

Publication List

Original Papers

1. Modeling of ablation of the target material for the plasma for coherent and incoherent EUV sources, A. Sasaki, A. Sunahara, K. Nishihara, W. Nishikawa, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 373 - 376 (2018).
2. Ultra-intense X-Ray Radiation Photopumping of Exotic States of Matter by Relativistic Laser-Plasma in the Radiation-Dominated Kinetic Regime (RDKR), A. Ya. Faenov, J. Coglan, S. A. Pikuz, A. Zhidkov, T. A. Pikuz, J. Abdallah Jr., E. Tubman, N. M. H. Butler, R. J. Dance, I. Yu. Skobelev, M. Z. Alkhimova, N. Booth, J. Green, C. Gregory, A. Andreev, M. Nishiuchi, H. Sakaki, A. Sagisaka, A. Pirozhkov, K. Ogura, Y. Fukuda, M. Kanasaki, N. Hasegawa, M. Nishikino, M. Kando, T. Kawachi, K. Kondo, P. McKenna, G. J. Tallents, N. Woolsey, R. Kodama, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 149 - 158 (2018).
3. Research on Laser Acceleration and Coherent X-RAY Generation Using J-KAREN-P Laser, A. Pirozhkov, M. Nishiuchi, H. Kiriya, A. Kon, H. Sakaki, Y. Fukuda, N.P. Dover, K. Sekiguchi, K. Nishitani, A. Sagisaka, T. A. Pikuz, A. Ya. Faenov, K. Ogura, Y. Hayashi, H. Kotaki, T. Zh. Esirkepov, K. Huang, N. Nakanii, K. Kondo, J.K. Koga, K. Kondo, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 135 - 142 (2018).
4. High-Order Harmonic Generation by Relativistic Plasma Singularities: The Driving Laser Requirements, A. Pirozhkov, T. Zh. Esirkepov, T. A. Pikuz, A. Ya. Faenov, K. Ogura, Y. Hayashi, H. Kotaki, E. N. Ragozin, D. Neely, H. Kiriya, J.K. Koga, Y. Fukuda, A. Sagisaka, M. Nishikino, T. Imazono, N. Hasegawa, T. Kawachi, H. Daido, Y. Kato, S.V. Bulanov, K. Kondo, M. Kando, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 85 - 92 (2018).
5. ERL-based Laser-Compton Scattering X-ray source for X-ray Imaging, A. Kosuge, A. Akagi, Y. Honda, S. Araki, J. Urakawa, T. Terunuma, R. Nagai, T. Shizuma, M. Mori, R. Hajima, *Proceedings of the 15th International Conference on X-ray Lasers*, **202**, 261 - 264 (2018).
6. Proposal for Experiment Systems Using Laser-Driven Heavy Ions and XFELs to Understand Physical Phenomena Occurring near the Incident Ion Path, K. Moribayashi, *Proceedings of the 15th International Conference on X-ray Lasers*, **202**, 121 - 123 (2018).
7. Analysis of reflection signal from EUV multilayer mirror for irradiation-induced damage study, M. Ishino, S. Ichimaru, M. Hatayama, N. Hasegawa, S. Oku, M. Nishikino, *Proceeding of The 15th International Conference on X-Ray Lasers*, **202**, 315 - 319 (2018).
8. In Situ Characterization of XFEL Beam Intensity Distribution and Focusability by High-Resolution LiF Crystal Detector, T. A. Pikuz, A. Ya. Faenov, T. Matsuoka, B. Albertazzi, N. Ozaki, N. Hartely, O. Muray Ricardo Arturo, T. Yabuuchi, H. Habara, S. Matsuyama, K. Yamauchi, Y. Inubushi, T. Togashi, H. Yumoto, Y. Tange, K. Tono, Y. Sato, M. Yabashi, M. Nishikino, T. Kawachi, A. Mitrofanov, S. A. Pikuz, D. Bleiner, A. Grum-Grzhimailo, N. N. Rosanov, N. V. Vysotina, M. Harmand, M. Koenig, K. A. Tanaka, T. Ishikawa, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 109 - 116 (2018).
9. Progress and Prospects of X-Ray Laser Research in QST, M. Nishikino, N. Hasegawa, M. Ishino, T. Imazono, A. Sasaki, K. Mikami, T. Dinh, T. Suemoto, S. Namba, A. Ya. Faenov, T. A. Pikuz, S. Ichimaru, M. Hatayama, T. Kawachi, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 21 - 24 (2018).
10. Irradiation damage test of Mo/Si, Ru/Si and Nb/Si multilayers using the soft x-ray laser built at QST, S. Ichimaru, M. Ishino, M. Nishikino, M. Hatayama, N. Hasegawa, T. Kawachi, T. Maruyama, K. Inokuma, M. Zenba, S. Oku, *Proceeding of The 15th International Conference on X-Ray Lasers*, **202**, 303 - 307 (2018).
11. Spectral weight of resonant inelastic X-ray scattering in doped cuprates: Effect of core-hole lifetime, T. Tohyama, K. Tsutsui, *International Journal of Modern Physics B* (2018).
12. Achieving Laser Wakefield Accelerated Electron Beams of Low Enough Energy Spread for an X-FEL, J. K. Koga, T. Zh. Esirkepov, S.V. Bulanov, M. Kando, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 117 - 120 (2018).

13. The Observation of Transient Thin Film Structures During the Femto-Second Laser Ablation Process by Using the Soft X-Ray Laser Probe, N. Hasegawa, M. Nishikino, M. Ishino, N. Onishi, A. M. Ito, Y. Minami, M. Baba, A. Ya. Faenov, N. Inogamov, T. Kawachi, K. Kondo, T. Suemoto, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 273 - 278 (2018).
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15. Investigation of Surface Excitation Effect for Ablation of 4H-SiC Substrate Using Double-Pulse Beam, K. Matsunaga, T. Hayashi, S. Kurokawa, H. Yokoo, N. Hasegawa, M. Nishikino, T. Kumada, T. Otobe, Y. Matsukawa, Y. Takaya, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 321 - 326 (2018).
16. Laser-Induced Damage on Silica Glasses by Irradiation of Soft X-Ray Laser Pulse, K. Mikami, M. Ishino, T. Dinh, Y. Yamamoto, N. Hasegawa, M. Nishikino, T. Kawachi, S. Motokoshi, T. Jitsuno, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 333 - 337 (2018).
17. Development of a High Repetition Rate and High Pulse Energy Nd:YAG MOPA Laser System, K. Mikami, N. Hasegawa, H. Okada, S. Kondo, M. Nishikino, T. Kawachi, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 405 - 408 (2018).
18. Superfluorescence/Superradiance in Helium Following Free-Electron Laser Excitation, H. James, S.Kuma, H.Iwayama, E.Shigemasa, *Proceedings of the 15th International Conference on X-Ray Lasers*, **202**, 105 -108 (2018).
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22. Laser Requirements for High-Order Harmonic Generation by Relativistic Plasma Singularities, A. Pirozhkov, T.Zh. Esirkepov, T. A. Pikuz, A. Ya. Faenov, A. Sagisaka, K. Ogura, Y. Hayashi, H. Kotaki, E. N. Ragozin, D. Neely, J. K. Koga, Y. Fukuda, M. Nishikino, T. Imazono, N. Hasegawa, T. Kawachi, H. Daido, Y. Kato, S. V. Bulanov, K. Kondo, H. Kiriya, M. Kando, *Quantum Beam Science*, **2(1)**, 7 (2018).
23. Determination of specific ion positions of Cr³⁺ and O²⁻ in Cr₂O₃ thin films and their relationship to exchange anisotropy at Co/Cr₂O₃ interfaces, Yu Shiratsuchi, Yuuta Nakano, Nobuhito Inami, Tetsuro Ueno, Kanta Ono, Reiji Kumai, Ryoko Sagayama, Ryoichi Nakatani, *Journal of Applied Physics*, **123**, 103903-1 - 103903-7 (2018).
24. X-ray magnetic circular dichroism and hard X-ray photoelectron spectroscopy of tetragonal Mn₇₂Ge₂₈ epitaxial thin film, J. Kim, M. Mizuguchi, N. Inami, T. Ueno, S. Ueda, K. Takanashi, *Japanese Journal of Applied Physics*, **57(4S)**, 04FN10-1 - 04FN10-3 (2018).
25. Persistent optical hole-burning spectroscopy of nano-confined dye molecules in liquid at room temperature: spectral narrowing due to a glassy state and extraordinary relaxation in a nano-cage, H. Murakami, *The Journal of Chemical Physics*, **148(14)**, 144505-1 - 144505-12 (2018).
26. UV Harmonic Generation and Laser-Driven Proton Acceleration from Thin-Foil Target, A. Sagisaka, A. Pirozhkov, M. Nishiuchi, K. Ogura, H. Sakaki, A. Ya. Faenov, T. A. Pikuz, E. Timur, S. Bulanov, M. Kando, H. Kiriya, K. Kondo, *The Review of Laser Engineerin*, **46(3)**, 148 - 151 (2018).
27. Improvement of Contact Grating Device for Efficient Terahertz Wave Generation Using Bi-Angular Filter, K. Nagashima, M. Tsubouchi, Y. Ochi, M. Maruyama, *Journal of Applied Physics*, **123(13)**, 123104-1 - 123104-6 (2018)

28. 高エネルギーX線回折を用いた銅酸化物高温超伝導体における電荷密度波の研究, 石井 賢司, 佐藤 研太朗, 浅野 駿, 藤田 全基, 中尾 裕則, *Spring-利用研究成果集*, **6(1)**, 46 - 49 (2018).
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31. The J-KAREN-P facility laser performance status, H. Kiriya, M. Nishiuchi, A. Pirozhkov, Y. Fukuda, H. Sakaki, A. Sagisaka, N. P. Dover, K. Kondo, K. Ogura, M. Mori, Y. Miyasaka, N. Nakanii, K. Huang, J. Koga, T. Zh. Esirkepov, M. Kando, K. Kondo, *The Review of Laser Engineering*, **46(3)**, 134 - 137 (2018).
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40. Ion acceleration experiment with the high intensity, high contrast J-KAREN-P laser system, M. Nishiuchi, H. Kiriya, H. Sakaki, N. P. Dover, K. Kondo, T. Miyahara, J. K. Koga, A. Pirozhkov, A. Sagisaka, Y. Fukuda, K. Ogura, Y. Watanabe, M. Kando, K. Kondo, *The review of laser engineering*, **46(3)**, 145 - 147 (2018).
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Awards

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2. 公益社団法人日本金属学会 水素化物に関わる次世代学術・応用展開研究会 優秀ポスター賞, 谷上 真惟 (日本金属学会・水素化物に関わる次世代研究会、2017 年 11 月 17 日)
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