

学術論文（2025年2月18日時点）

1 原著論文 57 報（下線は岡田研所属）

1. G. Honda, T. Yoshihara, M. Inagaki, T. Ito, T. Nagaishi, S. Kobayashi, K. Kanie, T. Okada, S. Awaji,
“Development of Fluorine-Free MOD REBCO Tape With BaHfO₃ Artificial Pinning Centers,”
IEEE Transactions on Applied Superconductivity, (2025) *in press*.
2. T. Okada, Y. Shimamura, S. Awaji,
“Superconducting Properties of GdBCO Coated Conductors With Domain Control by Bending Strain,”
IEEE Transactions on Applied Superconductivity, (2025) *in press*.
3. K. Sakurai, Y. Tsuchiya, M. Tahashi, H. Goto, T. Okada, S. Awaji,
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IEEE Transactions on Applied Superconductivity, **35** (2025) 4701505.
4. T. Uto, T. Tosaka, T. Shitaka, H. Nezuka, S. Hanai, H. Takewa, J. Inagaki, S. Ioka, A. Badel, K. Takahashi, A. Zampa, T. Okada, Y. Tsuchiya, S. Awaji,
“Basic Design of REBCO Insert Coil of 33 T Cryogen-Free Superconducting Magnet,”
IEEE Transactions on Applied Superconductivity, **35** (2025) 4601405.
5. S. Awaji, A. Badel, A. Zampa, K. Takahashi, T. Okada, Y. Tsuchiya, T. Uto, T. Tosaka, H. Takewa, H. Nezuka, S. Hanai, M. Sugimoto, R. Taniguchi, H. Fukushima, K. Hirose, S. Muto, S. Fujita, M. Daibo,
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IEEE Transactions on Applied Superconductivity, **35** (2025) 4300406.
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IEEE Transactions on Applied Superconductivity, **35** (2024) 4300206.
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8. A. Badel, K. Takahashi, A. Zampa, T. Okada, Y. Tsuchiya, S. Awaji, T. Uto, T. Tosaka, H. Takewa, H. Nezuka, S. Hanai,

- “Conceptual Design of a 33 T Cryogen-Free Magnet REBCO Insert: Mechanical Aspects and Protection Against Thermal Runaway,”
IEEE Transactions on Applied Superconductivity, **34** (2024) 4301205.
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IEEE Transactions on Applied Superconductivity, **34** (2024) 6602105.
 10. K. Takahashi, T. Okada, Y. Tsuchiya, S. Awaji, H. Takewa, S. Hanai, S. Ioka,
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IEEE Transactions on Applied Superconductivity, **34** (2024) 4601905.
 11. Y. Tsuchiya, K. Mizuno, Y. Kohama, A. Zampa, T. Okada, S. Awaji,
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IEEE Transactions on Applied Superconductivity, **34** (2024) 9500207.
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Superconductor Science and Technology, **36** (2023) 105005.
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 17. A. Badel, K. Takahashi, A. Zampa, T. Okada, G. Nishijima, T. Uto, H. Takewa, S. Hanai, S. Ioka, J. Inagaki, S. Awaji,
“First validation of Robust REBCO insert concept on a large 20-pancake prototype reaching up

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IEEE Transactions on Applied Superconductivity, **33** (2023) 4601505.
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IEEE Transactions on Applied Superconductivity, **33** (2023) 4601405.
19. T. Yoshihara, G. Honda, T. Nagaishi, S. Kobayashi, K. Kanie, T. Okada, S. Awaji,
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IEEE Transactions on Applied Superconductivity, **33** (2023) 6600205.
20. T. Okada D. Kobayashi, K. Sakai, S. Awaji, M. Kikuchi, T. Kato,
“Mechanical and critical current characteristics of high-strength Bi₂Sr₂Ca₂Cu₃O_{10+δ} multi-filamentary tapes reinforced with thicker Ni-alloy laminations with various pre-tensions,”
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22. Y. Doi, R. Teranishi, T. Miyajima, A. Matsumoto, V. Petrykin, S. Lee, T. Okada, S. Awaji,
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IEEE Transactions on Applied Superconductivity, **32** (2022) 6602504.
23. K. Kajikawa, M. Mieziaki, Y. Fujiwara, S. Awaji, A. Badel, K. Takahashi, T. Okada, T. Abe,
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IEEE Transactions on Applied Superconductivity, **32** (2022) 4702005.
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IEEE Transactions on Applied Superconductivity, **32** (2022) 8400305.
25. T. Abe, A. Badel, T. Okada, S. Awaji, S. Fujita, K. Tsuchiya, Y. Iijima, M. Daibo,
“REBCO Coil With Robust Behavior Against Local Defects Wound Using Two-Tape Bundle,”
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Superconductor Science and Technology, **35** (2022) 084009.

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“AC Loss Measurements in an HTS Coil Wound Using Two-Ply Bundle Conductor,”
IEEE Transactions on Applied Superconductivity, **32** (2022) 4700205.
28. D. Kobayashi, T. Okada, S. Awaji,
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IEEE Transactions on Applied Superconductivity, **32** (2021) 6400105.
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IEEE Transactions on Applied Superconductivity, **31** (2021) 6601006.
33. S. Awaji, A. Badel, T. Okada, K. Takahashi, H. Miyazaki, S. Hanai, S. Ioka, S. Fujita, S. Muto, Y. Iijima, M. Daibo, K. Kajikawa,
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Superconductor Science and Technology, **33** (2020) 094014.
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I. Tsukada, Y. Uwatoko, A. Maeda,
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2 解説記事 2 報

1. 岡田達典, 今井良宗, 前田京剛,
“鉄系超伝導体の磁場中マイクロ波表面インピーダンス測定,”
「東京大学低温センター年報 2013」, 東京大学低温センター, **5** (2014) 29.
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3 研究指導学生の学位論文（博士 2 報，修士 7 報，学士 8 報）

3.1 博士論文

1. <東北大学> 2024 年 3 月 Junyi Luo,
“Critical Current Density and Mechanical Properties of High Performance $\text{Ba}_{1-x}\text{K}_x\text{Fe}_2\text{As}_2$ Superconducting Tapes.”
2. <東北大学> 2020 年 3 月 夏原 真司,
“強磁場マグネット応用に向けた実用人工ピン導入 REBCO 線材に関する研究.”

3.2 修士論文

1. <東北大学> 2023 年 3 月 日景 大雅,
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“鉄カルコゲナイド超伝導薄膜における一軸ひずみ効果と強磁場臨界電流特性.”
 4. <東北大学> 2020 年 8 月 Junyi Luo,
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 5. <東北大学> 2020 年 3 月 美齊津 英典,
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3.3 学士論文

1. <東北大学> 2024 年 3 月 島村 雄飛,
“曲げひずみ印加で面内ドメイン制御した REBCO 線材の磁場中超伝導特性.”
2. <東北大学> 2022 年 3 月 木村 啓太,
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4. <東北大学> 2020 年 3 月 藤村 暢寿,
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5. <東北大学> 2020 年 3 月 Samuel Galbreath,
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