Tomoko Yoshino

List of Publications by Year
in descending order

117	3,146	136950	182427
papers	citations	32	51
		h-index	g-index

121	121	121	3570
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Size-Selective Microcavity Array for Rapid and Efficient Detection of Circulating Tumor Cells. Analytical Chemistry, 2010, 82, 6629-6635.	6.5	309
2	Size-Based Isolation of Circulating Tumor Cells in Lung Cancer Patients Using a Microcavity Array System. PLoS ONE, 2013, 8, e67466.	2.5	151
3	Oil Accumulation by the Oleaginous Diatom Fistulifera solaris as Revealed by the Genome and Transcriptome. Plant Cell, 2015, 27, 162-176.	6.6	149
4	Marine microalgae for production of biofuels and chemicals. Current Opinion in Biotechnology, 2018, 50, 111-120.	6.6	131
5	Efficient and Stable Display of Functional Proteins on Bacterial Magnetic Particles Using Mms13 as a Novel Anchor Molecule. Applied and Environmental Microbiology, 2006, 72, 465-471.	3.1	98
6	Microcavity Array System for Size-Based Enrichment of Circulating Tumor Cells from the Blood of Patients with Small-Cell Lung Cancer. Analytical Chemistry, 2013, 85, 5692-5698.	6.5	89
7	Magnetic cell separation using nanoâ€sized bacterial magnetic particles with reconstructed magnetosome membrane. Biotechnology and Bioengineering, 2008, 101, 470-477.	3.3	79
8	Establishment of a Genetic Transformation System for the Marine Pennate Diatom Fistulifera sp. Strain JPCC DA0580â€"A High Triglyceride Producer. Marine Biotechnology, 2013, 15, 48-55.	2.4	71
9	Selection and characterization of microalgae with potential for nutrient removal from municipal wastewater and simultaneous lipid production. Journal of Bioscience and Bioengineering, 2020, 129, 565-572.	2.2	71
10	Assembly of G Protein-Coupled Receptors onto Nanosized Bacterial Magnetic Particles Using Mms16 as an Anchor Molecule. Applied and Environmental Microbiology, 2004, 70, 2880-2885.	3.1	58
11	Proteomics Analysis of Oil Body-Associated Proteins in the Oleaginous Diatom. Journal of Proteome Research, 2013, 12, 5293-5301.	3.7	56
12	Enhancement of glycerol metabolism in the oleaginous marine diatom Fistulifera solaris JPCC DA0580 to improve triacylglycerol productivity. Biotechnology for Biofuels, 2015, 8, 4.	6.2	56
13	Stoichiometrically Controlled Immobilization of Multiple Enzymes on Magnetic Nanoparticles by the Magnetosome Display System for Efficient Cellulose Hydrolysis. Biomacromolecules, 2015, 16, 3863-3868.	5.4	49
14	Enhanced NADPH production in the pentose phosphate pathway accelerates lipid accumulation in the oleaginous diatom Fistulifera solaris. Algal Research, 2017, 23, 126-134.	4.6	49
15	Outdoor Cultivation of Marine Diatoms for Year-Round Production of Biofuels. Marine Drugs, 2017, 15, 94.	4.6	49
16	Microfluidic Device with Chemical Gradient for Single-Cell Cytotoxicity Assays. Analytical Chemistry, 2011, 83, 3648-3654.	6.5	48
17	Development of a novel method for screening of estrogenic compounds using nano-sized bacterial magnetic particles displaying estrogen receptor. Analytica Chimica Acta, 2005, 532, 105-111.	5.4	47
18	Magnetic separation of CD14+ cells using antibody binding with protein A expressed on bacterial magnetic particles for generating dendritic cells. Biochemical and Biophysical Research Communications, 2006, 350, 1019-1025.	2.1	47

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19	Structure and properties of oil bodies in diatoms. Philosophical Transactions of the Royal Society B: Biological Sciences, 2017, 372, 20160408.	4.0	47
20	Fully automated immunoassay for detection of prostate-specific antigen using nano-magnetic beads and micro-polystyrene bead composites, â€˜Beads on Beadsâ€™. Analytica Chimica Acta, 2007, 597, 331-339.	5.4	46
21	Alkane production by the marine cyanobacterium Synechococcus sp. NKBG15041c possessing the Î±-olefin biosynthesis pathway. Applied Microbiology and Biotechnology, 2015, 99, 1521-1529.	3.6	45
22	In Vivo Live Cell Imaging for the Quantitative Monitoring of Lipids by Using Raman Microspectroscopy. Analytical Chemistry, 2014, 86, 8224-8230.	6.5	43
23	A process design and productivity evaluation for oil production by indoor mass cultivation of a marine diatom, Fistulifera sp. JPCC DA0580. Bioresource Technology, 2013, 137, 132-138.	9.6	42
24	Development of efficient expression system for protein display on bacterial magnetic particles. Biochemical and Biophysical Research Communications, 2005, 338, 1678-1681.	2.1	41
25	Seasonal variation of biomass and oil production of the oleaginous diatom Fistulifera sp. in outdoor vertical bubble column and raceway-type bioreactors. Journal of Bioscience and Bioengineering, 2014, 117, 720-724.	2.2	41
26	Homoeolog expression bias in allopolyploid oleaginous marine diatom Fistulifera solaris. BMC Genomics, 2018, 19, 330.	2.8	41
27	Surface modification of magnetic nanoparticles using asparagines-serine polypeptide designed to control interactions with cell surfaces. Biomaterials, 2010, 31, 4952-4957.	11.4	40
28	Morphological and molecular phylogenetic analysis of the high triglycerideâ€producing marine diatom, <scp>F</scp>istulifera solaris sp. nov. (<scp>B</scp>acillariophyceae). Phycological Research, 2014, 62, 257-268.	1.6	37
29	High-throughput pyrosequencing of the chloroplast genome of a highly neutral-lipid-producing marine pennate diatom, Fistulifera sp. strain JPCC DA0580. Photosynthesis Research, 2011, 109, 223-229.	2.9	36
30	Leukocyte counting from a small amount of whole blood using a sizeâ€controlled microcavity array. Biotechnology and Bioengineering, 2012, 109, 2017-2024.	3.3	34
31	Direct magnetic separation of immune cells from whole blood using bacterial magnetic particles displaying protein G. Biotechnology Progress, 2009, 25, 219-226.	2.6	33
32	Novel nanocomposites consisting of in vivo-biotinylated bacterial magnetic particles and quantum dots for magnetic separation and fluorescent labeling of cancer cells. Journal of Materials Chemistry, 2009, 19, 6361.	6.7	33
33	Noncovalent Immobilization of Streptavidin on In Vitro- and In Vivo-Biotinylated Bacterial Magnetic Particles. Applied and Environmental Microbiology, 2008, 74, 5139-5145.	3.1	32
34	Profiling of Polar Lipids in Marine Oleaginous Diatom Fistulifera solaris JPCC DA0580: Prediction of the Potential Mechanism for Eicosapentaenoic Acid-Incorporation into Triacylglycerol. Marine Drugs, 2014, 12, 3218-3230.	4.6	31
35	Profiling of fatty acid methyl esters from the oleaginous diatom Fistulifera sp. strain JPCC DA0580 under nutrition-sufficient and -deficient conditions. Journal of Applied Phycology, 2014, 26, 2295-2302.	2.8	30
36	Single nucleotide polymorphism genotyping of aldehyde dehydrogenase 2 gene using a single bacterial magnetic particle. Biosensors and Bioelectronics, 2003, 18, 661-666.	10.1	29

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37	Inducible Expression of Transmembrane Proteins on Bacterial Magnetic Particles in Magnetospirillum magneticum AMB-1. Applied and Environmental Microbiology, 2010, 76, 1152-1157.	3.1	29
38	Production of eicosapentaenoic acid by high cell density cultivation of the marine oleaginous diatom Fistulifera solaris. Bioresource Technology, 2017, 245, 567-572.	9.6	29
39	Biosynthesis of Polyunsaturated Fatty Acids in the Oleaginous Marine Diatom Fistulifera sp. Strain JPCC DA0580. Marine Drugs, 2013, 11, 5008-5023.	4.6	27
40	Manipulation of a Single Circulating Tumor Cell Using Visualization of Hydrogel Encapsulation toward Single-Cell Whole-Genome Amplification. Analytical Chemistry, 2016, 88, 7230-7237.	6.5	26
41	Oleosome-Associated Protein of the Oleaginous Diatom Fistulifera solaris Contains an Endoplasmic Reticulum-Targeting Signal Sequence. Marine Drugs, 2014, 12, 3892-3903.	4.6	25
42	Dynamic oil body generation in the marine oleaginous diatom Fistulifera solaris in response to nutrient limitation as revealed by morphological and lipidomic analysis. Algal Research, 2015, 12, 359-367.	4.6	25
43	Effective expression of human proteins on bacterial magnetic particles in an anchor gene deletion mutant of Magnetospirillum magneticum AMB-1. Biochemical and Biophysical Research Communications, 2012, 426, 7-11.	2.1	23
44	Proteomics analysis of lipid droplets indicates involvement of membrane trafficking proteins in lipid droplet breakdown in the oleaginous diatom Fistulifera solaris. Algal Research, 2019, 44, 101660.	4.6	23
45	Automated DNA extraction from genetically modified maize using aminosilane-modified bacterial magnetic particles. Journal of Biotechnology, 2006, 125, 361-368.	3.8	22
46	Development of the automated circulating tumor cell recovery system with microcavity array. Biosensors and Bioelectronics, 2015, 67, 438-442.	10.1	22
47	Peptide-mediated microalgae harvesting method for efficient biofuel production. Biotechnology for Biofuels, 2016, 9, 10.	6.2	22
48	Chloroplast-targeting protein expression in the oleaginous diatom Fistulifera solaris JPCC DA0580 toward metabolic engineering. Journal of Bioscience and Bioengineering, 2015, 119, 28-34.	2.2	21
49	Identification and Functional Analysis of Delta-9 Desaturase, a Key Enzyme in PUFA Synthesis, Isolated from the Oleaginous Diatom Fistulifera. PLoS ONE, 2013, 8, e73507.	2.5	20
50	Comprehensive analysis of triacylglycerol lipases in the oleaginous diatom Fistulifera solaris JPCC DA0580 with transcriptomics under lipid degradation. Journal of Bioscience and Bioengineering, 2018, 126, 258-265.	2.2	20
51	Transcriptomic profiling of single circulating tumor cells provides insight into human metastatic gastric cancer. Communications Biology, 2022, 5, 20.	4.4	20
52	Magnetic Separation of Melanoma-Specific Cytotoxic T Lymphocytes from a Vaccinated Melanoma Patientâ€™s Blood Using MHC/Peptide Complex-Conjugated Bacterial Magnetic Particles. Bioconjugate Chemistry, 2009, 20, 304-309.	3.6	19
53	In Vivo Biotinylation of Bacterial Magnetic Particles by a Truncated Form of Escherichia coli Biotin Ligase and Biotin Acceptor Peptide. Applied and Environmental Microbiology, 2010, 76, 5785-5790.	3.1	19
54	Production of Ï‰3 fatty acids in marine cyanobacterium Synechococcus sp. strain NKBG 15041c via genetic engineering. Applied Microbiology and Biotechnology, 2017, 101, 6899-6905.	3.6	19

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55	Bioengineering of Bacterial Magnetic Particles and their Applications in Biotechnology. Recent Patents on Biotechnology, 2010, 4, 214-225.	0.8	18
56	Functional Expression of Thyroid-Stimulating Hormone Receptor on Nano-Sized Bacterial Magnetic Particles in Magnetospirillum magneticum AMB-1. International Journal of Molecular Sciences, 2013, 14, 14426-14438.	4.1	17
57	Monitoring of cellular behaviors by microcavity array-based single-cell patterning. Analyst, The, 2014, 139, 425-430.	3.5	17
58	Enhancement of Biomass and Lipid Productivities of Water Surface-Floating Microalgae by Chemical Mutagenesis. Marine Drugs, 2017, 15, 151.	4.6	17
59	Rapid imaging and detection of circulating tumor cells using a wide-field fluorescence imaging system. Analytica Chimica Acta, 2017, 969, 1-7.	5.4	16
60	Novel method for evaluation of chemicals based on ligand-dependent recruitment of GFP labeled coactivator to estrogen receptor displayed on bacterial magnetic particles. Analytica Chimica Acta, 2008, 626, 71-77.	5.4	15
61	Nanoâ€sized bacterial magnetic particles displaying pyruvate phosphate dikinase for pyrosequencing. Biotechnology and Bioengineering, 2009, 103, 130-137.	3.3	15
62	High-Throughput Manipulation of Circulating Tumor Cells Using a Multiple Single-Cell Encapsulation System with a Digital Micromirror Device. Analytical Chemistry, 2018, 90, 9734-9741.	6.5	15
63	Colony fingerprint for discrimination of microbial species based on lensless imaging of microcolonies. PLoS ONE, 2017, 12, e0174723.	2.5	14
64	Radular stylus of Cryptochiton stelleri: A multifunctional lightweight and flexible fiber-reinforced composite. Journal of the Mechanical Behavior of Biomedical Materials, 2020, 111, 103991.	3.1	14
65	Identification of a frustule-associated protein of the marine pennate diatom Fistulifera sp. strain JPCC DA0580. Marine Genomics, 2014, 16, 39-44.	1.1	13
66	Potential of water surface-floating microalgae for biodiesel production: Floating-biomass and lipid productivities. Journal of Bioscience and Bioengineering, 2017, 123, 314-318.	2.2	13
67	Draft Genome Sequence of Marine Cyanobacterium Synechococcus sp. Strain NKBG15041c. Genome Announcements, 2013, 1, .	0.8	11
68	Functional expression of an scFv on bacterial magnetic particles by in vitro docking. Biochemical and Biophysical Research Communications, 2014, 445, 1-5.	2.1	11
69	Functional Expression of Full-Length TrkA in the Prokaryotic Host Magnetospirillum magneticum AMB-1 by Using a Magnetosome Display System. Applied and Environmental Microbiology, 2015, 81, 1472-1476.	3.1	11
70	DNA recovery from a single bacterial cell using charge-reversible magnetic nanoparticles. Colloids and Surfaces B: Biointerfaces, 2016, 139, 117-122.	5.0	11
71	Colony Fingerprint-Based Discrimination of Staphylococcus species with Machine Learning Approaches. Sensors, 2018, 18, 2789.	3.8	11
72	Enhanced heterologous protein display on bacterial magnetic particles using a lon protease gene deletion mutant in Magnetospirillum magneticum AMB-1. Journal of Bioscience and Bioengineering, 2013, 116, 65-70.	2.2	10

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73	Taming chlorophylls by early eukaryotes underpinned algal interactions and the diversification of the eukaryotes on the oxygenated Earth. ISME Journal, 2019, 13, 1899-1910.	9.8	10
74	Evaluation of cancer cell deformability by microcavity array. Analytical Biochemistry, 2017, 520, 16-21.	2.4	9
75	Biosynthesis of Thermoresponsive Magnetic Nanoparticles by Magnetosome Display System. Bioconjugate Chemistry, 2018, 29, 1756-1762.	3.6	9
76	Gel-based cell manipulation method for isolation and genotyping of single-adherent cells. Analyst, The, 2019, 144, 990-996.	3.5	9
77	Amplification-free detection of bacterial genes using a signaling probe-based DNA microarray. Biosensors and Bioelectronics, 2021, 194, 113659.	10.1	9
78	Magnetic Separation of Human Podocalyxin-like Protein 1 (hPCLP1)-Positive Cells from Peripheral Blood and Umbilical Cord Blood Using Anti-hPCLP1 Monoclonal Antibody and Protein A Expressed on Bacterial Magnetic Particles. Cell Structure and Function, 2009, 34, 23-30.	1.1	8
79	Monitoring of benzene-induced hematotoxicity in mice by serial leukocyte counting using a microcavity array. Biosensors and Bioelectronics, 2013, 40, 110-114.	10.1	8
80	Novel designs of single-chain MHC I/peptide complex for the magnetosome display system. Protein Engineering, Design and Selection, 2015, 28, 53-58.	2.1	8
81	Characterization of a novel marine unicellular alga, Pseudoneochloris sp. strain NKY372003 as a high carbohydrate producer. Journal of Bioscience and Bioengineering, 2020, 129, 687-692.	2.2	8
82	Comprehensive evaluation of leukocyte lineage derived from human hematopoietic cells in humanized mice. Journal of Bioscience and Bioengineering, 2012, 113, 529-535.	2.2	7
83	Development of Titania-Integrated Silica Cell Walls of the Titanium-Resistant Diatom, Fistulifera solaris. ACS Applied Bio Materials, 2018, 1, 2021-2029.	4.6	7
84	Rapid discrimination of fungal species by the colony fingerprinting. Biosensors and Bioelectronics, 2019, 146, 111747.	10.1	7
85	Intron-mediated enhancement of transgene expression in the oleaginous diatom Fistulifera solaris towards bisabolene production. Algal Research, 2021, 57, 102345.	4.6	7
86	Engineered chlorophyll catabolism conferring predator resistance for microalgal biomass production. Metabolic Engineering, 2021, 66, 79-86.	7.0	7
87	Single Nucleotide Polymorphism Analysis Using a Bacterial Magnetic Particle Microarray. Electrochemistry, 2001, 69, 1008-1012.	1.4	7
88	Simple and rapid CD4 testing based on large-field imaging system composed of microcavity array and two-dimensional photosensor. Biosensors and Bioelectronics, 2015, 67, 350-355.	10.1	6
89	Assessment of Benzene-Induced Hematotoxicity Using a Human-Like Hematopoietic Lineage in NOD/Shi-scid/IL-2RÎ³null Mice. PLoS ONE, 2012, 7, e50448.	2.5	6
90	Recent advances in research on biointerfaces: From cell surfaces to artificial interfaces. Journal of Bioscience and Bioengineering, 2022, , .	2.2	6

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91	The Effects of Solvents and Solid-to-Solvent Ratios on Ultrasound-Assisted Extraction of Carotenoids from Chlorella vulgaris. International Journal of Technology, 2020, 11, 941.	0.8	6
92	A stable human progesterone receptor expressing HeLa reporter cell line as a tool in chemical evaluation at the different cell-cycle phases. Toxicology Letters, 2009, 186, 123-129.	0.8	5
93	Algal biomass production by phosphorus recovery and recycling from wastewater using amorphous calcium silicate hydrates. Bioresource Technology, 2021, 340, 125678.	9.6	5
94	Reporter gene assay against lipophilic chemicals based on siteâ€specific genomic recombination of a nuclear receptor gene, its response element, and a luciferase reporter gene within a stable HeLa cell line. Biotechnology and Bioengineering, 2008, 99, 1453-1461.	3.3	4
95	Inducible expression system for the marine cyanobacterium Synechococcus sp. strain NKBG 15041c. International Journal of Hydrogen Energy, 2014, 39, 19382-19388.	7.1	4
96	Prostaglandin production by the microalga with heterologous expression of cyclooxygenase. Biotechnology and Bioengineering, 2021, 118, 2734-2743.	3.3	4
97	Magnetosome membrane engineering to improve G protein-coupled receptor activities in the magnetosome display system. Metabolic Engineering, 2021, 67, 125-132.	7.0	4
98	Tracking Difference in Gene Expression in a Time-Course Experiment Using Gene Set Enrichment Analysis. PLoS ONE, 2014, 9, e107629.	2.5	4
99	Effects of fatty acid synthase-inhibitors on polyunsaturated fatty acid production in marine diatom Fistulifera solaris JPCC DA0580. Journal of Bioscience and Bioengineering, 2022, 133, 340-346.	2.2	4
100	Assessment on the oil accumulation by knockdown of triacylglycerol lipase in the oleaginous diatom Fistulifera solaris. Scientific Reports, 2021, 11, 20905.	3.3	3
101	Bioengineering of bacterial magnetic particles and its application to estrogen receptor-ligand binding assay. Materials Research Society Symposia Proceedings, 2008, 1094, 1.	0.1	2
102	Performance evaluation of a highâ€throughput separation system for circulating tumor cells based on microcavity array. Engineering in Life Sciences, 2020, 20, 485-493.	3.6	2
103	Analysis of UV irradiation-induced cell settling of an oleaginous diatom, Fistulifera solaris, for efficient biomass recovery. Algal Research, 2020, 47, 101834.	4.6	2
104	Lipid droplet-associated proteins in diverse microalgae revealed by proteomic analysis. Perspectives in Phycology, 2017, 4, 25-32.	1.9	2
105	Application of Cold-tolerant Marine diatom, <i>Mayamaea</i> sp. JPCC CTDA0820 to Low-Energy Cultivation Process for Stable Biodiesel Production. Nihon Enerugi Gakkaishi/Journal of the Japan Institute of Energy, 2015, 94, 1087-1091.	0.2	2
106	Signaling probe design for amplification-free detection of bacterial genes using DNA microarray. Journal of Bioscience and Bioengineering, 2022, 133, 133-139.	2.2	2
107	Draft Genome Sequence of Marine Cyanobacterium Synechococcus sp. Strain NKBG042902, Which Harbors a Homogeneous Plasmid Available for Metabolic Engineering. Genome Announcements, 2014, 2, .	0.8	1
108	Lensless imaging-based discrimination between tumour cells and blood cells towards circulating tumour cell cultivation. Analyst, The, 2021, 146, 7327-7335.	3.5	1

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109	One-step separation of CD20+cells from whole blood using bacterial magnetic particles displaying protein G. Materials Research Society Symposia Proceedings, 2008, 1094, 1.	0.1	0
110	Site-selective immobilization of streptavidin on enzymatically biotinylated bacterial magnetic particles. Materials Research Society Symposia Proceedings, 2008, 1094, 1.	0.1	0
111	ãƒ¤ã‚ãƒŠãƒŽç£æ°—ãƒ“ãƒ¼ã‚ºå®Œæ™‚å¿œç”¨. Hyomen Gijutsu/Journal of the Surface Finishing Society of Japan, 2008, 59, 377-381	0.2	0
112	Surface modification of bacterial magnetic nanoparticles using artificial polypeptides consisting of a repeated asparagine-serine dipeptide and a transmembrane peptide. Materials Research Society Symposia Proceedings, 2012, 1464, 1.	0.1	0
113	Towards single-cell genome analysis of circulating tumor cells based on microcavity array. , 2016, , .		0
114	Bioengineering and Biotechnological Applications of Bacterial Magnetic Particles. , 2018, , 77-93.		0
115	Outside Back Cover Image, Volume 118, Number 7, July 2021. Biotechnology and Bioengineering, 2021, 118, iii.	3.3	0
116	Sensitivity of microcavity array system for circulating tumor cells in lung cancer patients.. Journal of Clinical Oncology, 2012, 30, e21007-e21007.	1.6	0
117	Singleâ€cell genotyping of phytoplankton from ocean water by gelâ€based cell manipulation. Biotechnology Journal, 2022, , 2100633.	3.5	0