Hidayah Ariffin

List of Publications by Year
in descending order

97 papers	2,926 citations	172207 29 h-index	189595 50 g-index
100 all docs	100 docs citations	100 times ranked	3003 citing authors

#	Article	IF	Citations
1	Natural fiber reinforced polylactic acid composites: A review. Polymer Composites, 2019, 40, 446-463.	2.3	296
2	Isolation and characterization of microcrystalline cellulose from roselle fibers. International Journal of Biological Macromolecules, 2017, 103, 931-940.	3.6	168
3	Isolation and characterization of nanocrystalline cellulose from roselle-derived microcrystalline cellulose. International Journal of Biological Macromolecules, 2018, 114, 54-63.	3.6	138
4	Determination of multiple thermal degradation mechanisms of poly(3-hydroxybutyrate). Polymer Degradation and Stability, 2008, 93, 1433-1439.	2.7	102
5	Production of bacterial endoglucanase from pretreated oil palm empty fruit bunch by bacillus pumilus EB3. Journal of Bioscience and Bioengineering, 2008, 106, 231-236.	1.1	97
6	Renewable sugars from oil palm frond juice as an alternative novel fermentation feedstock for value-added products. Bioresource Technology, 2012, 110, 566-571.	4.8	94
7	Sustainable production of polyhydroxyalkanoates from renewable oil-palm biomass. Biomass and Bioenergy, 2013, 50, 1-9.	2.9	94
8	Modification of Oil Palm Mesocarp Fiber Characteristics Using Superheated Steam Treatment. Molecules, 2013, 18, 9132-9146.	1.7	84
9	Highly selective transformation of poly[(R)-3-hydroxybutyric acid] into trans-crotonic acid by catalytic thermal degradation. Polymer Degradation and Stability, 2010, 95, 1375-1381.	2.7	82
10	Mechanical, dynamic, and thermomechanical properties of coir/pineapple leaf fiber reinforced polylactic acid hybrid biocomposites. Polymer Composites, 2019, 40, 2000-2011.	2.3	75
11	Chemical recycling of polyhydroxyalkanoates as a method towards sustainable development. Biotechnology Journal, 2010, 5, 484-492.	1.8	73
12	Effects of Surface Treatments on Tensile, Thermal and Fibre-matrix Bond Strength of Coir and Pineapple Leaf Fibres with Poly Lactic Acid. Journal of Bionic Engineering, 2018, 15, 1035-1046.	2.7	68
13	Sustainable one-pot process for the production of cellulose nanofiber and polyethylene / cellulose nanofiber composites. Journal of Cleaner Production, 2019, 207, 590-599.	4.6	63
14	Cellular and Molecular Interaction of Human Dermal Fibroblasts with Bacterial Nanocellulose Composite Hydrogel for Tissue Regeneration. ACS Applied Materials & Interfaces, 2018, 10, 39532-39543.	4.0	57
15	Biosynthesis and characterization of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) copolymer from wild-type Comamonas sp. EB172. Polymer Degradation and Stability, 2010, 95, 1382-1386.	2.7	53
16	Bio-based production of crotonic acid by pyrolysis of poly(3-hydroxybutyrate) inclusions. Journal of Cleaner Production, 2014, 83, 463-472.	4.6	52
17	Efficient utilization of oil palm frond for bio-based products and biorefinery. Journal of Cleaner Production, 2014, 65, 252-260.	4.6	52
18	Effect of Synthesis Temperature on the Size of ZnO Nanoparticles Derived from Pineapple Peel Extract and Antibacterial Activity of ZnOâ€“Starch Nanocomposite Films. Nanomaterials, 2020, 10, 1061.	1.9	51

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19	Well-Dispersed Cellulose Nanofiber in Low Density Polyethylene Nanocomposite by Liquid-Assisted Extrusion. Polymers, 2020, 12, 927.	2.0	51
20	Performance evaluation and chemical recyclability of a polyethylene/poly(3-hydroxybutyrate-co-3-hydroxyvalerate) blend for sustainable packaging. RSC Advances, 2013, 3, 24378.	1.7	50
21	Case study for a palm biomass biorefinery utilizing renewable non-food sugars from oil palm frond for the production of poly(3-hydroxybutyrate) bioplastic. Journal of Cleaner Production, 2015, 87, 284-290.	4.6	48
22	Impact Strength and Flexural Properties Enhancement of Methacrylate Silane Treated Oil Palm Mesocarp Fiber Reinforced Biodegradable Hybrid Composites. Scientific World Journal, The, 2014, 2014, 1-8.	0.8	42
23	Enhancement of Mechanical and Dynamic Mechanical Properties of Hydrophilic Nanoclay Reinforced Polylactic Acid/Polycaprolactone/Oil Palm Mesocarp Fiber Hybrid Composites. International Journal of Polymer Science, 2014, 2014, 1-8.	1.2	40
24	Superheated steam pretreatment of cellulose affects its electrospinnability for microfibrillated cellulose production. Cellulose, 2018, 25, 3853-3859.	2.4	40
25	Biohydrogen production from oil palm frond juice and sewage sludge by a metabolically engineered Escherichia coli strain. International Journal of Hydrogen Energy, 2013, 38, 10277-10283.	3.8	37
26	Performance Evaluation of Cellulose Nanofiber with Residual Hemicellulose as a Nanofiller in Polypropylene-Based Nanocomposite. Polymers, 2021, 13, 1064.	2.0	36
27	Oil Palm Mesocarp Fiber as New Lignocellulosic Material for Fabrication of Polymer/Fiber Biocomposites. International Journal of Polymer Science, 2013, 2013, 1-7.	1.2	35
28	Enhancement of Mechanical and Thermal Properties of Polylactic Acid/Polycaprolactone Blends by Hydrophilic Nanoclay. Indian Journal of Materials Science, 2013, 2013, 1-11.	0.6	32
29	Utilisation of superheated steam in oil palm biomass pretreatment process for reduced chemical use and enhanced cellulose nanofibre production. International Journal of Nanotechnology, 2019, 16, 668.	0.1	31
30	Characterization and Cellular Internalization of Spherical Cellulose Nanocrystals (CNC) into Normal and Cancerous Fibroblasts. Materials, 2019, 12, 3251.	1.3	30
31	Functionality of Cellulose Nanofiber as Bio-Based Nucleating Agent and Nano-Reinforcement Material to Enhance Crystallization and Mechanical Properties of Polylactic Acid Nanocomposite. Polymers, 2021, 13, 389.	2.0	29
32	Oil Palm Biomass Biorefinery for Sustainable Production of Renewable Materials. Biotechnology Journal, 2019, 14, e1800394.	1.8	28
33	Modification of cellulose degree of polymerization by superheated steam treatment for versatile properties of cellulose nanofibril film. Cellulose, 2020, 27, 7417-7429.	2.4	28
34	The Influence of Green Surface Modification of Oil Palm Mesocarp Fiber by Superheated Steam on the Mechanical Properties and Dimensional Stability of Oil Palm Mesocarp Fiber/Poly(butylene succinate) Biocomposite. International Journal of Molecular Sciences, 2014, 15, 15344-15357.	1.8	26
35	Intracellular polyhydroxyalkanoates recovery by cleaner halogen-free methods towards zero emission in the palm oil mill. Journal of Cleaner Production, 2012, 37, 353-360.	4.6	25
36	Influence of Alkaline-Peroxide Treatment of Fiber on the Mechanical Properties of Oil Palm Mesocarp Fiber/Poly(butylene succinate) Biocomposite. BioResources, 2014, 10, .	0.5	25

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37	Cellulose nanofibrils for biomaterial applications. Materials Today: Proceedings, 2019, 16, 1959-1968.	0.9	25
38	Optimisation of Epoxide Ring-Opening Reaction for the Synthesis of Bio-Polyol from Palm Oil Derivative Using Response Surface Methodology. Molecules, 2021, 26, 648.	1.7	25
39	Anhydride production as an additional mechanism of poly(3â€hydroxybutyrate) pyrolysis. Journal of Applied Polymer Science, 2009, 111, 323-328.	1.3	24
40	Factors Affecting Poly(3-hydroxybutyrate) Production from Oil Palm Frond Juice by<i>Cupriavidus necator</i>(<mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML") Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 622 Td (id="M1"> Journal of Biomedicine and Biotechnology, 2012, 2012, 1-8.	3.0	20
41	Assessment of Municipal Solid Waste Generation in Universiti Putra Malaysia and Its Potential for Green Energy Production. Sustainability, 2019, 11, 3909.	1.6	19
42	Recovery and purification of intracellular polyhydroxyalkanoates from recombinant Cupriavidus necator using water and ethanol. Biotechnology Letters, 2012, 34, 253-259.	1.1	18
43	Oil Palm Frond Juice as Future Fermentation Substrate: A Feasibility Study. BioMed Research International, 2014, 2014, 1-8.	0.9	18
44	Mechanical Strength, Thermal Conductivity and Electrical Breakdown of Kenaf Core Fiber/Lignin/Polypropylene Biocomposite. Polymers, 2020, 12, 1833.	2.0	18
45	Morphological, physico-chemical, and thermal properties of cellulose nanowhiskers from roselle fibers. Cellulose, 2019, 26, 6599-6613.	2.4	17
46	Bacterial Resistance against Heavy Metals in Pseudomonas aeruginosa RW9 Involving Hexavalent Chromium Removal. Sustainability, 2021, 13, 9797.	1.6	17
47	Efficient Polyhydroxyalkanoate Recovery from RecombinantCupriavidus necatorby Using Low Concentration of NaOH. Environmental Engineering Science, 2012, 29, 783-789.	0.8	16
48	Surface Modifications of Oil Palm Mesocarp Fiber by Superheated Steam, Alkali, and Superheated Steam-Alkali for Biocomposite Applications. BioResources, 2014, 9, .	0.5	16
49	Characterization and application of bioactive compounds in oil palm mesocarp fiber superheated steam condensate as an antifungal agent. RSC Advances, 2016, 6, 84672-84683.	1.7	16
50	Subcritical Water-Carbon Dioxide Pretreatment of Oil Palm Mesocarp Fiber for Xylooligosaccharide and Glucose Production. Molecules, 2018, 23, 1310.	1.7	16
51	Dynamics of Microbial Populations Responsible for Biodegradation during the Full-Scale Treatment of Palm Oil Mill Effluent. Microbes and Environments, 2019, 34, 121-128.	0.7	15
52	Emerging application of biochar as a renewable and superior filler in polymer composites. RSC Advances, 2022, 12, 13938-13949.	1.7	15
53	Thermal, Physical and Mechanical Properties of Poly(Butylene Succinate)/Kenaf Core Fibers Composites Reinforced with Esterified Lignin. Polymers, 2021, 13, 2359.	2.0	14
54	Non-solvent-based pretreatment of poly(3-hydroxybutyrate) for improved bio-based crotonic acid production. RSC Advances, 2015, 5, 33546-33553.	1.7	13

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55	Dynamically controlled fibrillation under combination of ionic liquid with mechanical grinding. Journal of Applied Polymer Science, 2017, 134, .	1.3	13
56	Factors Affecting Spinnability of Oil Palm Mesocarp Fiber Cellulose Solution for the Production of Microfiber. BioResources, 2016, 12, .	0.5	12
57	Effect of Superheated Steam Treatment on the Mechanical Properties and Dimensional Stability of PALF/PLA Biocomposite. Polymers, 2019, 11, 482.	2.0	12
58	Fresh oil palm frond juice as a novel and alternative fermentation medium for bacterial cellulose production. Materials Today: Proceedings, 2021, 42, 101-106.	0.9	12
59	Improving the decolorization of glycerol by adsorption using activated carbon derived from oil palm biomass. Environmental Science and Pollution Research, 2021, 28, 27976-27987.	2.7	12
60	Melt- vs. Non-Melt Blending of Complexly Processable Ultra-High Molecular Weight Polyethylene/Cellulose Nanofiber Bionanocomposite. Polymers, 2021, 13, 404.	2.0	12
61	Improved Properties of Poly(3-hydroxybutyrate-co-3-hydroxyvalerate) Produced byComamonassp. EB172 Utilizing Volatile Fatty Acids by Regulating the Nitrogen Source. BioMed Research International, 2013, 2013, 1-7.	0.9	11
62	Lignocellulose Structure and the Effect on Nanocellulose Production. , 2019, , 17-30.		10
63	Effects of (R)-3-hydroxyhexanoate units on thermal hydrolysis of poly((R)-3-hydroxybutyrate-co-(R) Tj ETQq1 1 0.784314 rgBT /Overlo	2.7	9
64	Durability of Superheated Steam-Treated Light Red Meranti (Shorea spp.) and Kedondong (Canarium) Tj ETQq0 0 0 rgBT /Overlock 10 Tf	1.6	9
65	Combined Effects of Cellulose Nanofiber Nucleation and Maleated Polylactic Acid Compatibilization on the Crystallization Kinetic and Mechanical Properties of Polylactic Acid Nanocomposite. Polymers, 2021, 13, 3226.	2.0	9
66	Basic Characteristics of Cellulase Immobilized on Lignophenol. Kobunshi Ronbunshu, 2011, 68, 315-319.	0.2	8
67	In vitro cytotoxicity of superheated steam hydrolyzed oligo((R)-3-hydroxybutyrate-co-(R)-3-hydroxyhexanoate) and characteristics of its blend with poly(L-lactic acid) for biomaterial applications. PLoS ONE, 2018, 13, e0199742.	1.1	8
68	Precise Depolymerization of Poly(3-hydoxybutyrate) by Pyrolysis. , 0, , .		7
69	Optimization of Superheated Steam Treatment to Improve Surface Modification of Oil Palm Biomass Fiber. BioResources, 2016, 11, .	0.5	7
70	Superheated Steam Treatment of Oil Palm Mesocarp Fiber Improved the Properties of Fiber-Polypropylene Biocomposite. BioResources, 2016, 12, .	0.5	7
71	Process Optimization of Ultra-High Molecular Weight Polyethylene/Cellulose Nanofiber Bionanocomposites in Triple Screw Kneading Extruder by Response Surface Methodology. Molecules, 2020, 25, 4498.	1.7	7
72	Chemical, Physical and Biological Treatments of Pineapple Leaf Fibres. Green Energy and Technology, 2020, , 73-90.	0.4	7

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73	Synthesis and comparative study of thermal, electrochemical, and cytotoxicity properties of graphene flake and sheet. Research on Chemical Intermediates, 2017, 43, 4981-4991.	1.3	6
74	Compositional and Morphological Changes of Chemical Modified Oil Palm Mesocarp Fiber by Alkaline Bleaching and Silane Coupling Agents. BioResources, 2014, 9, .	0.5	5
75	Effect of 3-Aminopropyltrimethoxysilane on Chemically Modified Oil Palm Mesocarp Fiber/Poly(butylene succinate) Biocomposite. BioResources, 2015, 10, .	0.5	5
76	Oil Palm Biomass Biorefinery for Future Bioeconomy in Malaysia. , 2019, , 265-285.		5
77	Chemical Modification of Oil Palm Mesocarp Fiber by Methacrylate Silane: Effects on Morphology, Mechanical, and Dynamic Mechanical Properties of Biodegradable Hybrid Composites. BioResources, 2015, 11, .	0.5	5
78	Static Mechanical, Interfacial, and Water Absorption Behaviors of Alkali Treated Oil Palm Mesocarp Fiber Reinforced Poly(butylene succinate) Biocomposites. BioResources, 2014, 10, .	0.5	4
79	Synthesis of Bio-based Monomer from Vegetable Oil Fatty Acids and Design of Functionalized Greener Polyester. Chemistry Letters, 2014, 43, 1517-1519.	0.7	4
80	Tar-free and Benzo[<i>a</i>]pyrene-free Hydrothermal Liquefaction of Bamboo and Antibacterial Property of Recovered Vinegar. Chemistry Letters, 2015, 44, 1342-1344.	0.7	4
81	Changes in diad sequence distribution by preferential chain scission during the thermal hydrolysis of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate). Polymer Journal, 2016, 48, 839-842.	1.3	4
82	Multi-step pretreatment as an eco-efficient pretreatment method for the production of cellulose nanofiber from oil palm empty fruit bunch. Asia-Pacific Journal of Molecular Biology and Biotechnology, 0, , 1-8.	0.2	4
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91	Factorial experimental design for biobutanol production from oil palm frond (OPF) juice by Clostridium acetobutylicum ATCC 824. Chemical Engineering Research Bulletin, 2017, 19, 36.	0.2	1
92	Statistical Optimization for Biobutanol Production by Clostridium acetobutylicum ATCC 824 from Oil Palm Frond (OPF) Juice Using Response Surface Methodology. MATEC Web of Conferences, 2017, 111, 03001.	0.1	1
93	Multistep, Nonchlorinated Treatment for Cellulose Isolation From Oil Palm Fronds. , 2019, , 31-40.		1
94	Characterization of Cellulose Nanofiber From Various Tropical Plant Resources. , 2019, , 71-89.		1
95	Parameters Optimization in Compression Molding of Ultra-high Molecular Weight Polyethylene/Cellulose Nanofiber Bio-nanocomposites by using Response Surface Methodology. Pertanika Journal of Science and Technology, 2020, 28, .	0.3	1
96	Static Mechanical, Thermal Stability, and Interfacial Properties of Superheated Steam Treated Oil Palm Biomass Reinforced Polypropylene Biocomposite. Pertanika Journal of Science and Technology, 2020, 28, .	0.3	0
97	Nanocellulose applications in packaging materials. , 2022, , 289-310.		0