

Kumar Sudesh

List of Publications by Year in descending order

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208
papers

10,340
citations

53660

45
h-index

40881

93
g-index

220
all docs

220
docs citations

220
times ranked

8823
citing authors

#	ARTICLE	IF	CITATIONS
1	Synthesis, structure and properties of polyhydroxyalkanoates: biological polyesters. Progress in Polymer Science, 2000, 25, 1503-1555.	11.8	1,867
2	Production and modification of nanofibrillated cellulose using various mechanical processes: A review. Carbohydrate Polymers, 2014, 99, 649-665.	5.1	1,046
3	Applications of cyanobacteria in biotechnology. Journal of Applied Microbiology, 2009, 106, 1-12.	1.4	415
4	Sustainability of Biobased and Biodegradable Plastics. Clean - Soil, Air, Water, 2008, 36, 433-442.	0.7	295
5	Isolation and recovery of microbial polyhydroxyalkanoates. EXPRESS Polymer Letters, 2011, 5, 620-634.	1.1	225
6	Biosynthesis of polyhydroxyalkanoate copolymers from mixtures of plant oils and 3-hydroxyvalerate precursors. Bioresource Technology, 2008, 99, 6844-6851.	4.8	165
7	Effects of dietary organic acids on growth, nutrient digestibility and gut microflora of red hybrid tilapia, <i>Oreochromis</i> sp., and subsequent survival during a challenge test with <i>Streptococcus agalactiae</i> . Aquaculture Research, 2009, 40, 1490-1500.	0.9	153
8	Antimicrobial resistance: Prevalence, economic burden, mechanisms of resistance and strategies to overcome. European Journal of Pharmaceutical Sciences, 2022, 170, 106103.	1.9	150
9	Scaffolds from electrospun polyhydroxyalkanoate copolymers: Fabrication, characterization, bioabsorption and tissue response. Biomaterials, 2008, 29, 1307-1317.	5.7	144
10	Biosynthesis and Characterization of Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) from Palm Oil Products in a <i>Wautersia eutropha</i> Mutant. Biotechnology Letters, 2005, 27, 1405-1410.	1.1	132
11	Biodegradability studies of poly(butylene succinate)/organo-montmorillonite nanocomposites under controlled compost soil conditions: Effects of clay loading and compatibiliser. Polymer Degradation and Stability, 2012, 97, 1345-1354.	2.7	125
12	Biodegradation of different formulations of polyhydroxybutyrate films in soil. SpringerPlus, 2016, 5, 762.	1.2	122
13	Activated carbon from biomass waste precursors: Factors affecting production and adsorption mechanism. Chemosphere, 2022, 294, 133764.	4.2	109
14	Biosynthesis and characterization of polyhydroxyalkanoate containing high 3-hydroxyhexanoate monomer fraction from crude palm kernel oil by recombinant <i>Cupriavidus necator</i> . Bioresource Technology, 2012, 121, 320-327.	4.8	107
15	Degradation of commercially important polyhydroxyalkanoates in tropical mangrove ecosystem. Polymer Degradation and Stability, 2006, 91, 2931-2940.	2.7	104
16	Controlled biosynthesis and characterization of poly(3-hydroxybutyrate-co-3-hydroxyvalerate-co-3-hydroxyhexanoate) from mixtures of palm kernel oil and 3HV-precursors. Polymer Degradation and Stability, 2008, 93, 17-23.	2.7	101
17	Photocatalytic activity and biodegradation of polyhydroxybutyrate films containing titanium dioxide. Polymer Degradation and Stability, 2006, 91, 1800-1807.	2.7	99
18	Sustainable production of polyhydroxyalkanoates from renewable oil-palm biomass. Biomass and Bioenergy, 2013, 50, 1-9.	2.9	94

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19	Rapid and Efficient Gene Delivery into Plant Cells Using Designed Peptide Carriers. <i>Biomacromolecules</i> , 2013, 14, 10-16.	2.6	94
20	Can Polyhydroxyalkanoates Be Produced Efficiently From Waste Plant and Animal Oils?. <i>Frontiers in Bioengineering and Biotechnology</i> , 2020, 8, 169.	2.0	94
21	Effects of culture conditions on the composition of poly(3-hydroxybutyrate-co-4-hydroxybutyrate) synthesized by <i>Comamonas acidovorans</i> . <i>Polymer Degradation and Stability</i> , 2004, 84, 129-134.	2.7	87
22	A new biological recovery approach for PHA using mealworm, <i>Tenebrio molitor</i> . <i>Journal of Biotechnology</i> , 2016, 239, 98-105.	1.9	86
23	Synthesis of polyhydroxyalkanoate from palm oil and some new applications. <i>Applied Microbiology and Biotechnology</i> , 2011, 89, 1373-1386.	1.7	84
24	Saponified palm kernel oil and its major free fatty acids as carbon substrates for the production of polyhydroxyalkanoates in <i>Pseudomonas putida</i> PGA1. <i>Applied Microbiology and Biotechnology</i> , 1997, 47, 207-211.	1.7	81
25	Effect of increased PHA synthase activity on polyhydroxyalkanoates biosynthesis in <i>Synechocystis</i> sp. PCC6803. <i>International Journal of Biological Macromolecules</i> , 2002, 30, 97-104.	3.6	81
26	Enhanced polyhydroxybutyrate (PHB) production by newly isolated rare actinomycetes <i>Rhodococcus</i> sp. strain BSRT1-1 using response surface methodology. <i>Scientific Reports</i> , 2021, 11, 1896.	1.6	80
27	Poly(3-hydroxybutyrate)-functionalised multi-walled carbon nanotubes/chitosan green nanocomposite membranes and their application in pervaporation. <i>Separation and Purification Technology</i> , 2011, 76, 419-427.	3.9	78
28	Structure of polyhydroxyalkanoate (PHA) synthase PhaC from <i>Chromobacterium</i> sp. USM2, producing biodegradable plastics. <i>Scientific Reports</i> , 2017, 7, 5312.	1.6	78
29	Biosynthesis and characterization of polyhydroxyalkanoate containing 5-hydroxyvalerate units: Effects of 5HV units on biodegradability, cytotoxicity, mechanical and thermal properties. <i>Polymer Degradation and Stability</i> , 2013, 98, 331-338.	2.7	77
30	Bioplastics: A boon or bane?. <i>Renewable and Sustainable Energy Reviews</i> , 2021, 147, 111237.	8.2	76
31	Isolation and Characterization of a <i>Burkholderia</i> sp. USM (JCM15050) Capable of Producing Polyhydroxyalkanoate (PHA) from Triglycerides, Fatty Acids and Glycerols. <i>Journal of Polymers and the Environment</i> , 2010, 18, 584-592.	2.4	70
32	Biosynthesis of poly(3-hydroxybutyrate-co-4-hydroxybutyrate) copolymer by <i>Cupriavidus</i> sp. USMAA1020 isolated from Lake Kulim, Malaysia. <i>Bioresource Technology</i> , 2008, 99, 4903-4909.	4.8	69
33	Conversion of rice husks to polyhydroxyalkanoates (<sc>PHA</sc>) via a three-step process: optimized alkaline pretreatment, enzymatic hydrolysis, and biosynthesis by <i>Burkholderia cepacia</i> USM (<sc>JCM</sc> 15050). <i>Journal of Chemical Technology and Biotechnology</i> , 2017, 92, 100-108.	1.6	69
34	Conventional Technology and Nanotechnology in Wood Preservation: A Review. <i>BioResources</i> , 2018, 13, .	0.5	69
35	Evaluation of jatropha oil to produce poly(3-hydroxybutyrate) by <i>Cupriavidus necator</i> H16. <i>Polymer Degradation and Stability</i> , 2010, 95, 1365-1369.	2.7	67
36	Quorum-sensing inhibitory compounds from extremophilic microorganisms isolated from a hypersaline cyanobacterial mat. <i>Journal of Industrial Microbiology and Biotechnology</i> , 2013, 40, 759-772.	1.4	64

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37	Revisiting the Single Cell Protein Application of <i>Cupriavidus necator</i> H16 and Recovering Bioplastic Granules Simultaneously. PLoS ONE, 2013, 8, e78528.	1.1	61
38	Biosynthesis and mobilization of poly(3-hydroxybutyrate) [P(3HB)] by <i>Spirulina platensis</i> . International Journal of Biological Macromolecules, 2005, 36, 144-151.	3.6	59
39	Utilization of waste fish oil and glycerol as carbon sources for polyhydroxyalkanoate production by <i>Salinivibrio</i> sp. M318. International Journal of Biological Macromolecules, 2019, 141, 885-892.	3.6	59
40	Improved synthesis of P(3HB-co-3HV-co-3HHx) terpolymers by mutant <i>Cupriavidus necator</i> using the PHA synthase gene of <i>Chromobacterium</i> sp. USM2 with high affinity towards 3HV. Polymer Degradation and Stability, 2010, 95, 1436-1442.	2.7	54
41	Properties of binderless particleboard from oil palm trunk with addition of polyhydroxyalkanoates. Composites Part B: Engineering, 2012, 43, 1109-1116.	5.9	54
42	Enhanced production of poly(3-hydroxybutyrate-co-4-hydroxybutyrate) copolymer with manipulated variables and its properties. Journal of Industrial Microbiology and Biotechnology, 2009, 36, 547-556.	1.4	51
43	Molecular design and biosynthesis of biodegradable polyesters. Polymers for Advanced Technologies, 2000, 11, 865-872.	1.6	49
44	Electrospun poly(3-hydroxybutyrate-co-3-hydroxyhexanoate)/silk fibroin film is a promising scaffold for bone tissue engineering. International Journal of Biological Macromolecules, 2020, 145, 173-188.	3.6	47
45	Degradation of Polyhydroxyalkanoate (PHA): a Review. Journal of Siberian Federal University - Biology, 2017, 10, 21-225.	0.2	47
46	Biosynthesis and native granule characteristics of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) in <i>Delftia acidovorans</i> . International Journal of Biological Macromolecules, 2007, 40, 466-471.	3.6	46
47	Biosynthesis and characterization of poly(3-hydroxybutyrate-co-3-hydroxyvalerate) and poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) copolymers using <i>Jatropha</i> oil as the main carbon source. Process Biochemistry, 2011, 46, 1572-1578.	1.8	46
48	Characterization of the Highly Active Polyhydroxyalkanoate Synthase of <i>Chromobacterium</i> sp. Strain USM2. Applied and Environmental Microbiology, 2011, 77, 2926-2933.	1.4	46
49	Evaluation of date seed oil and date molasses as novel carbon sources for the production of poly(3-Hydroxybutyrate-co-3-Hydroxyhexanoate) by <i>Cupriavidus necator</i> H16 Re 2058/pCB113. Industrial Crops and Products, 2018, 119, 83-92.	2.5	45
50	A novel biological recovery approach for PHA employing selective digestion of bacterial biomass in animals. Applied Microbiology and Biotechnology, 2018, 102, 2117-2127.	1.7	44
51	Characterization and Properties of G4X Mutants of <i>Ralstonia eutropha</i> PHA Synthase for Poly(3-hydroxybutyrate) Biosynthesis in <i>Escherichia coli</i> . Macromolecular Bioscience, 2005, 5, 197-206.	2.1	43
52	Nitrile- π -functionalized Hg(II)- and Ag(I)- π -heterocyclic carbene complexes: synthesis, crystal structures, nuclease and DNA binding activities. Applied Organometallic Chemistry, 2012, 26, 689-700.	1.7	43
53	An integrative study on biologically recovered polyhydroxyalkanoates (PHAs) and simultaneous assessment of gut microbiome in yellow mealworm. Journal of Biotechnology, 2018, 265, 31-39.	1.9	43
54	PHA synthase (PhaC): interpreting the functions of bioplastic-producing enzyme from a structural perspective. Applied Microbiology and Biotechnology, 2019, 103, 1131-1141.	1.7	43

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55	DNA-functionalized thermoresponsive bioconjugates synthesized via ATRP and click chemistry. <i>Polymer</i> , 2011, 52, 895-900.	1.8	42
56	Simultaneous Adsorption and Photocatalytic Degradation of Malachite Green Using Electrospun P(3HB)-TiO ₂ Nanocomposite Fibers and Films. <i>International Journal of Photoenergy</i> , 2011, 2011, 1-11.	1.4	42
57	Fabrication and Characterization of an Electrospun PHA/Graphene Silver Nanocomposite Scaffold for Antibacterial Applications. <i>Materials</i> , 2018, 11, 1673.	1.3	42
58	Exploring Various Techniques for the Chemical and Biological Synthesis of Polymeric Nanoparticles. <i>Nanomaterials</i> , 2022, 12, 576.	1.9	42
59	Biological recovery and properties of poly(3-hydroxybutyrate) from <i>Cupriavidus necator</i> H16. <i>Separation and Purification Technology</i> , 2017, 172, 1-6.	3.9	40
60	Boron Nitride Doped Polyhydroxyalkanoate/Chitosan Nanocomposite for Antibacterial and Biological Applications. <i>Nanomaterials</i> , 2019, 9, 645.	1.9	40
61	The Oil-Absorbing Property of Polyhydroxyalkanoate Films and its Practical Application: A Refreshing New Outlook for an Old Degrading Material. <i>Macromolecular Bioscience</i> , 2007, 7, 1199-1205.	2.1	38
62	Microbial Degradation of Rubber: Actinobacteria. <i>Polymers</i> , 2021, 13, 1989.	2.0	38
63	Genetic Analysis of <i>Comamonas acidovorans</i> Polyhydroxyalkanoate Synthase and Factors Affecting the Incorporation of 4-Hydroxybutyrate Monomer. <i>Applied and Environmental Microbiology</i> , 1998, 64, 3437-3443.	1.4	38
64	Improved production of poly(4-hydroxybutyrate) by <i>Comamonas acidovorans</i> and its freeze-fracture morphology. <i>International Journal of Biological Macromolecules</i> , 1999, 25, 79-85.	3.6	37
65	Biosynthesis of P(3HB-co-3HHx) with improved molecular weights from a mixture of palm olein and fructose by <i>Cupriavidus necator</i> Re2058/pCB113. <i>International Journal of Biological Macromolecules</i> , 2017, 102, 1112-1119.	3.6	37
66	Evaluation of Sludge Palm Oil as Feedstock and Development of Efficient Method for its Utilization to Produce Polyhydroxyalkanoate. <i>Waste and Biomass Valorization</i> , 2019, 10, 709-720.	1.8	37
67	Thermoresponsive Micellization and Micellar Stability of Poly(<i>N</i> -isopropylacrylamide)- <i>b</i> -DNA Diblock and Miktoarm Star Polymers. <i>Langmuir</i> , 2012, 28, 14347-14356.	1.6	36
68	Spectroscopic Evidence for the Unusual Stereochemical Configuration of an Endosome-Specific Lipid. <i>Angewandte Chemie - International Edition</i> , 2012, 51, 533-535.	7.2	35
69	Fabrication of biopolymer polyhydroxyalkanoate/chitosan and 2D molybdenum disulfide "doped" scaffolds for antibacterial and biomedical applications. <i>Applied Microbiology and Biotechnology</i> , 2020, 104, 3121-3131.	1.7	35
70	Polyhydroxyalkanoate biosynthesis and simplified polymer recovery by a novel moderately halophilic bacterium isolated from hypersaline microbial mats. <i>Journal of Applied Microbiology</i> , 2013, 114, 384-395.	1.4	34
71	Evaluation of BP-M-CPF4 polyhydroxyalkanoate (PHA) synthase on the production of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) from plant oil using <i>Cupriavidus necator</i> transformants. <i>International Journal of Biological Macromolecules</i> , 2020, 159, 250-257.	3.6	34
72	Characterization and Biodegradability of Rice Husk-Filled Polymer Composites. <i>Polymers</i> , 2021, 13, 104.	2.0	34

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73	Solar Photocatalytic Decolorization and Detoxification of Industrial Batik Dye Wastewater Using P(3HB)-TiO ₂ Nanocomposite Films. Clean - Soil, Air, Water, 2011, 39, 265-273.	0.7	32
74	Characterization of Site-Specific Mutations in a Short-Chain-Length/Medium-Chain-Length Polyhydroxyalkanoate Synthase: <i>In Vivo</i> and <i>In Vitro</i> Studies of Enzymatic Activity and Substrate Specificity. Applied and Environmental Microbiology, 2013, 79, 3813-3821.	1.4	32
75	RNA-Seq Analysis Provides Insights for Understanding Photoautotrophic Polyhydroxyalkanoate Production in Recombinant <i>Synechocystis</i> Sp.. PLoS ONE, 2014, 9, e86368.	1.1	32
76	Efficient production of polyhydroxyalkanoates (PHAs) from <i>Pseudomonas mendocina</i> PSU using a biodiesel liquid waste (BLW) as the sole carbon source. Bioscience, Biotechnology and Biochemistry, 2016, 80, 1440-1450.	0.6	32
77	Formation of new polyhydroxyalkanoate containing 3-hydroxy-4-methylvalerate monomer in <i>Burkholderia</i> sp.. Applied Microbiology and Biotechnology, 2011, 89, 1599-1609.	1.7	31
78	Asymmetric Open-Closed Dimer Mechanism of Polyhydroxyalkanoate Synthase PhaC. IScience, 2020, 23, 101084.	1.9	31
79	Polyhydroxyalkanoate (PHA) synthase genes and PHA-associated gene clusters in <i>Pseudomonas</i> spp. and <i>Janthinobacterium</i> spp. isolated from Antarctica. Journal of Biotechnology, 2020, 313, 18-28.	1.9	31
80	Biodegradability of Epoxidized Soybean Oil Based Thermosets in Compost Soil Environment. Journal of Polymers and the Environment, 2014, 22, 140-147.	2.4	29
81	Effects of polyhydroxyalkanoate degradation on soil microbial community. Polymer Degradation and Stability, 2016, 131, 9-19.	2.7	28
82	Enzyme-Mimic Peptide Assembly To Achieve Amidolytic Activity. Biomacromolecules, 2016, 17, 3375-3385.	2.6	28
83	Composite properties and biodegradation of biologically recovered P(3HB-co-3HHx) reinforced with short kenaf fibers. Polymer Degradation and Stability, 2017, 137, 100-108.	2.7	27
84	The Use of Palm Oil-Based Waste Cooking Oil to Enhance the Production of Polyhydroxybutyrate [P(3HB)] by <i>Cupriavidus necator</i> H16 Strain. Arabian Journal for Science and Engineering, 2018, 43, 3453-3463.	1.7	27
85	Biodegradation of fibrillated oil palm trunk fiber by a novel thermophilic, anaerobic, xylanolytic bacterium <i>Caldicoprobacter</i> sp. CL-2 isolated from compost. Enzyme and Microbial Technology, 2018, 111, 21-28.	1.6	27
86	Polyhydroxyalkanoate synthase (PhaC): The key enzyme for biopolyester synthesis. Current Research in Biotechnology, 2022, 4, 87-101.	1.9	27
87	Potential of Oil Palm Trunk Sap as a Novel Inexpensive Renewable Carbon Feedstock for Polyhydroxyalkanoate Biosynthesis and as a Bacterial Growth Medium. Clean - Soil, Air, Water, 2012, 40, 310-317.	0.7	26
88	Identification of a new polyhydroxyalkanoate (PHA) producer <i>Aquitalea</i> sp. USM4 (JCM 19919) and characterization of its PHA synthase. Journal of Bioscience and Bioengineering, 2016, 122, 550-557.	1.1	26
89	Production of Polyhydroxyalkanoates From Underutilized Plant Oils by <i>Cupriavidus necator</i> . Clean - Soil, Air, Water, 2018, 46, 1700542.	0.7	26
90	Biosynthesis and characterization of novel polyhydroxyalkanoate polymers with high elastic property by <i>Cupriavidus necator</i> PHB ⁺ 4 transformant. Polymer Degradation and Stability, 2010, 95, 2226-2232.	2.7	25

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91	Efficient ethanol production from separated parenchyma and vascular bundle of oil palm trunk. <i>Bioresource Technology</i> , 2012, 125, 37-42.	4.8	25
92	Site-directed saturation mutagenesis at residue F420 and recombination with another beneficial mutation of <i>Ralstonia eutropha</i> polyhydroxyalkanoate synthase. <i>Biotechnology Letters</i> , 2005, 27, 705-712.	1.1	24
93	Enhanced Recovery and Purification of P(3HB-co-3HHx) from Recombinant <i>Cupriavidus necator</i> Using Alkaline Digestion Method. <i>Applied Biochemistry and Biotechnology</i> , 2012, 167, 524-535.	1.4	24
94	Identification of new rubber-degrading bacterial strains from aged latex. <i>Polymer Degradation and Stability</i> , 2014, 109, 354-361.	2.7	24
95	Optimization of Poly(<i>N</i> -isopropylacrylamide) as an Artificial Amidase. <i>Biomacromolecules</i> , 2015, 16, 411-421.	2.6	24
96	Recovery and subsequent characterization of polyhydroxybutyrate from <i>Rhodococcus equi</i> cells grown on crude palm kernel oil. <i>Journal of Taibah University for Science</i> , 2016, 10, 543-550.	1.1	24
97	Biodegradation of Natural Rubber and Natural Rubber Products by <i>Streptomyces</i> sp. Strain CFMR 7. <i>Journal of Polymers and the Environment</i> , 2017, 25, 606-616.	2.4	24
98	Study of electrospun fish gelatin nanofilms from benign organic acids as solvents. <i>Food Packaging and Shelf Life</i> , 2019, 19, 66-75.	3.3	24
99	Phenol and p-nitrophenol biodegradations by acclimated activated sludge: Influence of operational conditions on biodegradation kinetics and responding microbial communities. <i>Journal of Environmental Chemical Engineering</i> , 2021, 9, 105420.	3.3	24
100	Enhanced Incorporation of 3-Hydroxy-4-Methylvalerate Unit into Biosynthetic Polyhydroxyalkanoate Using Leucine as a Precursor. <i>AMB Express</i> , 2011, 1, 6.	1.4	23
101	PHA Production and PHA Synthases of the Halophilic Bacterium <i>Halomonas</i> sp. SF2003. <i>Bioengineering</i> , 2020, 7, 29.	1.6	23
102	Electron and X-ray diffraction study on poly(4-hydroxybutyrate). <i>Polymer</i> , 2001, 42, 8915-8918.	1.8	22
103	Polyhydroxyalkanoate Film Formation and Synthase Activity During In Vitro and In Situ Polymerization on Hydrophobic Surfaces. <i>Biomacromolecules</i> , 2008, 9, 2811-2818.	2.6	22
104	Biosynthesis and mobilization of a novel polyhydroxyalkanoate containing 3-hydroxy-4-methylvalerate monomer produced by <i>Burkholderia</i> sp. USM (JCM15050). <i>Bioresource Technology</i> , 2010, 101, 7916-7923.	4.8	22
105	Factors affecting the freeze-fracture morphology of in vivo polyhydroxyalkanoate granules. <i>Canadian Journal of Microbiology</i> , 2000, 46, 304-311.	0.8	21
106	Atomic Force Microscopic Observation of in Vitro Polymerized Poly[(R)-3-hydroxybutyrate]: Insight into Possible Mechanism of Granule Formation. <i>Biomacromolecules</i> , 2005, 6, 2671-2677.	2.6	21
107	Biosynthesis of poly(3-hydroxybutyrate-co-3-hydroxy-4-methylvalerate) by recombinant <i>Escherichia coli</i> expressing leucine metabolism-related enzymes derived from <i>Clostridium difficile</i> . <i>Journal of Bioscience and Bioengineering</i> , 2014, 117, 670-675.	1.1	21
108	Double-stranded DNA introduction into intact plants using peptide–DNA complexes. <i>Plant Biotechnology</i> , 2015, 32, 39-45.	0.5	21

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109	Screening and Evaluation of Poly(3-hydroxybutyrate) with <i>Rhodococcus equi</i> Using Different Carbon Sources. <i>Arabian Journal for Science and Engineering</i> , 2017, 42, 2371-2379.	1.7	21
110	A novel and wide substrate specific polyhydroxyalkanoate (PHA) synthase from unculturable bacteria found in mangrove soil. <i>Journal of Polymer Research</i> , 2018, 25, 1.	1.2	21
111	High cell density culture of <i>Cupriavidus necator</i> H16 and improved biological recovery of polyhydroxyalkanoates using mealworms. <i>Journal of Biotechnology</i> , 2019, 305, 35-42.	1.9	21
112	Production of P(3HB-co-4HB) copolymer with high 4HB molar fraction by <i>Burkholderia contaminans</i> Kad1 PHA synthase. <i>Biochemical Engineering Journal</i> , 2020, 153, 107394.	1.8	21
113	Potential Applications of Polyhydroxyalkanoates as a Biomaterial for the Aging Population. <i>Polymer Degradation and Stability</i> , 2020, 181, 109371.	2.7	21
114	Revelation of the ability of <i>Burkholderia</i> sp. USM (JCM 15050) PHA synthase to polymerize 4-hydroxybutyrate monomer. <i>AMB Express</i> , 2012, 2, 41.	1.4	20
115	Whole genome amplification approach reveals novel polyhydroxyalkanoate synthases (PhaCs) from Japan Trench and Nankai Trough seawater. <i>BMC Microbiology</i> , 2014, 14, 318.	1.3	19
116	In vitro biocompatibility evaluation of poly(3-hydroxybutyrate-co-4-hydroxybutyrate) copolymer in fibroblast cells. <i>Journal of Biomedical Materials Research - Part A</i> , 2007, 81A, 317-325.	2.1	18
117	Direct production of polyhydroxybutyrate from waste starch by newly-isolated <i>Bacillus aryabhattai</i> T34-N4. <i>Environmental Technology (United Kingdom)</i> , 2020, 41, 3318-3328.	1.2	18
118	Efficient bioconversion of palm acid oil and palm kernel acid oil to poly(3-hydroxybutyrate) by <i>Cupriavidus necator</i> . <i>Canadian Journal of Chemistry</i> , 2008, 86, 533-539.	0.6	17
119	Polyhydroxyalkanoate (PHA) accumulating bacteria from the gut of higher termite <i>Macrotermes carbonarius</i> (Blattodea: Termitidae). <i>World Journal of Microbiology and Biotechnology</i> , 2010, 26, 1015-1024.	1.7	17
120	Biosynthesis of novel polyhydroxyalkanoate containing 3-hydroxy-4-methylvalerate by <i>Chromobacterium</i> sp. USM2. <i>Journal of Applied Microbiology</i> , 2011, 111, 559-571.	1.4	17
121	Expression of <i>Aeromonas caviae</i> polyhydroxyalkanoate synthase gene in <i>Burkholderia</i> sp. USM (JCM15050) enables the biosynthesis of SCL-MCL PHA from palm oil products. <i>Journal of Applied Microbiology</i> , 2012, 112, 45-54.	1.4	17
122	Influence of steam treatment on the properties of particleboard made from oil palm trunk with addition of polyhydroxyalkanoates. <i>Industrial Crops and Products</i> , 2013, 51, 334-341.	2.5	17
123	Detoxification of Sap from Felled Oil Palm Trunks for the Efficient Production of Lactic Acid. <i>Applied Biochemistry and Biotechnology</i> , 2017, 183, 412-425.	1.4	17
124	Evaluation of soil burial biodegradation behavior of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) on the basis of change in copolymer composition monitored by thermally assisted hydrolysis and methylation-gas chromatography. <i>Journal of Analytical and Applied Pyrolysis</i> , 2019, 137, 146-150.	2.6	17
125	Polyhydroxyalkanoates from Palm Oil: Biodegradable Plastics. <i>SpringerBriefs in Microbiology</i> , 2013, , .	0.1	16
126	Directed evolution of poly[(R)-3-hydroxybutyrate] depolymerase using cell surface display system: functional importance of asparagine at position 285. <i>Applied Microbiology and Biotechnology</i> , 2013, 97, 4859-4871.	1.7	16

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127	Optimization of <i>Salmonella</i> Typhi biofilm assay on polypropylene microtiter plates using response surface methodology. <i>Biofouling</i> , 2016, 32, 477-487.	0.8	16
128	Direct observation of polyhydroxyalkanoate granule-associated-proteins on native granules and on poly(3-hydroxybutyrate) single crystals by atomic force microscopy. <i>Polymer Degradation and Stability</i> , 2004, 83, 281-287.	2.7	15
129	Structural characterization of nanoparticles from thermoresponsive poly(N-isopropylacrylamide)-DNA conjugate. <i>Journal of Colloid and Interface Science</i> , 2012, 374, 315-320.	5.0	15
130	Biosynthesis of poly(3-hydroxybutyrate) and its copolymers by <i>Yangia</i> sp. ND199 from different carbon sources. <i>International Journal of Biological Macromolecules</i> , 2016, 84, 361-366.	3.6	15
131	Green Nanotechnology for Synthesis and characterization of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) nanoparticles for sustained bortezomib release using supercritical CO ₂ assisted particle formation combined with electrodeposition. <i>International Journal of Biological Macromolecules</i> , 2018, 107, 436-445.	3.6	15
132	Production of P(3HB-co-3HHx) with Controlled Compositions by Recombinant <i>Cupriavidus necator</i> Re2058/pCB113 from Renewable Resources. <i>Clean - Soil, Air, Water</i> , 2016, 44, 1234-1241.	0.7	14
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#	ARTICLE	IF	CITATIONS
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