

原著論文_著書_総説 リスト

原著論文

2025

55.

4-Desmethyl 7-Prenyl Mollicellin Analogue Isolated from *Chaetomium brasiliense*.

Morita, S.,# Furumura, S.,# Morishita, Y., Ozaki, T., Fukano, H., Hoshino, H., Hirabayashi, A., Suzuki, M., Oshima, Y., Asai, T.,*

(Morita and Furumura are contributed equally.)

Chem Pharm. Bull. **2026**, *74* 170-174. <https://doi.org/10.1248/cpb.c25-00729>

54.

Genome mining-based discovery of an atypical fungal non-reducing polyketide synthase encoding dimeric alkylresorcinol biosynthesis.

Homma, Y.,# Hasegawa, T.,# Morishita, Y.,# Koremura, S., Sugawara, A., Ozaki, T., Asai, T.,*

(Homma, Hasegawa and Morishita are contributed equally.)

J. Antibiot. **2026**, *79*, 195-204. <https://doi.org/10.1038/s41429-025-00891-y>.

53.

Discovery of a fungal HR-PKS cluster encoding biosynthetic pathways for macrolides with two distinct ring sizes.

Li, Y.,# Morishita, Y.,# Sugawara, A., Moussa, A. Y., Elissawy, A. M., Singab, A. N. B., Ozaki, T., Asai, T.*

(Li and Morishita are contributed equally.)

Chem. Pharm. Bull. **2026**, *74*, 64-70. doi: 10.1248/cpb.c25-00638.

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Vinigrol Tricyclic Scaffold Biosynthesis Employs an Atypical Terpene Cyclase and a Multipotent Cyclization Cascade.

Tsukada, K., Sato, F., Matsuyama, T., Matsuda, R., Ozaki, T.,* Morishita, Y., Furumura, S., Homma, Y., Sekiya, H., Sugawara, A., Kubota, M., Mitsuhashi, T., Yasuno, Y., Shinada, T., Nagata, R., Kuzuyama, T., Taniguchi, T., Fujita, M., Uchiyama, M.,* Asai, T.*

(Tsukada, Sato and Matsuyama are contributed equally.)

J. Am. Chem. Soc. **2025**, *147*, 45168-45177. <https://pubs.acs.org/doi/10.1021/jacs.5c14400>

51.

Genome Mining-Based Discovery of Pyrano[2,3-c]pyrrole Type Natural Products Possessing Alkyl Side Chain with Branched Methyl Groups.

Shi, Y., Ozaki, T.,* Morishita, Y., Taniguchi, T., Sato, H., Aoyama, Y., Sugawara, A., Numata, K., Fuse, T., Matsuda, R., Hosotani, K., Fukano, H., Hoshino, Y., Hirabayashi, A., Suzuki, M., Yasuda, J., Yoshikawa, R., Hayashi, H., Kodama, N. E., Shimotai, Y., Hamamoto, H., Davis, A. R., Asai, T.*

Org. Lett. **2025**, *27*, 8580–8585. <https://doi.org/10.1021/acs.orglett.5c02504>

50.

Ketosynthase Domain Catalyzes β -Lactonization in the Biosynthesis of the HMG-CoA Synthase Inhibitor Hymeglusin.

Hirokawa, M., Ozaki, T.,* Tsukada, K., Sugawara, A., Morishita, Y., Asai, T.*

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49.

Biosynthesis of Circumdatins Employs an Anthranilate Tailoring Pathway for NRPS Substrate Supplies.

Sato, Y., Morishita, Y., Homma, Y., Sugawara, A., Moussa, A. Y., Elissawy, A. M., Singab, A. N. B., Ozaki, T., Asai, T.*

(Sato and Morishita are contributed equally.)

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48.

Discovery and Theoretical Studies of Nonenzymatic Polyketide Dimerizations of Chaetophenols.

Matsui, H., Morishita, Y., Yamamoto, T., Ozaki, T., Sugawara, A., Masumoto, Y., Watanabe, M., Watanabe, A., Sato, H., Kanazawa, J., Taniguchi, T., Uchiyama, M.,* Asai, T.*

(Matsui and Morishita are contributed equally.)

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Kadooka, C., Izumitsu, K., Asai, T., Hiramatsu, K., Mori, K., Okutsu, K., Yoshizaki, Y., Takamine, K., Goto, M., Tamaki, H., Futagami, T.*

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Semi-synthesis of a DNA-Tagged Polyketide–Peptide Hybrid Macrocycle Using a Biosynthetically Prepared Fungal Macrolide as a Synthetic Component.

Koremura, S., Sugawara, A., Morishita, Y., Ozaki, T., Asai, T.* (Koremura, Sugawara and Morishita are contributed equally.)

Org. Lett. **2024**, *26*, 9151-9156. <https://doi.org/10.1021/acs.orglett.4c03588>

45.

Genome mining of labdane-related diterpenoids: Discovery of the two-enzyme pathway leading to

(-)-sandaracopimaradiene in the fungus *Arthrinium sacchari*

Sato, F., Sonohara, T., Fujiki, S., Sugawara, A., Morishita, Y., Ozaki, T.,* Asai, T.*

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A new 3,6-dialkyl- α -pyrone produced by the heterologous expression of a PKS-NRPS hybrid enzyme derived from a *Pestalotiopsis* endophyte.

Shi, Y., Ozaki, T., Sugawara, A., Morishita, Y., Tang, Y. P., Shivas, R. G., Davis, R. A., Asai, T.*

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Furumura, S., Ozaki, T., Sugawara, A., Morishita, Y., Tsukada, K., Ikuta, T., Inoue, A., Asai, T.*

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42. Discovery of a Cyclic Depsipeptide from *Chaetomium mollipilium* by the Genome Mining Approach

Homma, Y., Sugawara, A., Morishita, Y., Tsukada, K., Ozaki, T., Asai, T.*

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著書

2. Synthetic Biology-Based Natural Product Discovery

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New Tide of Natural Product Chemistry Springer, 3-16 (2023)

1. Chemical Activation of Natural Product Biosynthesis in Filamentous Fungi

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総説・解説

9. 合成生物学を基盤とする天然物の探索と創製研究

浅井禎吾

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8. 合成生物学を基盤とする天然物の探索研究

浅井禎吾

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"いま知りたい"

長鎖 DNA 合成 ーゲノムは読む時代から書く時代へ

7. 糸状菌の遺伝子情報を活用する天然物ケミカルスペースの開拓

浅井禎吾

月間ファインケミカル

特集ポストゲノム時代の天然物化学ーゲノム情報に基づいた天然物の探索と合成ー
2021 4 月 vol. 50, No.4 (4/15)

6. 微生物に「天然にはない天然物」をつくらせる

浅井禎吾

現代化学 2020 年 8 月 FLASH

5. 単離・構造決定に立脚する天然物化学研究の展開,

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1. 糸状菌二次代謝のエピジェネティック制御と天然物探索

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特許出願

TAQing システムを利用した糸状菌の改良

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