Yuki Abe

List of Publications by Year
in descending order

47 papers	585 citations	623734 14 h-index	677142 22 g-index
50 all docs	50 docs citations	50 times ranked	529 citing authors

#	Article	IF	Citations
1	Magnetized fast isochoric laser heating for efficient creation of ultra-high-energy-density states. Nature Communications, 2018, 9, 3937.	12.8	75
2	Fast ignition realization experiment with high-contrast kilo-joule peta-watt LFEX laser and strong external magnetic field. Physics of Plasmas, 2016, 23, .	1.9	54
3	In-Target Protonâ€“Boron Nuclear Fusion Using a PW-Class Laser. Applied Sciences (Switzerland), 2022, 12, 1444.	2.5	31
4	Ultrahigh-contrast kilojoule-class petawatt LFEX laser using a plasma mirror. Applied Optics, 2016, 55, 6850.	2.1	30
5	Direct Heating of a Laser-Imploded Core by Ultraintense Laser-Driven Ions. Physical Review Letters, 2015, 114, 195002.	7.8	28
6	Proof-of-principle experiment for laser-driven cold neutron source. Scientific Reports, 2020, 10, 20157.	3.3	28
7	Petapascal Pressure Driven by Fast Isochoric Heating with a Multipicosecond Intense Laser Pulse. Physical Review Letters, 2020, 124, 035001.	7.8	26
8	Energetic <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mi>Î±</mml:mi></mml:math> -particle sources produced through proton-boron reactions by high-energy high-intensity laser beams. Physical Review E, 2021, 103, 053202.	2.1	25
9	Heating efficiency evaluation with mimicking plasma conditions of integrated fast-ignition experiment. Physical Review E, 2015, 91, 063102.	2.1	23
10	High-Intensity Neutron Generation via Laser-Driven Photonuclear Reaction. Plasma and Fusion Research, 2015, 10, 2404003-2404003.	0.7	23
11	Generation of Î±-Particle Beams With a Multi-kJ, Peta-Watt Class Laser System. Frontiers in Physics, 2020, 8, .	2.1	22
12	Relativistic magnetic reconnection in laser laboratory for testing an emission mechanism of hard-state black hole system. Physical Review E, 2020, 102, 033202.	2.1	17
13	Single shot radiography by a bright source of laser-driven thermal neutrons and x-rays. Applied Physics Express, 2021, 14, 106001.	2.4	17
14	Enhancing laser beam performance by interfering intense laser beamlets. Nature Communications, 2019, 10, 2995.	12.8	16
15	Direct evaluation of high neutron density environment using <mml:math xmlns:mml="http://www.w3.org/1998/Math/MathML"><mml:mrow><mml:mo>(</mml:mo><mml:mrow><mml:mi>[illegible]/mml:m[illegible]<mml:m[illegible] reaction induced by laser-driven neutron source. Physical Review C, 2021, 104, .	2.9	14
16	The photonuclear neutron and gamma-ray backgrounds in the fast ignition experiment. Review of Scientific Instruments, 2012, 83, 10D909.	1.3	12
17	Electromagnetic field growth triggering super-ponderomotive electron acceleration during multi-picosecond laser-plasma interaction. Communications Physics, 2019, 2, .	5.3	11
18	Robustness of large-area suspended graphene under interaction with intense laser. Scientific Reports, 2022, 12, 2346.	3.3	11

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19	Production of intense, pulsed, and point-like neutron source from deuterated plastic cavity by mono-directional kilo-joule laser irradiation. Applied Physics Letters, 2017, 111, 233506.	3.3	10
20	The avalanche image intensifier panel for fast neutron radiography by using laser-driven neutron sources. High Energy Density Physics, 2020, 36, 100833.	1.5	10
21	Characterizing a fast-response, low-afterglow liquid scintillator for neutron time-of-flight diagnostics in fast ignition experiments. Review of Scientific Instruments, 2014, 85, 11E126.	1.3	9
22	Monte Carlo particle collision model for qualitative analysis of neutron energy spectra from anisotropic inertial confinement fusion. High Energy Density Physics, 2020, 36, 100803.	1.5	8
23	Development of Compton X-ray spectrometer for high energy resolution single-shot high-flux hard X-ray spectroscopy. Review of Scientific Instruments, 2016, 87, 043502.	1.3	8
24	Development of Multichannel Time-of-Flight Neutron Spectrometer for the Fast Ignition Experiment. Plasma and Fusion Research, 2014, 9, 4404110-4404110.	0.7	7
25	Whispering Gallery Effect in Relativistic Optics. JETP Letters, 2018, 107, 351-354.	1.4	7
26	The conceptual design of 1-ps time resolution neutron detector for fusion reaction history measurement at OMEGA and the National Ignition Facility. Review of Scientific Instruments, 2020, 91, 063304.	1.3	7
27	Development of multichannel low-energy neutron spectrometer. Review of Scientific Instruments, 2014, 85, 11E125.	1.3	5
28	Accuracy evaluation of a Compton X-ray spectrometer with bremsstrahlung X-rays generated by a 6 MeV electron bunch. Review of Scientific Instruments, 2014, 85, 11D634.	1.3	5
29	Photonuclear reaction based high-energy x-ray spectrometer to cover from 2 MeV to 20 MeV. Review of Scientific Instruments, 2014, 85, 11D629.	1.3	5
30	Plasma mirror implementation on LFEX laser for ion and fast electron fast ignition. Nuclear Fusion, 2017, 57, 126018.	3.5	5
31	Dosimetric calibration of GafChromic HD-V2, MD-V3, and EBT3 films for dose ranges up to 100 kGy. Review of Scientific Instruments, 2021, 92, 063301.	1.3	5
32	Development of Compton X-Ray Spectrometer for Fast Ignition Experiment. Plasma and Fusion Research, 2014, 9, 4405109-4405109.	0.7	4
33	Large aperture fast neutron imaging detector with 10-ns time resolution. Proceedings of SPIE, 2017, , .	0.8	4
34	Efficient and Repetitive Neutron Generation by Double-Laser-Pulse Driven Photonuclear Reaction. Plasma and Fusion Research, 2018, 13, 2404009-2404009.	0.7	3
35	A large-aperture high-sensitivity avalanche image intensifier panel. Review of Scientific Instruments, 2018, 89, 101128.	1.3	3
36	A multichannel gated neutron detector with reduced afterpulse for low-yield neutron measurements in intense hard X-ray backgrounds. Review of Scientific Instruments, 2018, 89, 101114.	1.3	3

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37	Verification of fast heating of core plasmas produced by counter-illumination of implosion lasers. High Energy Density Physics, 2020, 37, 100890.	1.5	3
38	Super-strong magnetic field-dominated ion beam dynamics in focusing plasma devices. Scientific Reports, 2022, 12, 6876.	3.3	3
39	A multi-stage scintillation counter for GeV-scale multi-species ion spectroscopy in laser-driven particle acceleration experiments. Review of Scientific Instruments, 2022, 93, .	1.3	3
40	Hot Electron and Ion Spectra in Axial and Transverse Laser Irradiation in the GXII-LFEX Direct Fast Ignition Experiment. Plasma and Fusion Research, 2021, 16, 2404076-2404076.	0.7	2
41	The Development of the Neutron Detector for the Fast Ignition Experiment by using LFEX and Gekko XII Facility. Plasma and Fusion Research, 2014, 9, 4404105-4404105.	0.7	1
42	The Neutron Imaging Diagnostics and Reconstructing Technique for Fast Ignition. Plasma and Fusion Research, 2014, 9, 4404108-4404108.	0.7	1
43	Development of the High Energy Bremsstrahlung X-Ray Spectrometer by Using (<i>Î³</i>, n) Reaction. Plasma and Fusion Research, 2014, 9, 4404112-4404112.	0.7	0
44	3 Ã— 10⁸D-D Neutron Generation by High-Intensity Laser Irradiation onto the Inner Surface of Spherical CD Shells. Plasma and Fusion Research, 2018, 13, 2401028-2401028.	0.7	0
45	Investigation of plasma states formed under the interaction of high-power laser pulses with wire-shape Alâ€"Cu target. Journal of Physics: Conference Series, 2021, 1787, 012028.	0.4	0
46	Characteristics of Laser-Driven Neutron Sources. The Review of Laser Engineering, 2018, 46, 564.	0.0	0
47	Generation of Strong Magnetic Field with High-Power Laser. The Review of Laser Engineering, 2019, 47, 518.	0.0	0