

2021年4月～論文発表(予定)

発行年月	論文題目	著者氏名（全員）	学会又は雑誌等名	巻、号、ページ等
2025.04	<u>Experimental demonstration of transient CHI start-up using a floating biased electrode configuration</u>	K. Kuroda ・ ; R. Raman ; T. Onchi; Y. Otsuka; T. Motoki; M. Hasegawa ; K. Hanada ; M. Ono ; J. A. Rogers; R. Ikezoe ; H. Idei ; T. Ido ; M. Nagata; T. Kanki ; O. Mitarai; N. Nishino; K. Kono; S. Kawasaki; T. Nagata; A. Higashijima; S. Shimabukuro; I. Niiya; I. Sekiya; K. Nakamura ; A. Ejiri ; S. Murakami	Physics of Plasmas	Volume 32, Issue 4 April 2025
2024.10	<u>Heating characteristic of Electron Bernstein Wave using high-field side X-mode injection in QUEST</u>	Takahiro Murakami, Shinichiro Kojima, Kazuaki Hanada, Hiroshi Idei, Takeshi Ido, Ryuya Ikezoe, Makoto Hasegawa, Takumi Onchi, Kaori Kono, Kengoh Kuroda	Plasma Physics and Controlled Fusion	Volume 66, Number 11
2024.08	<u>Electron cyclotron current start-up using a retarding electric field in the QUEST spherical tokamak</u>	Onchi, Takumi; Idei, Hiroshi; Hanada, Kazuaki; Watanabe, Osamu; Miyata, Rikuya; Zhang, Yifan; Koide, Yuji; Otsuka, Yuya; Yamaguchi, Takahiro; Higashijima, Aki; Nagata, Takahiro; Sekiya, Izumi; Shimabukuro, Shun; Niiya, Ichiro; Kono, Kaori; Zennifa, Fadilla; Nakamura, Kazuo; Ikezoe, Ryuya; Hasegawa, Makoto; Kuroda, Kengoh; Nagashima, Yoshihiko; Ido, Takeshi; Kariya, Tsuyoshi; Ejiri, Akira; Murakami, Sadayoshi; Fukuyama, Atsushi; Kosuga, Yusuke	Nuclear Fusion	Volume 64, Number 10
2024.06	<u>Improving Current Distribution Model for EBWCD using Flux Loops in QUEST</u>	Zhou Junyao, Hanada Kazuaki, Kuroda Kengoh, Onchi Takumi, Idei Hiroshi, Ikezoe Ryuya, Hasegawa Makoto, Nagashima Yoshihiko, Ido Takeshi, Kinoshita Toshiki	Evergreen	Vol. 11, Issue 02, pp555-562
2024.06	<u>Turbulence Transition in Magnetically Confined Hydrogen and Deuterium Plasmas</u>	T. Kinoshita, K. Tanaka, A. Ishizawa, H. Sakai, M. Nunami, Y. Ohtani, H. Yamada, M. Sato, M. Nakata, T. Tokuzawa, R. Yasuhara, Y. Takemura, I. Yamada, H. Funaba, K. Ida, M. Yoshinuma, T. Tsujimura, R. Seki, K. Ichiguchi, and C. A. Michael	Physical Review Letters	132, 235101
2024.05	<u>Hydrogen removal by electron cyclotron wall conditioning with neon gas and its impact of tokamak plasma start-up on the QUEST spherical tokamak</u>	Fukumoto, Masakatsu; Yue, Qilin; Hanada, Kazuaki; Kojima, Shinichiro; Nakano, Tomohide; Yoshida, N; Ikezoe, Ryuya; Nagashima, Yoshihiko; Ido, Takeshi; Onchi, Takumi; Idei, Hiroshi; Iguchi, Hiroki; Komiyama, Takumi; Shikama, Taiichi; Ejiri, Akira; Masuzaki, Suguru; Sakamoto, Mizuki; Ueda, Yoshio; Kuroda, Kengoh; Kono, Kaori; Shimabukuro, Shun; Higashijima, Aki	Nuclear Fusion	64 (2024) 066022 (8pp)
2024.01	<u>Demonstration of transient CHI startup using a floating biased electrode configuration</u>	Kuroda K., Raman R., Onchi T., Hasegawa M., Hanada K., Ono M., Nelson B.A., Rogers J., Ikezoe R., Idei H., Ido T., Nagata M., Mitarai O., Nishino N., Otsuka Y., Zhang Y., Kono K., Kawasaki S., Nagata T., Higashijima A., Shimabukuro S., Niiya I., Sekiya I., Nakamura K., Takase Y., Ejiri A., Murakami S.	Nuclear Fusion	64(1), 014002, 2024
2023.10	<u>Deformation Induced by Magnetic Field on GaInSn Flow Surface</u>	Ryosuke HIRAKA, Jabir AL SALAMI, Takumi TSUGIKI, Kazuaki HANADA and Changhong HU	Plasma and Fusion Research	Volume 18, 2405083 (2023)

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2023.08	<u>Sudden Change Events of Plasma Current during Electron-Cyclotron Current Start-Up on the QUEST Spherical Tokamak</u>	R. Ikezoe, K.Takeda, K. Kuroda, T. Onchi, T. Nagata, I. Sekiya, H. Idei, F. Zennifa, Y. Zhang, S. Sakai, R. Miyata, T. Yamaguchi, M. Hasegawa, Y. Nagashima, T. Ido and K. Hanada	Plasma and Fusion Research	Volume 18, 2402066 (2023)
2023.06	<u>A versatile power supply system for the central solenoid of the QUEST spherical tokamak</u>	Y. Zhang , T. Onchi , K. Nakamura , Y. Otsuka , Y. Koide , Q. Yue , T. Nagata , S. Kawasaki , K. Kuroda , M. Hasegawa , R. Ikezoe , T. Ido , K. Hanada , H. Idei	Fusion Engineering and Design	Volume 191, June 2023, 113648
2023.07	<u>Circuit design for doubling the toroidal magnetic field on the QUEST spherical tokamak</u>	Takumi Onchi, Hiroshi Idei, Nagato Yanagi, Yifan Zhang, Kazuo Nakamura, Kengoh Kuroda, Makoto Hasegawa, Ryuya Ikezoe, Kazuaki Hanada, Takeshi Ido , Masahiro Kobayashi, Yuichi Ogawa, Minoru Yoshitani, Takemi Kawamura	Fusion Engineering and Design	Volume 192, July 2023, 113794
2023.06	<u>QUEST Database for Tokamak Big Data</u> (Letters)	Makoto HASEGAWA, Aki HIGASHIJIMA, Ichiro NIIYA, Kazuaki HANADA, Hiroshi IDEI, Takeshi IDO, Ryuya IKEZOE, Takumi ONCHI, Kengo KURODA and Daisuke SAKURAI	Plasma and Fusion Research	Volume 18, 1305048 (2023)
2023.05	<u>Initial testing of Ohmic heating through double flux swing during electron cyclotron start-up in the QUEST spherical tokamak</u>	Yifan Zhang, Takumi Onchi, Kazuo Nakamura, Qilin Yue, Takahiro Nagata, Shoji Kawasaki, Kengoh Kuroda, Makoto Hasegawa, Ryuya Ikezoe, Takeshi Ido, K Hanada and Hiroshi Idei	Plasma Science and Technology	Volume 25, Number 5
2023.05	<u>Hot spots induced by RF-accelerated electrons in the scrape-off layer on Experimental Advanced Superconducting Tokamak</u>	Y. Wang, K. Hanada, H. Liu, X. Gao, Y. Jie, Y. Li, M. Li, C. Wu, Y. Hu, K. He, B. Zhang, L. Zhang, Q. Zang, T. Zhang, T. Zhou, L. Yu, R. Liang, Y. Chu and J. Xie	Nuclear Fusion	Volume 63, Number 5
2023.04	<u>8.56-GHz quasi-optical launcher system with incident-mode selectivity on the QUEST spherical tokamak</u>	H. Idei , M. Sakaguchi , K. Mishra , T. Onchi , R. Ikezoe , O. Watanabe , Y. Tanaka , T. Saito , T. Ido , K. Hanada	Fusion Engineering and Design	189(2023) 113479
2022.11	<u>Improvements to the High-Field-Side Transient CHI System on QUEST</u>	K. Kuroda · R. Raman · M. Hasegawa · T. Onchi · K. Hanada · M. Ono · B. A. Nelson · J. Rogers · R. Ikezoe ·H. Idei · T. Ido1 · O. Mitarai · M. Nagata · S. Kawasaki · T. Nagata · A. Higashijima · S. Shimabukuro · I. Niiya ·I. Sekiya · S. Kojima · K. Nakamura · Y. Takase · S. Murakami	Journal of Fusion Energy	41, Article number: 25 (2022)
2022.11	<u>Conceptual Design of a Heavy Ion Beam Probe for QUEST : Q-shu University Experiment with Steady-State Spherical Tokamak</u>	T. Ido, M. Hasegawa, R. Ikezoe, T. Onchi, K. Hanada, H. Idei, K. Kuroda, Y. Nagashima	Review of Scientific Instruments	93, 113516 (2022)

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2022.10	<u>Adaptive Capon beamforming for lensless electron cyclotron emission imaging with high spatial resolution</u>	H. Idei, M. Fukuyama, S. Sakai, K. Mishra, K. Nishimura, R. Ikezoe, T. Onchi, T. Ido	Review of Scientific Instruments	93, 103531 (2022)
2022.07	<u>Towards automated gas leak detection through cluster analysis of mass spectrometer data</u>	Hasegawa, M., Sakurai, D., Higashijima, A., Niiya, I., Matsushima, K., Hanada, K., Idei, H., Ido, T., Ikezoe, R., Onchi, T., Kuroda, K.	Fusion Engineering and Design	180113199
2022.04	<u>Quaternion Analysis of Transient Phenomena in Matrix Converter Based on Space-Vector Modulation</u>	Kazuo NAKAMURA, Yifan ZHANG, Takumi ONCHI, Hiroshi IDEI, Makoto HASEGAWA, Kazutoshi TOKUNAGA, Kazuaki HANADA, Hirotaka CHIKARAISHI, Osamu MITARAI, Shoji KAWASAKI, Aki HIGASHIJIMA, Takahiro NAGATA and Shun SHIMABUKURO	Plasma and Fusion Research	Volume 17, 2405025 (2022)
2021.08	<u>Observation of second harmonic electron cyclotron resonance heating and current-drive transition during non-inductive plasma start-up experiment in QUEST</u>	Shinichiro Kojima, Kazuaki Hanada, Hiroshi Idei, Takumi Onchi, Ryuya Ikezoe, Yoshihiko Nagashima, Makoto Hasegawa, Kengoh Kuroda, Kazuo Nakamura, Aki Higashijima, Takahiro Nagata, Shoji Kawasaki, Shun Shimabukuro, Hatem Elserafy, Masaharu Fukuyama, Akira Ejiri, Taiichi Shikama, Nao Yoneda, Ryota Yoneda, Tsuyoshi Kariya, Yuichi Takase, Sadayoshi Murakami, Nicola Bertelli and Masayuki Ono	Plasma Physics and Controlled Fusion	63 (2021) 105002
2021.06	<u>Overview of recent progress on steady state operation of all-metal plasma facing wall device QUEST</u>	K. Hanada, N. Yoshida, M. Hasegawa, M. Oya, Y. Oya, I. Takagi, A. Hatayama, T. Shikama, H. Idei, Y. Nagashima, R. Ikezoe, T. Onchi, K. Kuroda, S. Kawasaki, A. Higashijima, T. Nagata, S. Shimabukuro, K. Nakamura, S. Murakami, Y. Takase, X. Gao, H. Liu, and J. Qian	Nuclear Materials and Energy	Volume 27, June 2021, 101013
2021.05	<u>Conceptual design of heavy ion beam probes on the PLATO tokamak</u>	Ido, T., Fujisawa, A., Takemura, K., Kobayashi, T.-K., Nishimura, D., Kasuya, N., Fukuyama, A., Moon, C., Yamasaki, K., Inagaki, S., Nagashima, Y., Yamada, T.	Review of Scientific Instruments	92, 053553 (2021)

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2021.04	<u>Initial Results from High-Field-Side Transient CHI Start-Up on QUEST</u>	Kengoh KURODA, Roger RAMAN, Makoto HASEGAWA, Takumi ONCHI, Brian A. NELSON, John ROGERS, Osamu MITARAI, Kazuaki HANADA, Masayuki ONO, Thomas JARBOE, Masayoshi NAGATA, Hiroshi IDEI, Takeshi IDO, Ryuya IKEZOE, Shoji KAWASAKI, Takahiro NAGATA, Aki HIGASHIJIMA, Shun SHIMABUKURO, Ichiro NIIYA, Canbin HUANG, Shinichiro KOJIMA, Akihiro KIDANI, Takahiro MURAKAMI, Kazuo NAKAMURA, Yuichi TAKASE, Sadayoshi MURAKAMI	Plasma and Fusion Research	2021 Volume 16 2402048