

学術論文 (* Corresponding author)

2023 (R5)

- 1) Ultrahigh-throughput screening of *Trichoderma reesei* strains capable of carbon catabolite repression release and cellulase hyperproduction using a microfluidic droplet platform,
Xuan Chinh Luu, Yosuke Shida, Yoshiyuki Suzuki, Daiki Kuwahara, Takeshi Fujimoto, Yuka Takahashi, Naomi Sato, Akihiro Nakamura, Wataru Ogasawara*,
Bioscience, Biotechnology, and Biochemistry, zbad108 (online), (2023.8.8)

2022 (R4)

- 2) Prediction of ethanol fermentation under stressed conditions using yeast morphological data,
Kaori Itto-Nakama, Shun Watanabe, Shinsuke Ohnuki, Naoko Kondo, Ryota Kikuchi, Toru Nakamura, Wataru Ogasawara, Ken Kasahara, Yoshikazu Ohya,
Journal of Bioscience and Bioengineering, **135(3)**, 210-216,(2023.1.13),
<https://doi.org/10.1016/j.jbiosc.2022.12.008>
- 3) A microfluidic device for simultaneous detection of enzyme secretion and elongation of a single hypha,
Ayaka Itani, Yosuke Shida, Wataru Ogasawara*,
Frontiers in Microbiology,**14**, 1125760, (2023.03.03)
<https://doi.org/10.3389/fmicb.2023.1125760>
- 4) LsSpt23p is a regulator of triacylglycerol synthesis in the oleaginous yeast *Lipomyces starkeyi*,
Hiroaki Takaku, Haruka Kazama, Rikako Sato, Kazuki Mori, Satoshi Ara, Koji Ishiya, Tomohiko Matsuzawa, Katsuro Yaoi, Hideo Araki, Yosuke Shida, Wataru Ogasawara,
Kosuke Tashiro, Satoru Kuhara, Harutake Yamazaki, Sachiyo Aburatani,
Applied Microbiology and Biotechnology, **107(4)**, 1269-1284, (2023.01.17)
<https://doi.org/10.1007/s00253-023-12361-2>

- 5) The monitoring of oil production process by deep learning based on morphology in oleaginous yeasts,
Yukina Kitahara, Ayaka Itani, Kazuma, Ohtomo, Yosuke Oda, Yuka Takahashi, Makoto Okamura, Mizue Mizoshiri, Yosuke Shida, Toru Nakamura, Ryosuke Harakawa, Masahiro Iwahashi, Wataru Ogasawara*,
Applied Microbiology and Biotechnology, **107**, 915-929, (2022.12.28)
<https://doi.org/10.1007/s00253-022-12338-7>

- 6) A novel high-throughput approach for transforming filamentous fungi employing a droplet-based microfluidic platform,
Xuan Chinh, Yosuke Shida, Yoshiyuki Suzuki, Naomi Sato, Akihiro Nakamura, Wataru Ogasawara*,
New Biotechnology, **72**, 149-158, (2022.12.25)
<https://doi.org/10.1016/j.nbt.2022.11.003>

- 7) Using gel microdroplets to develop a simple high-throughput screening platform for oleaginous microorganisms,
Yuma Tanaka, Akihiro Nakamura, Yoshiyuki Suzuki, Kodai Maruta, Yosuke Shida, Wataru Ogasawara*,
Journal of Biotechnology, **358**(10), 46-54, (2022,11.10)
<https://doi.org/10.1016/j.jbiotec.2022.08.016>

- 8) A real-time monitoring system for automatic morphology analysis of yeast cultivation in a jar fermenter,
Yukina Kitahara, Ayaka Itani, Yosuke Oda, Makoto Okamura, Mizue Mizoshiri, Yosuke Shida, Toru Nakamura, Ken Kasahara, Wataru Ogasawara*,
Applied Microbiology and Biotechnology, **106**(12), 4683-4693, (2022.6.10),
<https://doi.org/10.1007/s00253-022-12002-0>

- 9) 7-Aminocoumarin-4-acetic Acid as a Fluorescent Probe for Detecting Bacterial Dipeptidyl Peptidase Activities in Water-in-Oil Droplets and in Bulk,
Akihiro Nakamura, Nobuyuki Honma, Yuma Tanaka, Yoshiyuki Suzuki, Yosuke Shida, Yuko Tsuda, Koushi Hidaka*, and Wataru Ogasawara*
Analytical Chemistry, **94**, Article number: 2416-2424, (2022.2.8),
<https://doi.org/10.1021/acs.analchem.1c04108>

2021 (R3)

- 10) Disruption of alpha-tubulin releases carbon catabolite repression and enhances enzyme production in *Trichoderma reesei* even in the presence of glucose, Nozomu Shibata, Hiroshi Kakeshita, Kazuaki Igarashi, Yasushi Takimura, Yosuke Shida, Wataru Ogasawara, Tohru Koda, Tomohisa Hasunuma, Akihiko Kondo *Biotechnology for Biofuels*, **14**, Article number: 39, (2021.2.8), <https://doi.org/10.1186/s13068-021-01887-0>
- 11) Structural basis for an exceptionally strong preference for asparagine residue at the S2 subsite of *Stenotrophomonas maltophilia* dipeptidyl peptidase 7, Akihiro Nakamura, Yoshiyuki Suzuki, Yasumitsu Sakamoto, Saori Roppongi, Chisato Kushibiki, Natsuri Yonezawa, Masato Takahashi, Yosuke Shida, Hiroaki Gouda, Takamasa Nonaka, Nobutada Tanaka, Wataru Ogasawara*, *Scientific reports*, **11**, Article number: 7929, (2021.4.12) <https://doi.org/10.1038/s41598-021-86965-x>

2020(R2)

- 12) Involvement of Xyr1 and Are1 for Trichoderma pepsin Gene Expression in Response to Cellulose and Galactose in *Trichoderma reesei*, Daranagama ND, Yoshiyuki Suzuki, Yosuke Shida, Wataru Ogasawara*, *Current Microbiology*, **77**, 1506-1517, April 1 (2020), doi:10.1007/s00284-020-01955-y
- 13) Functional analysis of a novel lytic polysaccharide monooxygenase from *Streptomyces griseus* on cellulose and chitin, Kazuki Sato, Daisuke Chiba, Sayaka Yoshida, Mayu Takahashi, Kazuhide Totani, Yosuke Shida, Wataru Ogasawara, Yuko S.Nakagawa, *International Journal of Biological Macromolecules*, **164**, 2085-2091, (2020), <https://doi.org/10.1016/j.ijbiomac.2020.08.015>

2019(R1)

- 14) The Crystal Structure of Peptidase Toward Drug Discovery, Sakamoto, Yasumitsu, Saori Roppongi, Yoshiyuki Suzuki, Tsukasa Ishihara, Koushi Hidaka, Akihiro Nakamura, Nobuyuki Honma, Wataru Ogasawara, and Nobutada Tanaka,

- 15) Characterization of earthworm α -amylases for dietary supplement development and biomass utilization,
Shin-ichi Akazawa, Yuki Ikarashi, Keisuke Yokoyama, Yosuke Shida, Wataru Ogasawara,
Environmental Science and Pollution Research, **27**, 33458-33463, (2019)
- 16) Fragment-Based Discovery of the First Nonpeptidyl Inhibitor of an S46 Family Peptidase,
Sakamoto, Yasumitsu, Yoshiyuki Suzuki, Akihiro Nakamura, Yurie Watanabe, Mizuki Sekiya, Saori Roppongi, Chisato Kushibiki, Ippei Iizuka, Osamu Tani, Hitoshi Sakashita, Koji Inaka, Hiroaki Tanaka, Mitsugu Yamada, Kazunori Ohta, Nobuyuki Honma, Yosuke Shida, Wataru Ogasawara, Mayumi Nakanishi-Matsui, Takamasa Nonaka, Hiroaki Gouda, and Nobutada Tanaka,
Sci. Rep. 9, 13587 (2019).
- 17) Skin-deep Surface Patterning of Calcite,
David C Green, Yosuke Shida, Nobuyuki Honma, Mark A Holden, Yi-Yeoun Kim, Alexander N Kulak, Wataru Ogasawara, Fiona C Meldrum,
Chemistry of Materials, **31**, 8725-33, (2019)
- 18) Hiroaki Takaku, Atsumi Miyajima, Haruka Kazama, Rikako Sato, Satoshi Ara, Tomohiko Matsuzawa, Katsuro Yaoi, Hideo Araki, Yosuke Shida, Wataru Ogasawara, Harutake Yamazaki,
A novel electroporation procedure for highly efficient transformation of *Lipomyces starkeyi*, Journal of Microbiological Methods, **169**, 105816, (2019)
- 19) Pham Khanh Dung, Yosuke Shida, Atsushi Miyata, Takeru Takamizawa, Yoshiyuki Suzuki, Satoshi Ara, Harutake Yamazaki, Kazuo Masaki, Kazuki Mori, Sachiyo Aburatani, Hideki Hirakawa, Kosuke Tashiro, Satoru Kuhara, Hiroaki Takaku, Ogasawara Wataru*,
Effect of light on carotenoid and lipid production in the oleaginous yeast *Rhodospiridium toruloides*, Bioscience Biotechnology and Biochemistry, **87**(7), 1501-1512, Mar 19(2020), <https://doi.org/10.1080/09168451.2020.1740581>

2018 (H30)

- 20) Crystal structures of a bacterial dipeptidyl peptidase IV reveal a novel substrate recognition mechanism distinct from that of mammalian orthologues,
Saori Roppongi, Yoshiyuki Suzuki, Chika Tateoka, Mayu Fujimoto, Saori Morisawa, Ippei Iizuka, Akihiro Nakamura, Nobuyuki Honma, Yosuke Shida, Wataru Ogasawara, Nobutada Tanaka, Yasumitsu Sakamoto & Takamasa Nonaka, Scientific Reports 8(1), Article number:2714, (2018)

- 21) Engineering of the *Trichoderma reesei xylanase3* promoter for efficient enzyme expression,
Hiroki Hirasawa, Koki Shioya, Takanori Furukawa, Shuji Tani, Jun-ichi Sumitani, Takashi Kawaguchi, Yasushi Morikawa, Yosuke Shida, Wataru Ogasawara*, Applied Microbiology and Biotechnology, 102(6), 2737-2752, (2018)

- 22) High-pressure tolerance of earthworm fibrinolytic and digestive enzymes,
Shin-ichi Akazawa, Haruka Tokuyama, Shunsuke Sato, Toshinori Watanabe, Yosuke Shida, Wataru Ogasawara, Journal of Bioscience and Bioengineering, 125(5), 155-159, (2018)

- 23) Nitric oxide production from nitrite reduction and hydroxylamine oxidation by copper-containing dissimilatory nitrite reductase (NirK) from an aerobic ammonia-oxidizing archaeon, *Nitrososphaera viennensis*,
Shun Kobayashi, Daisuke Hira, Keitaro Yoshida, Masanori Toyofuku, Yosuke Shida, Wataru Ogasawara, Takashi Yamaguchi, Nobuo Araki, Mamoru Oshiki, Microbes and Environments,33(4), doi:10.1264/jsme2.ME18058, (2018)

- 24) Proteolytic analysis of *Trichoderma reesei* in cellulase-inducing condition reveals a role for trichodermapepsin (TrAsP) in cellulase production,
Nayani Dhanushka Daranagama, Koki Shioya, Masahiro Yuki, Haruna Sato, Yuki Ohtaki, Yoshiyuki Suzuki, Yosuke Shida, Wataru Ogasawara*, Journal of Industrial Microbiology & Biotechnology, Vol.46(6), 831-842, (2019)
DOI: 10.1007/s10295-019-02155-9 (2018)

- 25) Cellulase productivity of *Trichoderma reesei* mutants developed in Japan varies with varying pH conditions,

Hiroki Hirasawa, Koki Shioya, Kazuki Mori, Kosuke Tashiro, Sachiyo Aburatani, Yosuke Shida, Satoru Kuhara, Wataru Ogasawara*,
Journal of Bioscience and Bioengineering, 128(3),264-273, (2019)

- 26) Purification, Cloning, Functional Expression, Structure, and Characterization of a Thermostable β -Mannanase from *Talaromyces trachyspermus* B168 and Its Efficiency in Production of Mannooligosaccharides from Coffee Wastes, Kentaro Suzuki, Mari Michikawa, Haruna Sato, Masahiro Yuki, Kei Kamino, Wataru Ogasawara, Shinya Fushinobu, Satoshi Kaneko, The Japanese Society of Applied Glycoscience,65, 13-21, (2018)

2017 (H29)

- 27) Periplasmic form of dipeptidyl aminopeptidase IV from *Pseudoxanthomonas mexicana* WO24: purification, kinetic characterization, crystallization and X-ray crystallographic analysis, Saori Roppongi, Chika Tateoka, Mayu Fujimoto, Ippei Iizuka, Saori Morisawa, Akihiro Nakamura, Nobuyuki Honma, Yoshiyuki Suzuki, Yosuke Shida, Wataru Ogasawara, Nobutada Tanaka, Yasumitsu Sakamoto and Takamasa Nonaka, Acta Crystallographica Section F,73(11),601-606, (2017)

2016 (H28)

- 28) (Review)Deciphering the molecular mechanisms behind cellulase production in *Trichoderma reesei*, the hyper-cellulolytic filamentous fungus, Shida Y., Furukawa T., Ogasawara W*, Bioscience, Biotechnology, and Biochemistry, 80(9), 1712-29, (2016)
- 29) 糖非発酵グラム陰性細菌由来新規ジペプチド産生酵素の構造と機能, 阪本 泰光, 野中 孝昌, 鈴木 義之, 小笠原 渉, 田中 信忠, 日本結晶学会誌, 58(5), 221-7, (2016)
- 30) 微生物によるキノコ廃菌床からの化学工業原料生産システム開発, 高久 洋暁, 山崎 晴文, 志田 洋介, 小笠原 渉, 環境技術, 45(5),239-245, (2016)

31) Efficient gene targeting in non-homologous end-joining-deficient *Lipomyces starkeyi* strains, Oguro Y., Yamazaki H., Ara S., Shida Y., Ogasawara W., Takagi M., Takaku H., *Current Genetics*, Published online: 20 Feb. (2017)

2015(H27)

32) The impact of a single-nucleotide mutation of *bgl2* on cellulase induction in a *Trichoderma reesei* mutant, Y. Shida, K. Yamaguchi, M. Nitta, A. Nakamura, M. Takahashi, S. Kidokoro, K. Mori, K. Tashiro, S. Kuhara, T. Matsuzawa, K. Yaoi, Y. Sakamoto, N. Tanaka, Y. Morikawa and W. Ogasawara*, *Biotechnol Biofuels*, 8:230, (2015),

33) A high performance *Trichoderma reesei* strain that reveals the importance of XylanaseIII in cellulosic biomass conversion, H. Nakazawa, T. Kawai, N. Ida, Y. Shida, K. Shioya, Y. Kobayashi, H. Okada, S. Tani, J. Sumitani, T. Kawaguchi, Y. Morikawa and W. Ogasawara*, *Enzyme. Microb. Technol.*, in press, 82, 89-95, (2015)

34) Characterization of two endoglucanases for the classification of the earthworm. *Eisenia fetida* Waki, SI. Akazawa*, Y. Ikarashi, K. Yarimizu, T. Kobayashi, H. Nakazawa, W. Ogasawara and Y. Morikawa, *Biosci. Biotechnol. Biochem.*, 21:1-12, (2015)

35) On the Mechanism of Cuprate Crystal Growth: The Role of Mixed Metal Carbonates, D. C. Green, R. Boston, S. Glatzel, M. R. Lees, S. C. Wimbush, J. Potticary, W. Ogasawara and S. R. Hall*, *Adv. Funct. Mater.*, 25 (29):4700-7, (2015)

36) Ultrastructure of the cellulolytic fungus *Trichoderma reesei*, Y. Shida, A. Morikawa, R. Tamochi, N. Nango, H. Okada, M. Osumi and W. Ogasawara*, *Plant Morphology*, in press, (2015)

37) Structural and mutational analyses of dipeptidyl peptidase 11 from *Porphyromonas gingivalis* reveal the molecular basis for strict substrate specificity, Y. Sakamoto, Y. Suzuki, C. Tateoka, S. Roppongi, M. Fujimoto, K. Inaka, H. Tanaka, M. Yamada, K. Ohtake, H. Gouda, T. Nonaka, W. Ogasawara* and N. Tanaka*, *Sci. Rep.* 5, Article number:11151, (2015).

- 38) Heterologously expressed *Aspergillus aculeatus* β -glucosidase in *Saccharomyces cerevisiae* is a cost-effective alternative to commercial supplementation of β -glucosidase in industrial ethanol production using *Trichoderma reesei* cellulases, T. Treebupachatsakul, H. Nakazawa, H. Shinbo, H. Fujikawa, A. Nagaiwa, N. Ochiai, T. Kawaguchi, M. Nikaido, K. Totani, K. Shioya, Y. Shida, Y. Morikawa, W. Ogasawara* and H. Okada, *J. Biosci. Bioeng.*, in press, (2015)
- 39) Utilization of recombinant *Trichoderma reesei* expressing *Aspergillus aculeatus* β -glucosidase I (JN11) for a more economical production of ethanol from lignocellulosic biomass, T. Treebupachatsakul, K. Shioya, H. Nakazawa, T. Kawaguchi, Y. Morikawa, Y. Shida, W. Ogasawara* and H. Okada, *J. Biosci. Bioeng.*, in press, (2015)
- 40) Multicopy integration and expression of heterologous genes in the oleaginous yeast, *Lipomyces starkeyi*, Y. Oguro, H. Yamazaki, Y. Shida, W. Ogasawara, M. Takagi and H. Takaku*, *Biosci. Biotechnol. Biochem.*, 79(3):512-5, (2015)
- 41) Crystallization and preliminary X-ray crystallographic studies of dipeptidyl peptidase 11 from *Porphyromonas gingivalis*, Y. Sakamoto, Y. Suzuki, I. Iizuka, C. Tateoka, S. Roppongi, M. Fujimoto, H. Gouda, T. Nonaka, W. Ogasawara and N. Tanaka*, *Acta Crystallogr. F*, 71(Pt 2):206-10, (2015)

2014 (H26)

- 42) Effects of *clbR* overexpression on enzyme production in *Aspergillus aculeatus* vary depending on the cellulosic biomass degrading enzyme species, E. Kunitake, A. Kawamura, S. Tani, S. Takenaka, W. Ogasawara, J. Sumitani and T. Kawaguchi*, *Biosci. Biotechnol. Biochem.*, 79(3):488-95, (2014).
- 43) Formation of superconducting yttrium barium copper oxide using sulphur-containing templates, R. Boston, K. Awaya, T. Nakayama, W. Ogasawara and S. R. Hall*, *RSC Adv.*, 26824-28, (2014)
- 44) S46 Peptidases are the First Exopeptidases to be Members of Clan PA, Y. Sakamoto, Y. Suzuki, I. Iizuka, C. Tateoka, S. Roppongi, M. Fujimoto, K. Inaka, H. Tanaka, M.

Masaki, K.Ohta, H. Okada , T. Nonaka, Y. Morikawa, K. T. Nakamura, W. Ogasawara* and N.Tanaka*, *Sci. Rep. 4*, Article number: 4977, (2014)

- 45) Identification of the Catalytic Triad of Family S46 Exopeptidases, Closely Related to Clan PA Endopeptidases, Y. Suzuki, Y. Sakamoto, N. Tanaka, H. Okada, Y. Morikawa and W. Ogasawara*, *Sci. Rep. 4*, Article number:4292, (2014)
- 46) Crystallization and preliminary X-ray crystallographic studies of dipeptidyl aminopeptidase BII from *Pseudoxanthomonas mexicana* WO24, Y. Sakamoto, Y. Suzuki, I. Iizuka, C.Tateoka, S.Roppongi, H.Okada, T.Nonaka, Y. Morikawa, K. Nakamura, W. Ogasawara and N. Tanaka*, *Acta Crystallogr. F.*, (70):221-224, (2014)

2013 (H25)

- 47) NaOH処理を利用したきのこ廃菌床からの資源回収, 岡部陽平, 齋藤耕平, 中村明靖, 幡本将史, 志田洋介, 小笠原 涉, 福田雅夫, 若山 樹, 今田美郎, 山口隆司*, 土木学会論文集 G(環境), 69巻7号, [III-145-III-150], (2013)
- 48) A comprehensive analysis of the effects of the main component enzymes of cellulase derived from *Trichoderma reesei* on biomass saccharification, T. Kawai, H. Nakazawa, H. Ida, H. Okada, W. Ogasawara, Y. Morikawa and Y. Kobayashi*, *J. Ind. Microbiol. Biotechnol.*, 40(8):805-810, (2013)
- 49) Single Nucleotide Polymorphism Analysis of a *Trichoderma reesei* Hyper-Cellulolytic Mutant Developed in Japan, J. O. Porciuncula, T. Furukawa, K. Mori, Y. Shida, H. Hirakawa, K. Tashiro, S. Kuhara, S. Nakagawa, Y. Morikawa and W. Ogasawara*, *Biosci. Biotechnol. Biochem.*, 23;77(3):534-43, (2013) (2013論文賞)
- 50) Identification of major facilitator transporters involved in cellulase production during lactose culture of *Trichoderma reesei* PC-3-7, J. O. Porciuncula, T. Furukawa, Y. Shida, K. Mori, S. Kuhara, Y. Morikawa and W. Ogasawara*, *Biosci. Biotechnol. Biochem.*, 77(5):120992-1-9, (2013)

51) Ethanol production from high cellulose concentration by the basidiomycete fungus *Flammulina velutipes*, T. Maehara, H. Ichinose, T. Furukawa, W. Ogasawara, K. Takabatake and K. Kaneko*, *Fungal Biology*, **117**(3):220-26, (2013)

2012 (H24)

52) Analysis of the saccharification capability of high-functional cellulase JN11 for various pretreated biomasses through a comparison with commercially available counterparts, T. Kawai, H. Nakazawa, N. Ida, H. Okada, S. Tani, J. Sumitani, T. Kawaguchi, W. Ogasawara, Y. Morikawa and Y. Kobayashi*, *J. Ind. Microbiol. Biotechnol.*, **39**(12):1741-1749, (2012)

53) A New Zn(II)2Cys6-Type Transcription Factor BglR Regulates beta-glucosidase Expression in *Trichoderma reesei*, M. Nitta, T. Furukawa, Y. Shida, K. Mori, S. Kuhara, Y. Morikawa and W. Ogasawara*, *Fungal Genet. Biol.*, **49**(5):388-97, (2012), DOI:10.1016/j.fgb.2012.02.009

54) Hyphal surface architecture and cell morphology of *Trichoderma reesei*, M. Nitta, Y. Shida, H. Okada, M. Osumi and W. Ogasawara*, *J. Elect. Micros.*, **61**(3):187-92, (2012)

55) Biotemplated synthesis of catalytic Au–Pd nanoparticles, S. R. Hall*, A. M. Collins, N. J. Wood, W. Ogasawara, M. Morad, P. J. Miedziak, M. Sankar, D. W. Knight and G. J. Hutchings, *RSC Adv.*, **2**(6), 2217-2220, (2012)

56) Construction of a recombinant *Trichoderma reesei* Strain Expressing *Aspergillus aculeatus* β -glucosidase 1 for Efficient Biomass Conversion, H. Nakazawa, T. Kawai, N. Ida, Y. Shida, Y. Kobayashi, H. Okada, S. Tani, J. Sumitani, T. Kawaguchi, Y. Morikawa and W. Ogasawara*, *Biotechnol. Bioeng.*, **109**(1):92-9, (2012)

57) High Jc in a biopolymer-mediated synthesis of YBa2Cu3O7-, S. R. Hall*, C. F. Hall, K. Hansberry, S. C. Wimbush, Y. Shida and W. Ogasawara, *Supercond. Sci. Technol.*, **25**(3):035009, (2012)

2011 (H23)

- 58) Biotemplated synthesis of superconducting plate-like YBa₂Cu₃O_{7-δ} using oligosaccharides, S.R. Hall*, S.C. Wimbush, Y. Shida and W. Ogasawara, *Chem. Phys. Lett.*, 507(1-3):144-150, (2011)
- 59) General Route to Functional Metal Oxide Nanosuspensions, Enzymatically Deshelled Nanoparticles, and Their Application in Photocatalytic Water Splitting, C. Neudeck, Y. Kim, W. Ogasawara, Y. Shida, F. Meldrum and D. Walsh*, *small.*, 7(7):869-73, (2011)

2010 (H22)

- 60) Crystallization and preliminary X-ray crystallographic studies of an exo-beta-D-glucosaminidase from *Trichoderma reesei*, Y. Sakamoto, M. Ike, N. Tanaka, Y. Suzuki, W. Ogasawara, H. Okada, T. Nonaka*, Y. Morikawa and K.T. Nakamura, *Acta Crystallogr. F, Struct. Biol. Cryst. Commun.*, 1;66(Pt 3):309-12, (2010)

2009 (H21)

- 61) Identification of specific binding sites for XYR1, a transcriptional activator of cellulolytic and xylanolytic genes in *Trichoderma reesei*, T. Furukawa, Y. Shida, N. Kitagami, K. Mori, M. Kato, T. Kobayashi, H. Okada, W. Ogasawara and Y. Morikawa*, *Fungal. Genet. Biol.*, 46, 564-74, (2009)
- 62) Evaluation and characterization of *Trichoderma reesei* cellulase and xylanase promoters, Z. Rahman, Y. Shida, T. Furukawa, Y. Suzuki, H. Okada, W. Ogasawara and Y. Morikawa*, *Appl. Microbiol. Biotechnol.*, 82, 899-908, (2009)
- 63) Application of *Trichoderma reesei* cellulase and xylanase promoters through homologous recombination for enhanced production of extracellular beta-glucosidase I, Z. Rahman, Y. Shida, T. Furukawa, Y. Suzuki, H. Okada, W. Ogasawara and Y. Morikawa*, *Biosci. Biotechnol. Biochem.*, 73, 1083-9, (2009)

64) Directed evolution of endoglucanase III (Cel12A) from *Trichoderma reesei*, H. Nakazawa, K. Okada, T. Onodera, W. Ogasawara, H. Okada and Y. Morikawa*, *Appl. Microbiol. Biotechnol.*, 83, 649-57, (2009)

2008 (H20)

65) Characterization of the catalytic domains of *Trichoderma reesei* endoglucanase I, II, and III, expressed in *Escherichia coli*, H. Nakazawa, K. Okada, R. Kobayashi, T. Kubota, T. Onodera, N. Ochiai, N. Omata, W. Ogasawara, H. Okada and Y. Morikawa*, *Appl. Microbiol. Biotechnol.*, 81, 681-9, (2008)

66) The essential acidic amino acid residues for catalytic activity of an exo-beta-d-glucosaminidase from *Trichoderma reesei*, M. Ike, W. Ogasawara, H. Okada and Y. Morikawa*, *J. Mol. Catal. B: Enzymatic.*, 55, 55-60, (2008)

67) Identification of the cis-acting elements involved in regulation of xylanase III gene expression in *Trichoderma reesei* PC-3-7, T. Furukawa, Y. Shida, N. Kitagami, Y. Ota, M. Adachi, S. Nakagawa, R. Shimada, M. Kato, T. Kobayashi, H. Okada, W. Ogasawara and Y. Morikawa*, *Fungal. Genet. Biol.*, 45, 1094-102, (2008)

68) Functional analysis of the *egl3* upstream region in filamentous fungus *Trichoderma reesei*, Y. Shida, T. Furukawa, W. Ogasawara, M. Kato, T. Kobayashi, H. Okada and Y. Morikawa*, *Appl. Microbiol. Biotechnol.*, 78, 515-24, (2008)

2007 (H19)

69) Cellobiohydrolase I (Cel7A) from *Trichoderma reesei* has chitosanase activity, M. Ike, Y. Ko, K. Yokoyama, J. Sumitani, T. Kawaguchi, W. Ogasawara, H. Okada and Y. Morikawa*, *Mol. Cat. B: Enzyatic.*, 47, 159-163, (2007)

2006 (H18)

- 70) Cloning and heterologous expression of the exo-beta-D-glucosaminidase-encoding gene (gls93) from a filamentous fungus, *Trichoderma reesei* PC-3-7, M. Ike, K. Isami, Y. Tanabe, M. Nogawa, W. Ogasawara, H. Okada and Y. Morikawa*, *Appl. Microbiol. Biotechnol.*, 72, 687-695, (2006)
- 71) Cloning, functional expression and promoter analysis of xylanase III from *Trichoderma reesei*, W. Ogasawara, Y. Shida, T. Furukawa, R. Shimada, S. Nakagawa, M. Kawamura, T. Yagyū, A. Kosuge, J. Xu, M. Nogawa, H. Okada and Y. Morikawa*, *Appl. Microbiol. Biotechnol.*, 72, 995-1003, (2006)
- 72) Purification, characterization, and gene cloning of 46 kDa chitinase (Chi46) from *Trichoderma reesei* PC-3-7 and its expression in *Escherichia coli*, M. Ike, K. Nagamatsu, A. Shioya, M. Nogawa, W. Ogasawara, H. Okada and Y. Morikawa*, *Appl. Microbiol. Biotechnol.*, 71, 294-303, (2006)

2005 (H17)

- 73) Isoforms of dipeptidyl aminopeptidase IV from *Pseudomonas* sp. WO24: role of the signal sequence and overexpression in *Escherichia coli*, W. Ogasawara, C. Tanaka, M. Suzuki, G. Kobayashi, Y. Ogawa, H. Okada and Y. Morikawa*, *Protein Expr. Purif.*, 241-251, (2005)

2003 (H15)

- 74) Sugar-anionic clay composite materials: intercalation of pentoses in layered double hydroxide, S. Aizawa, H. Hirahara, K. Ishiyama, W. Ogasawara, Y. Umetsu and E. Narita*, *J. Solid State Chem.*, 174, 342-348, (2003)

2001 (H13)

- 75) Direct intercalation of amino acids into layered double hydroxides by coprecipitation, S. Aizawa, S. Takahashi, W. Ogasawara, Y. Umetsu and E. Narita*, *J. Solid State Chem.*, 162, 52-62, (2001)

2000 (H12)

76) Template mineralization of ordered macroporous chitin-silica composites using a cuttlebone-derived organic matrix, W. Ogasawara, W. Shenton, S. A. Davis and S. Mann*, *Chem. Mater.*, 12, 2835-2837, (2000)

77) Coprecipitation behavior of amino acids with Zn-Al layered double hydroxide precipitates, S. Aizawa, S. Takahashi, W. Ogasawara, Y. Umetsu and E. Narita*, *Clay Science*, 11(3), 17-328, (2000)

1999 (H11)

78) Uptake of anionic dye by layered double hydroxide dispersed to siliceous porous substances, T. Yamagishi, W. Ogasawara and E. Narita*, *Clay Science*, 11, 1-10, (1999)

1997 (H9)

79) Purification and characterization of a Dipeptidyl carboxypeptidase from *Pseudomonas* sp. WO24, W. Ogasawara, N. Abe, T. Hagio, H. Okada and Y. Morikawa*, *Biosci. Biotechnol. Biochem.*, 61, 858-863, (1997)

80) Purification and characterization of Dipeptidyl Aminopeptidase from *Aureobacterium* sp. WO26, W. Ogasawara, N. Inanobe, K. Ochiai, K. Ando, H. Okada and Y. Morikawa*, *Biosci. Biotechnol. Biochem.*, 61, 146-151, (1997)

1996 (H8)

81) The gene encoding Dipeptidyl Aminopeptidase BI from *Pseudomonas* sp. WO24: cloning, sequence and expression in *Escherichia coli*, W. Ogasawara, G. Kobayashi, S. Ishimaru, H. Okada and Y. Morikawa*, *Gene*, 206, 229-236, (1996)

- 82) Dipeptidyl Aminopeptidase IV from *Pseudomonas* sp. WO24, W. Ogasawara, Y. Ogawa, K. Yano, H. Okada and Y. Morikawa*, *Biosci. Biotechnol. Biochem.*, 60, 2032-2037, (1996)
- 83) Two types of novel dipeptidyl aminopeptidases from *Pseudomonas* sp. WO24, W. Ogasawara, G. Kobayashi, H. Okada and Y. Morikawa*, *J. Bacteriol.*, 128, 6288-6295, (1996)
- 84) A novel dipeptidyl aminopeptidase from *Pseudomonas* sp. WO24, W. Ogasawara, K. Ochiai, K. Ando, K. Yano, M. Yamasaki, H. Okada and Y. Morikawa*, *J. Bacteriol.*, 178, 1283-1288, (1996)