

代表的な発表論文（アンダーラインはセンター関連教職員）

1. Matsuoka K, Sato R, Matsukura Y, Kawajiri Y, Iino H, Nozawa N, Shibata K, Kondo Y, Satoh S, Asahina M (2021) Wound-inducible ANAC071 and ANAC096 transcription factors promote cambial cell formation in incised Arabidopsis flowering stems, *Communications Biology*, <https://doi.org/10.1038/s42003-021-01895-8>
2. Hashimoto K and Jin J (2021) Mechanical Properties of Interface Layers in SiC/TiAl Composite' *Material Science Forum* Vol.1016 pp 151-155
3. Enomoto H, Takeda S, Hatta H. Spatial analysis of phosphatidylinositol molecular species in pork chop tissues using matrix-assisted laser desorption/ionization-mass spectrometry imaging. *Journal of Oleo Science*, 2021. (in Press)
4. Enomoto H. Adhesive film applications help to prepare strawberry fruit sections for desorption electrospray ionization-mass spectrometry imaging. *Bioscience, Biotechnology, and Biochemistry*, 2021. (Published online) <https://doi.org/10.1093/bbb/zbab033>
5. Fujishima R, Kugo H, Yanagimoto K, Enomoto H, Moriyama T, Zaima N. Similar distribution of orally administered eicosapentaenoic acid and M2 macrophage marker in the hypoperfusion-induced abdominal aortic aneurysm wall. *Food & Function*, 2021. (Published online) <https://doi.org/10.1039/D0FO03317K>
6. Yumoto E, Sato M, Kubota T, Enomoto H, Miyamoto K, Yamane H, Koga J (2020) Direct LC–ESI–MS/MS analysis of plant glucosylceramide and ceramide species with 8E and 8Z isomers of the long chain base. *Biosci. Biotechnol. Biochem.*, 31 December 2020 <https://doi.org/10.1093/bbb/zbaa032>
7. Notaguchi M, Kurotani K, Sato Y, Tabata R, Kawakatsu Y, Okayasu K, Sawai Y, Okada R, Asahina M, Ichihashi Y, Shirasu K, Suzuki T, Niwa M, Higashiyama T. (2020) Cell-cell adhesion in plant grafting is facilitated by β -1,4-glucanases. *Science*, 369, 698–702 (2020) DOI: 10.1126/science.abc3710
8. Enomoto H, Kotani M, Ohmura T (2020) Novel Blotting Method for Mass Spectrometry Imaging of Metabolites in Strawberry Fruit by Desorption/Ionization Using Through Hole Alumina Membrane, *Foods*, 9(4), 408.
9. Enomoto H, Nirasawa T(2020) Localization of Flavan-3-ol Species in Peanut Testa by Mass Spectrometry Imaging. *Molecules* , 25(10), 2373, 2020.
10. Takeda S, Harauma A, Okamoto M, Enomoto E, Kudo T, Suzuki T, Mizunoya W, Moriguchi T. (2020) Effects of whey protein hydrolysate on growth promotion and immunomodulation in mouse pups in artificial rearing system. *Animal Science Journal*, 91(1):e13395, 2020.

11. Shinozaki Y, Beauvoit BP, Takahara M, Hao S, Ezura K, Andrieu MH, Nishida K, Mori K, Suzuki Y, Kuhara S, Enomoto H, Kusano M, Fukushima A, Mori T, Kojima M, Kobayashi M, Sakakibara H, Saito K, Ohtani Y, Bénard C, Prodhomme D, Gibon Y, Ezura H, Ariizumi T. Fruit setting rewires central metabolism via gibberellin cascades. *Proc Natl Acad Sci U S A*. 2020 Sep 22;117(38):23970-23981.
12. 榎元廣文(2020) 農畜産物中の代謝物の分布解析への質量分析イメージングの応用、*JMS Mycotoxins*, 論文 ID: 70-2-1, 2020.
13. Notaguchi M, Kurotani K, Sato Y, Tabata R, Kawakatsu Y, Okayasu K, Sawai Y, Okada R, Asahina M, Ichihashi Y, Shirasu K, Suzuki T, Niwa M, Higashiyama T. (2020) Cell-cell adhesion in plant grafting is facilitated by β -1,4-glucanases. *Science*, 369, 698–702 (2020) DOI: 10.1126/science.abc3710
14. Takeda S, Kaneko S, Sogawa K, Ahhmed AM, Enomoto H, Kawarai S, Taira K, Mizunoya W, Minami M, Sakata R (2020) Isolation, Evaluation, and Identification of Angiotensin I-Converting Enzyme Inhibitory Peptides from Game Meat, *Foods*, 9(9),1168.
15. Enomoto H (2020) Mass Spectrometry Imaging of Flavonols and Ellagic Acid Glycosides in Ripe Strawberry Fruit, *Molecules*, 25(20), 4600.
16. 榎元廣文 (2020) 質量分析イメージング法を用いたインゲンマメ未熟種子中のアブシシン酸および 12-オキソ-フィトジエン酸の可視化、植物の生長調節, 「特集:質量分析による低分子化合物の可視化」 55(2), pp.77-83.
17. 朝比奈雅志、中野渡幸、山田一貴、湯本絵美、佐藤忍、レーザマイクロダ イセクション法を用いた凍結切片からの遺伝子発現解析、*Plant Morphology*. 2020 32: 39-43
18. Kimura S, Nakajima M, Yumoto E, Miyamoto K, Yamane H, Ong M, Tomita-Yokotani K, Asami T. Cytokinins affect the akinete-germination stage of a terrestrial filamentous cyanobacterium, *Nostoc* sp. HK-01. *Plant Growth Regul* 92, 273–282 (2020). <https://doi.org/10.1007/s10725-020-00636-x>
19. Enomoto H, Furukawa T, Takeda S, Hatta H, Zaima N. Unique distribution of diacyl-, alkylacyl-, and alkenylacyl-phosphatidylcholine species visualized in pork chop tissues by matrix-assisted laser desorption/ionization–mass spectrometry imaging. *Foods*, 9(2), 205, 2020.
20. Enomoto H, Takahashi S, Takeda S, Hatta H. Distribution of flavan-3-ol species in ripe strawberry fruit revealed by matrix-assisted laser desorption/ionization-mass spectrometry imaging. *Molecules*, 25(1), 103, 2019.

21. Enomoto H, Takeda S, Hatta H, Zaima N. Tissue-specific distribution of sphingomyelin species in pork chop revealed by matrix-assisted laser desorption/ionization–imaging mass spectrometry. *Journal of Food Science*, 84(7), 1758-1763, 2019.
22. Desaki Y, Takahashi S, Sato K, Maeda K, Matsui S, Yoshimi I, Miura T, Jumonji JI, Takeda J, Yashima K, Kohari M, Suenaga T, Terada H, Narisawa T, Shimizu T, Yumoto E, Miyamoto K, Narusaka M, Narusaka Y, Kaku H, Shibuya N. PUB4, aCERK1-Interacting Ubiquitin Ligase, Positively Regulates MAMP-Triggered Immunity in Arabidopsis. *Plant Cell Physiol*. 2019 Nov 1;60(11):2573-2583. doi:10.1093/pcp/pcz151. PMID: 31368495.
23. Miyamoto K, Matsumoto T, Yumoto E, Sakazawa T, Yokota T, Yamane H, Uchida K. Facile preparation of optically active jasmonates and their biological activities in rice. *Biosci Biotechnol Biochem*. 2019 May;83(5):876-881. doi:10.1080/09168451.2019.1569500. Epub 2019 Jan 24. PMID: 30676297.
24. Enomoto H, Sensu T, Yumoto E, Yokota T, Yamane H. Derivatization for detection of abscisic acid and 12-oxo-phytodienoic acid using matrix-assisted laser desorption/ionization imaging mass spectrometry. *Rapid Commun Mass Spectrom*. 2018 Sep 15;32(17):1565-1572. doi: 10.1002/rcm.8200. PMID: 29888502.
25. Matsuoka K, Yanagi R, Yumoto E, Yokota T, Yamane H, Satoh S, Asahina M. RAP2.6L and jasmonic acid-responsive genes are expressed upon Arabidopsis hypocotyl grafting but are not needed for cell proliferation related to healing. *Plant Mol Biol*. 2018 Apr;96(6):531-542. doi: 10.1007/s11103-018-0702-4. Epub 2018 Jan 17. PMID: 29344830.
26. Guo L, Qiu J, Ye C, Jin G, Mao L, Zhang H, Yang X, Peng Q, Wang Y, Jia L, Lin Z, Li G, Fu F, Liu C, Chen L, Shen E, Wang W, Chu Q, Wu D, Wu S, Xia C, Zhang Y, Zhou X, Wang L, Wu L, Song W, Wang Y, Shu Q, Aoki D, Yumoto E, Yokota T, Miyamoto K, Okada K, Kim DS, Cai D, Zhang C, Lou Y, Qian Q, Yamaguchi H, Yamane H, Kong CH, Timko MP, Bai L, Fan L. *Echinochloa crus-galli* genome analysis provides insight into its adaptation and invasiveness as a weed. *Nat Commun*. 2017 Oct 18;8(1):1031. doi: 10.1038/s41467-017-01067-5. PMID: 29044108; PMCID:PMC5647321.
27. Enomoto H, Sato K, Miyamoto K, Ohtsuka A, Yamane H. Distribution analysis of anthocyanins, sugars, and organic acids in strawberry fruits using matrix-assisted laser desorption/ionization-imaging mass spectrometry. *Journal of Agricultural and Food Chemistry*, 66(19), 4958-4965, 2018.
28. Xu D, Miao J, Yumoto E, Yokota T, Asahina M, Watahiki M. YUCCA9-Mediated Auxin Biosynthesis and Polar Auxin Transport Synergistically Regulate Regeneration of Root Systems Following Root Cutting. *Plant Cell Physiol*. 2017 Oct 1;58(10):1710-1723. doi: 10.1093/pcp/pcx107. PMID: 29016906; PMCID:PMC5921505.

29. Enomoto H, Sensu T, Sato K, Sato F, Paxton T, Yumoto E, Miyamoto K, Asahina M, Yokota T, Yamane H. Visualisation of abscisic acid and 12-oxo-phytodienoic acid in immature *Phaseolus vulgaris* L. seeds using desorption electrospray ionisation-imaging mass spectrometry. *Sci Rep.* 2017 Feb 17;7:42977. doi:10.1038/srep42977. PMID: 28211480; PMCID: PMC5314351.
30. Miyamoto K, Enda I, Okada T, Sato Y, Watanabe K, Sakazawa T, Yumoto E, Shibata K, Asahina M, Iino M, Yokota T, Okada K, Yamane H. Jasmonoyl-l-isoleucine is required for the production of a flavonoid phytoalexin but not diterpenoid phytoalexins in ultraviolet-irradiated rice leaves. *Biosci Biotechnol Biochem.* 2016 Oct;80(10):1934-8. doi: 10.1080/09168451.2016.1189319. Epub 2016 May 31. PMID: 27240428.

特許

1. 柳原尚久、特願 2021-039184、“ハロゲン化アルカリ金属の製造方法及びハロゲン化物の製造方法”、2021-03-11。