Toshinari Maeda

List of Publications by Year
in descending order

115	3,805	126858	143943
papers	citations	33 h-index	57 g-index

118	118	118	4100
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Quorum quenching quandary: resistance to antivirulence compounds. ISME Journal, 2012, 6, 493-501.	4.4	254
2	Role of quorum sensing in bacterial infections. World Journal of Clinical Cases, 2015, 3, 575.	0.3	168
3	Quorum sensing enhancement of the stress response promotes resistance to quorum quenching and prevents social cheating. ISME Journal, 2015, 9, 115-125.	4.4	161
4	Enhanced hydrogen production from glucose by metabolically engineered Escherichia coli. Applied Microbiology and Biotechnology, 2007, 77, 879-890.	1.7	151
5	Metabolic engineering to enhance bacterial hydrogen production. Microbial Biotechnology, 2008, 1, 30-39.	2.0	146
6	Influence of pretreated activated sludge for electricity generation in microbial fuel cell application. Bioresource Technology, 2013, 145, 90-96.	4.8	136
7	Metabolically engineered bacteria for producing hydrogen via fermentation. Microbial Biotechnology, 2008, 1, 107-125.	2.0	126
8	Biochar enhanced the nitrifying and denitrifying bacterial communities during the composting of poultry manure and rice straw. Waste Management, 2020, 106, 240-249.	3.7	117
9	Resistance to Quorum-Quenching Compounds. Applied and Environmental Microbiology, 2013, 79, 6840-6846.	1.4	108
10	Reconfiguring the Quorum-Sensing Regulator SdiA of Escherichia coli To Control Biofilm Formation via Indole and N -Acylhomoserine Lactones. Applied and Environmental Microbiology, 2009, 75, 1703-1716.	1.4	106
11	Resistance to the quorum-quenching compounds brominated furanone C-30 and 5-fluorouracil inPseudomonas aeruginosaclinical isolates. Pathogens and Disease, 2013, 68, 8-11.	0.8	93
12	Escherichia coli hydrogenase 3 is a reversible enzyme possessing hydrogen uptake and synthesis activities. Applied Microbiology and Biotechnology, 2007, 76, 1035-1042.	1.7	90
13	Open fermentative production of l-lactic acid with high optical purity by thermophilic Bacillus coagulans using excess sludge as nutrient. Bioresource Technology, 2014, 151, 28-35.	4.8	85
14	Can resistance against quorum-sensing interference be selected?. ISME Journal, 2016, 10, 4-10.	4.4	80
15	Isolation, identification of sludge-lysing strain and its utilization in thermophilic aerobic digestion for waste activated sludge. Bioresource Technology, 2009, 100, 2475-2481.	4.8	78
16	Hydrogen production by recombinant Escherichia coli strains. Microbial Biotechnology, 2012, 5, 214-225.	2.0	62
17	Pyocyanin Restricts Social Cheating in Pseudomonas aeruginosa. Frontiers in Microbiology, 2018, 9, 1348.	1.5	59
18	CO2 sequestration by methanogens in activated sludge for methane production. Applied Energy, 2015, 142, 426-434.	5.1	58

#	Article	IF	Citations
19	Isolation and characterization of gallium resistant Pseudomonas aeruginosa mutants. International Journal of Medical Microbiology, 2013, 303, 574-582.	1.5	57
20	High variability in quorum quenching and growth inhibition by furanone C-30 inPseudomonas aeruginosaclinical isolates from cystic fibrosis patients. Pathogens and Disease, 2015, 73, ftv040.	0.8	57
21	Cu2O/TiO2 decorated on cellulose nanofiber/reduced graphene hydrogel for enhanced photocatalytic activity and its antibacterial applications. Chemosphere, 2022, 286, 131731.	4.2	57
22	Inhibition of hydrogen uptake in Escherichia coli by expressing the hydrogenase from the cyanobacterium Synechocystis sp. PCC 6803. BMC Biotechnology, 2007, 7, 25.	1.7	56
23	Metabolic engineering of Escherichia coli to enhance hydrogen production from glycerol. Applied Microbiology and Biotechnology, 2014, 98, 4757-4770.	1.7	55
24	Protein engineering of hydrogenase 3 to enhance hydrogen production. Applied Microbiology and Biotechnology, 2008, 79, 77-86.	1.7	52
25	Impact of different antibiotics on methane production using waste-activated sludge: mechanisms and microbial community dynamics. Applied Microbiology and Biotechnology, 2016, 100, 9355-9364.	1.7	48
26	Gallium induces the production of virulence factors inPseudomonas aeruginosa. Pathogens and Disease, 2014, 70, 95-98.	0.8	47
27	Formate detection by potassium permanganate for enhanced hydrogen production in Escherichia coli. International Journal of Hydrogen Energy, 2008, 33, 2409-2412.	3.8	42
28	Protein Engineering of the Transcriptional Activator FhlA To Enhance Hydrogen Production in Escherichia coli. Applied and Environmental Microbiology, 2009, 75, 5639-5646.	1.4	39
29	Mature Biofilm Degradation by Potential Probiotics: Aggregatibacter actinomycetemcomitans versus Lactobacillus spp.. PLoS ONE, 2016, 11, e0159466.	1.1	39
30	Purification and characterization of a serine protease secreted by Brevibacillus sp. KH3 for reducing waste activated sludge and biofilm formation. Bioresource Technology, 2011, 102, 10650-10656.	4.8	38
31	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
32	Microalgae-bacteria interaction in palm oil mill effluent treatment. Journal of Water Process Engineering, 2020, 35, 101203.	2.6	37
33	Enhanced production of lactic acid with reducing excess sludge by lactate fermentation. Journal of Hazardous Materials, 2009, 168, 656-663.	6.5	36
34	Influence of Escherichia coli hydrogenases on hydrogen fermentation from glycerol. International Journal of Hydrogen Energy, 2013, 38, 3905-3912.	3.8	35
35	Bioconversion of glycerol for bioethanol production using isolated Escherichia coli SS1. Brazilian Journal of Microbiology, 2012, 43, 506-516.	0.8	34
36	Enhancement of sludge reduction and methane production by removing extracellular polymeric substances from waste activated sludge. Chemosphere, 2014, 117, 552-558.	4.2	34

#	Article	IF	Citations
37	Seeking key microorganisms for enhancing methane production in anaerobic digestion of waste sewage sludge. Applied Microbiology and Biotechnology, 2018, 102, 5323-5334.	1.7	34
38	Quorum sensing between Gram-negative bacteria responsible for methane production in a complex waste sewage sludge consortium. Applied Microbiology and Biotechnology, 2019, 103, 1485-1495.	1.7	32
39	Mechanism of carbon partitioning towards starch and triacylglycerol in Chlorella vulgaris under nitrogen stress through whole-transcriptome analysis. Biomass and Bioenergy, 2020, 138, 105600.	2.9	31
40	Selection of Functional Quorum Sensing Systems by Lysogenic Bacteriophages in Pseudomonas aeruginosa. Frontiers in Microbiology, 2017, 8, 1669.	1.5	30
41	Electron carriers increase electricity production in methane microbial fuel cells that reverse methanogenesis. Biotechnology for Biofuels, 2018, 11, 211.	6.2	30
42	Exploiting Quorum Sensing Inhibition for the Control of Pseudomonas aeruginosa and Acinetobacter baumannii Biofilms. Current Topics in Medicinal Chemistry, 2017, 17, 1915-1927.	1.0	30
43	Uncharacterized Escherichia coli proteins YdjA and YhjY are related to biohydrogen production. International Journal of Hydrogen Energy, 2012, 37, 17778-17787.	3.8	28
44	RELATIONSHIP BETWEEN MUTAGENICITY AND REACTIVITY OR BIODEGRADABILITY FOR NITROAROMATIC COMPOUNDS. Environmental Toxicology and Chemistry, 2007, 26, 237.	2.2	26
45	Global regulator H-NS and lipoprotein NlpI influence production of extracellular DNA in Escherichia coli. Biochemical and Biophysical Research Communications, 2010, 401, 197-202.	1.0	26
46	Current state and perspectives in hydrogen production by Escherichia coli: roles of hydrogenases in glucose or glycerol metabolism. Applied Microbiology and Biotechnology, 2018, 102, 2041-2050.	1.7	26
47	Bioenergy from dairy manure: technologies, challenges and opportunities. Science of the Total Environment, 2021, 790, 148199.	3.9	23
48	Improvement of (R,R)-2,3-butanediol production from corn stover hydrolysate by cell recycling continuous fermentation. Chemical Engineering Journal, 2018, 332, 361-369.	6.6	22
49	A Review of Current and Emerging Approaches for Water Pollution Monitoring. Water (Switzerland), 2020, 12, 3417.	1.2	22
50	Shift of low to high nucleic acid bacteria as a potential bioindicator for the screening of anthropogenic effects in a receiving river due to palm oil mill effluent final discharge. Ecological Indicators, 2018, 85, 79-84.	2.6	20
51	Regulation of homologous integration in yeast by the DNA repair proteins Ku70 and RecQ. Molecular Genetics and Genomics, 2005, 273, 167-176.	1.0	19
52	Enhanced reduction of waste activated sludge at a low temperature by locally isolated strains Pseudomonas sp. VNT and Aeromonas sp. VNT. Bioresource Technology, 2014, 174, 134-141.	4.8	19
53	Enhanced phagocytosis of Aggregatibacter actinomycetemcomitans cells by macrophages activated by a probiotic Lactobacillus strain. Journal of Dairy Science, 2018, 101, 5789-5798.	1.4	19
54	AiiM Lactonase Strongly Reduces Quorum Sensing Controlled Virulence Factors in Clinical Strains of Pseudomonas aeruginosa Isolated From Burned Patients. Frontiers in Microbiology, 2019, 10, 2657.	1.5	19

#	Article	IF	Citations
55	Enrichment of waste sewage sludge for enhancing methane production from cellulose. Bioresource Technology, 2021, 321, 124497.	4.8	19
56	Bacterial community shift revealed Chromatiaceae and Alcaligenaceae as potential bioindicators in the receiving river due to palm oil mill effluent final discharge. Ecological Indicators, 2017, 82, 526-529.	2.6	18
57	A rapid colorimetric screening method for vanillic acid and vanillin-producing bacterial strains. Journal of Applied Microbiology, 2014, 116, 903-910.	1.4	17
58	Biofilm formation of periodontal pathogens on hydroxyapatite surfaces: Implications for periodontium damage. Journal of Biomedical Materials Research - Part A, 2016, 104, 2873-2880.	2.1	17
59	Characterization of gallium resistance induced in a Pseudomonas aeruginosa cystic fibrosis isolate. Archives of Microbiology, 2020, 202, 617-622.	1.0	17
60	Bacterial Resistance against Heavy Metals in Pseudomonas aeruginosa RW9 Involving Hexavalent Chromium Removal. Sustainability, 2021, 13, 9797.	1.6	17
61	Effect of azithromycin on enhancement of methane production from waste activated sludge. Journal of Industrial Microbiology and Biotechnology, 2014, 41, 1051-1059.	1.4	16
62	Pyrosequencing analysis of microbial community and food-borne bacteria on restaurant cutting boards collected in Seri Kembangan, Malaysia, and their correlation with grades of food premises. International Journal of Food Microbiology, 2015, 200, 57-65.	2.1	16
63	Toxicity identification and evaluation of palm oil mill effluent and its effects on the planktonic crustacean Daphnia magna. Science of the Total Environment, 2020, 710, 136277.	3.9	16
64	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
65	TNT biodegradation and production of dihydroxylamino-nitrotoluene by aerobic TNT degrader Pseudomonas sp. strain TM15 in an anoxic environment. Biodegradation, 2008, 19, 795-805.	1.5	14
66	Beneficial knockouts in Escherichia coli for producing hydrogen from glycerol. Applied Microbiology and Biotechnology, 2015, 99, 2573-2581.	1.7	14
67	Inhibition of methane production by the palm oil industrial waste phospholine gum in a mimic enteric fermentation. Journal of Cleaner Production, 2017, 165, 621-629.	4.6	14
68	Microbial community dynamics and electricity generation in MFCs inoculated with POME sludges and pure electrogenic culture. International Journal of Hydrogen Energy, 2021, 46, 36903-36916.	3.8	14
69	One-Step Isolation and Identification of Hydroxylamino-Dinitrotoluenes, Unstable Products from 2,4,6-Trinitrotoluene Metabolites, with Thin-Layer Chromatography and Laser Time-of-Flight Mass Spectrometry. Journal of Chromatographic Science, 2006, 44, 96-100.	0.7	13
70	Enhanced fuel ethanol production from rice straw hydrolysate by an inhibitor-tolerant mutant strain of Scheffersomyces stipitis. RSC Advances, 2017, 7, 31180-31188.	1.7	13
71	Endolithic Microbial Habitats Hosted in Carbonate Nodules Currently Forming within Sediment at a High Methane Flux Site in the Sea of Japan. Geosciences (Switzerland), 2019, 9, 463.	1.0	13
72	Iron limitation by transferrin promotes simultaneous cheating of pyoverdine and exoprotease in Pseudomonas aeruginosa. ISME Journal, 2021, 15, 2379-2389.	4.4	12

#	Article	IF	Citations
73	Effect of Aso limonite on anaerobic digestion of waste sewage sludge. AMB Express, 2020, 10, 74.	1.4	11
74	Real-time PCR for rapidly detecting aniline-degrading bacteria in activated sludge. Chemosphere, 2013, 91, 1338-1343.	4.2	10
75	Alcaligenaceae and Chromatiaceae as reliable bioindicators present in palm oil mill effluent final discharge treated by different biotreatment processes. Ecological Indicators, 2018, 95, 468-473.	2.6	10
76	Accessing the anti-microbial activity of cyclic peptide immobilized on reduced graphene oxide. Materials Letters, 2021, 304, 130621.	1.3	10
77	Four products from Escherichia coli pseudogenes increase hydrogen production. Biochemical and Biophysical Research Communications, 2013, 439, 576-579.	1.0	9
78	Diluted Luria-Bertani medium vs. sewage sludge as growth media: comparison of community structure and diversity in the culturable bacteria. Applied Microbiology and Biotechnology, 2021, 105, 3787-3798.	1.7	9
79	Advancement of Metatranscriptomics towards Productive Agriculture and Sustainable Environment: A Review. International Journal of Molecular Sciences, 2022, 23, 3737.	1.8	9
80	Seeding Public Goods Is Essential for Maintaining Cooperation in Pseudomonas aeruginosa. Frontiers in Microbiology, 2019, 10, 2322.	1.5	8
81	Alcaligenaceae and Chromatiaceae as pollution bacterial bioindicators in palm oil mill effluent (POME) final discharge polluted rivers. Ecological Indicators, 2020, 111, 106048.	2.6	8
82	Engineering anaerobic digestion via optimizing microbial community: effects of bactericidal agents, quorum sensing inhibitors, and inorganic materials. Applied Microbiology and Biotechnology, 2021, 105, 7607-7618.	1.7	8
83	Structural chromosome aberrations cause swelling of the nucleus. Genes and Environment, 2016, 38, 22.	0.9	7
84	Preparation of bioactive and antibacterial PMMA-based bone cement by modification with quaternary ammonium and alkoxysilane. Journal of Biomaterials Applications, 2021, 36, 311-320.	1.2	7
85	Improvement of Cyclodextrin Glycosyltransferase Gene Expression in Escherichia coli by Insertion of Regulatory Sequences Involved in the Promotion of RNA Transcription. Molecular Biotechnology, 2013, 54, 961-968.	1.3	6
86	Effect of Calcium Acetate Content on Apatite-Forming Ability and Mechanical Property of PMMA Bone Cement Modified with Quaternary Ammonium. Materials, 2020, 13, 4998.	1.3	6
87	Evaluation of hydrogen metabolism by Escherichia coli strains possessing only a single hydrogenase in the genome. International Journal of Hydrogen Energy, 2021, 46, 1728-1739.	3.8	6
88	Antibacterial Chitosan Nanofiber Thin Films with Bacitracin Zinc Salt. Polymers, 2021, 13, 1104.	2.0	6
89	Antibacterial properties of phenothiazine derivatives against multidrugâ€resistant Acinetobacter baumannii strains. Journal of Applied Microbiology, 2021, 131, 2235-2243.	1.4	6
90	Effect of sodium tungstate on anaerobic digestion of waste sewage sludge: Enhanced methane production via increased acetoclastic methanogens. Journal of Environmental Chemical Engineering, 2022, 10, 107524.	3.3	6

#	Article	IF	Citations
91	Effect of different concentrations of sodium selenite on anaerobic digestion of waste sewage sludge. Environmental Technology and Innovation, 2022, 27, 102403.	3.0	6
92	Identification of Spontaneous Conversion Products of Unstable 2,4,6-Trinitrotoluene Metabolites, Hydroxylamino-dinitrotoluenes, by Combination of Thin-Layer Chromatography and Laser Time-of-Flight Mass Spectrometry. Journal of Chromatographic Science, 2007, 45, 345-349.	0.7	5
93	Oceans as bioenergy pools for methane production using activated methanogens in waste sewage sludge. Applied Energy, 2017, 202, 399-407.	5.1	5
94	Pseudogene YdfW in Escherichia coli decreases hydrogen production through nitrate respiration pathways. International Journal of Hydrogen Energy, 2019, 44, 16212-16223.	3.8	4
95	Design, Synthesis and Antibacterial Studies of Novel Cationic Amphipathic Cyclic Undecapeptides and Their Linear Counterparts against Virulent Bacterial Strains. Scientia Pharmaceutica, 2021, 89, 10.	0.7	4
96	Microbial Community Structures and Methanogenic Functions in Wetland Peat Soils. Microbes and Environments, 2022, 37, n/a.	0.7	4
97	Cytocompatible and Antibacterial Properties of Chitosan-Siloxane Hybrid Spheres. Polymers, 2019, 11, 1676.	2.0	3
98	Screening of TNT-biodegrable Bacteria in Soils Polluted by 2,4,6-Trinitroluene. Journal of Environmental Chemistry, 2003, 13, 695-704.	0.1	3
99	Quorum quenching of autoinducer 2 increases methane production in anaerobic digestion of waste activated sludge. Applied Microbiology and Biotechnology, 2022, 106, 4763-4774.	1.7	3
100	Crucial problem in rapid spectrophotometric determination of 2,4,6-trinitrotoluene and its breakthrough method. Journal of Microbiological Methods, 2006, 66, 568-571.	0.7	2
101	Survivability of Alcaligenaceae and Chromatiaceae as palm oil mill effluent pollution bioindicators under fluctuations of temperature, pH and total suspended solid. Journal of Bioscience and Bioengineering, 2021, 132, 174-182.	1.1	2
102	Quinolone Signals Related to Pseudomonas Quinolone Signal-Quorum Sensing Inhibits the Predatory Activity of Bdellovibrio bacteriovorus. Frontiers in Microbiology, 2021, 12, 722579.	1.5	2
103	Zero-Emission of Palm Oil Mill Effluent Final Discharge Promoted Bacterial Biodiversity Rebound in the Receiving Water System. Applied Sciences (Switzerland), 2021, 11, 10814.	1.3	2
104	Impact of 5-fluorouracil on anaerobic digestion using sewage sludge. Chemosphere, 2022, 298, 134253.	4.2	2
105	Pseudogene product YqiG is important for pflB expression and biohydrogen production in Escherichia coli BW25113. 3 Biotech, 2018, 8, 435.	1.1	1
106	Microbial Degradation of 2,4,6-Trinitrotoluene: Application to Explosives Sensor. Environmental Science and Engineering, 2012, , 213-233.	0.1	1
107	The prevalence of foodborne pathogenic bacteria on cutting boards and their ecological correlation with background biota. AIMS Microbiology, 2016, 2, 138-151.	1.0	1
108	Dark Fermentative Biohydrogen Production from Palm oil Mill Effluent: Operation Factors and Future Progress of Biohydrogen Energy. Pertanika Journal of Science and Technology, 2020, 28, .	0.3	1

#	Article	IF	Citations
109	A Novel Archaeal Lineage in Boiling Hot Springs around Oyasukyo Gorge (Akita, Japan). Microbes and Environments, 2021, 36, n/a.	0.7	1
110	A simple approach for random genomic insertionâ€“deletions using ambiguous sequences in Escherichia coli. Journal of Basic Microbiology, 0, , .	1.8	1
111	Triple knockout of frdC gltA and pta genes enhanced pHA production in Escherichia coli. Asia-Pacific Journal of Molecular Biology and Biotechnology, 0, , 11-18.	0.2	0
112	Fate of <i>Escherichia coli </i>O157 Spiked into Commercially Available Fermented Soybean Paste (miso). Journal of the Japanese Society for Food Science and Technology, 2020, 67, 376-383.	0.1	0
113	Effect of Sodium Tungstate on Nucleic Acid Extraction from Anaerobic Digestion Sludge â€”Efficacy of Fluorescence Measurement in the Ribonucleic Acid Quantificationâ€. Bunseki Kagaku, 2022, 71, 201-206.	0.1	0
114	Influence of Trifluoroacetic Acid Addition on Reversed Phase HPLC Analysis of Oligo(lactic acid). Bunseki Kagaku, 2022, 71, 197-200.	0.1	0
115	Editorial: Molecular Engineering of Sensory Mechanisms in Bacteria for Biosensing Technologies and Novel Tools for Microbial Engineering. Frontiers in Bioengineering and Biotechnology, 2022, 10, 894553.	2.0	0