Alexander SteinbÃ¼chel

List of Publications by Year
in descending order

348 papers	20,440 citations	9234 74 h-index	16605 123 g-index
375 all docs	375 docs citations	375 times ranked	11200 citing authors

#	Article	IF	Citations
1	Diversity of bacterial polyhydroxyalkanoic acids. FEMS Microbiology Letters, 1995, 128, 219-228.	0.7	706
2	Genome sequence of the bioplastic-producing â€œKnallgasâ€•bacterium Ralstonia eutropha H16. Nature Biotechnology, 2006, 24, 1257-1262.	9.4	527
3	Bacterial and other biological systems for polyester production. Trends in Biotechnology, 1998, 16, 419-427.	4.9	468
4	Microdiesel: Escherichia coli engineered for fuel production. Microbiology (United Kingdom), 2006, 152, 2529-2536.	0.7	438
5	Metabolic engineering and pathway construction for biotechnological production of relevant polyhydroxyalkanoates in microorganisms. Biochemical Engineering Journal, 2003, 16, 81-96.	1.8	376
6	Increased diversification of polyhydroxyalkanoates by modification reactions for industrial and medical applications. Applied Microbiology and Biotechnology, 2007, 74, 1-12.	1.7	356
7	Biochemical and genetic analysis of PHA synthases and other proteins required for PHA synthesis. International Journal of Biological Macromolecules, 1999, 25, 3-19.	3.6	351
8	A Novel Bifunctional Wax Ester Synthase/Acyl-CoA:Diacylglycerol Acyltransferase Mediates Wax Ester and Triacylglycerol Biosynthesis inAcinetobacter calcoaceticus ADP1. Journal of Biological Chemistry, 2003, 278, 8075-8082.	1.6	341
9	Perspectives for Biotechnological Production and Utilization of Biopolymers: Metabolic Engineering of Polyhydroxyalkanoate Biosynthesis Pathways as a Successful Example. Macromolecular Bioscience, 2001, 1, 1-24.	2.1	327
10	Biology of the Metabolically Diverse Genus Gordonia. Applied and Environmental Microbiology, 2004, 70, 3195-3204.	1.4	276
11	A New Metabolic Link between Fatty Acid de NovoSynthesis and Polyhydroxyalkanoic Acid Synthesis. Journal of Biological Chemistry, 1998, 273, 24044-24051.	1.6	259
12	Considerations on the structure and biochemistry of bacterial polyhydroxyalkanoic acid inclusions. Canadian Journal of Microbiology, 1995, 41, 94-105.	0.8	258
13	Neutral Lipid Bodies in Prokaryotes: Recent Insights into Structure, Formation, and Relationship to Eukaryotic Lipid Depots. Journal of Bacteriology, 2005, 187, 3607-3619.	1.0	256
14	Fatty acid synthesis in Escherichia coli and its applications towards the production of fatty acid based biofuels. Biotechnology for Biofuels, 2014, 7, 7.	6.2	239
15	Biodegradation of Natural Rubber and Related Compounds: Recent Insights into a Hardly Understood Catabolic Capability of Microorganisms. Applied and Environmental Microbiology, 2005, 71, 2803-2812.	1.4	233
16	Polyhydroxyalkanoic acids. , 1991, , 123-213.		209
17	Poly(3-hydroxybutyrate) Granule-Associated Proteins:Â Impacts on Poly(3-hydroxybutyrate) Synthesis and Degradationâ€. Biomacromolecules, 2005, 6, 552-560.	2.6	208
18	Mechanism of lipid-body formation in prokaryotes: how bacteria fatten up. Molecular Microbiology, 2004, 55, 750-763.	1.2	203

#	Article	IF	Citations
19	<i>Ralstonia eutropha</i> Strain H16 as Model Organism for PHA Metabolism and for Biotechnological Production of Technically Interesting Biopolymers. Journal of Molecular Microbiology and Biotechnology, 2009, 16, 91-108.	1.0	193
20	Microalgae as bioreactors for bioplastic production. Microbial Cell Factories, 2011, 10, 81.	1.9	192
21	Regulation of phasin expression and polyhydroxyalkanoate (PHA) granule formation in Ralstonia eutropha H16. Microbiology (United Kingdom), 2002, 148, 2413-2426.	0.7	186
22	Occurrence, functions and biosynthesis of polyamides in microorganisms and biotechnological production. Die Naturwissenschaften, 2002, 89, 11-22.	0.6	185
23	Microbial Degradation of Poly(amino acid)s. Biomacromolecules, 2004, 5, 1166-1176.	2.6	175
24	Cloning and molecular analysis of the poly(3-hydroxyalkanoic acid) gene locus of Pseudomonas aeruginosa PAO1. FEBS Journal, 1992, 209, 15-30.	0.2	162
25	Identification of a new class of biopolymer: bacterial synthesis of a sulfur-containing polymer with thioester linkages. Microbiology (United Kingdom), 2001, 147, 11-19.	0.7	162
26	Formation of poly(3-hydroxyalkanoates) by phototrophic and chemolithotrophic bacteria. Archives of Microbiology, 1991, 155, 415-421.	1.0	160
27	The Wax Ester Synthase/Acyl Coenzyme A:Diacylglycerol Acyltransferase from Acinetobacter sp. Strain ADP1: Characterization of a Novel Type of Acyltransferase. Journal of Bacteriology, 2005, 187, 1369-1376.	1.0	158
28	Metabolic characteristics of the species Variovorax paradoxus. Applied Microbiology and Biotechnology, 2013, 97, 541-560.	1.7	149
29	Acyltransferases in Bacteria. Microbiology and Molecular Biology Reviews, 2013, 77, 277-321.	2.9	145
30	Isolation of prokaryotic RNA and detection of specific mRNA with biotinylated probes. Journal of Microbiological Methods, 1990, 11, 73-81.	0.7	144
31	Role of Fatty Acid De Novo Biosynthesis in Polyhydroxyalkanoic Acid (PHA) and Rhamnolipid Synthesis by Pseudomonads: Establishment of the Transacylase (PhaG)-Mediated Pathway for PHA Biosynthesis in Escherichia coli. Applied and Environmental Microbiology, 2001, 67, 3102-3109.	1.4	143
32	PHA Recovery from Biomass. Biomacromolecules, 2013, 14, 2963-2972.	2.6	141
33	Application of enzymatically synthesized short-chain-length hydroxy fatty acid coenzyme A thioesters for assay of polyhydroxyalkanoic acid synthases. Applied Microbiology and Biotechnology, 1994, 40, 699-709.	1.7	140
34	Gordonia polyisoprenivorans sp. nov., a rubber-degrading actinomycete isolated from an automobile tyre. International Journal of Systematic and Evolutionary Microbiology, 1999, 49, 1785-1791.	0.8	139
35	Biosynthesis of novel thermoplastic polythioesters by engineered Escherichia coli. Nature Materials, 2002, 1, 236-240.	13.3	138
36	The complex structure of polyhydroxybutyrate (PHB) granules: four orthologous and paralogous phasins occur in Ralstonia eutropha. Microbiology (United Kingdom), 2004, 150, 2301-2311.	0.7	137

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37	Poly(3-Hydroxybutyrate) Production from Glycerol by Zobellella denitrificans MW1 via High-Cell-Density Fed-Batch Fermentation and Simplified Solvent Extraction. Applied and Environmental Microbiology, 2009, 75, 6222-6231.	1.4	136
38	Analysis of Storage Lipid Accumulation in Alcanivorax borkumensis : Evidence for Alternative Triacylglycerol Biosynthesis Routes in Bacteria. Journal of Bacteriology, 2007, 189, 918-928.	1.0	133
39	Cloning and nucleotide sequences of genes relevant for biosynthesis of poly(3-hydroxybutyric acid) in Chromatium vinosum strain D. FEBS Journal, 1992, 209, 135-150.	0.2	130
40	Rhodococcus opacus strain PD630 as a new source of high-value single-cell oil? Isolation and characterization of triacylglycerols and other storage lipids. Microbiology (United Kingdom), 2000, 146, 1143-1149.	0.7	127
41	Conversion of Glycerol to Poly(3-Hydroxypropionate) in Recombinant Escherichia coli. Applied and Environmental Microbiology, 2010, 76, 622-626.	1.4	126
42	Constitutive Expression of the Î²-Ketothiolase Gene in Transgenic Plants. A Major Obstacle for Obtaining Polyhydroxybutyrate-Producing Plants. Plant Physiology, 2002, 128, 1282-1290.	2.3	122
43	Fatty acid alkyl esters: perspectives for production of alternative biofuels. Applied Microbiology and Biotechnology, 2010, 85, 1713-1733.	1.7	122
44	Synthesis of Novel Lipids in Saccharomyces cerevisiae by Heterologous Expression of an Unspecific Bacterial Acyltransferase. Applied and Environmental Microbiology, 2004, 70, 7119-7125.	1.4	119
45	Biochemical and Molecular Basis of Microbial Synthesis of Polyhydroxyalkanoates in Microorganisms. Advances in Biochemical Engineering/Biotechnology, 2001, 71, 81-123.	0.6	117
46	Evaluation of non-cyanobacterial genome sequences for occurrence of genes encoding proteins homologous to cyanophycin synthetase and cloning of an active cyanophycin synthetase from Acinetobacter sp. strain DSM 587. Archives of Microbiology, 2002, 177, 371-380.	1.0	117
47	Purification and Characterization of the Poly(Hydroxyalkanoic Acid) Synthase from Chromatium vinosum and Localization of the Enzyme at the Surface of Poly(Hydroxyalkanoic Acid) Granules. FEBS Journal, 1994, 226, 71-80.	0.2	115
48	Influence of homologous phasins (PhaP) on PHA accumulation and regulation of their expression by the transcriptional repressor PhaR in Ralstonia eutropha H16. Microbiology (United Kingdom), 2005, 151, 825-833.	0.7	113
49	Molecular characterization of the cyanophycin synthetase from Synechocystis sp. strain PCC6308. Archives of Microbiology, 2000, 174, 297-306.	1.0	112
50	Synthesis of poly(3-hydroxyalkanoates) in Escherichia coli expressing the PHA synthase gene phaC2 from Pseudomonas aeruginosa: comparison of PhaC1 and PhaC2. FEMS Microbiology Letters, 2006, 157, 155-162.	0.7	112
51	Neutral Lipid Biosynthesis in Engineered Escherichia coli : Jojoba Oil-Like Wax Esters and Fatty Acid Butyl Esters. Applied and Environmental Microbiology, 2006, 72, 1373-1379.	1.4	110
52	Non-biodegradable biopolymers from renewable resources: perspectives and impacts. Current Opinion in Biotechnology, 2005, 16, 607-613.	3.3	106
53	Highly Efficient Biotransformation of Eugenol to Ferulic Acid and Further Conversion to Vanillin in Recombinant Strains of Escherichia coli. Applied and Environmental Microbiology, 2003, 69, 6569-6576.	1.4	103
54	Key enzymes for biosynthesis of neutral lipid storage compounds in prokaryotes: Properties, function and occurrence of wax ester synthases/acyl-CoA:diacylglycerol acyltransferases. Biochimie, 2007, 89, 230-242.	1.3	103

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55	Technical-Scale Production of Cyanophycin with Recombinant Strains of Escherichia coli. Applied and Environmental Microbiology, 2002, 68, 3377-3384.	1.4	98
56	Plasmid addiction systems: perspectives and applications in biotechnology. Microbial Biotechnology, 2010, 3, 634-657.	2.0	97
57	Potential of Rhodococcus strains for biotechnological vanillin production from ferulic acid and eugenol. Applied Microbiology and Biotechnology, 2006, 72, 745-755.	1.7	95
58	Recent developments in non-biodegradable biopolymers: Precursors, production processes, and future perspectives. Applied Microbiology and Biotechnology, 2019, 103, 143-157.	1.7	95
59	Identification and Characterization of Genes fromStreptomycessp. Strain K30 Responsible for Clear Zone Formation on Natural Rubber Latex and Poly(cis-1,4-isoprene) Rubber Degradation. Biomacromolecules, 2005, 6, 180-188.	2.6	94
60	Physiological and morphological responses of the soil bacterium Rhodococcus opacus strain PD630 to water stress. FEMS Microbiology Ecology, 2004, 50, 75-86.	1.3	92
61	Large scale extraction of poly(3-hydroxybutyrate) from Ralstonia eutropha H16 using sodium hypochlorite. AMB Express, 2012, 2, 59.	1.4	92
62	Excretion of pyruvate by mutants of Alcaligenes eutrophus, which are impaired in the accumulation of poly(?-hydroxybutyric acid) (PHB), under conditions permitting synthesis of PHB. Applied Microbiology and Biotechnology, 1989, 31, 168-175.	1.7	89
63	The role of the fatty acid Î²-oxidation multienzyme complex from Pseudomonas oleovorans in polyhydroxyalkanoate biosynthesis: molecular characterization of the fadBA operon from P. oleovorans and of the enoyl-CoA hydratase genes phaJ from P. oleovorans and Pseudomonas putida. Archives of Microbiology, 2002, 178, 149-160.	1.0	88
64	Production of a copolyester of 3-hydroxybutyric acid and 3-hydroxyvaleric acid from single unrelated carbon sources by a mutant of Alcaligenes eutrophus. Applied Microbiology and Biotechnology, 1992, 37, 1.	1.7	87
65	Genome-wide transcriptome analyses of the â€˜Knallgasâ€™ bacterium Ralstonia eutropha H16 with regard to polyhydroxyalkanoate metabolism. Microbiology (United Kingdom), 2010, 156, 2136-2152.	0.7	87
66	Formation of Short Chain Length/Medium Chain Length Polyhydroxyalkanoate Copolymers by Fatty Acid Î²-Oxidation InhibitedRalstoniaeutropha. Biomacromolecules, 2002, 3, 208-213.	2.6	83
67	Cloning and characterization of a gene involved in triacylglycerol biosynthesis and identification of additional homologous genes in the oleaginous bacterium Rhodococcus opacus PD630. Microbiology (United Kingdom), 2008, 154, 2327-2335.	0.7	83
68	Historical and Recent Achievements in the Field of Microbial Degradation of Natural and Synthetic Rubber. Applied and Environmental Microbiology, 2012, 78, 4543-4551.	1.4	82
69	Metabolic routing towards polyhydroxyalkanoic acid synthesis in recombinant Escherichia coli (fadR): inhibition of fatty acid ÁŽÂ²-oxidation by acrylic acid. FEMS Microbiology Letters, 1998, 167, 89-94.	0.7	81
70	Studies on the biodegradability of polythioester copolymers and homopolymers by polyhydroxyalkanoate (PHA)-degrading bacteria and PHA depolymerases. Archives of Microbiology, 2004, 182, 212-25.	1.0	81
71	Molecular characterization of the poly(3-hydroxybutyrate) (PHB) synthase from Ralstonia eutropha: in vitro evolution, site-specific mutagenesis and development of a PHB synthase protein model. BBA - Proteins and Proteomics, 2002, 1594, 178-190.	2.1	80
72	Assessment of technological options and economical feasibility for cyanophycin biopolymer and high-value amino acid production. Applied Microbiology and Biotechnology, 2007, 77, 257-267.	1.7	80

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73	Mutation in a â€œ tesB -Likeâ€•Hydroxyacyl-Coenzyme A-Specific Thioesterase Gene Causes Hyperproduction of Extracellular Polyhydroxyalkanoates by Alcanivorax borkumensis SK2. Journal of Bacteriology, 2006, 188, 8452-8459.	1.0	79
74	Integrated omics study delineates the dynamics of lipid droplets in Rhodococcus opacus PD630. Nucleic Acids Research, 2014, 42, 1052-1064.	6.5	79
75	Involvement of Two Latex-Clearing Proteins during Rubber Degradation and Insights into the Subsequent Degradation Pathway Revealed by the Genome Sequence of Gordonia polyisoprenivorans Strain VH2. Applied and Environmental Microbiology, 2012, 78, 2874-2887.	1.4	78
76	Identification of Poly(cis-1,4-Isoprene) Degradation Intermediates during Growth of Moderately Thermophilic Actinomycetes on Rubber and Cloning of a Functional lcp Homologue from Nocardia farcinica Strain E1. Applied and Environmental Microbiology, 2006, 72, 3375-3382.	1.4	77
77	Biosynthesis of Poly(3-hydroxybutyrate-co-3-mercaptobutyrate) as a Sulfur Analogue to Poly(3-hydroxybutyrate) (PHB). Biomacromolecules, 2001, 2, 1061-1065.	2.6	74
78	Heterologous Expression of Cyanophycin Synthetase and Cyanophycin Synthesis in the Industrial Relevant Bacteria Corynebacterium glutamicum and Ralstonia eutropha and in Pseudomonas putida. Biomacromolecules, 2001, 2, 1338-1342.	2.6	73
79	Biosynthesis and Biodegradation of 3-Hydroxypropionate- Containing Polyesters. Applied and Environmental Microbiology, 2010, 76, 4919-4925.	1.4	73
80	Investigation of the Amycolatopsis sp. Strain ATCC 39116 Vanillin Dehydrogenase and Its Impact on the Biotechnical Production of Vanillin. Applied and Environmental Microbiology, 2013, 79, 81-90.	1.4	73
81	Large-Scale Production of Poly(3-Hydroxyoctanoic Acid) by Pseudomonas putida GPo1 and a Simplified Downstream Process. Applied and Environmental Microbiology, 2009, 75, 643-651.	1.4	72
82	Application of a KDPG-aldolase gene-dependent addiction system for enhanced production of cyanophycin in Ralstonia eutropha strain H16. Metabolic Engineering, 2006, 8, 66-78.	3.6	71
83	Bacterial lipid droplets bind to DNA via an intermediary protein that enhances survival under stress. Nature Communications, 2017, 8, 15979.	5.8	71
84	Metabolic Pathway for Biosynthesis of Poly (3-Hydroxybutyrate-co-4-Hydroxybutyrate) from 4-Hydroxybutyrate by Alcaligenes eutrophus. FEBS Journal, 1995, 227, 43-60.	0.2	70
85	In vitro synthesis of poly(3-hydroxybutyric acid) by using an enzymatic coenzyme A recycling system. FEMS Microbiology Letters, 1998, 168, 319-324.	0.7	70
86	Gordonia westfalica sp. nov., a novel rubber-degrading actinomycete.. International Journal of Systematic and Evolutionary Microbiology, 2002, 52, 1133-1139.	0.8	70
87	High-Cell-Density Cyclic Fed-Batch Fermentation of a Poly(3-Hydroxybutyrate)-Accumulating Thermophile, Chelatococcus sp. Strain MW10. Applied and Environmental Microbiology, 2010, 76, 7890-7895.	1.4	69
88	Physiological Conditions Conducive to High Cyanophycin Content in Biomass of Acinetobacter calcoaceticus Strain ADP1. Applied and Environmental Microbiology, 2005, 71, 858-866.	1.4	68
89	Studies on the Influence of Phasins on Accumulation and Degradation of PHB and Nanostructure of PHB Granules inRalstoniaeutrophaH16. Biomacromolecules, 2007, 8, 657-662.	2.6	68
90	Bacterial Acyltransferases as an Alternative for Lipaseâ€Catalyzed Acylation for the Production of Oleochemicals and Fuels. Angewandte Chemie - International Edition, 2008, 47, 3688-3694.	7.2	68

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91	Cloning and molecular analysis of the poly(3-hydroxybutyric acid) biosynthetic genes of Thiocystis violacea. Applied Microbiology and Biotechnology, 1993, 38, 493-501.	1.7	66
92	The methylcitric acid pathway in Ralstonia eutropha: new genes identified involved in propionate metabolism The GenBank accession numbers for the nucleotide sequences of the prp gene cluster are AF325554 and AF331923.. Microbiology (United Kingdom), 2001, 147, 2203-2214.	0.7	66
93	Identification, cloning and sequence analysis of the poly(3-hydroxyalkanoic acid) synthase gene of the Gram-positive bacteriumRhodococcus ruber. FEMS Microbiology Letters, 1992, 96, 73-79.	0.7	65
94	Biodegradable plastics. Current Opinion in Biotechnology, 1992, 3, 291-297.	3.3	64
95	Poly(3-Hydroxypropionate): a Promising Alternative to Fossil Fuel-Based Materials. Applied and Environmental Microbiology, 2014, 80, 6574-6582.	1.4	64
96	Technology Trends in Biodegradable Polymers: Evidence from Patent Analysis. Polymer Reviews, 2016, 56, 584-606.	5.3	64
97	Analysis of Genome Sequences for Genes of Cyanophycin Metabolism: Identifying Putative Cyanophycin Metabolizing Prokaryotes. Macromolecular Bioscience, 2007, 7, 278-296.	2.1	62
98	Polyhydroxyalkanoate (PHA) Accumulation in Sulfate-Reducing Bacteria and Identification of a Class III PHA Synthase (PhaEC) in Desulfococcus multivorans. Applied and Environmental Microbiology, 2004, 70, 4440-4448.	1.4	61
99	Dipeptides in nutrition and therapy: cyanophycin-derived dipeptides as natural alternatives and their biotechnological production. Applied Microbiology and Biotechnology, 2010, 87, 815-828.	1.7	61
100	Pilot-Scale Production of Fatty Acid Ethyl Esters by an Engineered Escherichia coli Strain Harboring the p(Microdiesel) Plasmid. Applied and Environmental Microbiology, 2010, 76, 4560-4565.	1.4	61
101	Latex Clearing Proteinâ€"an Oxygenase Cleaving Poly(cis -1,4-Isoprene) Rubber at the cis Double Bonds. Applied and Environmental Microbiology, 2014, 80, 5231-5240.	1.4	61
102	Production of rubber-like polymers by microorganisms. Current Opinion in Microbiology, 2003, 6, 261-270.	2.3	60
103	Characterization of Microbial Polythioesters:Â Physical Properties of Novel Copolymers Synthesized byRalstonia eutropha. Biomacromolecules, 2002, 3, 159-166.	2.6	59
104	Bacterial degradation of poly(trans-1,4-isoprene) (gutta percha). Microbiology (United Kingdom), 2007, 153, 347-356.	0.7	59
105	Novel precursor substrates for polythioesters (PTE) and limits of PTE biosynthesis inRalstonia eutropha. FEMS Microbiology Letters, 2003, 221, 191-196.	0.7	58
106	Ralstonia eutropha H16 in progress: Applications beside PHAs and establishment as production platform by advanced genetic tools. Critical Reviews in Biotechnology, 2018, 38, 494-510.	5.1	58
107	Molecular Characterization of a Thermostable Cyanophycin Synthetase from the Thermophilic Cyanobacterium Synechococcus sp. Strain MA19 and In Vitro Synthesis of Cyanophycin and Related Polyamides. Applied and Environmental Microbiology, 2002, 68, 93-101.	1.4	57
108	Functional expression of the PHA synthase gene phaC1 from Pseudomonas aeruginosa in Escherichia coli results in poly(3-hydroxyalkanoate) synthesis. FEMS Microbiology Letters, 2006, 150, 303-309.	0.7	57

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109	Isolation of Cyanophycin-degrading Bacteria, Cloning and Characterization of an Extracellular Cyanophycinase Gene (cphE) from Pseudomonas anguilliseptica Strain BI. Journal of Biological Chemistry, 2002, 277, 25096-25105.	1.6	56
110	Physical Properties of Microbial Polythioesters:Â Characterization of Poly(3-mercaptoalkanoates) Synthesized by EngineeredEscherichia coli. Biomacromolecules, 2003, 4, 1698-1702.	2.6	55
111	Engineering the heterotrophic carbon sources utilization range ofRalstonia eutrophaH16 for applications in biotechnology. Critical Reviews in Biotechnology, 2016, 36, 978-991.	5.1	54
112	Identification of phenyldecanoic acid as a constituent of triacylglycerols and wax ester produced by Rhodococcus opacus PD630. Microbiology (United Kingdom), 2002, 148, 1407-1412.	0.7	54
113	Schlegelella thermodepolymerans gen. nov., sp. nov., a novel thermophilic bacterium that degrades poly(3-hydroxybutyrate-co-3-mercaptopropionate). International Journal of Systematic and Evolutionary Microbiology, 2003, 53, 1165-1168.	0.8	53
114	Insights into the Microbial Degradation of Rubber and Gutta-Percha by Analysis of the Complete Genome of Nocardia nova SH22a. Applied and Environmental Microbiology, 2014, 80, 3895-3907.	1.4	53
115	Metabolic Engineering of the Actinomycete Amycolatopsis sp. Strain ATCC 39116 towards Enhanced Production of Natural Vanillin. Applied and Environmental Microbiology, 2016, 82, 3410-3419.	1.4	53
116	A multifunctional fermentative alcohol dehydrogenase from the strict aerobe Alcaligenes eutrophus: purification and properties. FEBS Journal, 1984, 141, 555-564.	0.2	52
117	Poly(3-Hydroxybutyrate) Degradation in Ralstonia eutropha H16 Is Mediated Stereoselectively to (S)-3-Hydroxybutyryl Coenzyme A (CoA) via Crotonyl-CoA. Journal of Bacteriology, 2013, 195, 3213-3223.	1.0	52
118	Harnessing eugenol as a substrate for production of aromatic compounds with recombinant strains of Amycolatopsis sp. HR167. Journal of Biotechnology, 2006, 125, 369-376.	1.9	51
119	Application of recombinant gene technology for production of polyhydroxyalkanoic acids: Biosynthesis of poly(4-hydroxybutyric acid) homopolyester. Journal of Polymers and the Environment, 1994, 2, 67-74.	0.8	50
120	Protamylasse, a Residual Compound of Industrial Starch Production, Provides a Suitable Medium for Large-Scale Cyanophycin Production. Applied and Environmental Microbiology, 2005, 71, 7759-7767.	1.4	50
121	Synthesis and Accumulation of Cyanophycin in Transgenic Strains of Saccharomyces cerevisiae. Applied and Environmental Microbiology, 2008, 74, 3410-3418.	1.4	50
122	Identification of 4-hydroxyhexanoic acid as a new constituent of biosynthetic polyhydroxyalkanoic acids from bacteria. Applied Microbiology and Biotechnology, 1994, 40, 710-716.	1.7	49
123	Metabolic Engineering of Saccharomyces cerevisiae for Production of Novel Cyanophycins with an Extended Range of Constituent Amino Acids. Applied and Environmental Microbiology, 2009, 75, 3437-3446.	1.4	49
124	Editorial. Applied Microbiology and Biotechnology, 2015, 99, 1-1.	1.7	49
125	Thio Wax Ester Biosynthesis Utilizing the Unspecific Bifunctional Wax Ester Synthase/Acyl Coenzyme A:Diacylglycerol Acyltransferase of Acinetobacter sp. Strain ADP1. Applied and Environmental Microbiology, 2005, 71, 790-796.	1.4	48
126	Poly(3-mercaptopropionate):Â A Nonbiodegradable Biopolymer?. Biomacromolecules, 2005, 6, 897-901.	2.6	48

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127	Assessment of bacterial acyltransferases for an efficient lipid production in metabolically engineered strains of E. coli. Metabolic Engineering, 2015, 32, 195-206.	3.6	48
128	Identification of theAnabaenasp. Strain PCC7120 Cyanophycin Synthetase as Suitable Enzyme for Production of Cyanophycin in Gram-Negative Bacteria LikePseudomonasputidaandRalstoniaeutropha. Biomacromolecules, 2004, 5, 1588-1595.	2.6	47
129	Clostridium sulfidigenes sp. nov., a mesophilic, proteolytic, thiosulfate- and sulfur-reducing bacterium isolated from pond sediment. International Journal of Systematic and Evolutionary Microbiology, 2009, 59, 1661-1665.	0.8	47
130	Biotechnological Process for Production of Î²-Dipeptides from Cyanophycin on a Technical Scale and Its Optimization. Applied and Environmental Microbiology, 2009, 75, 29-38.	1.4	47
131	Biosynthesis and Characterization of Poly(3-hydroxy-4-pentenoic acid). Macromolecules, 1999, 32, 7389-7395.	2.2	46
132	Characterization of the 101-Kilobase-Pair Megaplasmid pKB1, Isolated from the Rubber-Degrading Bacterium Gordonia westfalica Kb1. Journal of Bacteriology, 2004, 186, 212-225.	1.0	46
133	Analysis and optimization of triacylglycerol synthesis in novel oleaginous Rhodococcus and Streptomyces strains isolated from desert soil. Journal of Biotechnology, 2016, 225, 48-56.	1.9	46
134	Optimization of cyanophycin production in recombinant strains ofPseudomonas putida andRalstonia eutropha employing elementary mode analysis and statistical experimental design. Biotechnology and Bioengineering, 2006, 93, 698-717.	1.7	45
135	Biochemical and enzymological properties of the polyhydroxybutyrate synthase from the extremely halophilic archaeon strain 56. Archives of Biochemistry and Biophysics, 2002, 403, 284-291.	1.4	44
136	The Genomes of the Non-Clearing-Zone-Forming and Natural-Rubber- Degrading Species Gordonia polyisoprenivorans and Gordonia westfalica Harbor Genes Expressing Lcp Activity in Streptomyces Strains. Applied and Environmental Microbiology, 2008, 74, 2288-2297.	1.4	44
137	Electron microscopic observations on the macromolecular organization of the boundary layer of bacterial PHA inclusion bodies.. Journal of General and Applied Microbiology, 1996, 42, 445-455.	0.4	43
138	Proteomic and Transcriptomic Elucidation of the Mutant Ralstonia eutropha G ⁺ 1 with Regard to Glucose Utilization. Applied and Environmental Microbiology, 2011, 77, 2058-2070.	1.4	43
139	Preparative isolation of lipid inclusions from Rhodococcus opacus and Rhodococcus ruber and identification of granule-associated proteins. Archives of Microbiology, 2001, 177, 20-28.	1.0	42
140	Biotransformation of Eugenol to Ferulic Acid by a Recombinant Strain of Ralstonia eutropha H16. Applied and Environmental Microbiology, 2002, 68, 4315-4321.	1.4	42
141	Degradation of Cyanophycin by Sedimentibacter hongkongensis Strain KI and Citrobacter amalonaticus Strain G Isolated from an Anaerobic Bacterial Consortium. Applied and Environmental Microbiology, 2005, 71, 3642-3652.	1.4	42
142	Tetrathiobacter mimigardefordensis sp. nov., isolated from compost, a betaproteobacterium capable of utilizing the organic disulfide 3,3â€²-dithiodipropionic acid. International Journal of Systematic and Evolutionary Microbiology, 2006, 56, 1305-1310.	0.8	42
143	Secretion and Transcriptional Regulation of the Latex-Clearing Protein, Lcp, by the Rubber-Degrading Bacterium Streptomyces sp. Strain K30. Applied and Environmental Microbiology, 2008, 74, 5373-5382.	1.4	42
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