

主要原著論文_著書_総説リスト（尾崎太郎）

原著論文（抜粋）

1. **Heterologous expression of a polyketide synthase ACRTS2 in *Aspergillus oryzae* produces host selective ACR-toxins: Co-production of minor metabolites**
A. Kotani, T. Ozaki,* J. Takino, S. Mochizuki, K. Akimitsu, A. Minami,* H. Oikawa*
Biosci. Biotechnol. Biochem. **2022**, *86*, 287–293.
2. **Biosynthetic Studies of Phomopsins Unveil Posttranslational Installation of Dehydroamino Acids by UstYa Family Proteins**
K. Sogahata, T. Ozaki,* Y. Igarashi, Y. Naganuma, C. Liu, A. Minami,* H. Oikawa*
Angew. Chem. Int. Ed. **2021**, *60*, 25729–25734; *Angew. Chem.* **2021**, *133*, 25933–25938.
3. **Biochemistry-guided prediction of the absolute configuration of fungal reduced polyketides**
J. Takino, A. Kotani, T. Ozaki, W. Peng, J. Yu, Y. Guo, S. Mochizuki, K. Akimitsu, M. Hashimoto, T. Ye, A. Minami,* H. Oikawa*
Angew. Chem. Int. Ed. **2021**, *60*, 23403–23411; *Angew. Chem.* **2021**, *133*, 23591–23599.
4. **Biosynthesis of Cyclochlorotrine: Identification of the Genes Involved in Oxidative Transformations and Intramolecular *O,N*-Transacylation**
Y. Jiang, T. Ozaki,* C. Liu, Y. Igarashi, Y. Ye, S. Tang, T. Ye, J. Maruyama, A. Minami* and H. Oikawa*
Org. Lett., **2021**, *23*, 2616–2620.
5. **Biosynthesis of Indole Diterpene Lolitremes: Radical-Induced Cyclization of an Epoxyalcohol Affording a Characteristic Lolitremane Skeleton**
Y. Jiang, T. Ozaki, M. Harada, T. Miyasaka, H. Sato, K. Miyamoto, J. Kanazawa, C. Liu, J. Maruyama, M. Adachi, A. Nakazaki, T. Nishikawa, M. Uchiyama, A. Minami,* H. Oikawa*
Angew. Chem. Int. Ed. **2020**, *59*, 17996–18002; *Angew. Chem.* **2020**, *132*, 18152–18158.

6. Oxidative Ring Contraction by a Multifunctional Dioxygenase Generates the Core Cycloocatadiene in the Biosynthesis of Fungal Dimeric Anhydride Zopfiellin

†T. Shiina, †T. Ozaki, Y. Matsu, S. Nagamine, C. Liu, M. Hashimoto, *A. Minami and *H. Oikawa (†equal contribution)

Org. Lett. **2020**, *22*, 1997–2001.

7. Acyltransferase That Catalyses the Condensation of Polyketide and Peptide Moieties of Goadvionin Hybrid Lipopeptides

R. Kozakai, T. Ono, S. Hoshino, H. Takahashi, Y. Katsuyama, Y. Sugai, T. Ozaki, K. Teramoto, K. Teramoto, K. Tanaka, I. Abe, S. Asamizu, and H. Onaka*

Nat. Chem. **2020**, *12*, 869–877.

8. Minimal Lactazole Scaffold for In Vitro Thilopeptide Bioengineering

A. A. Vinogradov, M. Shimomura, Y. Goto,* T. Ozaki, S. Asamizu, Y. Sugai, H. Suga,* and H. Onaka*

Nat. Commun. **2020**, *11*, Article number: 2272.

9. Efficient Reconstitution of Basidiomycota Diterpene Erinacine Gene Cluster in Ascomycota Host *Aspergillus oryzae* Based on Genomic DNA Sequences

C. Liu, A. Minami,* T. Ozaki, J. Wu, H. Kawagishi, J. Maruyama, and H. Oikawa*

J. Am. Chem. Soc. **2019**, *141*, 15519–15523.

10. Ascomycete *Aspergillus oryzae* is an efficient expression host for production of basidiomycete terpenes by using genomic DNA sequences

S. Nagamine, C. Liu, J. Nishishita, T. Kozaki, K. Sogahata, Y. Sato, A. Minami,* T. Ozaki, C. Schmidt-Dannert, J. Maruyama, H. Oikawa*

Appl. Environ. Microbiol. **2019**, *85*, e00409–19.

11. Elucidation of Biosynthetic Pathway of a Plant Hormone Abscisic Acid in Phytopathogenic Fungi

J. Takino, T. Kozaki, T. Ozaki, C. Liu, *A. Minami, and *H. Oikawa

Biosci. Biotechnol. Biochem. **2019**, *83*, 1642–1649.

12. Heterologous Production of Asperipin-2a: Proposal for Sequential Oxidative Macrocyclization by a Fungi-specific DUF3328 Oxidase

Y. Ye, T. Ozaki,* M. Umemura, C. Liu, A. Minami, and H. Oikawa*

Org. Biomol. Chem. **2019**, *17*, 39–43.

13. Biosynthetic study of conidiation-inducing factor conidiogenone: heterologous production and cyclization mechanism of a key bifunctional diterpene synthase

T. Shiina, K. Nakagawa, Y. Fujisaki, T. Ozaki, C. Liu, T. Toyomasu, M. Hashimoto, H. Koshino, A. Minami, H. Kawaide, and H. Oikawa*

Biosci. Biotechnol. Biochem. **2019**, *83*, 192–201.

14. Identification of the Common Biosynthetic Gene Cluster for Both Antimicrobial Streptoaminals and Antifungal 5-Alkyl-1,2,3,4-tetrahydroquinolines

T. Ozaki, R. Sugiyama, M. Shimomura, S. Nishimura, S. Asamizu, Y. Katasuyama, H. Kakeya,* and H. Onaka*

Org. Biomol. Chem. **2019**, *17*, 2370–2378.

15. Total Biosynthesis of Brassicicenes: Identification of a Key Enzyme for Skeletal Diversification

A. Tazawa, Y. Ye, T. Ozaki,* C. Liu, Y. Ogasawara, T. Dairi, Y. Higuchi, N. Kato, K. Gomi, A. Minami, and H. Oikawa*

Org. Lett., **2019**, *20*, 6178–6182.

16. Unveiling Biosynthesis of the Phytohormone Abscisic Acid in Fungi: Unprecedented Mechanism of Core Scaffold Formation Catalyzed by an Unusual Sesquiterpene Synthase

J. Takino, T. Kozaki, Y. Sato, C. Liu, T. Ozaki, A. Minami,* and H. Oikawa*

J. Am. Chem. Soc. **2018**, *140*, 12392–12395.

17. Enzymatic Formation of a Skipped Methyl-Substituted Octaprenyl Side Chain of Longestin (KS-505a): Involvement of Homo-IPP as a Common Extender Unit

†T. Ozaki, †S. S. Sandip, L. Gao, R. Okuzumi, C. Liu, Y. Ogasawara, X. Lei, T. Dairi, A. Minami,* and H. Oikawa* (†equal contribution)

Angew. Chem. Int. Ed. **2018**, *57*, 6629–6632; *Angew. Chem.* **2018**, *130*, 6739–6742.

- 18. Identification of Novel Sesterterpenes by Genome Mining of Phytopathogenic Fungi *Phoma* and *Colletotrichum* sp.**
L. Gao, K. Narita, T. Ozaki,* Kumakura, P. Gan, A. Minami, C. Liu, X. Lei, K. Shirasu and H. Oikawa*
Tetrahedron Lett. **2018**, *59*, 1136–1139.
- 19. Dissection of goadsporin biosynthesis by *in vitro* reconstitution leading to designer analogues expressed *in vivo*.**
T. Ozaki,[†]K. Yamashita,[†] Y. Goto, M. Shimomura, S. Hayashi, S. Asamizu, Y. Sugai, H. Ikeda, H. Suga,* and H. Onaka* ([†]equal contribution)
Nat. Commun. **2017**, *8*, Article number: 14207.
- 20. Insights into the Biosynthesis of Dehydroalanines in Goadsporin.**
T. Ozaki, Y. Kurokawa, S. Hayashi, N. Oku, S. Asamizu, Y. Igarashi, and H. Onaka*
ChemBioChem **2016**, *17*, 218–223.
- 21. Genome Mining Reveals a Minimum Gene Set for the Biosynthesis of 32-Membered Macroyclic Thiopeptides Lactazoles.**
S. Hayashi, T. Ozaki, S. Asamizu, H. Ikeda, S. Ōmura, N. Oku, Y. Igarashi, H. Tomoda, and H. Onaka*
Chem. Biol. **2014**, *21*, 679–688.
- 22. Cyclolavandulyl Skeleton Biosynthesis via both Condensation and Cyclization Catalyzed by an Unprecedented Member of the cis-Isoprenyl Diphosphate Synthase Superfamily.**
T. Ozaki, P. Zhao, T. Shinada, M. Nishiyama, and T. Kuzuyama*
J. Am. Chem. Soc. **2014**, *136*, 4837–4840.
- 23. Novel Tryptophan Metabolism by a Potential Gene Cluster That Is Widely Distributed among Actinomycetes**
T. Ozaki, M. Nishiyama, and T. Kuzuyama*
J. Biol. Chem. **2013**, *288*, 9946–9956.
- 24. NovQ is a Prenyltransferase Capable of Catalyzing the Addition of a Dimethylallyl Group to Both Phenylpropanoids and Flavonoids**
T. Ozaki, S. Mishima, M. Nishiyama, and T. Kuzuyama*
J. Antibiot. **2009**, *62*, 385–392.

著書

英語

1. C. Liu, A. Minami, T. Ozaki, and H. Oikawa, “Biosynthesis of Indole Diterpenes” In *Comprehensive Natural Products III: Chemistry and Biology*; Liu, H.-W., Begley, T., Eds.; Elsevier: Oxford, Vol. 2, Elsevier, Chapter 16, pp. 446–466 (2020)
2. A. Minami, T. Ozaki, C. Liu, H. Oikawa, “Sesterterpene Biosynthesis: Cyclization Mechanisms and Oxidative Modifications” In *Comprehensive Natural Products III: Chemistry and Biology*; Liu, H.-W., Begley, T., Eds.; Elsevier: Oxford, Vol. 1, Elsevier, Chapter 17, pp. 553–576 (2020)

日本語

1. 酵母菌・麹菌・乳酸菌の産業応用展開（分担執筆）
南 篤志、劉 成偉、尾崎太郎、及川英秋
シーエムシー出版

総説・解説

英語

1. **Cyclopentane-forming di/sesterterpene synthases: widely distributed enzymes in bacteria, fungi, and plants**
A. Minami,* T. Ozaki, C. Liu, and H. Oikawa*
Nat. Prod. Rep. **2018**, *35*, 1330–1346.

日本語

1. 担子菌未利用生合成遺伝子を活用した有用物質生産法の開発
南篤志, 尾崎太郎, 及川英秋
ファインケミカル, **2021**, *50*, No. 4, 25–32.
2. 糸状菌由来生物活性天然物の全合成
南篤志, 尾崎太郎, 及川英秋
ファインケミカル, **2020**, *49*, No. 3, 19–24.
3. 糸状菌による植物ホルモンアブシジン酸の生合成・新奇な環化酵素の発見
南篤志, 尾崎太郎, 劉成偉, 及川英秋
バイオサイエンスとインダストリー, **2019**, *77*, 136–138.
4. 糸状菌テルペノン環化酵素遺伝子のゲノムマイニングによる新規天然物の生産
南篤志、尾崎太郎、劉成偉、及川英秋
バイオサイエンスとインダストリー **2018**, *76*, 20–25.
5. 多様なリボソーム翻訳後修飾ペプチド (RiPPs) の試験管内生合成
尾崎太郎、後藤佑樹、尾仲宏康
バイオサイエンスとインダストリー **2017**, *75*, 524–526.
6. 天然ペプチド骨格の合理的な設計手法の開発
尾崎太郎、菅裕明、尾仲宏康
酵素工学ニュース Vol. 78, 10–13 (2017)
7. リボソームが作るペプチド系天然物の生合成
尾崎太郎
化学と工業 **2017**, *70*, 882.

8. 翻訳後修飾による D-アミノ酸の導入
尾崎太郎
化学 2017, 72, 59–60.
9. 転移 RNA のいろいろな機能
尾崎太郎
生物工学会誌 2017, 95, 206.
10. 構造多様性を創出する新奇テルペノイド合成酵素の発見
尾崎太郎、葛山智久
バイオサイエンスとインダストリー 2014, 72, 412–414.
11. 新しいトリプトファン代謝経路を放線菌から発見
尾崎太郎、葛山智久
化学と生物 2014, 52, 148–150.