| 165 | Review and Challenges of Green Polymer-Based Nanocomposite Materials. Lecture Notes in Mechanical Engineering, 2023, , 613-624. | 0.4 | 1 |
| 166 | Mechanical properties of graphene nanoplatelets reinforced glass/epoxy composites manufactured using resin film infusion process. AIMS Materials Science, 2023, 10, 693-709. | 1.4 | 0 |
| 167 | Carbon Nanomaterials from Polyolefin Waste: Effective Catalysts for Quinoline Degradation through Catalytic Wet Peroxide Oxidation. Catalysts, 2023, 13, 1259. | 3.5 | 2 |
| 168 | Graphene-based materials for biotechnological and biomedical applications: Drug delivery, bioimaging and biosensing. Materials Today Chemistry, 2023, 33, 101750. | 3.5 | 2 |
| 169 | From grape bagasse to graphene-like porous carbon nanosheets for CO2 capture. Environmental Science and Pollution Research, 0, , . | 5.3 | 0 |
| 170 | Modified locally derived graphene nanoplatelets for enhanced rheological, filtration and lubricity characteristics of water-based drilling fluids. Arabian Journal of Chemistry, 2023, 16, 105305. | 4.9 | 3 |
| 171 | Biomass-derived carbon nanostructures and their applications as electrocatalysts for hydrogen evolution and oxygen reduction/evolution. , 0, 2, . | | 0 |
| 172 | Adsorptive removal of heavy metals, dyes, and pharmaceuticals: Carbon-based nanomaterials in focus. Carbon, 2024, 217, 118621. | 10.3 | 4 |
| 173 | Production and Application of Nanomaterials from Agricultural Waste. , 2023, , 321-354. | | 0 |
| 174 | Biomass-derived graphene and nanostructured carbons: A review for electrochemical applications. Journal of Non-Crystalline Solids, 2024, 626, 122779. | 3.1 | 0 |
| 175 | Insights into the DHQ-BN: mechanical, electronic, and optical properties. Scientific Reports, 2024, 14, . | 3.3 | 0 |
| 176 | Electrospun graphene carbon nanofibers for CO2 capture and storage: A review. Journal of Environmental Chemical Engineering, 2024, 12, 112014. | 6.7 | 0 |
| 177 | Carbon-based nanomaterials and nanocomposites synthesis, characterization, properties and applications: A review. , 2024, , . | | 0 |
| 179 | Fungal Carbon: A Cost-Effective Tunable Network Template for Creating Supercapacitors. Global Challenges, 2024, 8, . | 3.6 | 0 |