

Guo-Qiang Chen

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118
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371
ext. papers

21,512
ext. citations

7.9
avg, IF

7.36
L-index

#	Paper	IF	Citations
340	The application of polyhydroxyalkanoates as tissue engineering materials. <i>Biomaterials</i> , 2005 , 26, 6565-78	15.6	1132
339	A microbial polyhydroxyalkanoates (PHA) based bio- and materials industry. <i>Chemical Society Reviews</i> , 2009 , 38, 2434-46	58.5	896
338	Plastics derived from biological sources: present and future: a technical and environmental review. <i>Chemical Reviews</i> , 2012 , 112, 2082-99	68.1	641
337	A review on special wettability textiles: theoretical models, fabrication technologies and multifunctional applications. <i>Journal of Materials Chemistry A</i> , 2017 , 5, 31-55	13	394
336	Polyhydroxyalkanoate (PHA) scaffolds with good mechanical properties and biocompatibility. <i>Biomaterials</i> , 2003 , 24, 1041-5	15.6	256
335	Polyhydroxyalkanoates, challenges and opportunities. <i>Current Opinion in Biotechnology</i> , 2014 , 30, 59-65	11.4	213
334	Effect of surface treatment on the biocompatibility of microbial polyhydroxyalkanoates. <i>Biomaterials</i> , 2002 , 23, 1391-7	15.6	204
333	Polyhydroxyalkanoates as a source of chemicals, polymers, and biofuels. <i>Current Opinion in Biotechnology</i> , 2011 , 22, 768-74	11.4	203
332	Attachment, proliferation and differentiation of osteoblasts on random biopolyester poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) scaffolds. <i>Biomaterials</i> , 2004 , 25, 669-75	15.6	203
331	Study on the three-dimensional proliferation of rabbit articular cartilage-derived chondrocytes on polyhydroxyalkanoate scaffolds. <i>Biomaterials</i> , 2002 , 23, 4049-56	15.6	194
330	Application of CRISPRi for prokaryotic metabolic engineering involving multiple genes, a case study: Controllable P(3HB-co-4HB) biosynthesis. <i>Metabolic Engineering</i> , 2015 , 29, 160-168	9.7	178
329	Medical application of microbial biopolyesters polyhydroxyalkanoates. <i>Artificial Cells, Blood Substitutes, and Biotechnology</i> , 2009 , 37, 1-12		174
328	Unsterile and continuous production of polyhydroxybutyrate by Halomonas TD01. <i>Bioresource Technology</i> , 2011 , 102, 8130-6	11	173
327	Halophiles, coming stars for industrial biotechnology. <i>Biotechnology Advances</i> , 2015 , 33, 1433-42	17.8	170
326	Next generation industrial biotechnology based on extremophilic bacteria. <i>Current Opinion in Biotechnology</i> , 2018 , 50, 94-100	11.4	165
325	Biosynthesis of poly(3-hydroxydecanoate) and 3-hydroxydodecanoate dominating polyhydroxyalkanoates by Ebxidation pathway inhibited Pseudomonas putida. <i>Metabolic Engineering</i> , 2011 , 13, 11-7	9.7	162
324	In situ FTIR study on melting and crystallization of polyhydroxyalkanoates. <i>Polymer</i> , 2002 , 43, 6893-6899	3.9	160

323	Evaluation of three-dimensional scaffolds made of blends of hydroxyapatite and poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) for bone reconstruction. <i>Biomaterials</i> , 2005 , 26, 899-904	15.6	146
322	Reduced mouse fibroblast cell growth by increased hydrophilicity of microbial polyhydroxyalkanoates via hyaluronan coating. <i>Biomaterials</i> , 2003 , 24, 4621-9	15.6	142
321	Evaluation of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) conduits for peripheral nerve regeneration. <i>Biomaterials</i> , 2009 , 30, 217-25	15.6	141
320	Production of poly(3-hydroxybutyrate-co-4-hydroxybutyrate) from unrelated carbon sources by metabolically engineered <i>Escherichia coli</i> . <i>Metabolic Engineering</i> , 2010 , 12, 352-9	9.7	135
319	The behaviour of neural stem cells on polyhydroxyalkanoate nanofiber scaffolds. <i>Biomaterials</i> , 2010 , 31, 3967-75	15.6	134
318	Production of polyhydroxyalkanoates with high 3-hydroxydodecanoate monomer content by fadB and fadA knockout mutant of <i>Pseudomonas putida</i> KT2442. <i>Biomacromolecules</i> , 2007 , 8, 2504-11	6.9	132
317	Polyhydroxyalkanoates (PHA) for therapeutic applications. <i>Materials Science and Engineering C</i> , 2018 , 86, 144-150	8.3	129
316	Evaluation of three-dimensional scaffolds prepared from poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) for growth of allogeneic chondrocytes for cartilage repair in rabbits. <i>Biomaterials</i> , 2008 , 29, 2858-68	15.6	123
315	Nanofibrous polyhydroxyalkanoate matrices as cell growth supporting materials. <i>Biomaterials</i> , 2008 , 29, 3720-3728	15.6	122
314	A specific drug targeting system based on polyhydroxyalkanoate granule binding protein PhaP fused with targeted cell ligands. <i>Biomaterials</i> , 2008 , 29, 4823-30	15.6	121
313	Enhanced vascular-related cellular affinity on surface modified copolyesters of 3-hydroxybutyrate and 3-hydroxyhexanoate (PHBHHx). <i>Biomaterials</i> , 2005 , 26, 6991-7001	15.6	120
312	Engineering <i>Halomonas</i> TD01 for the low-cost production of polyhydroxyalkanoates. <i>Metabolic Engineering</i> , 2014 , 26, 34-47	9.7	117
311	Identification of a cellularly active SIRT6 allosteric activator. <i>Nature Chemical Biology</i> , 2018 , 14, 1118-1126	16.7	116
310	Biosynthesis of polyhydroxyalkanoate homopolymers by <i>Pseudomonas putida</i> . <i>Applied Microbiology and Biotechnology</i> , 2011 , 89, 1497-507	5.7	114
309	Microbial production and applications of chiral hydroxyalkanoates. <i>Applied Microbiology and Biotechnology</i> , 2005 , 67, 592-9	5.7	114
308	A rapid-acting, long-acting insulin formulation based on a phospholipid complex loaded PHBHHx nanoparticles. <i>Biomaterials</i> , 2012 , 33, 1583-8	15.6	112
307	Effects of crystallization of polyhydroxyalkanoate blend on surface physicochemical properties and interactions with rabbit articular cartilage chondrocytes. <i>Biomaterials</i> , 2005 , 26, 3537-48	15.6	111
306	Effect of composition of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) on growth of fibroblast and osteoblast. <i>Biomaterials</i> , 2005 , 26, 755-61	15.6	110

305	A Micro-Ark for Cells: Highly Open Porous Polyhydroxyalkanoate Microspheres as Injectable Scaffolds for Tissue Regeneration. <i>Advanced Materials</i> , 2018 , 30, e1802273	24	109
304	Poly(hydroxybutyrate-co-hydroxyhexanoate) promoted production of extracellular matrix of articular cartilage chondrocytes in vitro. <i>Biomaterials</i> , 2003 , 24, 4273-81	15.6	107
303	Plastics Completely Synthesized by Bacteria: Polyhydroxyalkanoates. <i>Microbiology Monographs</i> , 2010 , 17-37	0.8	106
302	Development of Halomonas TD01 as a host for open production of chemicals. <i>Metabolic Engineering</i> , 2014 , 23, 78-91	9.7	104
301	Production and characterization of poly(3-hydroxypropionate-co-4-hydroxybutyrate) with fully controllable structures by recombinant Escherichia coli containing an engineered pathway. <i>Metabolic Engineering</i> , 2012 , 14, 317-24	9.7	102
300	Engineering the ribosomal DNA in a megabase synthetic chromosome. <i>Science</i> , 2017 , 355,	33.3	99
299	Application of polyhydroxyalkanoates nanoparticles as intracellular sustained drug-release vectors. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2010 , 21, 127-40	3.5	99
298	Chondrogenic differentiation of human bone marrow mesenchymal stem cells on polyhydroxyalkanoate (PHA) scaffolds coated with PHA granule binding protein PhaP fused with RGD peptide. <i>Biomaterials</i> , 2011 , 32, 2305-13	15.6	99
297	Studies on bone marrow stromal cells affinity of poly (3-hydroxybutyrate-co-3-hydroxyhexanoate). <i>Biomaterials</i> , 2004 , 25, 1365-73	15.6	99
296	Application of (R)-3-hydroxyalkanoate methyl esters derived from microbial polyhydroxyalkanoates as novel biofuels. <i>Biomacromolecules</i> , 2009 , 10, 707-11	6.9	97
295	Engineering the diversity of polyesters. <i>Current Opinion in Biotechnology</i> , 2014 , 29, 24-33	11.4	96
294	Engineering Escherichia coli for enhanced production of poly(3-hydroxybutyrate-co-4-hydroxybutyrate) in larger cellular space. <i>Metabolic Engineering</i> , 2014 , 25, 183-93	9.7	96
293	Differentiation of human bone marrow mesenchymal stem cells grown in terpolyesters of 3-hydroxyalkanoates scaffolds into nerve cells. <i>Biomaterials</i> , 2010 , 31, 1691-8	15.6	94
292	The effect of D,L-beta-hydroxybutyric acid on cell death and proliferation in L929 cells. <i>Biomaterials</i> , 2006 , 27, 3758-65	15.6	94
291	A seawater-based open and continuous process for polyhydroxyalkanoates production by recombinant Halomonas campaniensis LS21 grown in mixed substrates. <i>Biotechnology for Biofuels</i> , 2014 , 7, 108	7.8	93
290	Biodegradation studies of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate). <i>Polymer Degradation and Stability</i> , 2004 , 85, 815-821	4.7	92
289	Engineering Biosynthesis Mechanisms for Diversifying Polyhydroxyalkanoates. <i>Trends in Biotechnology</i> , 2015 , 33, 565-574	15.1	90
288	In vitro effect of oligo-hydroxyalkanoates on the growth of mouse fibroblast cell line L929. <i>Biomaterials</i> , 2007 , 28, 3896-903	15.6	90

287	Effect of 3-hydroxyhexanoate content in poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) on in vitro growth and differentiation of smooth muscle cells. <i>Biomaterials</i> , 2006 , 27, 2944-50	15.6	90
286	Engineering the bacterial shapes for enhanced inclusion bodies accumulation. <i>Metabolic Engineering</i> , 2015 , 29, 227-237	9.7	89
285	Processability modifications of poly(3-hydroxybutyrate) by plasticizing, blending, and stabilizing. <i>Journal of Applied Polymer Science</i> , 2008 , 107, 166-173	2.9	88
284	Microbial production of polyhydroxyalkanoate block copolymer by recombinant <i>Pseudomonas putida</i> . <i>Applied Microbiology and Biotechnology</i> , 2011 , 90, 659-69	5.7	86
283	The effect of 3-hydroxybutyrate on the in vitro differentiation of murine osteoblast MC3T3-E1 and in vivo bone formation in ovariectomized rats. <i>Biomaterials</i> , 2007 , 28, 3063-73	15.6	86
282	3-Hydroxybutyrate methyl ester as a potential drug against Alzheimer's disease via mitochondria protection mechanism. <i>Biomaterials</i> , 2013 , 34, 7552-62	15.6	84
281	Synthesis of Diblock copolymer poly-3-hydroxybutyrate -block-poly-3-hydroxyhexanoate [PHB-b-PHHx] by a β -oxidation weakened <i>Pseudomonas putida</i> KT2442. <i>Microbial Cell Factories</i> , 2012 , 11, 44	6.4	83
280	Polymer nanoparticles. <i>Progress in Molecular Biology and Translational Science</i> , 2011 , 104, 299-323	4	83
279	Biosynthesis and characterization of polyhydroxyalkanoate block copolymer P3HB-b-P4HB. <i>Biomacromolecules</i> , 2011 , 12, 3166-73	6.9	82
278	Enhanced production of medium-chain-length polyhydroxyalkanoates (PHA) by PHA depolymerase knockout mutant of <i>Pseudomonas putida</i> KT2442. <i>Bioresource Technology</i> , 2009 , 100, 2265-70	11	82
277	Improvement of mechanical properties of poly(dl-lactide) films by blending of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate). <i>European Polymer Journal</i> , 2006 , 42, 764-775	5.2	82
276	Engineering <i>Halomonas bluephagenesis</i> TD01 for non-sterile production of poly(3-hydroxybutyrate-co-4-hydroxybutyrate). <i>Bioresource Technology</i> , 2017 , 244, 534-541	11	81
275	Biosynthesis and characterization of poly(3-hydroxydodecanoate) by β -oxidation inhibited mutant of <i>Pseudomonas entomophila</i> L48. <i>Biomacromolecules</i> , 2011 , 12, 3559-66	6.9	81
274	Surface Stress Effects on the Bending Direction and Twisting Chirality of Lamellar Crystals of Chiral Polymer. <i>Macromolecules</i> , 2010 , 43, 5762-5770	5.5	80
273	The improvement of fibroblast growth on hydrophobic biopolyesters by coating with polyhydroxyalkanoate granule binding protein PhaP fused with cell adhesion motif RGD. <i>Biomaterials</i> , 2010 , 31, 8921-30	15.6	80
272	Engineering bacteria for enhanced polyhydroxyalkanoates (PHA) biosynthesis. <i>Synthetic and Systems Biotechnology</i> , 2017 , 2, 192-197	4.2	79
271	The differential effects of aligned electrospun PHBHHx fibers on adipogenic and osteogenic potential of MSCs through the regulation of PPAR β signaling. <i>Biomaterials</i> , 2012 , 33, 485-93	15.6	79
270	The mechanical properties and in vitro biodegradation and biocompatibility of UV-treated poly(3-hydroxybutyrate-co-3-hydroxyhexanoate). <i>Biomaterials</i> , 2006 , 27, 2349-57	15.6	78

269	The effect of 3-hydroxybutyrate and its derivatives on the growth of glial cells. <i>Biomaterials</i> , 2007 , 28, 3608-16	15.6	77
268	Production of poly-3-hydroxybutyrate by <i>Bacillus</i> sp. JMa5 cultivated in molasses media. <i>Antonie Van Leeuwenhoek</i> , 2001 , 80, 111-8	2.1	77
267	CRISPRi engineering <i>E. coli</i> for morphology diversification. <i>Metabolic Engineering</i> , 2016 , 38, 358-369	9.7	77
266	Engineering biosynthesis of polyhydroxyalkanoates (PHA) for diversity and cost reduction. <i>Metabolic Engineering</i> , 2020 , 58, 82-93	9.7	76
265	Production and characterization of homopolymer polyhydroxyheptanoate (P3HHp) by a <i>fadBA</i> knockout mutant <i>Pseudomonas putida</i> KTOY06 derived from <i>P. putida</i> KT2442. <i>Process Biochemistry</i> , 2009 , 44, 106-111	4.8	75
264	Open and continuous fermentation: products, conditions and bioprocess economy. <i>Biotechnology Journal</i> , 2014 , 9, 1503-11	5.6	74
263	Enhanced production of D-(-)-3-hydroxybutyric acid by recombinant <i>Escherichia coli</i> . <i>FEMS Microbiology Letters</i> , 2002 , 213, 59-65	2.9	72
262	Morphology engineering of bacteria for bio-production. <i>Biotechnology Advances</i> , 2016 , 34, 435-440	17.8	70
261	Overexpression of NAD kinase in recombinant <i>Escherichia coli</i> harboring the <i>phbCAB</i> operon improves poly(3-hydroxybutyrate) production. <i>Applied Microbiology and Biotechnology</i> , 2009 , 83, 939-47	5.7	70
260	Production of novel polyhydroxyalkanoates by <i>Pseudomonas stutzeri</i> 1317 from glucose and soybean oil. <i>FEMS Microbiology Letters</i> , 1998 , 169, 45-49	2.9	70
259	Polyhydroxyalkanoate synthases <i>PhaC1</i> and <i>PhaC2</i> from <i>Pseudomonas stutzeri</i> 1317 had different substrate specificities. <i>FEMS Microbiology Letters</i> , 2004 , 234, 231-237	2.9	70
258	Interactions between a poly(3-hydroxybutyrate-co-3-hydroxyvalerate-co-3-hydroxyhexanoate) terpolyester and human keratinocytes. <i>Biomaterials</i> , 2008 , 29, 3807-14	15.6	68
257	Studies on comonomer compositional distribution of bacterial poly(3-hydroxybutyrate-co-3-hydroxyhexanoate)s and thermal characteristics of their fractions. <i>Biomacromolecules</i> , 2002 , 3, 1071-7	6.9	68
256	Production and characterization of medium-chain-length polyhydroxyalkanoate with high 3-hydroxytetradecanoate monomer content by <i>fadB</i> and <i>fadA</i> knockout mutant of <i>Pseudomonas putida</i> KT2442. <i>Applied Microbiology and Biotechnology</i> , 2007 , 76, 1153-9	5.7	67
255	Disruption of the polyhydroxyalkanoate synthase gene in <i>Aeromonas hydrophila</i> reduces its survival ability under stress conditions. <i>FEMS Microbiology Letters</i> , 2007 , 276, 34-41	2.9	66
254	Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) as an injectable implant system for prevention of post-surgical tissue adhesion. <i>Biomaterials</i> , 2009 , 30, 3075-83	15.6	65
253	Engineering <i>Halomonas</i> species TD01 for enhanced polyhydroxyalkanoates synthesis via CRISPRi. <i>Microbial Cell Factories</i> , 2017 , 16, 48	6.4	64
252	The expression of cross-linked elastin by rabbit blood vessel smooth muscle cells cultured in polyhydroxyalkanoate scaffolds. <i>Biomaterials</i> , 2008 , 29, 4187-94	15.6	64

251	The application of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) scaffolds for tendon repair in the rat model. <i>Biomaterials</i> , 2013 , 34, 6683-94	15.6	63
250	Production and characterization of homopolymer poly(3-hydroxyvalerate) (PHV) accumulated by wild type and recombinant <i>Aeromonas hydrophila</i> strain 4AK4. <i>Bioresource Technology</i> , 2009 , 100, 4296-9 ¹	11.4	62
249	Engineering microorganisms for improving polyhydroxyalkanoate biosynthesis. <i>Current Opinion in Biotechnology</i> , 2018 , 53, 20-25	11.4	61
248	YeastFab: the design and construction of standard biological parts for metabolic engineering in <i>Saccharomyces cerevisiae</i> . <i>Nucleic Acids Research</i> , 2015 , 43, e88	20.1	60
247	<i>Pseudomonas putida</i> KT2442 as a platform for the biosynthesis of polyhydroxyalkanoates with adjustable monomer contents and compositions. <i>Bioresource Technology</i> , 2013 , 142, 225-31	11	60
246	Hyperproduction of poly(4-hydroxybutyrate) from glucose by recombinant <i>Escherichia coli</i> . <i>Microbial Cell Factories</i> , 2012 , 11, 54	6.4	60
245	Sustained release of PI3K inhibitor from PHA nanoparticles and in vitro growth inhibition of cancer cell lines. <i>Applied Microbiology and Biotechnology</i> , 2011 , 89, 1423-33	5.7	60
244	A novel self-cleaving phasin tag for purification of recombinant proteins based on hydrophobic polyhydroxyalkanoate nanoparticles. <i>Lab on A Chip</i> , 2008 , 8, 1957-62	7.2	60
243	In vitro study on hemocompatibility and cytocompatibility of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate). <i>Journal of Biomaterials Science, Polymer Edition</i> , 2006 , 17, 1107-1121	3.5	59
242	Novel T7-like expression systems used for <i>Halomonas</i> . <i>Metabolic Engineering</i> , 2017 , 39, 128-140	9.7	58
241	Microbial synthesis of functional homo-, random, and block polyhydroxyalkanoates by Oxidation deleted <i>Pseudomonas entomophila</i> . <i>Biomacromolecules</i> , 2014 , 15, 2310-9	6.9	58
240	Production and characterization of terpolyester poly(3-hydroxybutyrate-co-3-hydroxyvalerate-co-3-hydroxyhexanoate) by recombinant <i>Aeromonas hydrophila</i> 4AK4 harboring genes <i>phaAB</i> . <i>Process Biochemistry</i> , 2007 , 42, 1342-1347	4.8	58
239	Engineering the growth pattern and cell morphology for enhanced PHB production by <i>Escherichia coli</i> . <i>Applied Microbiology and Biotechnology</i> , 2016 , 100, 9907-9916	5.7	57
238	MicroRNA regulation associated chondrogenesis of mouse MSCs grown on polyhydroxyalkanoates. <i>Biomaterials</i> , 2011 , 32, 6435-44	15.6	57
237	Microbial production of R-3-hydroxybutyric acid by recombinant <i>E. coli</i> harboring genes of <i>phbA</i> , <i>phbB</i> , and <i>tesB</i> . <i>Applied Microbiology and Biotechnology</i> , 2007 , 76, 811-8	5.7	57
236	Metabolic engineering for the production of copolyesters consisting of 3-hydroxybutyrate and 3-hydroxyhexanoate by <i>Aeromonas hydrophila</i> . <i>Macromolecular Bioscience</i> , 2004 , 4, 255-61	5.5	57
235	The power of synthetic biology for bioproduction, remediation and pollution control: The UNS Sustainable Development Goals will inevitably require the application of molecular biology and biotechnology on a global scale. <i>EMBO Reports</i> , 2018 , 19,	6.5	56
234	Increasing oxygen availability for improving poly(3-hydroxybutyrate) production by <i>Halomonas</i> . <i>Metabolic Engineering</i> , 2018 , 45, 20-31	9.7	56

233	The PHAomeS Trends in Biotechnology, 2015 , 33, 559-564	15.1	55
232	Effect of lipase treatment on the biocompatibility of microbial polyhydroxyalkanoates. <i>Journal of Materials Science: Materials in Medicine</i> , 2002 , 13, 849-54	4.5	55
231	CRISPR/Cas9 editing genome of extremophile Halomonas spp. <i>Metabolic Engineering</i> , 2018 , 47, 219-229	9.7	54
230	Engineering of Halomonas bluephagenesis for low cost production of poly(3-hydroxybutyrate-co-4-hydroxybutyrate) from glucose. <i>Metabolic Engineering</i> , 2018 , 47, 143-152	9.7	54
229	Promoter Engineering for Enhanced P(3HB- co-4HB) Production by Halomonas bluephagenesis. <i>ACS Synthetic Biology</i> , 2018 , 7, 1897-1906	5.7	54
228	Construction of pha-operon-defined knockout mutants of Pseudomonas putida KT2442 and their applications in poly(hydroxyalkanoate) production. <i>Macromolecular Bioscience</i> , 2007 , 7, 227-33	5.5	54
227	Biocompatibility of poly(3-hydroxybutyrate-co-3-hydroxyvalerate-co-3-hydroxyhexanoate) with bone marrow mesenchymal stem cells. <i>Acta Biomaterialia</i> , 2009 , 5, 1115-25	10.8	53
226	The effect of 3-hydroxybutyrate methyl ester on learning and memory in mice. <i>Biomaterials</i> , 2009 , 30, 1532-41	15.6	53
225	Production of poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) from gluconate and glucose by recombinant Aeromonas hydrophila and Pseudomonas putida. <i>Biotechnology Letters</i> , 2005 , 27, 1381-6	3	53
224	Engineering cell wall synthesis mechanism for enhanced PHB accumulation in E. coli. <i>Metabolic Engineering</i> , 2018 , 45, 32-42	9.7	51
223	Production of polyhydroxyalkanoates (PHA) by bacterial consortium from excess sludge fermentation liquid at laboratory and pilot scales. <i>Bioresource Technology</i> , 2014 , 171, 159-67	11	51
222	Production of two monomer structures containing medium-chain-length polyhydroxyalkanoates by beta-oxidation-impaired mutant of Pseudomonas putida KT2442. <i>Bioresource Technology</i> , 2009 , 100, 4891-4	11	51
221	Influence of DL-beta-hydroxybutyric acid on cell proliferation and calcium influx. <i>Biomacromolecules</i> , 2005 , 6, 593-7	6.9	51
220	Microbial polyhydroxyalkanoates as medical implant biomaterials. <i>Artificial Cells, Nanomedicine and Biotechnology</i> , 2018 , 46, 1-18	6.1	50
219	Comparative genomics study of polyhydroxyalkanoates (PHA) and ectoine relevant genes from Halomonas sp. TD01 revealed extensive horizontal gene transfer events and co-evolutionary relationships. <i>Microbial Cell Factories</i> , 2011 , 10, 88	6.4	50
218	The impact of PHB accumulation on L-glutamate production by recombinant Corynebacterium glutamicum. <i>Journal of Biotechnology</i> , 2007 , 132, 273-9	3.7	50
217	Enhanced production of polyhydroxybutyrate by multiple dividing E. coli. <i>Microbial Cell Factories</i> , 2016 , 15, 128	6.4	50
216	Production of 3-hydroxypropionate homopolymer and poly(3-hydroxypropionate-co-4-hydroxybutyrate) copolymer by recombinant Escherichia coli. <i>Metabolic Engineering</i> , 2011 , 13, 777-85	9.7	49

215	Study of Thermal Melting Behavior of Microbial Polyhydroxyalkanoate Using Two-Dimensional Fourier Transform Infrared Correlation Spectroscopy. <i>Applied Spectroscopy</i> , 2001 , 55, 888-893	3.1	48
214	Engineering NADH/NAD ratio in <i>Halomonas bluephagenesis</i> for enhanced production of polyhydroxyalkanoates (PHA). <i>Metabolic Engineering</i> , 2018 , 49, 275-286	9.7	48
213	Controlling cell volume for efficient PHB production by <i>Halomonas</i> . <i>Metabolic Engineering</i> , 2017 , 44, 30-37	9.7	47
212	Production and characterization of terpolyester poly(3-hydroxybutyrate-co-4-hydroxybutyrate-co-3-hydroxyhexanoate) by recombinant <i>Aeromonas hydrophila</i> 4AK4 harboring genes phaPCJ. <i>Biochemical Engineering Journal</i> , 2008 , 38, 384-389	4.2	47
211	Semirational Approach for Ultrahigh Poly(3-hydroxybutyrate) Accumulation in <i>Escherichia coli</i> by Combining One-Step Library Construction and High-Throughput Screening. <i>ACS Synthetic Biology</i> , 2016 , 5, 1308-1317	5.7	47
210	Grand Challenges for Industrializing Polyhydroxyalkanoates (PHAs). <i>Trends in Biotechnology</i> , 2021 , 39, 953-963	15.1	47
209	Thermal analyses of poly(3-hydroxybutyrate), poly(3-hydroxybutyrate-co-3-hydroxyvalerate), and poly(3-hydroxybutyrate-co-3-hydroxyhexanoate). <i>Journal of Applied Polymer Science</i> , 2001 , 82, 90-98	2.9	46
208	Biosynthesis and characterization of diblock copolymer of p(3-hydroxypropionate)-block-p(4-hydroxybutyrate) from recombinant <i>Escherichia coli</i> . <i>Biomacromolecules</i> , 2013 , 14, 862-70	6.9	45
207	Co-production of microbial polyhydroxyalkanoates with other chemicals. <i>Metabolic Engineering</i> , 2017 , 43, 29-36	9.7	45
206	Synthesis, characterization and biocompatibility of biodegradable elastomeric poly(ether-ester urethane)s Based on Poly(3-hydroxybutyrate-co-3-hydroxyhexanoate) and Poly(ethylene glycol) via melting polymerization. <i>Journal of Biomaterials Science, Polymer Edition</i> , 2009 , 20, 1179-202	3.5	45
205	Novel amphiphilic poly(ester-urethane)s based on poly[(R)-3-hydroxyalkanoate]: synthesis, biocompatibility and aggregation in aqueous solution. <i>Polymer International</i> , 2008 , 57, 887-894	3.3	45
204	Study of microbial polyhydroxyalkanoates using two-dimensional Fourier-transform infrared correlation spectroscopy. <i>Journal of Applied Polymer Science</i> , 2001 , 82, 934-940	2.9	45
203	Synthetic Biology and Genome-Editing Tools for Improving PHA Metabolic Engineering. <i>Trends in Biotechnology</i> , 2020 , 38, 689-700	15.1	45
202	Synthetic biology of microbes synthesizing polyhydroxyalkanoates (PHA). <i>Synthetic and Systems Biotechnology</i> , 2016 , 1, 236-242	4.2	44
201	Microbial Synthesis of 5-Aminolevulinic Acid and Its Coproduction with Polyhydroxybutyrate. <i>ACS Synthetic Biology</i> , 2016 , 5, 1264-1274	5.7	44
200	Production of poly- β -hydroxybutyrate by <i>Azotobacter vinelandii</i> in a two-stage fermentation process. <i>Biotechnology Letters</i> , 1997 , 11, 347-350		44
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198	Synthesis of Medium-Chain-Length Polyhydroxyalkanoate Homopolymers, Random Copolymers, and Block Copolymers by an Engineered Strain of <i>Pseudomonas entomophila</i> . <i>Advanced Healthcare Materials</i> , 2017 , 6, 1601017	10.1	43

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