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### **Education:**

B.S. Chemical Engineering, Kyoto University, Kyoto, Japan 1983  
M.S. Chemical Engineering, Kyoto University, Kyoto, Japan 1985  
Ph.D. Chemical Engineering, Kyoto University, Kyoto, Japan 1988

### **Professional Career:**

1988-1995: Associate Professor, Department of Applied Chemistry,  
Kyushu Institute of Technology, Kitakyushu, Japan  
1990-1991: Visiting Scientist, Department of Biotechnology  
Royal Institute of Technology, Stockholm, Sweden  
1995-2003: Associate Professor, School of Engineering, Department of Chemical Science  
and Engineering, Kobe University, Kobe, Japan  
2003- : Professor, School of Engineering, Department of Chemical Science and  
Engineering, Kobe University, Kobe, Japan  
2007- Director of Biorefinery Center, Kobe University  
2012- Team Leader, Cell Factory Research Team, Biomass Engineering Program,  
RIKEN, Yokohama Laboratory, Yokohama, Japan

## **Professional Membership:**

Yeast Research Society of Japan  
The Society for Biotechnology, Japan  
Japanese Society for Bioscience, Biotechnology and Agrochemistry  
The Society of Chemical Engineers, Japan  
The Chemical Society of Japan  
Japanese Society of Enzyme Engineering

## **Journal Editor:**

-*Editor:* Journal of Biotechnology  
-*Associate Editor:* Biochemical Engineering Journal  
-*Editorial Board:* Biotechnology for Biofuels  
-*Editorial Board:* Bioresource Technology  
-*Editorial Board:* Journal of Biological Engineering  
-*Editorial Board:* FEMS Yeast Research

## **Research Interests:**

1. Biorefinery: Production of biofuels and chemicals from biomass
2. Metabolic engineering and synthetic biology of microbial cells and animal cells
3. Combinatorial bioengineering and evolutionary engineering
4. Development of novel drug and gene delivery systems
5. Development of drug discovery systems
6. Bionanotechnology
7. Production of biopharmaceuticals

**Number of Publications: 334**

## **List of Publications**

1. Yoshimoto, N., Kida, A., Jie, X., Kurokawa, M., Iijima, M., Niimi, T., Maturana, A.D., Nikaido, I., Ueda, H.R., Tatematsu, K., Tanizawa, K., Kondo, A., Fujii, I., Kuroda, S. (2013) An automated system for high-throughput single cell-based breeding., *Scientific Report*, **in press**

2. Yamada, R., Hasunuma, T., Kondo, A. (Review) (2013) Endowing non-cellulolytic microorganisms with cellulolytic activity aiming for consolidated bioprocessing., *Biotechnology Advanced*, **in press**
3. Nishimura, Y., Takeda, K., Ishii, J., Ogino, C., Kondo, A. (2013) An affinity chromatography method used to purify His-tag-displaying bio-nanocapsules., *Journal of Virological Methods*, **in press**
4. Adachi, D., Koh, FH., Hama, S., Ogino, C., Kondo, A. (2013) A robust whole-cell biocatalyst that introduces a thermo-and solvent-tolerant lipase into an immobilized *Aspergillus oryzae*: Characterization and application to enzymatic biodiesel production., *Enzyme and Microbial Technology*, **in press**
5. Hong, WK., Heo, SY., Oh, BR., Kim, CH., Sohn, JH., Yang, JW., Kondo, A., Seo, JW. (2013) A transgene expression system for the marine microalgae *Aurantiochytrium* sp. KRS101 using a mutant allele of the gene encoding ribosomal protein L44 as a selectable transformation marker for cycloheximide resistance., *Bioprocess and Biosystems Engineering*, **in press**
6. Kato, H., Matsuda, F., Yamada, R., Nagata, K., Shirai, T., Hasunuma, T., Kondo, A. (2013) Cocktail  $\delta$ -integration of xylose assimilation genes for efficient xylose fermentation in *Saccharomyces cerevisiae*., *Journal of Bioscience and Bioengineering*, **in press**
7. Noda, S., Kawai, Y., Miyazaki, T., Tanaka, T., Kondo, A. (2013) Creation of endoglucanase-secreting *Streptomyces lividans* for enzyme production using cellulose as the carbon source., *Applied Microbiology and Biotechnology*, **in press**
8. Suzuki, H., Okazaki, F., Kondo, A., Yoshida, K. (2013) Genome mining and motif modifications of glycoside hydrolase family 1 members encoded by *Geobacillus kaustophilus* HTA426 provide thermostable 6-phospho- $\beta$ -glycosidase and  $\beta$ -fucosidase., *Applied Microbiology and Biotechnology*, **in press**
9. Srivastava, S.K., Yamada, R., Ogino, C., Kondo, A. (2013) Sidewall modification of multiwalled carbon nanotubes by *Allium sativum* (garlic) and its effect on the deposition of gold nanoparticles., *Carbon*, **in press**
10. Kondo, A., Ishii, J., Hara, K.Y., Hasunuma, T., Matsuda, F. (Review) (2013) Development of microbial cell factories for bio-refinery through synthetic bioengineering., *Journal of Biotechnology*, **in press**
11. Hama, S., Yoshida A., Tamadani, N., Noda, H., Kondo, A. (2013) Enzymatic production of biodiesel from waste cooking oil in a packed-bed reactor: An engineering approach to separation of hydrophilic impurities., *Bioresource Technology*, **in press**

12. Adachi, D., Hama, S., Nakashima, K., Bogaki, T., Ogino, C., Kondo, A. (2013) Production of biodiesel from plant oil hydrolysates using an *Aspergillus oryzae* whole-cell biocatalyst highly expressing *Candida antarctica* lipase B., *Bioresource Technology*, **in press**
13. Matano, Y., Hasunuma, T., Kondo, A. (2013) Cell recycle batch fermentation of high-solid lignocellulose using a recombinant cellulase-displaying yeast strain for high yield ethanol production in consolidated bioprocessing., *Bioresource Technology*, **in press**
14. Suga, H., Hasunuma, T., Ishii, J., Matsuda, F., Kondo, A. (2013) Implementation of transhydrogenase-like shunt to compromise redox imbalance during xylose fermentation to in *Saccharomyces cerevisiae*., *Applied Microbiology and Biotechnology*, **in press**
15. Hama, S., Kondo, A. (Review) (2013) Enzymatic biodiesel production: An overview of potential feedstocks and process development., *Bioresource Technology*, **in press**
16. Ishii, J., Yoshimura, K., Hasunuma, T., Kondo, A., (2013) Reduction of furan derivatives by overexpressing NADH-dependent Adh1 improves ethanol fermentation using xylose as sole carbon source with *Saccharomyces cerevisiae* harboring XR-XDH pathway., *Applied Microbiology and Biotechnology*, **in press**
17. Ho, S. H., Huang, S. W., Chen, C. Y., Hasunuma, T., Kondo, A., Chang, J. S. (2013) Bioethanol production using carbohydrate-rich microalgae biomass as feedstock., *Bioresource Technology*, **in press**
18. Hasunuma, T., Okazaki, F., Okai, N., Hara, K.Y., Ishii, J., Kondo, A. (Review) (2013) A review of enzymes and microbes for lignocellulosic biorefinery and the possibility of their application to consolidated bioprocessing technology., *Bioresource Technology*, **in press**
19. Ho, S.H., Huang, S.W., Chen, C.Y., Hasunuma, T., Kondo, A. Chang, J. S. (2013) Characterization and optimization of carbohydrates production from an indigenous microalga *Chlorella vulgaris* FSP-E., *Bioresource Technology*, **in press**
20. Ninomiya, K., Soda, H., Ogino, C., Takahashi, K., Shimizu, N. (2013) Effect of ionic liquid weight ratio on pretreatment of bamboo powder prior to enzymatic saccharification., *Bioresource Technology*, **in press**
21. Okazaki, F., Nakashima, N., Ogino, C., Kondo, A. (2013) Biochemical characterization of a thermostable  $\beta$ -1, 3-xylanase from the hyperthermophilic eubacterium *Thermotoga neapolitana* strain DSM 4359., *Applied Microbiology and Biotechnology*, **in press**
22. Nishimura, Y., Mimura, W., Fahimuddin, I., Amino, T., Ishii, J., Ogino C., Kondo, A. (2013) Granting specificity for breast cancer cells using a Hepatitis B core particle with a HER2-targeted affibody molecule., *Journal of Biochemistry*, **in press**
23. Matano, Y., Hasunuma, T., Kondo, A. (2013) Simultaneous improvement of saccharification and ethanol production from crystalline cellulose by alleviation of irreversible adsorption of

- cellulase with cell-surface engineered yeast strains., *Applied Microbiology and Biotechnology*, **in press**
24. Shirai, T., Matsuda, F., Okamoto, M., Kondo, A. (2013) Evaluation of control mechanisms for *Saccharomyces cerevisiae* central metabolic reactions using metabolome data of eight single-gene deletion mutants., *Applied Microbiology and Biotechnology*, **in press**
  25. Hong, WK., Yu, A., Heo, SY., Oh, BR., Kim, CH., Sohn, JH., Yang, JW., Kondo, A., Seo, JW. (2013) Production of lipids containing high levels of docosahexaenoic acid from empty palm fruit bunches by *Aurantiochytrium* sp. KRS101., *Bioprocess Biosyst Engineering*, **in press**
  26. Yoshimoto, N., Kida, A., Jie, X., Kurokawa, M., Iijima, M., Niimi, T., Maturana, A.D., Nikaido, I., Ueda, H.R., Tatematsu, K., Tanizawa, K., Kondo, A., Fujii, I., Kuroda, S. (2013) An automated system for high-throughput single cell-based breeding., *Scientific Report*, **in press**
  27. Tanaka, T., Matsumoto, S., Yamada, M., Yamada, R., Matsuda, F., Kondo, A. (2013) Active beta-glucosidase displaying *Schizosaccharomyces pombe* on the cell surface using novel anchor protein., *Applied Microbiology and Biotechnology*, **in press**
  28. Matsuda, F., Shirai, T., Ishii, J., Kondo, A. (2013) Regulation of central carbon metabolism in *Saccharomyces cerevisiae* by metabolic inhibitors., *Journal of Bioscience and Bioengineering*, **in press**
  29. Joseph, A., Aikawa, S., Sasaki, K., Matsuda, F., Tanaka, T., Kondo, A. (2013) Utilization of lactic acid bacterial genes in *synechocystis* sp. PCC 6803 for the production of lactic acid., *Bioscience, Biotechnology, and Biochemistry*, **in press**
  30. Srivastava, S.K., Yamada, R., Ogino, C., Kondo, A. (2013) Biogenic synthesis and characterization of gold nanoparticles by *Escherichia coli* K12 and its heterogeneous catalysis in degradation of 4-nitrophenol., *Nanoscale Research Letter.*, **in press**
  31. Noda, S., Miyazaki, T., Tanaka, T., Ogino, C., Kondo, A. (2013) High-level production of mature active-form *Streptomyces mobaraensis* transglutaminase via pro-transglutaminase processing using *Streptomyces lividans* as a host., *Biochemical Engineering Journal*, **in press**
  32. Oh, BR., Hong, WK., Heo, SY., Luo, LH., Kondo, A., Seo, JW., Kim CH. (2013) The production of 1,3-propanediol from mixtures of glycerol and glucose by a *Klebsiella pneumoniae* mutant deficient in carbon catabolite repression., *Bioresource Technology.*, **130**, 719-724
  33. Sasaki, K., Matsuda, F., Hasunuma, T., Ogino, C., Urairi, M., Yoshida, K., Kondo, A., Ability of a perfluoropolymer membrane to tolerate by-products of ethanol fermentation

- broth from dilute acid-pretreated rice straw., *Biochemical Engineering Journal*, **70**, 135-139 (2013)
34. Song, Y., Matsumoto, K., Tanaka, T., Kondo, A., Taguchi, S., Single-step production of polyhydroxybutyrate from starch by using  $\alpha$ -amylase cell-surface displaying system of *Corynebacterium glutamicum*., *Journal of Bioscience and Bioengineering*, **115**(1), 12-14 (2013)
  35. Ismail, K.S.K., Sakamoto, T., Hatanaka, H., Hasunuma, T., Kondo, A., Gene expression cross-profiling in genetically modified industrial *Saccharomyces cerevisiae* strains during high-temperature ethanol production from xylose., *Journal of Biotechnology*, **163**, 50-60 (2013)
  36. Adachi, D., Koda, R., Hama, S., Yamada, R., Nakashima, K., Ogino, C., Kondo, A., An integrative process model of enzymatic biodiesel production through ethanol fermentation of brown rice followed by lipase-catalyzed ethanolysis in a water -containing system., *Enzyme and Microbial Technology*, **52**, 118-122 (2013)
  37. Kiriya, K., Hara, K.Y., Kondo, A., Extracellular glutathione fermentation using engineered *Saccharomyces cerevisiae* expressing novel glutathione export., *Applied Microbiology and Biotechnology*, **96**(4), 1021-1027 (2012)
  38. Okazaki, F., Aoki, J., Tabuchi, S., Tanaka, T., Ogino, C., Kondo, A., Efficient heterologous expression and secretion in *Aspergillus oryzae* of a llama variable heavy-chain antibody fragment VHH against EGFR., *Applied Microbiology and Biotechnology*, **96**(1), 81-88 (2012)
  39. Hasunuma, T., Kondo, A. (Review), Development of yeast cell factories for consolidated bioprocessing of lignocellulose to bioethanol through cell surface engineering., *Biotechnology Advances*, **30**(6), 1207-1218 (2012)
  40. Fukutani, Y., Ishii, J., Noguchi, K., Kondo, A., Yohda, M., An improved bioluminescence-based signaling assay for odor sensing with a yeast expressing a chimeric olfactory receptor., *Biotechnology and Bioengineering*, **109**(12), 3143-3151 (2012)
  41. Matsuda, F., Kondo, T., Ida, K., Tezuka, H., Ishii, J., Kondo, A., Construction of an artificial pathway for isobutanol biosynthesis in the cytosol of *Saccharomyces cerevisiae*., *Bioscience, Biotechnology, and Biochemistry*, **76**(11), 2139-2141 (2012)
  42. Yoshida, A., Hama, S., Tamadani, N., Fukuda, H., Kondo, A., Continuous production of biodiesel using whole-cell biocatalysts: Sequential conversion of an aqueous oil emulsion into anhydrous product., *Biochemical Engineering Journal*, **68**, 7-11 (2012)
  43. Nishimura, Y., Ishii, J., Okazaki, F., Ogino, C., Kondo, A., Complex carriers of affibody-displaying bio-nanocapsules and composition -varied liposomes for

- HER2-expressing breast cancer cell-specific protein delivery., *Journal of Drug Targeting*., **20(10)**, 897-905 (2012)
44. Soma, Y., Inokuma, K., Tanaka, T., Ogino, C., Kondo, A., Okamoto, M., Hanai, T., Direct isopropanol production from cellobiose by engineered *Escherichia coli* using a synthetic pathway and a cell surface display system., *Journal of Bioscience and Bioengineering*, **114(1)**, 80-85 (2012)
  45. Hasunuma, T., Kondo, A. (Review), Consolidated bioprocessing and simultaneous saccharification and fermentation of lignocellulose to ethanol with thermotolerant yeast strains., *Process Biochemistry*, **47(9)**, 1287-1294 (2012)
  46. Takahashi, C., Shirakawa, J., Tsuchidate, T., Okai, N., Hatada, K., Nakayama, H., Tateno, T., Ogino, C., Kondo, A., Production of gamma-amino butyric acid using a recombinant *Corynebacterium glutamicum* expressing glutamate decarboxylase from *Escherichia coli*., *Enzyme and Microbial Technology*, **51**, 171-176 (2012)
  47. Matsumoto, T., Tanaka, T., Kondo, A. (Review), Enzyme-mediated methodologies for protein modification and bioconjugate synthesis., *Biotechnology Journal*, **7(9)**, 1137-1146 (2012)
  48. Tanino, T., Ito, T., Ogino, C., Ohmura, N., Ohshima, T., Kondo, A., Sugar consumption and ethanol fermentation by transporter-overexpressed xylose metabolizing *Saccharomyces cerevisiae* harboring a xyloseisomerase pathway., *Journal of Bioscience and Bioengineering*, **114(2)**, 209-211 (2012)
  49. Tanaka, T., Yamada, R., Ogino, C., Kondo, A. (Review), Recent developments in yeast cell surface display toward extended applications in biotechnology., *Applied Microbiology and Biotechnology*, **95**, 577-591 (2012)
  50. Ishii, J., Yoshimoto, N., Tatematsu, K., Kuroda, S., Ogino, C., Fukuda, H., Kondo, A., Cell wall trapping of autocrine peptides for human G-protein-coupled receptors on the yeast cell surface., *PLoS ONE*, **7(5)** : e37136 (2012)
  51. Hong, W.K., Kim, C.H., Rairakhwada, D., Kim, S., Hur, B.K., Kondo, A., Seo, J.W., Growth of the oleaginous microalga *Aurantiochytrium* sp. KRS101 on cellulosic biomass and the production of lipids containing high levels of docosahexaenoic acid., *Bioprocess and Biosystems Engineering*, **35**, 129-133 (2012)
  52. Yamakawa, S., Yamada, R., Tanaka, T., Ogino, C., Kondo, A., A number of repeated fermentations from raw starch using glucoamylase and  $\alpha$ -amylase co-displaying *Saccharomyces cerevisiae*., *Enzyme and Microbial Technology*, **50(6-7)**, 343-347 (2012)
  53. Ishii, J., Moriguchi, M., Hara, K.Y., Shibasaki, S., Fukuda, H., Kondo, A., Improved identification of agonist-mediated G $\alpha$ i-specific human G-protein-coupled receptor signaling in yeast cells by flow cytometry., *Analytical Biochemistry*, **426(2)**, 129-133 (2012)

54. Noda, S., Kitazono, E., Tanaka, T., Ogino, C., Kondo, A., Benzoic acid fermentation from starch and cellulose via a plant-like b-oxidation pathway in *Streptomyces maritimus*., *Microbial Cell Factories*, **11(1)** : 49 (2012)
55. Ryo, S., Ishii, J., Iguchi, Y., Fukuda, N., Kondo, A., Transplantation of the GAL regulon into G-protein signaling circuitry in yeast., *Analytical Biochemistry*, 424(1),27-31 (2012)
56. Fujitomi, K., Sanda, T., Hasunuma, T., Kondo, A., Deletion of the PHO13 gene in *Saccharomyces cerevisiae* improves ethanol production from lignocellulosic hydrolysate in the presence of acetic and formic acids, and furfural., *Bioresource Technology*, 111,161-166 (2012)
57. Matsumoto T., Tanaka T., Kondo, A. Sortase A-catalyzed site-specific co-immobilization on microparticles via streptavidin., *Langmuir*, 28(7), 3553-3557 (2012)
58. Kondo, T., Tezuka, H., Ishii, J., Matsuda, F., Ogino C., Kondo, A., Genetic engineering to enhance the Ehrlich pathway and alter carbon flux for increased isobutanol production from glucose by *Saccharomyces cerevisiae*., *Journal of Biotechnology*, 159(1-2),32-7 (2012)
59. Kato, H., Suyama, H., Yamada, R., Hasunuma, T., Kondo, A., Improvements in ethanol production from xylose by mating recombinant xylose-fermenting *saccharomyces cerevisiae* strains., *Applied Microbiology and Biotechnology*, 94(6), 1585-1592 (2012)
60. Hara, K. Y., Kim, S., Kiriya, K., Yoshida, H., Ishii, J., Ogino, C., Fukuda, H., Kondo, A., An energy-saving glutathione production method from low-temperature cooked rice using amylase-expressing *Saccharomyces cerevisiae*., *Biotechnology Journal*, 7(5),686-689 (2012)
61. Akimoto, S., Yokono, M., Hamada, F., Teshigahara, A., Aikawa, S., Kondo, A., Adaptation of light-harvesting systems of *Arthrospira platensis* to light conditions, probed by time-resolved fluorescence spectroscopy., *Biochimica et Biophysica Acta - Bioenergetics*, 1817(8), 1483-1489 (2012)
62. Aikawa, S., Izumi, Y., Matsuda, F., Hasunuma, T., Chang, J. S., Kondo, A., Synergistic enhancement of glycogen production in *Arthrospira platensis* by optimization of light intensity and nitrate supply., *Bioresource Technology*, 108,211-215 (2012)
63. Matano, Y., Hasunuma, T., Kondo, A., Display of cellulases on the cell surface of *Saccharomyces cerevisiae* affords high yield ethanol production from high-solid lignocellulosic biomass., *Bioresource Technology*, 108, 128-133 (2012)
64. Madhavan, A., Srivastava, A., Kondo, A., Bisaria, V., Bioconversion of lignocellulose-derived sugars to ethanol by engineered *Saccharomyces cerevisiae*., *Critical Reviews in Biotechnology*, 32(1), 22-48 (2012)



65. Kato, H., Izumi, Y., Hasunuma, T., Matsuda, F., Kondo, A. Widely targeted metabolic profiling analysis of yeast central metabolites., *Journal of Bioscience and Bioengineering.*, 113(5), 665-673 (2012)
66. Hara, K.Y., Kiriyama, K., Nakayama, H., Kondo, A., Improvement of glutathione production by metabolic engineering in sulfate assimilation pathway of *Saccharomyces cerevisiae.*, *Applied Microbiology and Biotechnology*, 94(5),1313-1319 (2012)
67. Biswas, R., Nakayama, H., Kondo, T., Yoshida, K., Bisaria, V., Kondo, A., Enhanced production of 2,3-butanediol by engineered *Bacillus subtilis.*, *Applied Microbiology and Biotechnology*, 94(3), 651-658 (2012)
68. Yoshida, A., Hama, S., Tamadani, N., Fukuda, H., Kondo, A., Improved performance of a packed-bed reactor for biodiesel production through whole-cell biocatalysis employing a high-lipase-expression system., *Biochemical Engineering Journal*, 63, 76-80 (2012)
69. Hara, K. Y., Kim, S., Yoshida, H., Arai, S., Kiriyama, K., Kondo, T., Okai, N., Ogino, C., Fukuda, H., Kondo, A., Development of a glutathione production process from proteinaceous biomass resources using protease-displaying *Saccharomyces cerevisiae.*, *Applied Microbiology and Biotechnology*, 93(4), 1495-1502 (2012)
70. Nishimura, Y., Shishido, T., Ishii, J., Tanaka, T., Ogino, C., Kondo, A., Protein-encapsulated bio-nanocapsules production with ER membrane localization sequences., *Journal of Biotechnology*, 157(1), 124-129 (2012)
71. Matsumoto, T., Takase, R., Tanaka, T., Fukuda, H., Kondo, A., Site-specific protein labeling with amine-containing molecules using *Lactobacillus plantarum* sortase., *Biotechnology Journal.*, 28(7), (2012)
72. Sakamoto, T., Hasunuma, T., Hori, Y., Yamada, R., Kondo, A., Direct ethanol production from rice straw hydrolysate by use of an engineered yeast strain codisplaying three types of hemicellulolytic enzymes on the surface of xylose-utilizing *Saccharomyces cerevisiae* cells., *Journal of Biotechnology*, 158, 203-210 (2012)
73. Hiraiwa, K., Ueda, M., Takeuchi, H., Oyama, T., Irino, T., Yoshikawa, T., Kondo, A., Kitagawa, Y. Sentinel node mapping with thermoresponsive magnetic nanoparticles in rats., *Journal of Surgical Research*, 174, 48-55 (2012)
74. Fukutani, Y., Nakamura, T., Yorozu, M., Ishii, J., Kondo, A., Yohda, M., The N-terminal replacement of an olfactory receptor for the development of a yeast-based biomimetic odor sensor., *Biotechnology and Bioengineering.*, 209(1), 205-212 (2012)
75. Noda, S., Miyazaki, T., Tanaka, T., Ogino, C., Kondo, A., Production of *Streptoverticillium cinnamoneum* transglutaminase and cinnamic acid by recombinant *Streptomyces lividans* cultured on biomass-derived carbon sources., *Bioresource Technology*, 104, 648-651 (2012)

76. Miyachi, Y., Ogino, C., Amino, T., Kondo, A. Development of a novel aptamer-based sensing system using atomic force microscopy., *Journal of Bioscience and Bioengineering*, 112(5), 511-514 (2011)
77. Matsuda, F., Hayashi, M., Kondo, A., Comparative profiling analysis of central metabolites in *Euglena gracilis* under various cultivation conditions., *Bioscience, Biotechnology and Biochemistry*, 75(11), 2253-2256 (2011)
78. Hama, S., Tamalampudi, S., Yoshida, A., Tamadani, N., Kuratani, N., Noda, H., Fukuda, H., Kondo, A., Process engineering and optimization of glycerol separation in a packed-bed reactor for enzymatic biodiesel production., *Bioresource Technology*, 12, 10419-10424 (2011)
79. Bando, H., Hisada, H., Ishida, H., Hata, Y., Katakura, Y., Kondo, A., Isolation of a novel promoter for efficient protein expression by *Aspergillus oryzae* in solid-state culture., *Applied Microbiology and Biotechnology*, 92, 561-569 (2011)
80. Nakashima, K., Yamaguchi, K., Taniguchi, N., Arai, S., Yamada, R., Katahira, S., Ishida, N., Takahashi, H., Ogino, C., Kondo, A., Direct bioethanol production from cellulose by the combination of cellulase displaying yeast and ionic liquid pretreatment., *Green Chemistry*, 13(10), 2948-2953 (2011)
81. Matsuda, F., Furusawa, C., Kondo, T., Ishii, J., Shimizu, H., Kondo, A., Engineering strategy of yeast metabolism for higher alcohol production., *Microbial Cell Factories*, 10(1), 70 (2011)
82. Matsuda, F., Yamasaki, M., Hasunuma, T., Ogino C., Kondo, A., Variation in biomass property among rice diverse cultivars., *Bioscience, Biotechnology, and Biochemistry.*, 75(8), 1603-1605 (2011)
83. Yoshida, S., Okano, K., Tanaka, T., Ogino, C., Kondo, A., Homo D-lactic acid production from xylose/glucose mixture using xylose-assimilating operon integrated *Lactobacillus plantrum.*, *Applied Microbiology and Biotechnology*, 92(1), 67-76 (2011)
84. Saitoh, S., Tanaka, T., Kondo, A., Co-fermentation of cellulose/xylan using engineered industrial yeast strain OC-2 displaying both  $\beta$ -glucosidase and  $\beta$ -xylosidase., *Applied Microbiology and Biotechnology*, 91(6), 1553-1559 (2011)
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86. Shinkawa, S., Okano, K., Yoshida, S., Tanaka, T., Ogino, C., Fukuda, H., Kondo, A., Improved homo L-lactic acid fermentation from xylose by abolishment of the phosphoketolase pathway and enhancement of the pentose phosphate pathway in

- genetically-modified xylose-assimilating *Lactococcus lactis*., Applied Microbiology and Biotechnology, 91(6), 1537-1544 (2011)
87. Yoshida, H., Hara, K., Kiriya, K., Nakayama, H., Okazaki, F., Matsuda, F., Ogino, C., Fukuda, H., Kondo, A., Enzymatic glutathione production using metabolically engineered *Saccharomyces cerevisiae* as a whole-cell biocatalyst., Applied Microbiology and Biotechnology, 91(4), 1001-1006 (2011)
  88. Fukuda, N., Ishii, J., Kondo, A., G  $\gamma$  recruitment system incorporating a novel signal amplification circuit to screen transient protein-protein interactions., FEBS Journal, 278, 3086-3094 (2011)
  89. Sanda, T., Hasunuma, T., Matsuda, F., Kondo, A., Repeated-batch fermentation of lignocellulosic hydrolysate to ethanol using a hybrid *Saccharomyces cerevisiae* strain metabolically engineered for tolerance to acetic and formic acids., Bioresource Technology, 102, 7917-7924 (2011)
  90. Fukuda, N., Ishii, J., Kaishima, M., Kondo, A., Amplification of agonist stimulation of human G-protein-coupled receptor signaling in yeast., Analytical Biochemistry, 417, 182-187 (2011)
  91. Hama, S., Tamalampudi, S., Yoshida, A., Tamadani, N., Kuratani, N., Noda, H., Fukuda, H., Kondo, A., Enzymatic packed-bed reactor integrated with glycerol-separating system for solvent-free production of biodiesel fuel., Biochemical Engineering Journal, 55, 66-71(2011)
  92. Okazaki, F., Ogino, C., Kondo, A., Mikami, B., Kurebayashi, Y., Tsuruta, H., Expression, crystallization and preliminary X-ray diffraction studies of thermostable  $\beta$  -1,3-xylanase from *Thermotoga neapolitana* strain DSM4359., Acta Crystallographica Section F-Structural Biology and Crystallization Communications., 67., 779-81 (2011)
  93. Morita, H., Hasunuma, T., Vassileva M., Tsenkova, R., Kondo, A., Near infrared spectroscopy as high-throughput technology for screening of xylose-fermenting recombinant *Saccharomyces cerevisiae* strains., Analytical Chemistry, 83(11), 4023-4029 (2011)
  94. Yamada, R., Taniguchi, N., Tanaka, T., Ogino, C., Fukuda, H., Kondo, A., Direct ethanol production from cellulosic materials using a cellulolytic enzymes expression optimized diploid *Saccharomyces cerevisiae* strain., Biotechnology for Fuels, 4: 8 (2011)
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