

6. 研究成果リスト

原著論文

No	論文タイトル	著者氏名	論文掲載誌名，発行情報
1	Recombination Dynamics of Electron–Hole Pairs in TlBr Crystals Probed by Transient Absorption Spectroscopy Using Pulsed Electron Beams	Masanori Koshimizu, Yusa Muroya, Mitsuhiro Nogami, and Keitaro Hitomi	Sensors and Materials 36 261-267(2024 1)
2	Extreme Ultraviolet Lithographic Performance and Reaction Mechanism of Polymeric Resist—Utilizing Radical- and Acid-Amplified Cross-Linking	Bilal A. Naqvi, Satoshi Enomoto, Kohei Machida, Yui Takata, Takahiro Kozawa, Yusa Muroya, Stefan De Gendt, and Danilo De Simone	Chem. Mater. 36 1459–1471(2024 2)
3	Dissolution dynamics of poly(4-hydroxystyrene-co-methacrylic acid) in tetraalkylammonium hydroxide aqueous solutions	Yutaro Iwashige, Kyoko Watanabe, Yuko Tsutsui Ito, Takahiro Kozawa, Kazuo Sakamoto, and Makoto Muramatsu	Jpn. J. Appl. Phys. 63 026504(2024 2)
4	Relationship between poly(4-hydroxystyrene) (PHS) and tetramethylammonium hydroxide (TMAH) concentrations during the development of PHS films in TMAH aqueous solution studied by a quartz crystal microbalance (QCM) method	Yuko Tsutsui Ito, Kyoko Watanabe, Yuqing Jin, Takahiro Kozawa, Kazuo Sakamoto and Makoto Muramatsu	Jpn. J. Appl. Phys. 63 018002(2024 1)
5	Shielding effect of underlayer against secondary electrons generated in substrate in extreme ultraviolet lithography	Takahiro Kozawa	Jpn. J. Appl. Phys. 63 016503(2023 12)
6	Design of High-Sensitive EUV Resist Materials based on Polyacetals	Hiroyuki Maekawa, Yutaro Iwashige, Hiroki Yamamoto, Kazumasa Okamoto, Takahiro	Journal of Photopolymer Science and Technology 36

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		Kozawa ,and Hiroto Kudo	31-39(2023 6)
7	Recovery of platinum group metal resources from high-level radioactive liquid wastes by non-contact photoreduction	Hanqin Weng, Yi Wang, Fuhai Li e, Yusa Muroya, Shinichi Yamashita, Sheng Cheng	Journal of Hazardous Materials 458 131852(2023 9)
8	Sensitization of polymethacrylate resist with adding acid-generating promoters upon exposure to EUV light	Kazumasa Okamoto, Akihiro Konda, Yuki Ishimaru, Takahiro Kozawa, Yasunobu Nakagawa and Masamichi Nishimura	Jpn.J.Appl.Phys. 62 116503(2023 11)
9	Analysis of resist images with pattern defects by Hough transform	Yuqing Jin, Takahiro Kozawa, Kota Aoki, Tomoya Nakamura, Yasushi Makihara, & Yasushi Yagi	Jpn.J.Appl.Phys. 62 086502(2023 8)
10	Reaction mechanisms of Sn-complex-side-chain polymer used for extreme ultraviolet lithography, studied by electron pulse radiolysis and γ -radiolysis	Yui Takata, Yusa Muroya, Takahiro Kozawa, Kohei Machida, Satoshi Enomoto, Bilal Naqvi, & Danilo De Simone	Jpn.J.Appl.Phys. 62 076502(2023 7)
11	Defect risks at interfaces of chemically amplified resists in extreme ultraviolet lithography process	Takahiro Kozawa	Jpn.J.Appl.Phys. 62 076501(2023 7)
12	Towards precise diagnosis time profile of ultrafast electron bunch trains using orthogonal terahertz streak camera	Xu Yang、 Song Yifang、 Tsai Cheng-Ying、 Wang Jian、 Liu Zhengzheng、 Qi Hong、 Fan Kuanjun、 Yang Jinfeng、 Meshkov O. I.	#REF!
13	MeV electron bunch compression and timing jitter suppression using a THz-driven	Song Yifang、 Tsai Cheng-Ying、 Fan Kuanjun、 Yang Jinfeng、	Nucl. Instrum. Methods A 31 167774(2023)

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	resonator	Qi Hong	
14	Design and performance study of a dielectric-filled cavity beam current monitor for HUST-PTF	Li Ji-Qing、Fan Kuan-Jun、Liu Zheng-Zheng、Wang Jian、Chen Qu-Shan、Yang Jinfeng	Nuclear Science and Techniques 34 129(2023)
15	Propagation and focusing dependency of a laser beam with its aberration distribution: understanding of the halo induced disturbance	Alexandre Rondepierre,Driss Oumbarek Espinos,Alexei Zhidkov,Tomonao Hosokai	Optics Continuum 2 6 1351-1367(2023 5)
16	Focusing and reduction of correlated energy spread of a chirped electron beams in passive plasma lens	N. Pathak, A. Zhidkov, D. Oumbarek Espinos and T. Hosokai	Physics of Plasmas 30 63103 1-11(2023 6)
17	Supersonic gas jet stabilization in laser-plasma acceleration	Zhen Zhe Lei,Yan Jun Gu,Zhan Jin,Shingo Sato,Alexei Zhidkov,Alexandre Rondepierre,Kai Huang,Nobuhiko Nakanii,Izuru Daito,Masakai Kando,Tomonao Hosokai	High Power Laser Science and Engineering 11 e91 1-8(2023 10)
18	Notable improvements on LWFA through precise laser wavefront tuning	Driss Oumbarek Espinos,Alexandre Rondepierre,Alexei Zhidkov,Naveen Pathak,Zhan Jin,Kai Huang,Nobuhiko Nakanii,Izuru Daito,Masaki Kando,Tomonao Hosokai	Scientific Reports 13 18466 1-10(2023 12)
19	Modular supersonic nozzle for the stable laser-driven electron acceleration	Zhenzhe Lei,Zhan Jin,Yan-Jun Gu,Shingo Sato,Alexei Zhidkov,Alexandre	Review of Scientific Instruments 95 15111 1-7(2024 1)

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		Rondepierre,Kai Huang,Nobuhiko Nakanii,Izuru Daito,Masaki Kando,Tomonao Hosokai	
20	Red, green, and blue radio-luminescent polymer dots doped with heteroleptic tris-cyclometalated iridium complexes	Zouyue Liu, Hieu Thi Minh Nguyen, Daiki Asanuma, Sachiko Tojo, Minoru Yamaji, Kiyohiko Kawai, Guillem Pratx, Mamoru Fujitsuka, and Yasuko Osakada	RSC Advances 13 22 15126-15131(2023 5)
21	Radioluminescence from polymer dots based on thermally activated delayed fluorescence	Daiki Asanuma, Hieu Thi Minh Nguyen, Zuoyue Liu, Sachiko Tojo, Hajime Shigemitsu, Minoru Yamaji, Kiyohiko Kawai, Tadashi Mori, Toshiyuki Kida, Guillem Pratx, Mamoru Fujitsuka, and Yasuko Osakad	Nanoscale Advances 5 13 3424–3427(2023 5)
22	Direct investigation of excited C60 dianion and its intramolecular electron transfer behaviors	Chao Lu, Masakazu Kobayashi, and Mamoru Fujitsuka	The Journal of Physical Chemistry A 127 40 8330–8337(2023 9)
23	Electron beam-induced white emission from iridium complexes-doped polymer dots	Zuoyue Liu, Zheming Su, Daiki Asanuma, Sachiko Tojo, Minoru Yamaji, Mamoru Fujitsuka, and Yasuko Osakada	Photochemical & Photobiological Sciences 23 2 329–338(2024 2)
24	Single-pulse extraction using a laser-activating GaAs reflective switch for a terahertz free-electron laser	Keigo Kawase, Goro Isoyama	Nuclear Instruments and Methods in Physics Research Sectin A: Acclerators, Spectrometers, Detectors and

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			Associated Equipment 1056 168618(2023 11)
25	Terahertz-induced martensitic transformation in partially stabilized zirconia	M. Nagai, Y. Higashitani, M. Ashida, K. Kusakabe, H. Niioka, A. N. Hattori, H. Tanaka, G. Isoyama, and N. Ozaki	Communications Physics 6 88(2023 4)
26	Recombination Dynamics of Electron–Hole Pairs in TlBr Crystals Probed by Transient Absorption Spectroscopy Using Pulsed Electron Beams	Masanori Koshimizu, Yusa Muroya, Mitsuhiro Nogami, Keitaro Hitomi	Sensors and Materials 36 261-267(2024 1)
27	Investigation of the provenance of Okinose sand using ESR signals of quartz in granite and granodiorite around Osaka Bay	Ryo Kobayashi, Hibiki Kojima, Atsushi Tani	Radiation Protection Dosimetry 119 14 1639–1645(2023 9)
28	Hydrogen transfer reactions via organic radicals in gamma-irradiated chibaite	Yuka Yokoyama, Shusuke Isogai, Kenta Kusuki, Atsushi Tani, Hirotugu Nishido	Radiation Protection Dosimetry 119 14 1646–1652(2023 9)

Reviews

No	タイトル	著者氏名	掲載誌名，発行情報
29	Martensite transformation triggered with intense THz pulses	M. Nagai, Y. Higashitani, M. Ashida, K. Kusakabe, H. Niioka, A. N. Hattori, H. Tanaka, G. Isoyama, and N. Ozaki	The 2023 48th International Conference on Infrared, Millimeter and Terahertz Waves (IRMMW-THz2023) (2023 9)